

2022 INTEGRATED ANNUAL REPORT

ACCORDING TO THE TEACHINGS OF 'FAR EASTERN PHILOSOPHY' ON THE ENERGY OF LIFE, NATURE AND HUMAN BEINGS CAN ESTABLISH A SUSTAINABLE LIFE IN A BALANCE WHERE 5 FUNDAMENTAL ELEMENTS PREVAIL

WE STRIVE TO PROTECT, RESTORE, AND ENHANCE LIFE BY ADDING VALUE, COMFORT, BALANCE, AND BEAUTY.

ZORLUENERJİ

2022
INTEGRATED
ANNUAL REPORT



CONTENTS

»	ABOUT THE REPORT	4
		8
»	OVERVIEW OF 2022 - SOIL	10
	OVERVIEW OF 2022	12
	Milestones from 2022	12
	CHAIRMAN'S MESSAGE	14
	CEO'S MESSAGE	18
	GOVERNANCE IN ZORLU ENERJİ	22
	Zorlu Enerji Board of Directors	22
	Metrics on the Board of Directors	25
	Zorlu Enerji Senior Management	26
	Senior Management Metrics	30
	Zorlu Enerji Policies and Commitments	31
»	ZORLU ENERJİ AND THE ENERGY SECTOR - FIRE	32
	DEVELOPMENTS IN 2022	34
	Global Trends and Energy Market Outlook	34
	Global'de Enerji Sektörü	35
	Energy Sector in Turkey	41
	Risks and Opportunities for Zorlu Enerji	46
	2022 PERFORMANCE INDICATORS	50
	Country Breakdowns of Net Sales	50
	Emission Intensity	52
	Water Use Intensity	53
	OHS Accident Frequency Rate	53
	Number of Employees	53
	Our Awards	54
	Sustainability Milestones	55
	ESG Indexes Performance	56
	CDP Scores	56
	Zorlu Enerji's Installed Capacity and Investments	58
	Zorlu Enerji's Fields of Activity	60
	Subsidiaries	62
	AFFILIATES	65
»	VALUE CREATION MODEL- WATER	66
	VALUE CREATION MODEL	68
	SUSTAINABILITY MANAGEMENT IN ZORLU ENERJİ	70
	MATERIALITY ANALYSIS	70
	Zorlu Enerji Sustainability Strategy	74
	Sustainability Governance Structure	77
	WORKING GROUPS	79
	SUSTAINABILITY GOALS	80
	Zorlu Enerji Sustainability Goals	80
	STAKEHOLDER COMMUNICATION	82
	EXISTING METHODS OF COMMUNICATION WITH KEY STAKEHOLDERS	83
	MEMBERSHIPS, COLLABORATIONS and INITIATIVES	84
	Partnerships within the scope of R&D Studies	87
	OUR RESPONSIBLE LOBBYING APPROACH	93
	STAKEHOLDER ENGAGEMENT	93
	SOCIAL IMPACT ASSESSMENT STUDIES	93

»	ZORLU ENERJİ CAPITALS - TREE	94
	ZORLU ENERJİ CAPITALS	96
	FINANCIAL CAPITAL	96
	Strong Economic Performance	96
	Summary Balance Sheet	96
	SUMMARY INCOME STATEMENT	96
	Responsible and Sustainable Finance	97
	Sale of Gökcedağ WPP 6th Verification Credits	98
	Gökgedağ WPP Carbon Credit Verification Periods	98
	Facilities Certified with I-REC	99
	UN Global Compact SDG Investment Commitment	99
	MANUFACTURED CAPITAL	100
	End-to-End Service Oriented Approach	100
	Generation Capacity	100
	Zorlu Enerji's Installed Capacity in Turkey	101
	Zorlu Enerji's Installed Capacity Abroad	102
	Licenses, Pre-licenses and Permits	103
	ZORLU ENERJİ'S ACTIVITIES IN 2022	104
	Electricity Generation and Sales	104
	Electricity Generation by Resource	104
	Electricity Distribution	105
	Natural Gas Distribution and Sales	105
	NATURAL CAPITAL	122
	Combat the Climate Crisis	124
	Biodiversity loss and deforestation	129
	Management of industrial accidents and environmental pollution	134
	Water Management	135
	Waste Water Treatment	136
	Responsible Waste Management	136
	Air Quality & Greenhouse Gas Emissions	137
	INTELLECTUAL CAPITAL	140
	Innovative Solutions	141
	Digitalization	142
	Products and services with environmental and social contribution	144
	R&D projects	146
	Integration, Infrastructure and Service Quality	152
	HUMAN CAPITAL	154
	Health and Safety	156
	Human Rights	161
	Inclusion, equality, diversity	161
	Employee Rights and Happiness	164
	Employee training and development	164
	Brand Reputation	168
	Accountability and Ethics	169
	SOCIAL CAPITAL	172
	Local Socio- economic Impact	172
	Cooperation for climate goals	174
	Stakeholder Engagement and Social Dialog	174
	Corporate Social Responsibility Projects	175
	Social Compliance in Supply Chain	178
	STATEMENT OF COMPLIANCE WITH SUSTAINABILITY PRINCIPLES	189

»	CORPORATE GOVERNANCE- METAL	206
	ADDITIONAL DISCLOSURES REQUIRED BY THE LEGISLATION	208
	CORPORATE GOVERNANCE	218
	Risks and the Assessment of the Board of Directors	218
	Internal Audit Activities and Internal Control System	222
	Statement of Compliance with Corporate Governance Principles	224
	Corporate Governance Compliance Report	225
	Corporate Governance Information Form	231
	THE DUTIES AND AUTHORITIES OF THE BOARD OF DIRECTORS	239
	Board Committees	239
	Board of Directors' Evaluation of the Working Principles and Effectiveness of the Board Committees	243
	STATEMENT OF INDEPENDENCE	244
»	FINANCIAL STATEMENTS	247
	CONVENIENCE TRANSLATION OF CONSOLIDATED FINANCIAL STATEMENTS	247
	Declaration of Responsibility for Annual Report	248
	Independent Auditor's Report on the Annual Report	250
	Declaration of Responsibility for Financial Statements	251
	Independent Auditor's Report	252
	Consolidated Financial Statements	257
»	ANNEXES	360
	Performance Indicators	360
	GRI Content Index	368
	Reporting Guidelines	378
	Additional Notifications in the Energy Sector	380
	Energy Utility Sector Additional Disclosures	
	UNITED NATIONS GLOBAL COMPACT (UNGC)	
	PROGRESS REPORTING	381
	WOMEN'S EMPOWERMENT PRINCIPLES (WEPs)	
	PROGRESS REPORTING	382
	Investor Information	383



Büyükdere Caddesi No:199,
Levent 199, İstanbul, 34330



PHONE
90 212 456 00



E-MAIL
zoren@zorlu.com





ABOUT THE REPORT



QUALIFICATION, PERIOD AND SCOPE OF THE REPORT

As Zorlu Enerji Elektrik Üretim AŞ (Zorlu Enerji or the Company) and its subsidiaries, we are pleased to present the Integrated Annual Report for 2022, which includes financial, environmental, social impact and governance data of our domestic and international subsidiaries and affiliates covering the 12-month period between January 1 and December 31, 2022.

This report, prepared to present Zorlu Enerji's economic, environmental and social performance for 2022 to its stakeholders, also includes sustainability reporting and the Board of Directors' annual report. The report is published annually and is available online via the Public Disclosure Platform (KAP) and the Company's website. The report is available on the Public Disclosure Platform (KAP) and at www.zorluenerji.com.tr The report has been prepared in an environmentally sensitive manner.

The report covers environmental and social data for all of the Company's domestic operations within the scope of its corporate profile and for the facilities operating abroad and under its operational control.



CAPITALS APPROACH AND VALUE CREATION MODEL

The report analyses and discusses Zorlu Enerji's current operations, future plans and sustainable value creation in an integrated manner according to the capital classification recommended by the International Integrated Reporting Council (IIRC). The report provides stakeholders with a transparent and clear overview of the Company's activities and includes information on significant issues affecting stakeholders, the interaction between the Company's strategy and business model, the management of relevant risks and opportunities, and the ability to create value in the long term.

This report has been prepared in accordance with the International Integrated Reporting Framework recommended by the IIRC and the core option of the GRI Standards published by the Global Reporting Initiative (GRI).



COMPLIANCE WITH THE LEGISLATION AND REGULATORY FRAMEWORK

Zorlu Enerji 2022 Integrated Annual Report is prepared in accordance with the materiality principle defined in the Global Reporting Initiative (GRI) Standards. The report, in which the company's performance is presented primarily through GRI indicators, takes into account the Sustainability Principles Compliance Framework of the Turkish Capital Markets Association (TCMA), the progress report of the United Nations Global Compact (UNGC), of which Zorlu Enerji is a signatory, and the Women's Empowerment Principles (WEPs).

The report meets the minimum requirements for annual reporting under the Capital Markets Law and provides insight into the Company's sustainability strategy, economic, environmental and social performance and its contribution to the United Nations Sustainable Development Goals.



AUDIT

The report is planned to receive independent verification audit in accordance with ISAE3000 (International Standard on Assurance Engagements) and AA1000 (AccountAbility) for stakeholder analysis. Verification reports resulting from the audit will be published on the Zorlu Enerji website. **(See, 2021 Integrated Annual Report Independent Assurance Report)**

Zorlu Enerji 2022 Integrated Annual Report and the financial information included in the report have been audited by KPMG Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik AŞ (KPMG). The Independent Auditor's Report, including the list and scope of assurance indicators, can be found on page 223 of the report.



STATEMENT OF SENIOR MANAGEMENT

According to Zorlu Enerji's senior management, this integrated report addresses all issues and developments in terms of Zorlu Enerji's ability to create value for its stakeholders and presents its integrated performance and future targets for the period January 1 - December 31, 2022. The Statement of Responsibility for the Board of Directors' Annual Report can be found on page 222 of the report.

REPORT CONTACT INFORMATION

- QHSE & Sustainability Directorate
isgc@zorlu.com
- Corporate Communications & Marketing Directorate
zorenki@zorlu.com
- Investor Relations Department
yatirimci@zoren.com.tr



GLOSSARY OF TECHNICAL TERMS

• R&D: Research and Development • UN Global Compact: United Nations Global Compact • CCS: Carbon Capture and Storage • CDP: Carbon Disclosure Project • CNG: Compressed Natural Gas • CO₂: Carbone Dioxide • CRM: Customer Relationship Management • EIA: Environmental Impact Assessment • ESG: Environmental, Social and Governance • DC Network: A type of direct current network produced by solar panels • Natural Gas Cogeneration Power Plant: A plant that simultaneously generates heat and power from natural gas	• Natural Gas Combined Cycle Power Plant: A group of heat engines generating mechanical energy with natural gas • EBRD: European Bank for Reconstruction and Development • EFQM: European Foundation for Quality Management • ELDER: Association of Electricity Distribution System Operators • EMRA: Energy Market Regulatory Authority • EPİAŞ: Enerji Piyasaları İşletme AŞ • EÜAŞ: Elektrik Üretim AŞ • GAZDAŞ: Gaziantep Doğal Gaz Dağıtım AŞ ve Trakya Bölgesi Doğal Gaz Dağıtım AŞ • SPP: Solar Power Plant • GHG: Greenhouse Gases	• Gold Standard Certification: The most rigorous and reputable certification program for carbon offset projects globally • GRI: Global Reporting Initiative • GWh: Energy production/ consumption in one hour is 109 times Wh • HEPP: Hydroelectric Power Plant • ICMA: International Capital Market Association • IEA: International Energy Agency • IFC: International Finance Corporation • IIRC: International Integrated Reporting Council • ILO: International Labor Organization • IOT: Internet of Things • I-REC: International Renewable Energy Certificate	• IRENA: International Renewable Energy Agency • ISO: International Standards Organization • Inverter: Electronic device that converts direct current from solar panels or wind turbines into alternating current used in city grids • OHS: Occupational Health and Safety • GPP: Geothermal Power Plant • PDP: Public Disclosure Platform • Compensation: The process of keeping the shift between the voltage and current signal close to zero to reduce loss in electrical transmission • KPI: Key Performance Indicators • Installed Capacity The maximum capacity that a power plant can meet, an installation system can handle and an electricity grid can carry	• LNG: Liquefied Natural Gas • Megawatt (MW): One million times the international standard power unit Watt • Megawatt Electricity (MWe): One million watts of electricity capacity • Megawatt Peak (MWp): 1 million times the Watt-Peak • NZE: Net Zero Emission • OEDAŞ: Osmangazi Elektrik Dağıtım AŞ • OEPSAŞ: Osmangazi Elektrik Perakende Satış AŞ • PPA: Power Purchase Agreement • PV (photovoltaic): Panels that provide natural electricity generation with radiation from the sun, solar panel • WPP: Wind Power Plant • RO: Reverse osmosis • CEMS: Continuous Emission Measurement Systems	• SDG: Sustainable Development Goals (Sustainable Development Goals) • ASD: Association for Sustainable Development • LRST: Last Resort Supply Tariff • CMB: Capital Markets Board • TCFD: Task Force on Climate-Related Financial Disclosures • TEDAŞ: Türkiye Elektrik Dağıtım AŞ • TEİAŞ: Türkiye Elektrik İletim AŞ • Thermal Power Plant: Power plant generating electricity from heat generated by fuel • CBA: Collective Bargaining Agreement • TWRE: Turkish Women in Renewables and Energy • UN Women: UN Women	• UNDP: United Nations Development Program • UNECE: United Nations Economic Commission for Europe • UNFCC CDM: United Nations Framework Convention on Climate Change Clean Development Mechanism • UNGC: United Nations Global Compact • VER: Voluntary/Verified Emission Reduction • Watt-Peak (Wp): A power unit used in photovoltaic systems that measures the energy conversion rate • WEPS: Women's Empowerment Principles • WRI: World Resources Institute • YEKA: Renewable Energy Resource Areas • YEKDEM: Renewable Energy Resources Support Mechanism	• YEK-G: Renewable Energy Resource Guarantee Certificate • YETA: Renewable Tariff • ZES: Zorlu Energy Solutions
---	---	--	--	---	---	--	--



5 Elements

The 5 elements, which are used in conjunction with the theory of Yin and Yang in Traditional Chinese Medicine and are an important philosophy in East Asian culture, represents the most fundamental 5 components of the universe. The 5 elements of soil, fire, water, tree, and metal reflect a symbolic expression of the cycles, transformations, or processes they represent. The understanding of the universe in Far Eastern Philosophy is shaped around these five elements. The human body, physical and spiritual health, harmony between nature, matter, and the universe are interpreted through these five elements.

According to the teachings of the life energy in the Yin and Yang theory, it is believed that when a regular "balance" is achieved in the production and consumption cycle among the five elements, it is possible to benefit from the healing power of nature. Therefore, maintaining balance and restoring it when disrupted is considered a priority for the continuity of life.

As Zorlu Enerji, we strive to add value, comfort, beauty, and balance to every life we touch with our innovative services and activities in all the geographies we serve.

We know the importance of energy as a valuable resource. With the vision of being the energy company of the future, our priority is to protect and restore the living spaces we touch and make sustainable life possible with value-adding projects we develop, in order to leave a more livable world for future generations.

SOIL

It is an element that inspires trust, fosters growth and abundance, represents stability, and creates value.

FIRE

It signifies passion, dedication, rising and spreading, and is associated with the Sun.

TREE

It is an element associated with resilience, agility, leadership, and justice.

WATER

Water is one of the elements with the highest adaptability characteristics. It represents motion and transformation.

METAL

It is an element associated with resilience, agility, leadership, and justice.



Overview of 2022

TRUSTWORTHY EXPERIENCE,
GROWING VALUE EVERY DAY

SOIL

Abundance, Trust, Stability, Value

Zorlu Holding, which has been adding value to our country for 70 years on solid foundations, and Zorlu Enerji, its representative in the energy sector celebrating its 30th anniversary this year, continues its stable growth with its investments that aim to create a positive impact in every aspect of life.





OVERVIEW OF 2022

Milestones from 2022

The global energy crisis that began in 2022 with the Russia-Ukraine conflict has had profound impacts on households, businesses and entire economies. Alongside their short-term actions, governments have also laid out their long-term plans on ways to reduce the risk of future supply disruptions and promote energy supply. This global crisis, in which Europe played a leading role, and the problems in natural gas supply were at the center of discussions in the energy market in 2022.

Energy prices have increased with the crisis, reaching close to their 2014 highs for oil and historic highs for natural gas. This period also led to a shift of capital from consumers to producers. Increasing natural gas and coal prices account for 90% of the average cost increase in electricity generation globally. High price increases and economic pressures point to the number of people without access to modern energy increasing for the first time in a decade, while around 75 million people with access to electricity will soon be unable to afford it, suggesting that 100 million people could return to traditional biomass for cooking instead of cleaner, healthier solutions.

While consumers continue to look for alternatives to high-priced natural gas, and although the crisis has boosted demand for oil and coal in the short term, lasting gains from the crisis point to faster progress with efficiency and electrification, as well as a shift towards low-emission sources, particularly renewables.

The cost advantages of clean energy technologies and the prospects for new technologies such as low-emission hydrogen, as well as the Inflation Reduction Act in the United States and Europe's increasing push for clean energy, are accelerating the transition to an emerging global clean energy economy.

Although the demand for fossil fuels will increase in the next few years as a result of the energy supply crisis, the share of fossil fuels in global energy production is expected to decline from around 80 percent in 2022 to below 75 percent by 2030 and to around 60 percent by 2050. The effort to fully meet climate commitments also points to a decreasing trend in demand for all fossil fuels by 2030.

The underinvestment in energy in recent years leaves the energy system much more vulnerable to the kind of shocks we faced in 2022. A smooth and secure energy transition will require a massive increase in clean energy investments. Zorlu Enerji closely monitors developments in 2022 and continues its efforts to develop its business model in line with global developments.





CHAIRMAN'S MESSAGE

Zeki ZORLU
Board Chairman



We are deeply saddened by the earthquake disaster centered in Kahramanmaraş on February 6, 2023, which had a severe impact on other provinces in the region. We wish blessings to the citizens who lost their lives, patience and condolences to their relatives, and we hope that all the wounded will recover as soon as possible.

With our belief that the wounds will be healed with solidarity in such times, we closely follow the developments in our provinces affected by the earthquake and continue to be in contact with the relevant public institutions and aid teams for all kinds of support. As Zorlu Holding, we have been working since the first day to stand by the disaster victims with all our means. So far, through our Group companies and the Mehmet Zorlu Foundation, we have provided aid to the region amounting to 250 million TL. From now on, we will increase our aid to 1 billion TRY with the container living space for 5,000 people and the schools we will build to stand by the people of the region. We will continue to work with the responsibility of contributing to the social and economic development of our country and society, as we have done for seventy years.

The year 2022 witnessed profound economic, social and political disruptions that affected the whole world. In addition to the highest inflation in four decades, tightening fiscal conditions in most countries and the worsening economic impact of the ongoing COVID-19 pandemic, the Russia-Ukraine war has put pressure on the global economy. The tightening of policies by central banks, which turned to expansionary monetary and fiscal policies during the pandemic period, and policymakers' goals of bringing down inflation slowed down demand in all sectors on a global scale. This has resulted in a growing number of economies experiencing a slowdown or contraction in growth.

The global growth rate has decreased from 6 percent in 2021 to 3.2 percent in 2022 and is estimated to slow down to about 2.7 percent in 2023. These forecasts point to the weakest growth since 2001, excluding the global financial crisis and the acute phase of the COVID-19 pandemic, and indicate a significant slowdown. In 2022, the global economy suffered two consecutive quarters of negative growth due to the slowdown in the US economy, the constriction in the Eurozone, the real estate sector crisis in China and the ongoing COVID-19 pandemic. Global inflation was 4.7 percent in 2021 and 7.7 percent in 2022.

Energy was one of the sectors most affected by these developments. The global energy crisis, which escalated with Russia's invasion of Ukraine, which holds more than 20 percent of the world's natural gas reserves, and brought the two main gas pipelines between Russia and the EU, "Nord Stream" and "Yamal", to a near standstill for the first time in their history, has had far-reaching effects on households, businesses and entire economies. In addition to the short-term actions taken by governments, long-term plans to reduce the risk of future blackouts and promote renewable energy have started to be developed.

As this global crisis and the natural gas problem, in which Europe plays a leading role, took center stage in energy market discussions in 2022, the struggle for survival replaced the struggle against the climate crisis in Europe. With the energy crisis in the region, the momentum of renewable energy investments, which had increased in the past years, has declined, while coal investments are on the rise and countries have decided to reopen nuclear power plants that have been closed one after another. LNG imports, which are meant to replace reduced natural gas supplies for European countries, have increased by 60 percent compared to the previous year, while the price of TTF gas has risen more than tenfold.

In the light of all these developments, we observe that while the sector's expectation at the global level was for a reduction in the regulatory impact, the expectation has now shifted towards increased public investment support in the sector to overcome the possible recession. On the other hand, with the transformation resulting from downsizing life trends, we see that distributed system needs are increasing, which requires accelerated infrastructure investments.



Although demand for fossil fuels will increase in the next few years due to the global crisis, the share of fossil fuels in global energy is expected to decline to below 75 percent by 2030 and to 60 percent by 2050. The effort to fully meet climate commitments is also a factor that will affect the ability to reduce demand for fossil fuels within targeted timeframes. At the same time, at this point, while efficiency and electrification-oriented businesses are taking center stage in the sector, the increasing importance of renewable energy sources is once again proved.

The global clean energy economy, which has witnessed developments such as the development and cost advantages provided by clean energy technologies, incentives for new technologies such as low-emission hydrogen, and the United States' Inflation Reduction Act, is growing day by day, supported and developed by Europe's increasing effort for clean energy and new policies.

The energy sector is rapidly moving towards the era of independent and decentralized renewable energy all over the world. As investments in areas such as supply security, digitalization, cyber security, blockchain, etc. expand with emerging technologies, the vital importance of renewable energy is better understood. International Energy Agency data shows that the expected growth in renewable energy

in the next 5 years will be equal to the growth experienced in the world in the last 20 years. As Zorlu Enerji, we see that areas such as green certification, hybrid power plants, electric vehicle charging stations and energy efficiency, which we have been working on for years, are rapidly expanding their place in the sector, and in parallel, ESG studies have become the focus of the sectors all over the world, not only on paper but also in the field, and we are pleased with the pioneering work we have done on behalf of our sector.

In 2022, Turkey increased its emission reduction target from 21 percent to 41 percent by 2030 at the 27th Conference of the Parties (COP27) to the United Nations (UN) Framework Convention on Climate Change. While 2038 was determined as the emission peak date, it was announced that emissions will start to decrease after 2038 and the net zero target will be achieved in 2053.

Within the scope of the National Energy Plan 2022, which will support both the economic growth and green energy transformation of our country and is prepared within the framework of the 2053 net zero emission target; an increase of approximately 39.5 percent in energy consumption is expected until 2035. It is stated that renewable energy sources, which have a share of 16.7 percent in primary energy consumption for 2020, will increase to 23.7 percent by 2035. The plan, which will take the green energy transformation "to the next level", aims to have 1 million electric vehicles on the

roads by 2030 with incentives to expand the electric vehicle ecosystem.

Energy demand is expected to continue to increase in the coming years due to economic growth and population growth. While it is predicted that investors interested in the energy sector will want to evaluate opportunities in the renewable energy sector instead of traditional energy sources such as oil and natural gas, it becomes important that investments include concepts such as reducing greenhouse gas emissions, protecting natural assets, supporting local communities and improving working conditions of employees.

The sustainability approach and values of companies that will invest in this area should be compatible with their ESG and financial goals. The needs and expectations of all stakeholders such as customers, employees and investors should be taken into account when setting these goals.

Zorlu Enerji closely follows the developments in 2022 and continues its efforts to develop its business model in line with global developments. Zorlu Enerji increased its performance rating from 57 points in 2021 to 61 points this year in the ESG assessment, which measures environmental impacts, social practices and corporate governance performance, and registered its rating as "advanced". I believe that Zorlu Enerji, which is preparing for the future with its ESG-based

regenerative business model approach, will be better prepared for economic vulnerabilities and climate risks.

As until today, we will continue to share the value we create with our stakeholders through our highly qualified human resources, innovative solutions and investments in projects focused on energy supply security and sustainability.

I would like to take this opportunity to extend my gratitude to our employees, our shareholders, our valuable business partners and all our stakeholders, whose constant support we feel, and to our employees, who, as always, showed high motivation despite the challenging conditions in 2022 and played a role in bringing uninterrupted energy to the farthest points of the country. I sincerely wish that the year 2023, when we will celebrate the 100th anniversary of our Republic, will bring well-being, health, peace and prosperity to the whole world, especially to our country.

Sincerely,

Zeki ZORLU
Board Chairman



CEO'S MESSAGE

İ. Sinan AK
CEO, Zorlu Enerji



Dear Stakeholders,

We are deeply saddened by the earthquakes that began on February 6, 2023 and affected eleven provinces, killing tens of thousands of our citizens. I wish prayers of mercy to all our citizens who lost their lives, condolences and patience to their families and relatives, and a speedy recovery to those who were injured.

We are confident that we will overcome these difficult days in unity and solidarity. As Zorlu Enerji, we mobilized all our resources from day one to help the people of the region. We supported the provision of electricity supply by deploying our electricity distribution services teams in Adıyaman. In Gaziantep and Kilis, our gas distribution region, we mobilized all our teams and worked 24/7 to ensure that the region was quickly supplied with natural gas. We sent aid trucks to Osmaniye province, where our Gökçedağ Wind Power Plant is located, and to the entire earthquake region to quickly heal the wounds. Our search and rescue teams and volunteer colleagues have been active in the region since the first day of the disaster. In order for the region to recover rapidly, we will continue to stand by our citizens with our projects that touch life in the coming period.

With these feelings and thoughts, I would like to present you our second integrated annual report, in which we have compiled our activities and sectoral developments in 2022 with the mission of a sustainable future.

As we enter the second century of our Republic, I am proud to share that our Company is taking strong steps towards its goals for a more robust future.

The year 2022 was a year in which the world tried to get used to the "new normal" as natural disasters such as droughts, hurricanes and floods continued with the increasing effects of the climate crisis and the global health crisis tried to be kept under control.

In our sector, which is one of the main actors of the economy, energy geopolitics has become decisive in international relations. The energy sector's activity agenda mainly focused on security of supply, climate crisis, digitalization, automation, electrification and mobility-centered transformation.

The political relations that led to the energy crisis that has severely affected Europe have led to an increase in energy prices, as well as a deterioration in food policies, and a deepening of the chip and raw material problem that was already on the agenda. Difficulties in sourcing high-priced chips and raw materials and logistics costs started to decline in the last quarter of 2022. Implementation of alternative renewable energy solutions can only produce results in the medium term when investment processes are taken into account.

When we look at the steps taken in the field of sustainability in the global arena, we see that it was a year in which carbon targets were closely monitored. At COP27 in November, the presidents of the world's two largest greenhouse gas emitters, the United States and China, gave the world hope by coming together and reaching an agreement to resume cooperation on climate change after a long period of tension. On the other hand, discussing the need for sectoral and system-wide transformations can also be considered a positive step. According to the UN Environment Program's (UNEP) Emissions Gap 2022 report, the world needs to reduce emissions by 45 percent to avoid catastrophe, and societies need to transform for a collective solution. The steps to be taken by the energy sector, which is one of the few important sectors for mitigation, will be critical.

We need to implement moves that will turn the energy crisis in Turkey's favor.

Despite the developments around the world, the figures show that Turkey has maintained employment and production and increased its exports, the most important stabilizer of the current account deficit. If we can make good use of this moment when the right time intersects with the opportunities we have, and if we can quickly implement the moves that will turn the energy crisis in Europe in favor of both our country and our sector, we can make a new beginning. In this respect, I find the natural gas discoveries made by our country in various fields valuable and I attach great importance to the investments to be initiated in our country in terms of rapidly putting the gas, which is found as an element that will change the balances, into the service of the sector.

As a highly experienced and successful company in terms of "new beginnings", we know from experience that in this environment where the need for security of supply is at an all-time high, actors with sufficient size, talent, technology and quick decision-making will stand out. Based on this experience, as a company that has all the capabilities to take the necessary steps, we focus on producing local and regional solutions that touch today, this moment, without waiting for tomorrow, both in the fields of electric vehicles and solar panels. With our consumer brands ZES and Electrip, we are working with the aim of realizing environmentally friendly and sustainable business models in both solar panels and electric vehicle charging stations.

In this regard, we continued our efforts to increase the share of renewable energy in our generation portfolio and improve our resource diversity throughout 2022. Investing especially in electrification and energy efficiency-oriented businesses has been one of the most important items on our agenda.



In 2022, our consolidated turnover increased by 158% to 30 billion TL.

As Zorlu Enerji, we achieved healthy growth and profitability in 2022. The company's consolidated turnover increased by 158% in 2022 compared to the previous year, reaching 30 billion TRY. In this period, EBITDA grew by 121% to 8.2 billion TRY, while Net Financial Debt/EBITDA ratio declined to 3.8x. As a result of strong growth in turnover and EBITDA, we closed 2022 with a net profit of 111 million TRY.

During the year, to finance our investments in electricity distribution, we secured financing from international financial institutions including the European Bank for Reconstruction and Development (EBRD), the Asian Infrastructure Investment Bank (AIIB), the International Finance Corporation (IFC), the Dutch Development Bank (FMO) and Denizbank for a total of \$375 million, repayable in Turkish lira.

We aim to grow healthily in Turkey with ZES and abroad with Electrip brand.

We expanded our network of electric charging stations. We started to establish our teams in Turkey with ZES and abroad with our Electrip brand for Europe-oriented growth. We continue our efforts to grow with charging station investments in Southern and Eastern Europe and to achieve a minimum 10% market share in the countries we enter. Our goal is to maintain the leadership we have achieved in our country with ZES and to reach a considerable size for our Electrip brand. We envision differentiation in energy management, especially with the investments we will make in our software and digital technology infrastructure. As a company with customer experience points that are managed with a good platform and produce fast solutions, we received our license from EMRA to operate as a charging network operator. With this license, we can not only install our own charging stations, but also issue certificates, commission the dealership process and sell platforms.

We broke new ground in geothermal energy, in which we are the leader in Turkey, and converted the Alaşehir Geothermal Power Plant into a hybrid (combined energy)

power plant with the support of a solar power unit. This project will be one of the pioneering examples of combined power plants in Turkey in terms of the technology it uses. On the other hand, we have serious geothermal discoveries in areas such as Aydın and Ağrı to be utilized when the investment climate is favorable. With the support of the EU Horizon 2020 Program, our fields continue to be used as pilot regions in many R&D projects, especially geothermal. GECO, one of the projects we have implemented, is the first in the world as an international carbon emission reduction project at our Kizildere 3 Power Plant, Turkey's largest geothermal power plant.

In the field of solar panels, we continue to both produce and cooperate with the world's major manufacturers. This year, for the first time, we started producing high-end solar panels with our ZES brand. On the other hand, we continue to distribute strong brands such as Solis and Enphase, which are world giants.

We ranked 4th among 57 companies in the world with our sustainability-oriented activities.

Another important investment area in 2022 was our stakeholder, community and planet-focused efforts in line with Zorlu Holding's Smart Life 2030 strategy. As a result of the assessment conducted by Moody's in 2022, we increased our score for our activities in ESG areas by 4 points compared to the previous year. Thus, we raised our rating to "Advanced" level with a total score of 61 points. With our high success in our ESG activities, we ranked 4th among 57 energy companies that are actively evaluated on a global scale. Our goal is to raise our rating much higher.

This year, with our sustainability strategy, we became one of the 14 companies from Turkey included in the 'Global Sustainability Leaders' survey prepared by Argüden Governance Academy. We were among the first signatories of the "CFO Principles on Integrated SDG Investments and Finance" published by the "CFO Coalition" established by the UN Global Compact in line with the Sustainable Development Goals (SDGs). We were also the first energy company to sign the International Science Based Targets Initiative (SBTi), which aims to reduce and eliminate the negative impacts of the climate crisis.

As an important step we took in the field of equal opportunities, we first equalized the number of female and male employees in our retail electricity sales company. Then, we launched the "Power of Women, Power of the Future Program" in Gaziantep, one of our operating regions, which aims to increase women's employment in the technical business areas of our industry and to train the female technicians of the future as a good example of public-academia-private sector cooperation.

Throughout the year, our activities were also honored with many awards. The Zero Carbon Footprint Forests Project, which we implemented to combat the climate crisis and for a sustainable future, received the Silver Achievement Award at the Sustainable Development Goals Awards organized by the Corporate Social Responsibility Association of Turkey. We were deemed worthy of an award in the "Climate Action" category in the organization where organizations that contribute to the realization of the 17 Sustainable Development Goals defined by the United Nations are evaluated. With the same project, we received the "Our Energy is Our Future" Award at the Turkey Energy and Natural Resources Summit.

We were awarded as the best in our sector in the "Leadership in Ethical and Environmental Responsibility" category at the Communitas Awards organized by the International Association of Marketing and Communication Professionals (AMCP) for the social responsibility projects and sector-leading practices we implemented in order to combat the climate crisis and ensure a sustainable future.

Our efforts to become a company that touches customers more with our infrastructure activities in the field of energy management were crowned with the Gold Award in the field of "Contact Center of the Year" at the 16th Stevie® Awards for Sales and Customer Service. In addition, we won the "Diamond Award" by being selected as the "Brand that Manages Customer Experience the Best" at the A.C.E. Awards 2021, which evaluates the customer satisfaction management of all customer-facing units of brands in Turkey. Thus, for the fourth time in a row, we became the company that provided the best customer satisfaction in the 'Energy' category.

We have signed a sponsorship that will set an example for industry and university cooperation in order to transfer their experiences to future generations and to contribute to young people's efforts to develop their learning-based scientific projects. We also mentor the ITU ZES Solar Car Team by sharing our knowledge and experience that goes far beyond financial support.

We are proud of our work throughout 2022. But we have a long way to go. Our goals are also clear on this path. As a company that produces energy and leads the management and transformation of the energy it produces, we plan to achieve net zero emissions in our operations and energy production by 2030, to extend this goal to the entire value chain by 2040, and to be a net zero emission company by 2050. We also aim to invest at least 10 million TRY in biodiversity.

We hope that our integrated annual report, in which we share a comprehensive view of our company's performance in financial, social, environmental and governance dimensions and our future goals, as well as revealing that we put our ESG efforts at the center of the way we do business and explaining our plans for our sustainability journey, will provide a comprehensive view of our performance in every aspect and inspire the entire business world, especially our industry, to work towards creating a more sustainable future.

In 2023, in line with our domestic and international growth strategy, we will continue to work with the goal of leading our industry in many areas.

I would like to thank all our shareholders and business partners, whose support we have always felt during this process, and all our colleagues who have worked with endless devotion under all circumstances.

With my warm regards,
İ. Sinan AK

Sector President - CEO



GOVERNANCE IN ZORLU ENERJİ

Zorlu Enerji Board of Directors



ZEKİ ZORLU
BOARD CHAIRMAN

(1939 - Denizli) Zeki Zorlu began his career in the family-owned textile company in Babadağ, Denizli. Having opened his first textile store in Trabzon, Zorlu laid the foundations of Korteks in Bursa in 1976. Zorlu founded Zorlu Holding together with his brother Ahmet Nazif Zorlu and added Vestel to the Holding's business portfolio in 1994. He also played a critical role in the foundation and acquisition of numerous companies in energy, tourism and real estate industries. In addition to his chairmanship duty on the Board of Zorlu Enerji, Zeki Zorlu also serves as the Vice Chairman of Zorlu Holding and as chairman for Zorlu Group companies operating in textile and real estate industries. Also assuming active roles in several civil society organizations, Zorlu is the Vice President of Textile Industry Assembly of TOBB (The Union of Chambers and Commodity Exchanges of Turkey). Zorlu is a member of the International Patent Cooperation Union, BUFAD (Bursa Disaster and Emergency Management Association), KALDER (Turkish Society for Quality), SUSEB (Association of Artificial Synthetic Fiber Manufacturers), the Bursa Research Foundation and the Association for International Competition and Technology.



BEKİR AĞIRDIR
VICE CHAIRMAN

(1956 - Denizli) After graduating from the Department of Business Administration at Middle East Technical University in 1979, Bekir Ağırđır served respectively, as Sales Manager and then Assistant General Manager at Bilsan Bilgisayar Malzemeleri AŞ (1980-1984), Sales Coordinator at Meteksam Ltd. (1984-1986), General Manager at Pirintaş Bilgisayar Malzemeleri ve Basım Sanayi AŞ (1986-1996), Deputy General Manager at Atılım Kâğıt ve Defter Sanayi AŞ (1996-1999) and as General Manager and Board Member at PMB Akıllı Kart ve Bilgi Teknolojileri AŞ (1999-2003). During 2003-2005, he worked as a Coordinator and then as General Manager at Tarih Vakfı (History Foundation of Turkey). Since 2005, Mr. Ağırđır has served as the General Manager and Board Member of KONDA Araştırma ve Danışmanlık Limited Şirketi (KONDA Research and Consultancy), and as of June 2022, he handed over his position as General Manager. In addition to his position as Vice Chairman of the Board at Zorlu Enerji, Ağırđır also serves as a Board Member of Vestel Beyaz Eşya Sanayi ve Ticaret AŞ and Vestel Elektronik Sanayi ve Ticaret AŞ, two other Zorlu Group companies. Bekir Ağırđır is the Board Member of Turkey Economic and Social Studies Foundation (TESEV) and Hrant Dink Foundation, and founding member of Yanındayız Association, Democratic Republic Program and EYMİR Cultural Foundation, and member of METU Alumni Association and commentator of T24 Internet Newspaper and GAIN Internet Media.



AHMET NAZİF ZORLU
BOARD MEMBER

(1944 - Denizli) Ahmet Zorlu began his professional career in a family-owned textile business in Babadağ, Denizli. Opening his first textile store in Trabzon, Ahmet Zorlu moved the company's headquarters to Istanbul and laid the foundations of Zorlu Holding together with his brother, Zeki Zorlu in 1970. Ahmet Zorlu set up his first company, Korteks in 1976 and gathered all of the companies under the roof of Zorlu Holding in 1990. Acquiring Vestel in 1994, Zorlu opened the door to new lines of business for Zorlu Holding. Ahmet Zorlu's entrepreneurialism, which began with the textile industry, went on to manifest itself in more companies operating in a wide range of industries such as consumer electronics, household appliances, energy, property development, metallurgy and defense. In addition to his duty as a Board Member at Zorlu Enerji, Ahmet Zorlu also serves as the Chairman or Vice Chairman of the Board in numerous Zorlu Group companies operating in different industries particularly including Vestel Elektronik and Vestel Beyaz Eşya. With a keen interest in non-governmental organizations, Zorlu sits on the Board of DEİK (Foreign Economic Relations Board), TUSIAD (Turkish Industry and Business Association), DENSİR (Education and Culture Foundation of People of Denizli), BASIAD (Babadağ Industry and Business Association) and TETSIAD (Turkish Home Textile Association).



OLGUN ZORLU
BOARD MEMBER

(1965 - Trabzon) Upon completing his higher education in textiles and business administration in the UK, Olgun Zorlu began his professional career in 1986. He started to serve in managerial positions at various Zorlu Group companies in 1988 and managed their foreign market research and business development operations. Zorlu started serving as a Board Member at Zorlu Holding in 1998. In addition to his board membership at Zorlu Enerji, Olgun Zorlu also serves as a Board Member at Zorlu Holding and various other Zorlu Group companies. Olgun Zorlu is a member of TUSIAD (Turkish Industry & Business Association) and TETSIAD (Turkish Home Textile Association).



SELEN ZORLU MELİK
BOARD MEMBER

(1975 - Trabzon) Selen Zorlu Melik graduated from the Department of Business Administration at Uludağ University. She began her professional career at Denizbank in 1998. Following her internship at Denizbank's Bursa branch, she joined the Management Trainee Program of the bank in 1999. After working in a number of positions at Denizbank's head office, she attended a Marketing Certificate Program at the University of California, Berkeley, USA in 2001. Melik began working at the Korteks Yarn Factory in 2002 and became a Board Member of the same company in 2004. Selen Zorlu Melik has been serving as a Board member at Zorlu Enerji since 2002



MEHMET EMRE ZORLU
BOARD MEMBER

(1984 - İstanbul) After graduating from the Electrical and Electronics Engineering Department at Koc University in 2006, Emre Zorlu completed his master's program in Innovation and Technology Management at Essex University in the UK in 2007-2008 and started working at Vestel Group of Companies in 2009. In addition to being a member of the Board of Directors at Zorlu Enerji, Zorlu also serves on the boards of Zorlu Holding and Zorlu Group companies. Emre Zorlu has been a member of the Board of Directors at Vestel Ventures ARGE AŞ, which aims to support and fund entrepreneurship in many areas such as technology, innovation and IP investments since 2015. Emre Zorlu is the Chairman of the Board of Directors of social innovation platform İmece and a Member of the Board of Trustees of the Entrepreneurship Foundation.

**BEKİR CEM KÖKSAL**
BOARD MEMBER

(1967 - Ankara) Cem Köksal graduated from the Department of Mechanical Engineering at Boğaziçi University in 1988 and completed his master's degree at Bilkent University in 1990. Köksal worked in the banking sector between 1990 and 2001. Köksal, who started as Deputy General Manager at Denizbank in 1997, joined Vestel in 2002 as the Head of Finance. Köksal, who continues to serve as a member of the Executive Board of Vestel Group of Companies, is also the chairman of Zorlu Holding AŞ Financial Affairs Group. Köksal has been serving as a member of Zorlu Enerji Board since 2002. Köksal also serves as the Chairman of the Sustainability Committee at Zorlu Holding AŞ. Cem Köksal is a member of the Board of Directors of UN Global Compact Turkey and a substitute member of the Board of Directors of the Association for Business and Sustainable Development (SKD).

**AYŞEGÜL İLDENİZ**
BOARD MEMBER

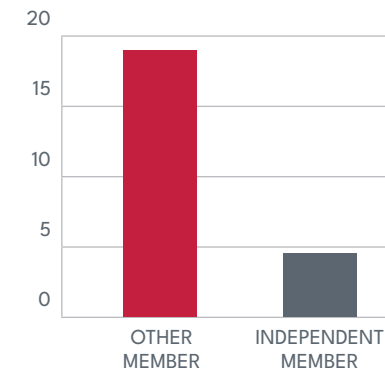
(1969 - İzmir) Ayşegül İldeniz graduated from Boğaziçi University, Department of Business Administration and completed her master's degree in Digital Communication at the University of San Francisco. After joining the global microprocessor giant Intel in 1998, Ayşegül İldeniz served as General Manager of Turkey; President of the Turkey, Middle East and Africa Region, which includes 67 countries; Member of the European Board of Directors; and World Vice President of the New Technologies Group at Intel Headquarters in Silicon Valley. Ms. İldeniz joined Silver Spring Networks, which is traded on the New York Stock Exchange and holds half of the American smart energy market with 26 million users, as COO in 2016 and implemented programs on smart cities in cities such as Chicago, Singapore, Paris, Copenhagen and Dubai. Ayşegül İldeniz is a pioneer in innovation, technology and future vision in Silicon Valley and Istanbul. In 2015, Ms. İldeniz was named "The World's Top 100 Most Creative People" by Fast Company, one of the most prestigious publications in the USA, and "America's 3rd Most Influential Turkish Woman" by TOA (Turks of America), and in Turkey, she was named "IT Woman of the Year" in 2004 and "Woman Executive of the Year" in 2006 by Dünya Newspaper; she was also awarded the 'Betül Mardin Leader Creating the Future' Award in 2016 and the Honorary Award by the METU Senate. She is a 2010 Eisenhower Turkey Fellow and currently the Chair of TÜSİAD Silicon Valley Network and a Board Member of the American Turkish Society and the New York-based "Turkish Philanthropy Funds". Ayşegül İldeniz also serves as a Board Member at Vestel Elektronik Sanayi ve Ticaret AŞ, Zorlu Enerji Elektrik Üretim AŞ, Doğan Şirketler Grubu Holding AŞ and Pegasus Hava Taşımacılığı AŞ.

**CEM MENGİ**
BOARD MEMBER

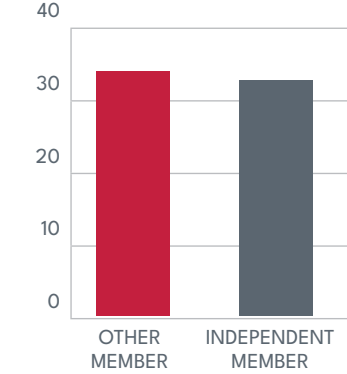
(1965- İzmir) Cem Mengi got "A Level" on Mathematics and Physics in the UK in 1984 and completed his education on Information Management Systems at International University Faculty of Business and Management in 1988. In the same year, he started his banking career at Finansbank, and held positions of Deputy General Manager and Chief Deputy General Manager in various fields at Interbank, Körfezbank, Rabobank International NV and ING Bank, respectively. Most recently, he served as the Chairman of the Credit Committee and Executive Board Member Responsible for Loans and Placements at Akbank TAŞ. Mengi, who was a Committee Member in organizations such as TUSIAD, DEİK, YASED and GYIAD in the past, is the Founding Chairman of CM Capital Management Company.

Metrics on the Board of Directors

Average Term for Board of Directors (Years)



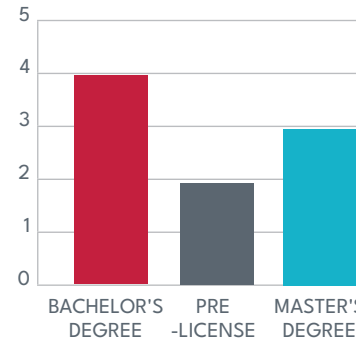
Average Work Experience for Board of Directors (Years)



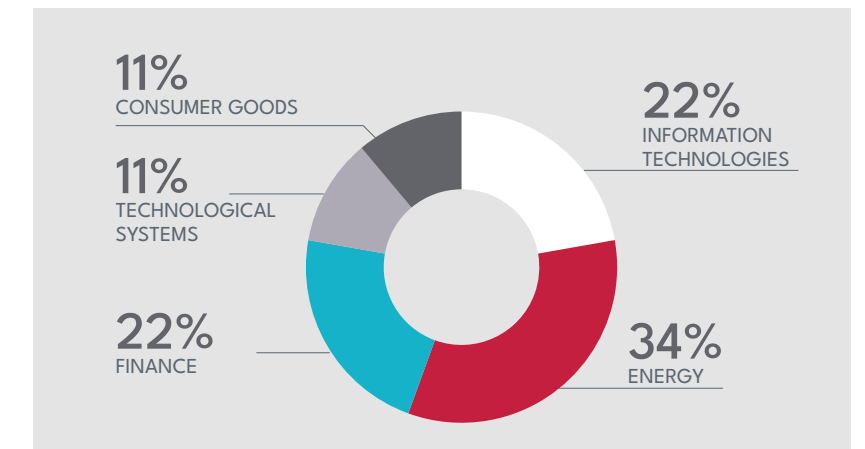
Board of Directors Gender Breakdown (Person)



Educational Status for Board of Directors (Person)

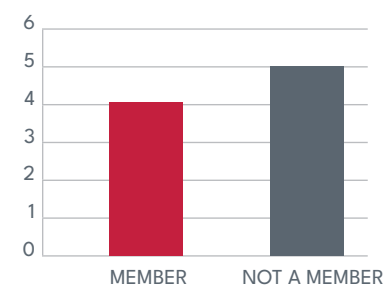


Sectoral Experience Breakdown (%)

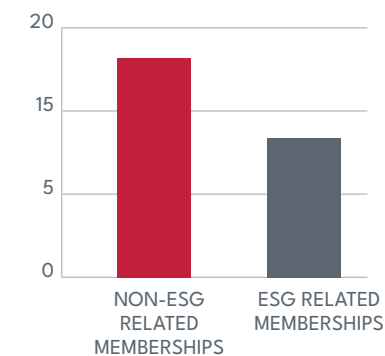


*The table is prepared in accordance with Global Industry Classification Standards (GICS). The Global Industry Classification Standards (GICS) is an industry taxonomy developed by MSCI and Standard & Poor's (S&P) for use by the global financial community.

Members of Board of Directors Assigned to Committees (Person)



ESG Related Memberships (Number)





Zorlu Enerji Senior Management



İBRAHİM SİNAN AK
CEO

(1971- Ankara) İ. Sinan Ak graduated from the Department of Management Engineering at Istanbul Technical University. He started his career as an investment specialist at Evgin Yatırım Menkul Değerler. He then received his MBA from Old Dominion University in the U.S. After working as a Finance Chief at Vestel Komünikasyon from 2000 to 2002 and as Finance Manager at Vestel Beyaz Eşya from 2002 to 2006, Ak joined Zorlu Energy Group in 2006. Ak served as the Deputy General Manager of Finance until 2012 and became the General Manager of Zorlu Enerji in January 2012. Ak has served as the CEO of Zorlu Energy Group, of which Zorlu Enerji Elektrik Üretim AŞ is a member, since December 1, 2016. Ak is also the CEO of Electrip Global Limited, a joint venture between Zorlu Enerji and Wren House Infrastructure LP (WH), which provides electric vehicle charging operator services.

İ. Sinan Ak is the Chairman of the Executive Board of the Turkey-Israel Business Council of the Foreign Economic Relations Board (DEİK) and a member of the Energy Business Council, Turkey-Russia Business Council, Turkey-Greece, Turkey-America and Turkey-UK Business Councils.

Member of the Board of Directors of the Electricity Distribution Services Association (ELDER) and Vice Chairman of the E Mobility Operators Association (E-MOD), Mr. Ak closely follows sectoral activities as a member of the Electricity Producers Association (EÜD), Turkish Electricity Industry Association (TESAB), Energy Efficiency Association (ENVER), Energy Investors Association (GÜYAD) and International Solar Energy Society (GÜNDER), Solar Energy Industrialists and Industry Association (GENSED), Roof Industrialists and Businessmen Association (ÇATIDER), Turkish Employers' Association of Construction Industries (INTES), Geothermal Energy Association (JED), World Energy Council Turkish National Committee Association (DEK), UN Global Compact, Energy Trade Association, TOBB Energy Assembly and TÜSİAD Energy Working Group, and is actively involved in the activities of Sabancı University Istanbul International Energy and Climate Center (IICEC).



ALİ KINDAP
GENERAL MANAGER
RESPONSIBLE FOR INVESTMENTS,
OPERATIONS AND MAINTENANCE

(1968 - Çankırı) Ali Kindap graduated from the Department of Mechanical Engineering at Middle East Technical University in 1990. He started his career at Gama Endüstri and later worked at Gürış Mühendislik ve İnşaat AŞ in energy and infrastructure projects. Kindap joined Zorlu Energy Group in 2008 and served as the Deputy General Manager Responsible for Thermal Power Plant Investments between 2011 and 2016. Ali Kindap was appointed as the General Manager Responsible for Investments, Operations and Maintenance as of January 1, 2017.

Ali Kindap is the Chairman of the Board of the Geothermal Energy Association (JED) and also serves as a Board Member at the Turkey Cogeneration Association Dear Kindap is also a member of Turkish Wind Energy Association (TÜREB), Bioenergy Association (BİYODER), Hydrogen Technologies Association and Energy Industrialists and Business People Association (ENSİA).



AYDIN AKAT
GENERAL MANAGER
RESPONSIBLE FOR INDUSTRIAL
PROJECTS AND APPLICATIONS

(1970 - Erzincan) Aydın Akat received an associate degree in civil engineering from Middle East Technical University in 1990 and graduated from the Department of Civil Engineering at Istanbul University in 1996. Akat began his career at Cevahirler İnşaat in 1990 and worked in various construction projects at Tekfen İnşaat from 1996 to 2005. Akat joined Zorlu Energy Group in 2005 as a Project Manager at Zorlu Endüstriyel ve Enerji Tesisleri İnşaat Ticaret AŞ and later served as an Engineering Manager at the same company from 2008 to 2011. Akat was the Deputy General Manager Responsible for Projects at Zorlu Enerji Elektrik Üretim AŞ from October 2011 to the end of 2016. Aydın Akat has been serving as the General Manager Responsible for Industrial Projects and Applications since January 1, 2017.



ELİF YENER
GENERAL MANAGER
OF FINANCIAL AFFAIRS

(1980 - İstanbul) Elif Yener graduated from the Department of Industrial Engineering at Boğaziçi University in 2004. After working in the Project Finance Department at Denizbank from 2004 to 2010, she enrolled in the MBA program at Columbia University and received her MBA in 2011. She joined Zorlu Holding in 2011 and was appointed to the position of Strategy and Business Development Manager in 2012. Yener joined Zorlu Energy Group in 2014. Elif Yener served respectively as Financial Affairs Group Manager and Financial Affairs Director and has been serving as the General Manager of Financial Affairs since July 1, 2019. Yener is a member of the Integrated Reporting Turkey Network (ERTA) and a signatory of the CFO Principles for Integrated SDG Investments and Financing published by the CFO Coalition of the UN Global Compact.



FUAT CELEPCİ
GENERAL MANAGER
RESPONSIBLE FOR
ELECTRICITY AND GAS
DISTRIBUTION OPERATIONS

(1959 - Kayseri) Fuat Celepci graduated from the Civil Engineering Department of the Middle East Technical University in 1982 and received his master's degree from the Faculty of Law at Bilkent University in 2011. He began his career as a civil engineer at the Turkish Electricity Corporation (TEK) in 1982. In 1984, Celepci joined BOTAŞ, where he served as the Deputy General Manager and a Board Member from 1999 to 2005. After retiring from his role as an advisor to the BOTAŞ General Manager in 2012, Celepci joined Zorlu Energy Group in 2012 and served as the General Manager of GAZDAŞ Gaziantep Doğal Gaz Dağıtım AŞ and Trakya Bölgesi Doğal Gaz Dağıtım AŞ, two Zorlu Energy Group companies, from 2012 to 2016. Since January 1, 2017, Celepci has been serving as the General Manager responsible for Electricity and Gas Distribution Operations at Zorlu Energy Group. Fuat Celepci serves as a Board Member at the Natural Gas Distribution Companies Association of Turkey (GAZBİR).



İNANÇ SALMAN
GENERAL MANAGER
RESPONSIBLE FOR TRADE

(1981 - İstanbul) İnanç Salman graduated from the Department of Industrial Engineering at Istanbul Technical University. Following his bachelor's degree in Industrial Engineering, he received his master's degree from Istanbul Technical University in 2006. Salman joined Zorlu Group in 2004 and served at the Zorlu Holding Human Resources Department from 2004 to 2007. In 2007, he joined Zorlu Energy Group, where he served respectively as Project Engineer, Organization Development Supervisor and Organization Development Manager. Salman served as the Deputy General Manager Responsible for Energy, Trade and Planning from 2013 to 2017. After serving as the Director of Trade from 2017, İnanç Salman was appointed as the General Manager Responsible for Trade on September 1, 2020. Salman is a member of Sales Network and All Battery Importers and Manufacturers Association (TÜMAKÜDER).



ERSEN ÖZYILMAZ
DIRECTOR OF PURCHASING
AND LOGISTICS

(1975 - İstanbul) Born in 1975 in Istanbul, Ersen Özyılmaz graduated from the Department of Electronic Control Systems at Zonguldak Karaelmas University in 1997. Özyılmaz started his career as a Purchasing Officer in the Technical Purchasing department at Gönpa AŞ and joined Zorlu Energy Group in 2000. He has worked as Purchasing Specialist, Purchasing Supervisor and Purchasing Manager within Zorlu Energy Group for more than 20 years. Özyılmaz has contributed to Zorlu Enerji's purchasing and logistics operations, most recently as Deputy Director of Purchasing and Logistics. He was appointed as Zorlu Enerji's Purchasing and Logistics Director on September 1, 2020.



EVREN EVCİT
DIRECTOR OF ZORLU SOLAR AND
FOREIGN INVESTMENTS

(1978 - İstanbul) Evren Evcit graduated from the Department of Mechanical Engineering at Istanbul Technical University and received his MBA from Boğaziçi University. Following his graduation, he served as the Chief Operating Officer and later as CEO at Anel Enerji. He was the Managing Director of Turkey at First Solar from 2014 to 2017. Evcit, who has been the Director of Zorlu Solar at Zorlu Energy Group since May 2017, also assumed the position of the Director of Purchasing and Logistics as of August 1, 2018. Evcit has been serving as the Director of Zorlu Solar and Foreign Investments since September 1, 2019. Evren Evcit is the Vice Chairman of the Executive Committee of the Turkey-Pakistan Business Council of the Foreign Economic Relations Board (DEİK). He is also a member of DEİK Turkey - Palestine and Turkey - Indonesia Business Councils. Evren Evcit is a Board Member at the Turkish Solar Energy Industry Association (GENSED).



FÜLYA BIÇAK MUŞTU
DIRECTOR OF INFORMATION
TECHNOLOGIES AND BUSINESS
DEVELOPMENT

(1974 - İzmir) Fulya Bıçak Muştı graduated from the Department of Industrial Engineering at Middle East Technical University and completed her MBA at Yeditepe University. Muştı worked as a senior Information Technology Manager at Bimsa, Danones, British American Tobacco, Çelebi Holding, Evyap Holding, Balpamak and HD Holding. Having 21 years of management experience, Muştı has served as a Senior Executive responsible for IT in the companies for the last 18 years. She has served as a Member of the Executive Board in various companies. In addition to IT Management, she has also been involved in the structuring of different functions of the management discipline such as Strategy Management, Corporate Process Management, PMO Management in different companies. Muştı, who has been working as the Director of Information Technologies and Business Development at Zorlu Energy Group since 2020, was included in the 2021 Fortune "Technology Leaders Shaping the Future" list. In 2023, she continues her successful work as one of the "50 Most Influential Technology Leaders" by BMI Business School in cooperation with DataExpert. In addition to her professional management role, she is involved in various volunteering activities such as Kalder EFQM Award Evaluator, ITSMF Turkey Board Member, IDC Advisory Board Member and social responsibility activities for some young people in need.



FUNDA KÜÇÜKOSMANOĞLU
MARKETING AND CORPORATE
COMMUNICATIONS DIRECTOR

(1971 - İstanbul) After graduating from the Physics Department at Uludağ University, Funda Küçükosmanoğlu first completed the English MBA program of Yeditepe University and then successfully completed her second university education at the Cultural Heritage and Tourism Department of Istanbul University. Küçükosmanoğlu, who started her career in 1997 at Turkcell İletişim AŞ, has undertaken different roles in the field of customer relations management at Turkcell and affiliated companies. After her experience as a manager in different areas of communication at the Corporate Communications Department of Coca-Cola Turkey, Küçükosmanoğlu joined Nestlé Waters Turkey in 2019 as Corporate Communications Manager. Küçükosmanoğlu who joined Zorlu Enerji as the Corporate Communications Group Manager in January 2021, has been appointed as the Marketing and Corporate Communications Director as of July 2022. Funda Küçükosmanoğlu is a member of Corporate Communicators Association, Business Council for Sustainable Development (BCSD Turkey), Corporate Responsibility Association of Turkey (TKSD), Private Sector Volunteers Association (ÖSGD) and Public Relations Association of Turkey (TÜHİD).



KAAN GENÇEL
DIRECTOR OF QHSE AND
SUSTAINABILITY

(1980 - Rize) Kaan Gençel graduated from the Department of Environmental Engineering at Middle East Technical University in 2004. He began his career in the field of Occupational Health, Safety and Environmental Engineering at Enka Enerji from 2005 to 2006. He participated in the MBA Program for International Management of Resources and Environment at the Technical University of Bergakademie Freiberg between 2006 and 2008. Additionally, he worked as an Occupational Health, Safety and Environment Engineer at Enercon Servis from 2008 to 2009, and as an Occupational Health, Safety and Environment Chief Engineer at Petkim from 2010 to 2013. He later worked as an Occupational Health, Safety and Environment Chief Engineer at Tüpraş from 2014 to 2016, after which he served as an Occupational Health, Safety and Environment Manager at Pegasus Airlines. Gençel who joined Zorlu Enerji Group as the Occupational Health, Safety and Environment Manager in 2018, has been appointed as the QHSE and Sustainability Director as of July 2022. Gençel also serves as the Leader of Zorlu Holding Environment and Working Group and is a member of TÜSİAD Environment and Climate Change Working Group.

**SERPİL KÖŞKER****DIRECTOR OF HUMAN
RESOURCES**

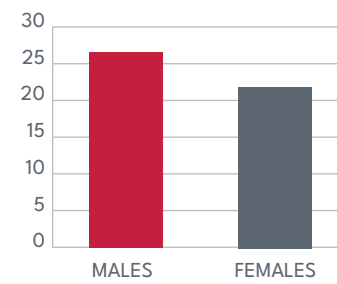
(1975 - Ankara) Serpil Köşker graduated from the Psychological Counseling and Guidance Department at Middle East Technical University in 1997 and completed her master's degree at the same university. After working as a research assistant at the same university, she started her professional career at Brisa Bridgestone Sabancı Lastik Sanayi ve Ticaret AŞ as a Human Resources Generalist in 2000. After that, she worked as the Human Resources Manager at Toyota Tsusho, where she was responsible for establishing all human resources processes and systems and integrating the department with the organization's global structure. In 2014, she joined Hayat Kimya and took part in corporate transformation and structuring HR processes as the Human Resources Manager of Kocaeli and Mersin Plants. After leading human resources processes and projects at Pirelli Turkey, which she joined in 2017, Köşker started to work in the BSH Group in 2020 as the Human Resources Director. As of October 2021, Köşker joined Zorlu Enerji to serve as the Director of Human Resources. She is also actively coaching and mentoring. She is also a member of Peryön and Sales Network.

**BAŞAK DALGA****INVESTOR RELATIONS
MANAGER**

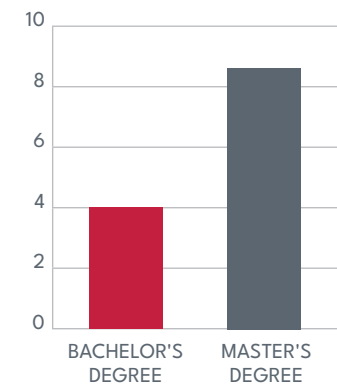
(1983 - Tobruk) Başak Dalga graduated from the Department of Economics at Istanbul University in 2005. After completing her master's degree in Italy, she began her professional life as an equity analyst at the Research Department of Global Yatırım in 2006. Dalga worked as an equity analyst at Eczacıbaşı Menkul Değerler from 2007 to 2008, and joined Zorlu Enerji in 2008 as Investor Relations and Corporate Finance Senior Specialist. She has been serving as the Investor Relations Manager since 2012. Başak Dalga holds the Capital Market Activities Level 3 License and the Corporate Governance Rating License.

Senior Management Metrics

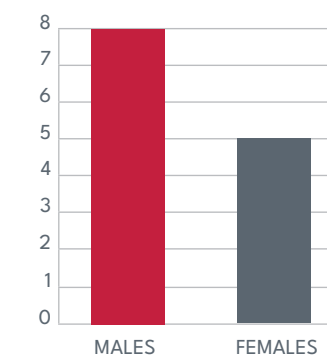
Average Term for Board of Senior (Years)



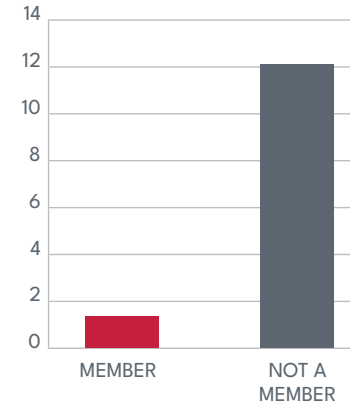
Educational Status for Senior Management (Person)



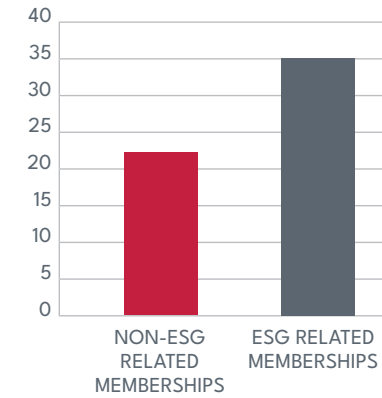
Senior Management Gender Breakdown (Person)



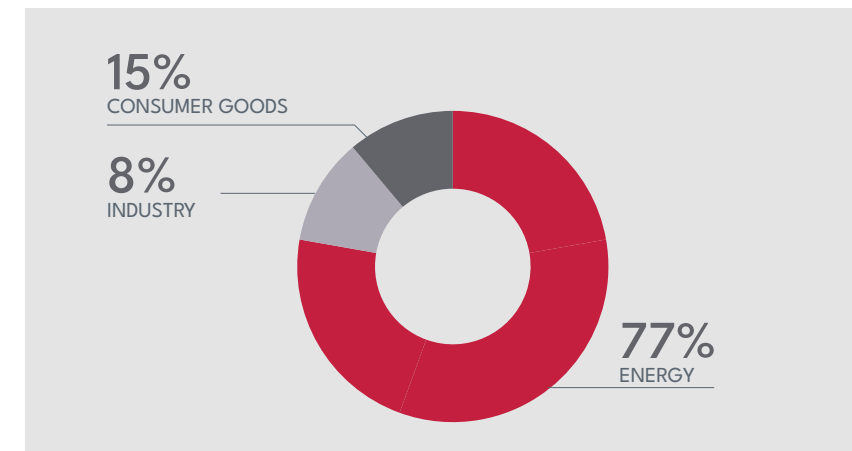
Participation in Board Directors Committees (Person)



ESG Realted Memberships (Number)



Sectoral Experience Breakdown (%)



*The table is prepared in accordance with Global Industry Classification Standards (GICS). The Global Industry Classification Standards (GICS) is an industry taxonomy developed by MSCI and Standard & Poor's (S&P) for use by the global financial community.

Zorlu Enerji Policies and Commitments

- **Sustainability Policy**
- **R&D & Innovation Commitment**
- **Biodiversity Conservation Commitment**
- **Environmental and Social Governance Principles Commitment**
- **Energy Access Commitment**
- **Nuclear Standoff Commitment**
- **Sustainable Supply Chain Policy**
- **Renewable Energy Commitment**
- **Corporate Restructuring & Human Rights Commitment**
- **Responsible Lobbying Commitment**
- **Information Security Management System Policy**
- **Zorlu Enerji Quality Policy**
- **Zorlu Enerji Environmental Policy**
- **Zorlu Enerji Occupational Health and Safety Policy**
- **SA8000 Policy**
- **Zorlu Enerji Human Resources Policy**
- **Zorlu Holding Human Rights Policy**
- **Zorlu Holding Supply Chain Principles**
- **Zorlu Holding Ethical Principles**



Zorlu Enerji and The Energy Sector

ADDING VALUE, ILLUMINATING
WITH ITS ENERGY

FIRE

Passion, Dedication, Success, Expansion

While being a good local stakeholder in the regions it operates in, Zorlu Enerji extends the knowledge and experience it gained in its sector beyond the country's borders.

Today, Zorlu Enerji, expanding its activities nationally and globally with its visionary approach and strategies, is among the successful and trustworthy companies in the energy sector.



DEVELOPMENTS IN 2022

Global Trends and Energy Market Outlook

Global Risks

The World Economic Forum's "Global Risks Report 2023" highlights some of the most serious risks we may face in the next decade. While the cost of living crisis is the biggest short-term risk, failure to mitigate and adapt to climate change is the biggest long-term concern, the report said. Geopolitical rivalries and tendencies towards introversion will increase economic constraints and exacerbate both short- and long-term risks. The Global Risks Report calls on countries to work together to avoid "resource competition". *

The next decade will be characterized by environmental and social crises driven by underlying geopolitical and economic trends. The "cost of living crisis" is the most serious global risk of the next two years, peaking in the short term. "Biodiversity loss and ecosystem collapse" is seen as one of the fastest worsening global risks over the next decade, with all six environmental risks ranking among the top 10 risks over the next 10 years. There were nine risks in the top 10 rankings in both the short and long term, including "Geo-economic challenges" and "Erosion of social cohesion and social polarization", with two new risks entering the top ranking: "Widespread cybercrime and cyber insecurity" and "Large-scale forced migration".



* ref: https://www3.weforum.org/docs/WEF_GRR23_Press_Release_TR.pdf

Global Risks Report 2023 - Global Risk Perception Survey Results

The 10 most severe risks the world can expect in the next 2 years:

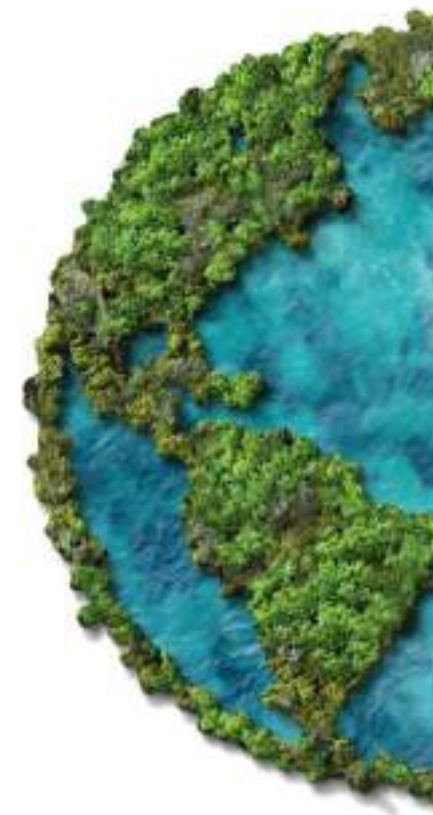
1. Lack of action for climate
2. Extreme weather conditions
3. Declining biodiversity
4. Damage to social cohesion
5. Crises to ensure the necessary conditions for life
6. Infectious diseases
7. Human damage to nature
8. Depletion of natural resources
9. Increase in debt
10. Geo-economic challenges

The 10 most severe risks the world can expect in the next 10 years:

1. Climate change action failure
2. Failure to adapt to climate change
3. Natural disasters and extreme weather events
4. Biodiversity loss and ecosystem collapse
5. Large-scale forced migration
6. Natural resource crises
7. Erosion of social cohesion and social polarization
8. Common cybercrimes and cyber insecurity
9. Geo-economic conflicts
10. Large-scale environmental damage

Energy Sector in Global

As consumers struggle for alternatives to high-priced gas, the crisis is increasing demand for oil and coal in the short term. But the lasting gains from the crisis, besides moving faster with efficiency and electrification, are accumulating in low-emission sources, primarily renewable energy, but also nuclear power in some cases.



High fuel prices account for 90% of the increase in the average cost of electricity generation worldwide, and more than 50% for natural gas. Renewable energy and carbon costs played a minor role in the cost increase.



As a result of the transition and crises, energy-related GHG emissions jumped to 36.6 Gt in 2021, the largest annual increase in emissions ever.



The post-Russia-Ukraine situation is causing a short-term increase in oil and coal demand. However, as a result of the crisis, efficiency and electricity-related energy production are on the rise, and demand for low-emission sources, particularly renewables, nuclear power and electric vehicles, is increasing.



The world's energy system has become much more vulnerable to the shocks seen in 2022 due to the reduced resources invested in clean energy investments in recent years.





Overview

After Russia's invasion of Ukraine, high and volatile fossil fuel prices have brought the energy security debate back to the surface. The oil price increase between 2021 and the first six months of 2022 is equivalent to USD 70 per ton CO₂; the natural gas price increase in Europe is equivalent to USD 350/t CO₂.

Spot natural gas purchase prices have also reached unprecedented levels, reaching USD 250 for a barrel of oil. Coal prices have also reached record highs, while oil has started to decline after reaching well above USD 100 per barrel in mid-2022. These increases accounted for 90% of the upward pressure on electricity costs worldwide.

In 2022, Europe imported significantly more liquefied natural gas (LNG) than the previous year to compensate for gas supply disruptions from Russia following the Ukraine-Russia crisis. China's reduced gas demand, which has continued Covid-19 restrictions until almost the end of 2022, has provided some relief to gas markets, but high LNG demand in Europe has diverted gas away from other importers in Asia.

Several countries are investing some of their unexpected oil and gas profits in renewable and low-emission hydrogen. Although revenues from hydrogen will not replace those from oil and gas in the short term, low-cost renewables and carbon capture, storage and utilization (CCUS) could provide a lasting economic advantage by attracting investment in energy-intensive sectors.

High energy prices result in a massive transfer of wealth from consumers to producers, which has returned to levels seen in 2014 for oil, but is completely unprecedented for natural gas. High fuel prices account for 90% of the average costs of electricity generation worldwide. Natural gas alone accounts for more than 50% of this increase. The fact that renewables and carbon dioxide costs play only a marginal role underlines that this is a crisis where energy transitions are the solution, not the problem.

According to the findings in this year's World Energy Outlook (WEO), due to the Covid-19 pandemic and the current energy crisis, 70 million people with access to electricity are likely to soon be unable to afford it, with many countries also facing a food security crisis and the increasingly visible impacts of the climate crisis.

As markets rebalance, the energy security provided by nuclear power is creating advances in renewable energy; coal's rise in the current crisis is expected to be temporary. The growth in electricity generation from renewable energy is expected to be fast enough to outpace the growth in total electricity generation and reduce the role of fossil fuels in electricity generation. The crisis has increased the utilization rates of existing coal-fired power plants, but has not led to new coal investments.

Although the demand for fossil fuels will increase in the next few years due to the global crisis, the share of fossil fuels in global energy is expected to fall from 80% in 2022 to below 75% by 2030 and to around 60% by 2050. The effort to fully meet climate commitments is also expected to reduce demand for all fossil fuels by 2030.

High energy prices, growing energy security concerns and strengthened climate policies are putting an end to a decade of rapid progress by the natural gas sector. Annual demand growth is expected to decline from 2.3% from 2010 to 2019 to 0.4% by 2030. Coal is seen as a temporary solution to demand from the electricity and industrial sectors in some regions as a result of price increases. However, efforts to reduce emissions are expected to reduce demand for coal again soon.

High short-term prices and strengthened and comprehensive policies stabilize overall energy demand growth. The growth in energy demand, particularly from India, Southeast Asia, Africa and the Middle East, and the growth in energy use in China, which has been a major driver of global energy trends over the past two decades, is expected to slow before 2030 as China transitions to a more service-oriented economy.

A smooth and secure energy transition will require a massive increase in clean energy investment flows. Staying on track for the NZE Scenario will require a tripling of spending on clean energy and infrastructure by 2030, as well as a shift towards much higher investments in emerging markets and developing economies.

Energy Transformation

In recent years, the pace of productivity improvements has slowed down. Between 2017 and 2020, the pace of energy efficiency improvement slowed from 2.1% between 2011 and 2016 to an average annual rate of 1%, and further slowed to 0.5% in 2021. Developed countries have allocated \$1.1 trillion in post-pandemic incentive packages in their economic plans, accounting for 90% of the budget allocated to clean energy incentives in the world. But despite having two-thirds of the global population, clean energy investments in emerging markets and developing economies, excluding China, account for less than one-fifth of the world's population.

Wind and solar have received a larger share of renewable energy investments than other renewable energy sources in the last 10 years. In this outlook, the share of electricity generation from these sources worldwide is expected to increase from 28% to 43% in 2030. However, the capital cost for PV plants in developing countries is still high. In 2021, the cost of capital for a solar plant in emerging economies is two to three times higher than in developed economies and China. If all the announced generation expansion plans for solar PV are realized, generation capacity will approach the levels required for the Net Zero Scenario in 2030.

Almost all refrigerators, freezers and air conditioners are now subject to MEPS (Minimum Energy Performance Standards) in developed economies, which has contributed significantly to improved energy efficiency among end users. Supply chains for some key technologies, including batteries, solar PV and electrolyzers, are expanding to support the global ambition. Under the STEP scenario (Stated Policies Scenario), annual clean energy investments are expected to reach more than \$2 trillion by 2030, an increase of more than 50 percent from today, with newly introduced policies in major energy markets.

Savings from energy efficiency practices adopted since 2000 have totaled 125 exajoules (EJ) by 2021, or about 30% of total current final consumption. Around 45% of these savings are energy efficiency gains in industry, largely as a result of strict minimum energy performance standards (MEPS) for electric motors. 35% of the savings came from transportation; since 2000, the fuel efficiency of cars has increased by 20% and that of trucks by 5%.

In developing countries, high prices and inflation are slowing progress towards access to modern energy. In 2022, the number of people without electricity is on an upward trend for the first time in decades. Crises in sub-Saharan Africa threaten almost all of the progress made there since 2013.

The recovery in global energy consumption after the pandemic-induced decline in 2020 came to an early end with the Russia-Ukraine crisis in early 2022, throwing global energy markets into turmoil, fueling inflationary pressures and slowing economic growth. Although market volatility did not start with this crisis, it was quickly exacerbated by it. This has led to volatility and spikes in energy prices, especially for natural gas in European markets. On the supply side, further disruptions are expected. Nevertheless, growth in the renewable energy sector continued, albeit at a slower pace.

Electric vehicles are rapidly gaining ground in transportation, providing additional efficiency gains. Increasing battery production capacity in the EV sector creates an opportunity to meet the targets set for electric mobility.



Recent Political Developments

A growing number of countries are setting long-term net zero emission targets. By September 2022, 84 countries accounting for around 85% of global GDP and the European Union have pledged to meet net zero emissions targets, accounting for 85% of CO₂ emissions and more than half of methane emissions from global power generation. The new commitments include India's net zero emissions commitment and Indonesia's 2021 Long-Term Low Emissions Strategy.

COP 27

The main issues at COP 27;

- The establishment of a fund to compensate developing countries for the losses and damages they incur due to climate change,
- Accelerating the transition to implementation of commitments to combat climate change,
- Low-emission and renewable energy, fair energy transition, climate finance, technology transfer, capacity building, scaling up collaborative actions and the need for "urgent" and "sustained" reductions in global greenhouse gas emissions.

COP 27 and Turkey

Murat Kurum, Minister of Environment, Urbanization and Climate Change, announced the framework of Turkey's updated NDC at COP27. In this context:

- The 21% emission growth reduction target for 2030 has been revised to 41%.
- Approximately 500 million tons of emission reductions are projected for 2030.
- Turkey's peak emission year is set for 2038 at the latest.

New Nuclear Investments

Many countries have announced plans to support new nuclear investments. For example, in February 2022, France announced plans to build 14 new large reactors by 2050 at a total cost of €50 billion. China has integrated the construction of new nuclear reactors into its strategy

to achieve its goal of carbon neutrality by 2060. South Korea has recently reversed its nuclear phase-out policy, deciding to extend the life of existing facilities and restart unfinished construction.

The increasing number of heavier vehicles, especially sports-oriented vehicles, being sold partially offsets the reductions in petroleum consumption resulting from the rising sales of electric vehicles.

Other Notes

- With solar panels and wind turbines becoming widespread in electricity generation, the share of fossil fuels in electricity generation decreased from 65% in 2018 to 62% in 2021.
- By 2030, around 8% of cars on the road are expected to be electric. However, the increase in the number of heavier vehicles sold, especially sport utility vehicles, is reversing some of the reductions in oil use resulting from rising EV sales. Oil production met around 70% of global oil demand growth between 2010 and 2019, whereas this ratio is projected to be 20% for 2020-2030. No net zero commitments made by major oil producing countries include explicit targets for reducing production. The amount of liquid fuel supplied from low-cost producers is gradually decreasing, with the share of Russia and OPEC members rising to 50% by 2030.
- The global LNG trade is increasingly taking market share from gas transported by long-distance pipelines and is expected to increase from 50% today to 60% in 2050.
- Low-carbon hydrogen accounts for less than 1% of the total hydrogen production available, with most of the production coming from natural gas or coal. Overall increases in hydrogen demand by 2030 remain small compared to increases in electricity and many other clean energy technologies, but these will increase depending on early action by governments and industry.
- All new coal industrial plants built after 2030 are planned to have near-zero emissions, and most of the plants built before that date have been adapted to be CCUS-based or to enable co-firing with bioenergy or hydrogen-based fuels. Most of the remaining coal use in 2050 is projected to come from the chemical, iron and steel industries.
- Changes in regulations - in particular, increased or frequently changing ESG regulations challenge companies. Nearly a quarter (23%) of CEOs say that increasing or frequently changing regulations are the biggest barrier to realizing ESG strategies, with setting and measuring agreed metrics identified as the second biggest challenge. In fact, 14% of CEOs say they have failed to create value from ESG strategies in business. Moreover, the complexity of supply chains is said to hamper efforts to achieve net zero. Supply chain complexity and lack of appropriate technology are seen as the main barriers to achieving carbon neutrality targets. Considering that supply chain risk is among the top 5 global risks to growth, organizations need to keep a close eye on their partners and how they can work better together.





	Policy Change	Authorization
The European Union	Phasing out coal-fired power plants in the Czech Republic, Slovenia and Romania.	Government (January and June 2022)
USA	Expansion of energy and climate programs under the Inflation Reduction Act and promotion of clean energy technologies. Five states have updated the standard policies for renewable portfolios.	Federal government (August 2022) Local states
China	New plan for renewable energy development: Higher targets for renewable energy.	National Development and Reform Commission (June 2022)
Canada	In line with the 2030 Emission Reduction Plan, Canada aims to achieve carbon emissions 40% below 2005 levels first and then 0% by 2050.	Federal government (June 2022)
Korea	According to the new Energy Policy Direction, the share of renewable sources in electricity generation will increase by 20% and nuclear by 30%, while the share of coal-fired sources will be reduced.	State Council (July 2022)
Japan	Restarting nuclear power plants in line with the 6th Strategic Energy Plan and the Green Transition (GX) policy.	Ministry of Economy, Trade and Industry (August 2022)
	Announced Policy	Authorization
G7 countries	Achieving a predominantly decarbonized electricity sector by 2035.	G7 Climate, Energy and Environment Presidency (May 2022)
Germany	Germany has set higher targets for expanding the use of wind and solar energy through green energy law reforms.	Government (July 2022)
The European Union	Fit for 55: At EU level, the Council aims to increase the share of renewable energy to 40% of all energy groups.	Council of the European Union (June 2022)
Australia, Ivory Coast, Israel, UAE, Vietnam	Net zero emission targets by 2050	National governments
India	Net zero emission targets by 2070	Prime Ministry (November 2021)
United Kingdom	The Energy Security Strategy sets new targets for offshore wind, nuclear and hydrogen sources.	Prime Ministry (April 2022)
Japan	Accelerated nuclear expansion, including SMRs envisioned in the GX initiative	(June 2022)

Energy Sector in Turkey

After the pandemic, a rapid recovery in economic activity was observed worldwide in 2021, resulting in a significant increase in electricity demand. However, the ongoing tensions between Russia and Ukraine and increasing geopolitical uncertainties have created an imbalance in energy supply as well as pricing and increased the demand for fossil fuels. In addition, the global decline in hydroelectric power generation due to the drought caused by the climate crisis and the decrease in electricity generation from wind power in Europe have further increased the demand for fossil fuels, leading to record increases in global coal and natural gas prices. The sharp rise in fuel costs led to sharp increases in electricity prices on a global scale.

Electricity consumption in Turkey, which increased during the post-pandemic recovery process, decreased by 1.2% in 2022 compared to the previous year to 328.7 GWh. In the same period, electricity generation similarly decreased by 2.6% to 326 GWh. In 2022, 34.6% of electricity generation came from domestic and imported coal, 22.2% from natural gas, 20.6% from hydroelectricity, 10.8% from wind, 4.7% from solar, 3.3% from geothermal energy and 3.7% from other sources. Electricity generation from hydroelectric energy, which had decreased in the drought year 2021 compared to the previous

year, increased to 20.6% in 2022 as a result of a 41% increase in the amount of water coming into the dams.

In the sector, where approximately 4,600 MW of new installed capacity has been added on average on an annual basis in the last 10 years, Turkey's installed capacity increased by a net 3,989 MW (after taking into account the plants with reduced capacity and shutdowns) to 103,809 MW by the end of 2022 with 977 new plants commissioned in 2022. While nearly two-thirds (65.6%) of the new capacity commissioned in 2022 came from renewable energy sources, the share of renewable power plants in installed capacity was 54%. Solar power plants ranked first with 1,610 MW in installed capacity increase, followed by coal with 1,452 MW, wind with 789 MW, biomass with 277 MW, hydroelectricity with 79 MW and geothermal with 15 MW. Of the total installed capacity, 30.4% is hydroelectric, 24.4% natural gas, 21% domestic and imported coal, 11% wind, 9.1% solar, 1.6% geothermal, 1.6% biomass and the remaining 0.9% other energy sources.

Of the installed capacity, 20.2% belongs to EÜAŞ, 3.3% to build-operate-transfer and transfer-of-operating-rights plants and 76.5% to independent generation companies and unlicensed power plants.



Electricity Prices, Resource Based Support Mechanism and YEKDEM

The regional geopolitical developments in early 2022 threw markets that had not fully recovered back into instability as natural gas and imported coal costs rose. Rising costs and instability in energy markets have created a security of energy supply problem for Turkey. Taking into account the increasing costs of households and commercial enterprises, the "Resource Based Support Mechanism" model was put into effect for a period of 6 months in order to prevent the reflection of increasing energy costs and to activate the inoperative installed capacity. At the end of the 6-month period, the support mechanism was extended for another 6 months.

Power plants are divided according to their energy resources, and the amount of money they will pay or receive to the "Resource Based Support Mechanism" is determined by the Maximum Settlement Price (MSP) parameter, which is differentiated according to the type of resource determined by EMRA.

In 2022, the average market clearing price increased by 394% compared to the previous year, reaching 2,511 TL/MWh, due to the increase in natural gas and coal prices and the fluctuations in the exchange rate.

In addition, with a decision taken by EMRA on 14.10.2021, the maximum price limits were updated and the increase in both natural gas and imported coal prices in 2022 caused the maximum limit determined by EMRA to increase to 2,500 TL/MWh with the Official Gazette decision dated March 30, 2022, 2,750 TL/MWh with the Official Gazette decision dated May 19, 2022, 3,750 TL/MWh with the Official Gazette decision dated June 30, 2022, 4,000 TL/MWh with the Official Gazette decision dated July 29, 2022 and 4,800 TL/MWh with the Official Gazette decision dated September 1, 2022.

In 2022, the MCP was significantly higher compared to YEKDEM prices. With MCP prices expected to remain high for a while due to geopolitical reasons, investors' willingness to participate in YEKDEM is suppressed. In this framework, the number of companies applying for YEKDEM in the Final YEK List for 2023 published by EMRA decreased to 882 from 1,034 in 2022. Accordingly, the total capacity to benefit from YEKDEM in 2023 decreased by approximately 4,300 MW compared to 2022.



Electricity Storage Legislation

An amendment to the legislation on electricity storage activities was published in the Official Gazette dated November 19, 2022 and numbered 32018. Solar and wind power plant investors who will build electricity storage facilities on their sites are allowed to add wind or solar energy capacity equivalent to the electricity storage capacity (within the framework of upper and lower limits). With these amendments, generating companies that establish Solar and Wind Power Plants, which have the right to increase their capacity by integrating electricity storage facilities, will be able to sell the electricity they generate over the additional capacity within the scope of the existing purchase guarantee YEKDEM.

Each legal entity that will build an electricity storage facility on its site is allowed to add wind or solar energy capacity up to the electricity storage capacity (within the framework of upper and lower limits). According to the latest legislation, a maximum of 250 MW of pre-license applications can be made for both resources, while the minimum application for wind is 20 MW and the minimum application for solar is 10 MW.



Electricity Distribution

Within the scope of the national tariff, a single distribution fee is calculated for Turkey as a whole. Differences in revenues under the national tariff arising from regional loss and leakage differences between 21 distribution companies are balanced through price equalization (support) and revenue adjustment mechanisms. According to EMRA's December 2022 Electricity Market Sector Report, the total number of electricity consumers in Turkey reached 48.6 million as of the end of 2022. Invoiced electricity consumption in 2022 remained at the same level as in 2021 and amounted to 253 million MWh.

National Tariff

In 2022, the national retail electricity sales tariff (single term tariff), including distribution fee, before taxes and funds, was increased by 436% in the industrial group, 270% in the commercial group and 213% in the residential group.

As of January 1, 2022, the price applied to EÜAŞ's sales to distribution companies for technical and non-technical lost energy and electricity sales to incumbent supply companies was increased by 34%, while no changes were made in April and July. As of August 8, 2022, EÜAŞ started selling electricity to incumbent supply companies at a price of 110.0321 kr/kWh to support its regulated K1 customers. The tariff applied to electricity sales made by EÜAŞ to distribution companies within the scope of general lighting was increased by 221% on January 1, 2022, 48% on April 1, 2022, 28% on July 1, 2022 and 37% on October 1, 2022.

Retail Sales

Last Resort Supply Tariff (LRST) The annual electricity consumption limit for the last resort supply tariff, which started on April 1, 2018, was set at 50 million kWh for residential consumers and 7 million kWh for other consumer groups in 2022, as in 2021. However, these limits were revised as 50 million kWh/year for the residential consumer group, 7 million kWh/year for the agricultural irrigation consumer group and 1 million kWh/year for other consumer groups with EMRA's decision dated March 31, 2022 and numbered 10907; and 100 million kWh/year for the invoices to be issued as of 1/8/2022 for the residential and agricultural activities subscriber groups with EMRA's decision dated July 28, 2022 and numbered 11095. With EMRA's decision dated October 27, 2022 and numbered 11357, the annual electricity consumption limit for 2023 was set as 100 million kWh/year for residential and agricultural consumer groups and 1 million kWh/year for other consumer groups.



Eligible Consumer Limit

In line with the goal of gradually increasing the market openness rate and making all consumers eligible consumers, EMRA's decision dated December 17, 2020 and numbered 9814 set the eligible consumer limit as 1,200 kWh per year for 2021. The limit was gradually reduced by EMRA's decision dated December 16, 2021 and numbered 10623 by setting an annual limit of 1,100 kWh for 2022 and by EMRA's decision dated December 29, 2022 and numbered 11496 by setting an annual limit of 1,000 kWh for 2023.

Renewable Tariff (YETA)

Renewable Tariff (YETA) With the Renewable Tariff application, which was put into effect as of August 1, 2020, consumers who want to use green energy based on renewable energy sources can procure green energy from the responsible supply companies. In 2022, YETA was increased by 338.28% compared to 2021.

Gas Distribution

In the natural gas distribution sector in Turkey, 72 distribution companies, authorized as a result of tenders held by EMRA, carry out natural gas distribution activities in 81 provinces. By the end of December 2022, natural gas distribution companies reached a total of 19.7 million subscribers. While the number of residential subscribers is 19 million, the number of eligible consumers is approximately 725 thousand. In 2022, due to the first quarter being colder than seasonal norms, residential consumption increased by 8% compared to 2021 and amounted to 18 billion m³. In the same period, industrial consumption decreased by 13% to 9.2 billion m³, while natural gas consumption of power plants generating electricity from natural gas fell by 31% to 14.5 billion m³ due to the increase in costs. Thus, total consumption in 2022 decreased by 11% to 53.3 billion m³. In 2023, total consumption is estimated to be 56.1 billion m³.

Since there is no loss and leakage problem in the natural gas distribution sector as in the electricity distribution sector, a different distribution tariff is applied in each distribution region instead of the national tariff. The natural gas bill includes the distribution tariff, natural gas price and related taxes, which are calculated to meet the revenue requirement arising from the investment and operating expenses of distribution companies.

With the EMRA decision, the real reasonable rate of return in the calculation of system usage fees to be applied by natural gas distribution companies was increased from 12.85% to 14.38%, effective as of January 2019, but updated to 13.25% as of January 2022.



Risks and Opportunities for Zorlu Enerji

Zorlu Enerji determines the scope of risk management in parallel with the priorities of the organization and stakeholders and in an integrated manner with other group companies within Zorlu Group.

Zorlu Enerji takes actions to enable early identification of internal and external risks that may jeopardize the continuity and development of its operations and to manage the identified risks in a centralized structure and conducts works towards this end.

Within the scope of risk management, Zorlu Enerji includes the priority issues of the organization and stakeholders in the risk assessment process and performs risk assessment in line with global trends.

Zorlu Enerji has conducted impact assessments under each category and disclosed the actions taken or planned for these risk factors. At this point, risk assessment was handled within the framework of the TCFD approach and climate-related risks were classified in a separate category. As an important actor in the energy sector, Zorlu Enerji has included both its production and distribution activities in its risk assessment. The priority issues for each risk factor, the actions taken and the scope of the risk are summarized as follows;

Accordingly, Zorlu Enerji has categorized its risks under 4 categories;



Accordingly, the risks identified in the World Economic Forum's 2023 Global Risk Report and Zorlu Enerji's high-priority issues were in line, and the identified risks were integrated into Zorlu Enerji's risk management process.

Risk Category	Risk Scope	Actions	Priority Issue
Strategic Risks	• Reputation Risk • Geopolitical Risks • Energy Crisis • Regulatory Compliance Risk • Epidemic Diseases • International Political Risk • Cyber Risks • Social Risks	• In relation to new investment decisions, carrying out activities such as feasibility studies, cost-benefit analyses and budget studies in coordination with the relevant departments, • Diversification of the generation portfolio by investing in different energy sources, • Evaluation of legal, political, etc. risks before and after the investment by obtaining consultancy services when necessary, • Adopting different forms of management specific to the relevant investment, • Monitoring the return performance of the investments made, • Identifying innovative strategies for marketing and sales • Monitoring the operational risks that the Zorlu Holding Corporate Risk Management Department concludes to be significant based on its studies through key risk indicators via the information technologies system and informing the relevant business units about the risk levels when necessary • Providing all Zorlu Enerji personnel with regular mandatory training on occupational health and safety in line with the relevant regulations • Monitoring the recommendations of insurance companies to companies after risk inspections in a centralized structure • Commitment to compliance with the United Nations Global Compact and principles such as human rights, environment, society, ethics and anti-corruption • Ensuring multi-directional, consistent and continuous communication with all stakeholders of the company • Maintaining brand value and credibility; ensuring that all communication processes are managed in an integrated manner in line with strategic business objectives and representing Zorlu Enerji Marketing & Corporate Communications Directorate at the Directorate level within this framework • Managing regulatory changes, legal cases, tax disputes, infringement of intellectual property rights, unfair competition and related risks by communicating in coordination with all relevant units within the Company, • Conducting certain short-term rehabilitations and integrating new technologies • Considering the risks related to terrorist incidents, determining a wide insurance coverage within the Company and transferring potential risks to insurance companies to minimize their possible material effects	• Health and Safety • Human Rights • Brand Reputation • Inclusion, Equality and Diversity • Employee Rights and Happiness • Corporate Governance and Behavior



Risk Category	Risk Scope	Actions	Priority Issue
Operational Risks	- Supply Chain Risk - Profitability and Production Costs Risk - Risk of Rapid Change in Consumer Behavior	- Internal Audit, Financial Audit and Tax Audit Departments within Zorlu Holding auditing all operational activities, - Reporting and monitoring customer satisfaction by measuring it - Following policies and procedures related to compliance with legally prescribed standards regarding environmental health, stakeholder safety and stakeholder health - Recording and monitoring the maintenance and repair of machinery and equipment	- Process Safety - Strong Economic Performance
Financial Risks	- Currency Risk - Inflation Risk - Liquidity Risk - Interest Rate Risk - Price Stability Risk	- Using alternative financing methods, - Ensuring balance sheet asset-liability balance, - Using various hedging derivatives when necessary, - Monthly monitoring of budget targets and realizations and making revisions when necessary, - Ensuring lending and collateral structure in line with credit risk policies	- Strong Economic Performance - Responsible and Sustainable Finance
Climate-related Risks	- Global Warming and Climate Change Risk - Risk of Biodiversity Decline - Natural Disaster Risk	- Carrying out annual planned maintenance and repair works in distribution facilities, cutting the trees under the lines passing through forest areas in coordination with the Regional Directorates of Forestry against fire hazards, and redesigning the networks that have completed their economic life in a way that does not include such risks - In the event of a natural disaster or emergency, preparing the necessary plans to recover and restore the functionality of critical systems, technical infrastructure and facilities in alternative locations, reviewing business continuity and emergency action plans at regular intervals, organizing drills - Taking appropriate measures against unfavorable geographical and climatic conditions - Considering the risks related to natural disasters, determining a wide insurance coverage within the Company and transferring potential risks to insurance companies to minimize their possible material effects	- Fighting Against Climate Change - Transition to Low Carbon Technologies - Biodiversity Loss and Deforestation

Zorlu Enerji included legal compliance and policy risks in its risk assessment process and accordingly assessed the risks and opportunities that may arise after the European Union Green Deal. Rising energy prices and the negative effects of climate change, which are also a result of the current geopolitical conjuncture, are leading to a transformation in the energy sector. Coal and natural gas, which are currently heavily used in Turkey, are being replaced by renewable energy sources. Zorlu Enerji, which realizes all of its generation in Turkey from renewable energy sources, is making positive progress in managing this risk.

Conducting risk assessments under the headings of climate change and water stress, Zorlu Enerji assessed the climate-related acute and chronic risks addressed within the scope of TCFD reporting, and the impact of these risks on operations was addressed separately, especially in renewable energy plants that depend on water resources. Factors such as the inefficient operation of these energy sources and potential conflicts with local communities in the region and the division of water are also included in the assessment.

Energy supply and security topics were assessed in an integrated manner with supply chain security. Prioritizing the uninterrupted and secure delivery of energy supply to end users in the countries where it operates, Zorlu Enerji has included this scope in its risk assessment.

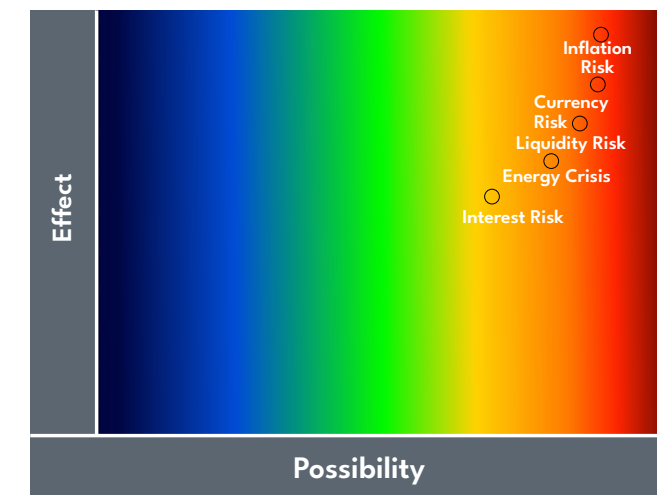
Zorlu Enerji has an advantageous position in terms of the risk factors evaluated, considering the geographies of its investments and the markets in which it operates. Zorlu Enerji's activities, its approach to ESG issues, and its organizational structure show that Zorlu Enerji is able to seize many areas of opportunity in the sector and in Turkey.

Opportunities on a global scale;

- With the Russia- Ukraine war, European countries have sought alternative energy sources to natural gas. At this point, the first and quick solution was to turn back to coal and nuclear energy sources. However, they have started to increase their investments in renewable energy sources in order to ensure sustainability and reduce foreign dependency. Solutions to increase the capacity utilization rates of renewable energy generation in energy production, improve feasibility studies and increase efficiency in energy production have started to emerge. In this sense, the importance of renewable energy generation has once again emerged.

- When financial stability and macroeconomic conditions are good, there is a general phase of rapid expansion and rapid growth in companies. Due to the emergence of economic problems and the increasing effects of financial risks,

companies are making decisions to slow down in expansion and growth. These decisions allow companies to reconsider their investments, strategies and improve their feasibility studies. In this sense, companies' experience in crisis management allows them to make their future plans more robust and their projects more focused on profitability.



Risk Name	Risk Score (Possibility-Impact)
Inflation Risk	15,82
Currency Risk	15,48
Liquidity Risk	14,61
Energy Crisis	14,04
Interest Risk	12,40
Natural Disaster Risk	12,21
Global Warming and Climate Change	12,10
Geopolitics Risk	11,81
Price Stability Risk	11,64
Cyber Risks	11,57
Supply Chain Risk	11,06
International Policy Risk	10,75
Epidemic Diseases	10,52
Profitability and Production Costs Risk	10,47
Decrease in Biodiversity Risk	8,87
Reputation Risk	8,73
Society Risks	8,22
Rapid Change in Consumer Behavior Risk	7,67
Compliance with the Legislation Risk	6,49

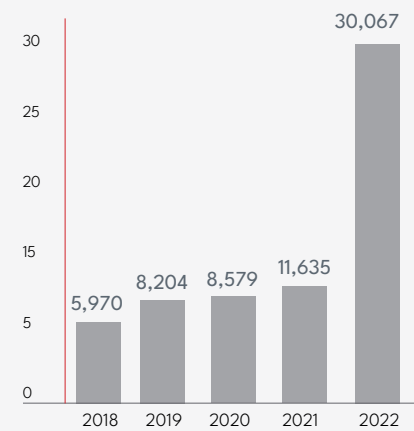


2022 PERFORMANCE INDICATORS

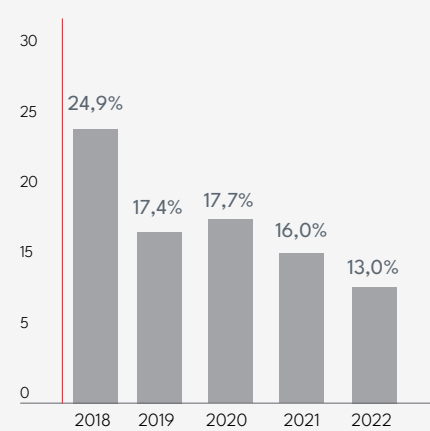
Country Breakdowns of Net Sales

January 1 - December 31, 2022	Electricity distribution	Natural gas distribution	Retail and wholesale electricity sales	Production, trade and other				
(thousand TRY)	Turkey	Turkey	Turkey	Turkey	Pakistan	Israel	Palestine	ZES (*)
Sales	3,608,852	9,869,927	13,742,330	10,129,465	369,994	43,612	3,792	119,816

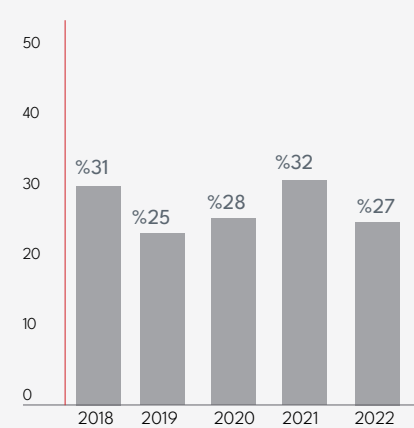
Net Sales (TL mn)



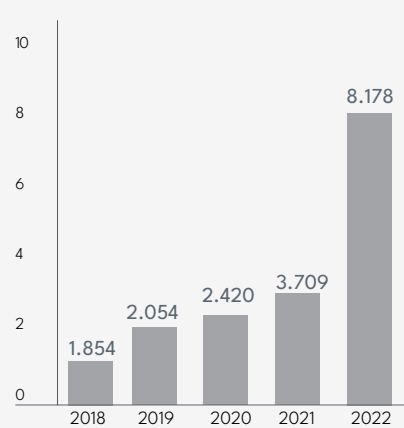
Gross Profit Margin (%)



EBITDA* (%)

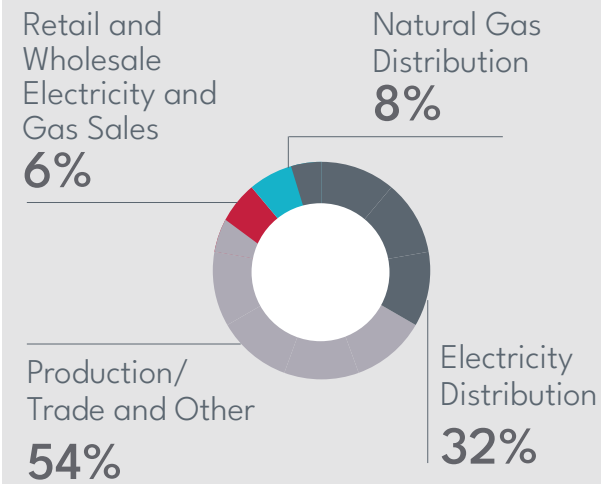


EBITDA Margin (TL mn)

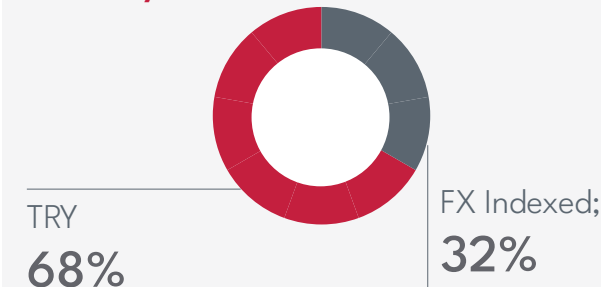


*EBITDA calculation includes the interest income related to the revenue cap arising from the electricity and natural gas distribution activities and the fair value difference related to the service concession arrangements while excluding the depreciation expense reported under the operating expenses.

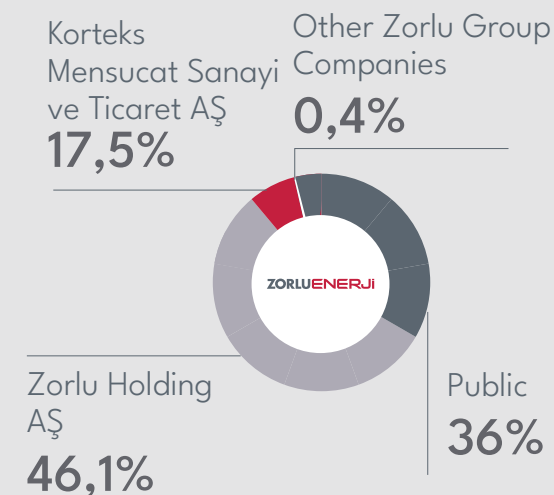
EBITDA Distribution by Activities



Breakdown of EBITDA by Currency



Zorlu Enerji Shareholding Structure



2022 SUMMARY PRICE INFORMATION

Number of Shares

250,000,000,000

Number of Public Shares

89,917,023,688

Annual Highest Price (TRY)

8.78

Annual Lowest Price (TRY)

1.44

End of Year Price (TRY)

7.11

Market Value* (Million TRY)

17,775

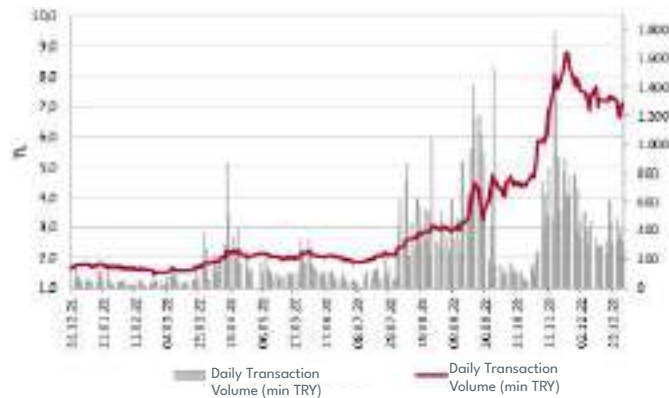
*As of 30.12.2022

ZORLU ENERJİ SHARES

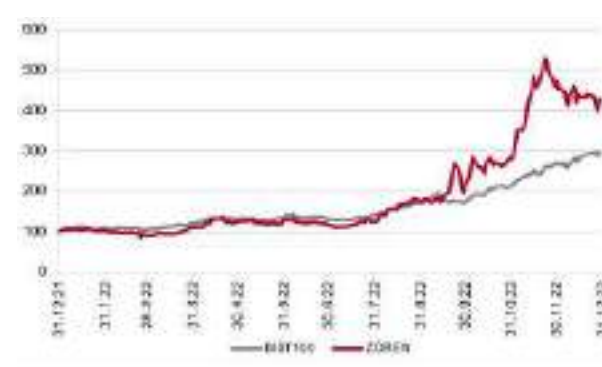
Zorlu Enerji Elektrik Üretim AŞ ("Zorlu Enerji" or the "Company"), 20% of whose shares were offered to the public in 2000, is traded on the Borsa İstanbul (BIST) under the ticker ZOREN. 36% of the Company's shares are tradable on Borsa İstanbul. Zorlu Enerji, the first energy company to go public in Turkey, will be listed on the MAIN MARKET by the end of 2022. Zorlu Enerji is included in BIST MAIN, BIST 100, BIST 100-30, BIST ALL, BIST BURSA, BIST ELECTRIC, BIST SERVICES and BIST SUSTAINABILITY indices.



ZORLU ENERJİ - SHARE PRICE



ZORLU ENERJİ - RELATIVE PERFORMANCE



Emission Intensity*

CARBON DENSITY

2022

Zorlu Enerji tCO₂e/Gross Generation (MWh)

0,41

GAZDAŞ tCO₂e x 10⁶/Gas Distribution (Sm³)

5,5

OEDAŞ tCO₂e/ENH Length (km)

4,37

2021

Zorlu Enerji tCO₂e/Gross Generation (MWh)

0,48

GAZDAŞ tCO₂e x 10⁶/Gas Distribution (Sm³)

4,6

OEDAŞ tCO₂e/ENH Length (km)

4,55

2020

Zorlu Enerji tCO₂e/Gross Generation (MWh)

0,46

GAZDAŞ tCO₂e x 10⁶/Gas Distribution (Sm³)

4,8

OEDAŞ tCO₂e/ENH Length (km)

4,23

*Calculations are based on scope 1 and scope 2 emissions.



Water Use Intensity

WITHDRAWN WATER (t)

2022

0.13

Gross Production (MWh)

2021

0.19

Gross Production (MWh)

2020

0.23

Gross Production (MWh)

WATER CONSUMPTION (t)

2022*

0.06

Gross Production (MWh)

2021

0.05

Gross Production (MWh)

2020

0.07

Gross Production (MWh)

*Domestic water consumption from OEDAŞ and GAZDAŞ is neglected. Mains, non-renewable groundwater and surface water use are taken into account.



Health and Safety Accident Frequency Rate (%)

ALL STAKE-HOLDERS	2022		2021		2020	
Health and Safety Data	Females	Males	Females	Males	Females	Males
Accident Frequency Rate*	2.95	19.66	6.63	15.93	0	1.82

*see Appendix for calculations; Social Performance Indicators Prepared by taking into account the data of Zorlu Enerji, OEDAŞ, GAZDAŞ, OEPSAŞ and contractor companies.

Number of Employees

FEMALES

2022

450

2021

401

MALES

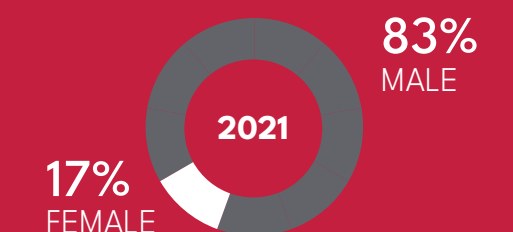
2022

2,286

2021

1,955

TOTAL EMPLOYEES



2022 Total Number of Employees

2,736

2021 Total Number of Employees

2,356



Our Awards



Sustainable Development Goals Awards 🌐

04.01.2022

The Zero Carbon Footprint Forests Project received the silver achievement award in the "Climate Action" category.



16. Stevie® Awards 'Sales and Customer Service Awards' 🌐

20.04.2022

Awarded the Gold prize as the "Communication Center of the Year".



A.C.E (Achievement in Customer Excellence) Awards 'Excellent Customer Satisfaction Achievement Awards' 🌐

20.04.2022

"Zorlu Enerji was selected as the 'Best Brand Managing Customer Experience' and won the 'Diamond Award', ranking 1st in its sector.



Communitas Award 🌐

04.05.2022

It was recognized as the best in its sector in the "Leadership in Ethical and Environmental Responsibility" category.



Turkey Energy and Natural Resources Summit "Our Energy Our Future" Awards 🌐

28.06.2022

It was awarded with the Zero Carbon Footprint Forests" Project.



CIO Awards 🌐

07.07.2022

Zorlu Enerji was awarded for its "ZES Domestic Charging Station Installation and Operation Management" project.



Turkey Customer Experience Awards 🌐

13.07.2022

The "Customer Experience Project" received the bronze award in the "Customer Experience Transformation" category.



Benefit to Economy Index Awards 🌐

10.10.2022

Zorlu Enerji was among the Brands in the Platinum League and the Symbol Brands of 2022.



Achievement Awards 2021 | Islamic Finance winners announced

Best sustainable Sukuk: Zorlu Enerji's TRY400mn SDG-linked Wakalah Sukuk programme



Achievement Awards 2021 | Restructuring and Refinancing winners announced

Best restructuring in CEE: Zorlu Renewable Energy's US\$300mn issuance

Sustainability Milestones

2010-11

Gökçedağ WPP received EBRD credit.

Gold Standard



Gökçedağ WPP received Gold Standard Certification.

ISO 14064 GHG verification done.



Zorlu Doğal completed ISO 9001, ISO 14001, OHSAS 18001 certification.

2012

Ranked among top 5 companies in the sector with its CDP score.



2016-17

Gold Standard



Pakistan Jhimpir WPP received Gold Standard Certification.

Listed in BIST sustainability Index.

Zero Carbon Footprint Forests Project with Mehmet Zorlu Foundation is ongoing.

2018

Green Loan (Green finance) agreement was signed with Garanti Bankası.



2019



Zorlu Doğal, received SA 8000 certification.

2022



With 61 points, we achieved the advanced level at Moody's ESG rating process

First company in the sector to publish Integrated Activity Report.

Undersigned CFA Principles for UNGlobal Compact SDG

Committed net zero to set Science Based Targets (SBT)

2020

Undersigned WEPS and UNGlobal Compact

Started ESG rating process powered ESG Management System installation activity.

Published sustainability strategy and targets.

WOMEN'S
EMPOWERMENT
PRINCIPLES





ESG Indexes Performance

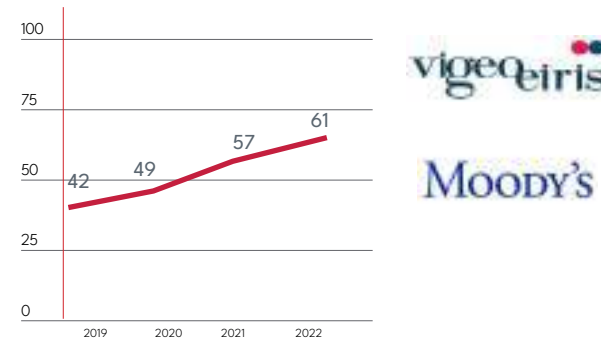
As Zorlu Enerji, we share our sustainability performance with our investors according to the assessments made by independent rating agencies (Argüden Academy, Vigeo Eiris, Moody's, Sustainalytics, Refinitiv) in line with the requirements of the Capital Markets Board (CMB) and our principle of transparency regarding our shares traded on Borsa Istanbul (BIST) under the code ZOREN.IS.

Having voluntarily joined the BIST Sustainability Index for the first time on November 1, 2016, Zorlu Enerji continued to be included in the index for the sixth time as a result of the evaluation conducted in 2022.



Zorlu Enerji, which has operations both in the domestic and international markets, is aware of the importance of international indexes and the ratings given by rating agencies. In order to be competitive in international markets and to be visible in these markets, Zorlu Enerji continuously develops itself, compares its competitive and strong structure with international companies in the sector, integrates best practices into the company, and shows good practices to other companies. To this end, Zorlu Enerji is included in the CDP report in the field of environment and Moody's and BIST Sustainability Indexes in the field of ESG, and improves its scores in the ratings made by these organizations every year. In 2022, Moody's score was raised by 4 points to 61, and it is aimed to raise it further in the coming periods.

Vigeo Eiris/Moody's ESG Performance



CDP Scores

In 2010, the Company joined the Carbon Disclosure Project (CDP) and started to report its corporate policies and targets on climate change, carbon emission amounts and reduction targets. Positioned as the first energy company from Turkey

to join the Carbon Disclosure Project (CDP), Zorlu Enerji updated its score to B in 2022.

CDP Performance	2018	2019	2020	2021	2022
CDP Climate Change Scores					
Zorlu Enerji Elektrik Üretim AŞ	A-	B-	B	B	B
GAZDAŞ Doğal Gaz Dağıtım AŞ	-	-	C	B-	B
OEDAŞ Osmangazi Elektrik Dağıtım AŞ	-	-	D	B	B
CDP Water Program Scores					
Zorlu Enerji Elektrik Üretim AŞ	B	B-	B-	B	B



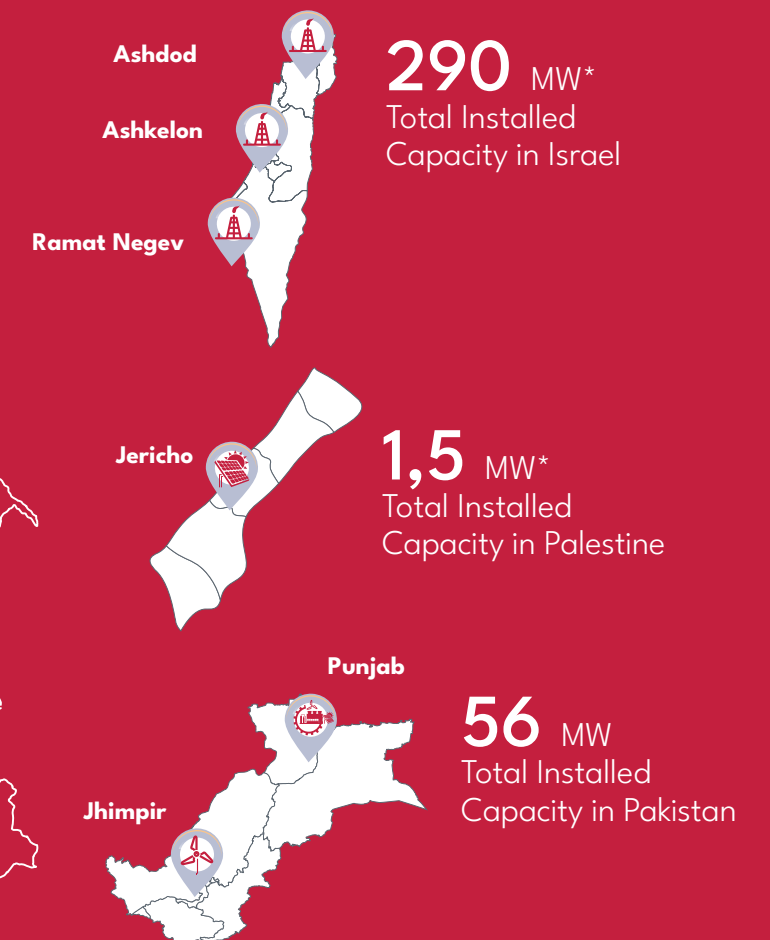
Zorlu Enerji, in order to be competitive in international markets and establish a visible presence, continuously strives for self-improvement. It compares its competitive and strong structure with international sector companies, integrates good examples into the company, and showcases them as best practice examples to other companies.



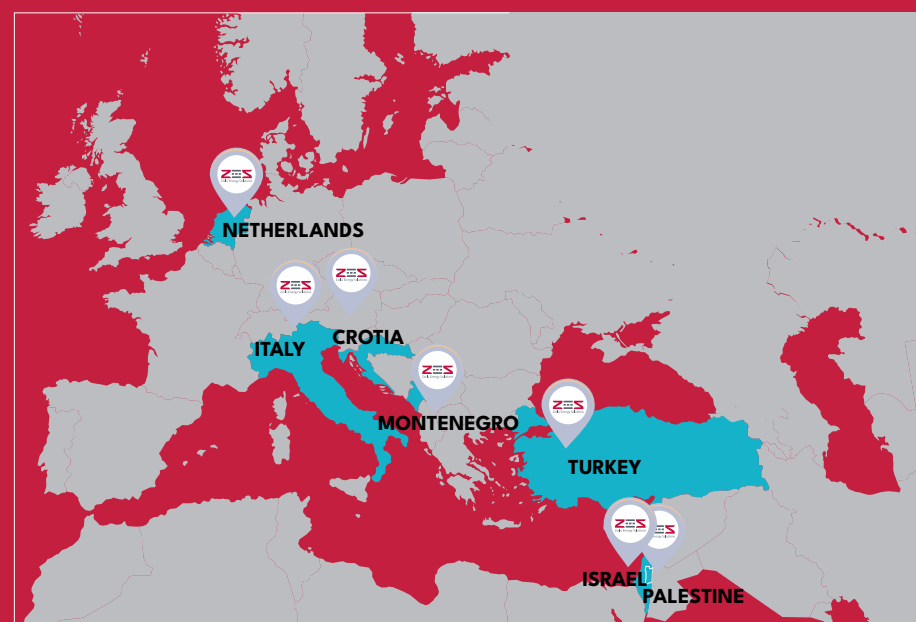
Zorlu Enerji's Installed Capacity and Investments



643 MW
Total Installed Capacity in
Turkey



*By partnership shares
*ZES, as of the end of 2021, provided electric charging services at a total of 934 points in 81 provinces. However, in 2022, this number increased to 1,570 points and 2,840 sockets (vehicle charging capacity) in all 81 provinces.



Countries with ZES Operations	Activity Type	Company
Turkey	Electricity sales, electric vehicle sharing and other	ZES Dijital Ticaret AŞ
Netherlands	Electric charging station sales, installation and operation	ZES N.V.
Israel	Electric charging station sales, installation and operation	ZES Israel Ltd.
Montenegro	Electric charging station sales, installation and operation	ZES D.O.O.
Italy	Electric charging station sales, installation and operation	ZES S.R.L.
Croatia	Electric charging station sales, installation and operation	ZES društvo s ograničenom odgovornošću za usluge



Geothermal
Power Plant



Wind Power
Plant



Hydroelectric
power plant



Electric
Charging
Station Network**



Electricity
Distribution



Power Plants
Under
Development



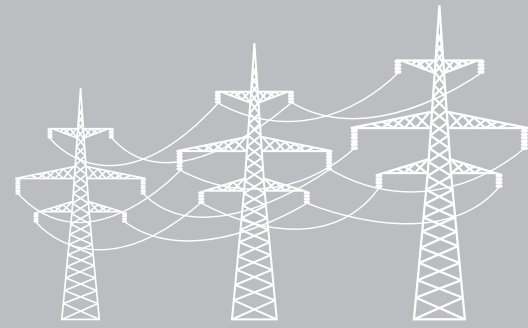
Natural Gas
Distribution



Doğal Gaz
Dağıtım



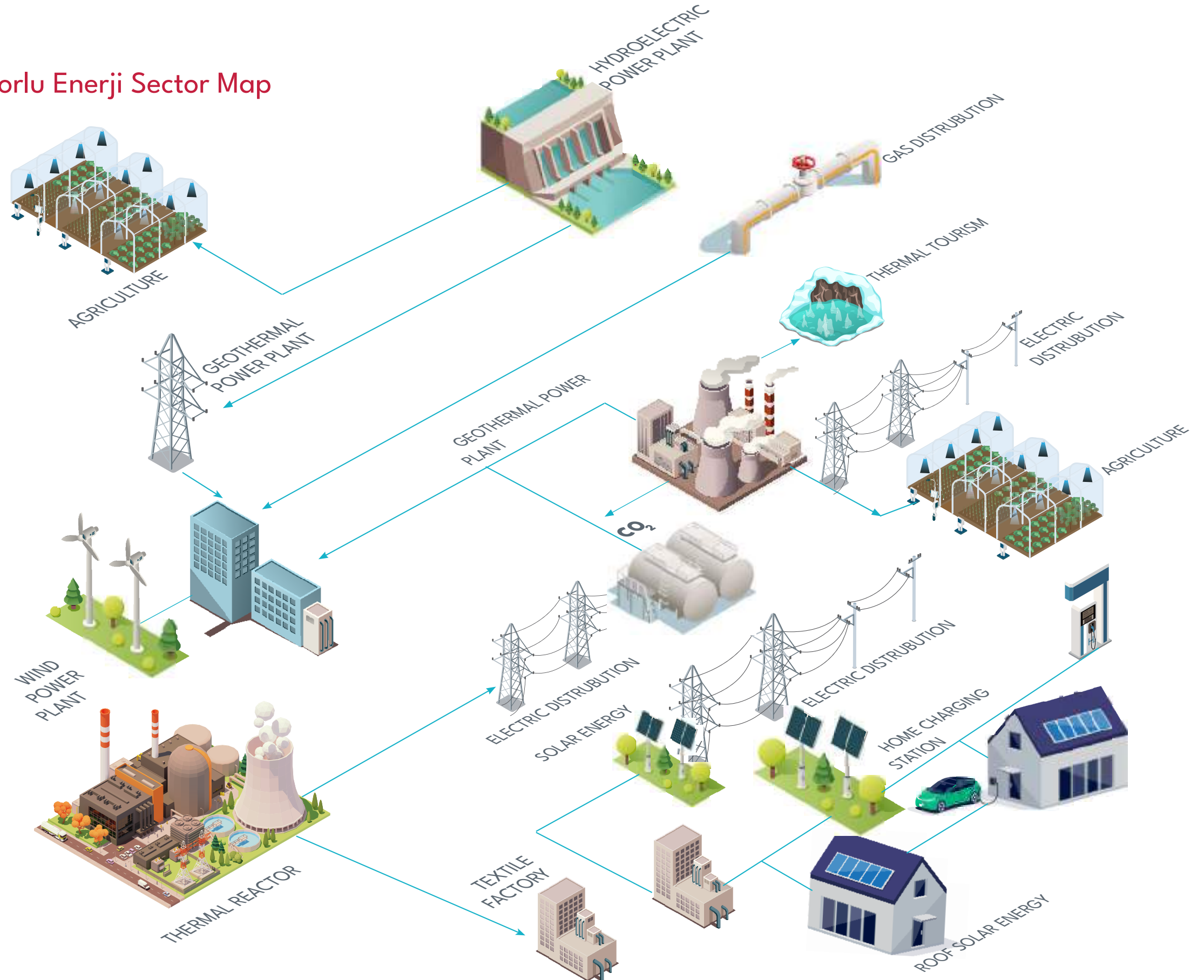
Solar
power plant



Business Areas of Zorlu Enerji

- Electricity Generation
- Electricity Distribution
- Electricity Sales and Trade
- Natural Gas Distribution
- Natural Gas Trade and Sales
- Trade and Installation of Energy Plants (Engineering Procurement Construction -EPC)
- Solar Panel Trade and Installation (Zorlu Solar)
- Smart Systems
- Sale, Installation and Operation of Electric Vehicle Charging Stations and Electric Vehicle Sharing

Zorlu Enerji Sector Map





Subsidiaries

Zorlu Enerji is exposed to, or has rights to, variable returns as a result of its involvement with a subsidiary and is able to control and influence these returns due to its control over the subsidiary. In other words, the subsidiary already has the rights that allow it to significantly manage the central management facilities, which can be exercised regardless of whether Zorlu Enerji controls another company or not. This means that Zorlu Enerji has a say over the subsidiary when it is the related company of the subsidiary. The possibility of convertible or usable voting width is also considered.

Companies controlled by Zorlu Enerji are referred to as subsidiaries and are consolidated from the date on which control is transferred to Zorlu Enerji. Not included in consolidation as of the date of control loss.

Using the full consolidation approach, the assets, liabilities, equity components, income and expense accounts and changes in cash flows of subsidiaries are included in the consolidated financial statements. Appropriate equity has been used to offset the carrying value of shares held by Zorlu Enerji and its subsidiaries. Consolidation has removed intra-group transactions and balances between Zorlu Enerji and its subsidiaries.

The Company's direct subsidiaries are as follows:

Direct Subsidiaries	Share Rate	Main Field of Activity	Country
Zorlu Osmangazi Enerji Sanayi ve Ticaret AŞ ("Zorlu Osmangazi")	100%	Electricity distribution and others	Turkey
Zorlu Yenilenebilir Enerji AŞ ("Zorlu Yenilenebilir")	100%	Electricity generation and others	Turkey
Zorlu Solar Enerji Tedarik ve Ticaret AŞ ("Zorlu Solar")	100%	Electricity generation and others	Turkey
Nemrut Jeotermal Elektrik Üretimi AŞ ("Nemrut Jeotermal")	100%	Electricity generation and others	Turkey
Electrip Araç Kiralama Ticaret AŞ ("Electrip")	100%	Renting and leasing of motorized light land vehicles and cars without drivers and other	Turkey
Zorlu Elektrik Enerjisi İthalat İhracat ve Toptan Ticaret AŞ ("Zorlu Elektrik")	100%	Wholesale of gas, liquid or electricity supply or production meters and other	Turkey
Zorlu Enerji Dağıtım AŞ ("Zorlu Enerji Dağıtım")	100%	Distribution of gaseous fuels through the main grid, distribution of electrical energy and other	Turkey
Zorlu Wind Pakistan (Private) Limited ("Zorlu Wind Pakistan")	99.70%	Electricity generation and others	Pakistan
Zorlu Enerji Pakistan Limited ("Zorlu Enerji Pakistan")	99.99%	Electricity generation and others	Pakistan
Zorlu Enerji İsrail Limited ("Zorlu Enerji İsrail")	100%	Electricity generation and others	Israel
Zador Israel Limited ("Zador")	100%	Electricity generation and others	Israel
ZJ Strong Energy for Renewable Energy Limited Co. ("ZJ Strong")	75%	Electricity generation and others	Palestine
Electrip Global B.V. ("Electrip Global") (*)	100%	Charging station maintenance, repair, installation, sale and other	Netherlands
Rarik Turkison Enerji AŞ ("Rarik Turkison")	100%	Engineering and consultancy activities for energy projects and other	Turkey
Alkan Jeotermal Enerji Elektrik Üretimi AŞ ("Alkan Jeotermal")	100%	Electricity generation and others	Türkiye
Tasfiye halinde Zorlu Enerji Asia Holding Limited ("Zorlu Enerji Asia")	100%	Energy projects and investment services	Dubai

On January 13, 2023, the shares plus one share representing half of the capital of our 100% subsidiary Electrip Global B.V. were sold and transferred by our Company to Electrip Global Limited for USD 50.000.000, and the shares minus one share (minority shares) representing half of the capital of Electrip Global B.V., which remained in the ownership of our Company, were transferred to Electrip Global Limited by our Company in the capital increase of Electrip Global Limited on the same date, by placing them as capital in kind against our capital commitment. With this share transfer, the management control of Electrip Global B.V. has been transferred to Wren House Infrastructure LP through Electrip Global Limited.

The Company's indirect subsidiaries are as follows:

Indirect Subsidiaries	Shareholder Direct Subsidiary and Share Rate	Main Field of Activity	Country
Osmangazi Elektrik Perakende Satış AŞ ("OEPSAŞ")	100% Zorlu Osmangazi	Electricity trade for users and other	Turkey
Osmangazi Elektrik Dağıtım AŞ ("OEDAŞ")	100% Zorlu Osmangazi	Electricity distribution and others	Turkey
Zorlu Doğal Elektrik Üretimi AŞ ("Zorlu Doğal")	100% Zorlu Yenilenebilir	Electricity generation and others	Turkey
Zorlu Jeotermal Enerji Elektrik Üretimi AŞ ("Zorlu Jeotermal")	100% Zorlu Yenilenebilir	Electricity generation and others	Turkey
Rotor Elektrik Üretim AŞ ("Rotor")	100% Zorlu Yenilenebilir	Electricity generation and others	Turkey
Trakya Bölgesi Doğal Gaz Dağıtım AŞ ("Trakya")	%90 Zorlu Enerji Dağıtım	Distribution of gaseous fuels through the main grid and other	Turkey
Gazdaş Gaziantep Doğal Gaz Dağıtım AŞ ("Gazdaş")	%90 Zorlu Enerji Dağıtım	Distribution of gaseous fuels through the main grid and other	Turkey
Zorlu Doğal Gaz Tedarik Ticaret AŞ ("Zorlu Doğal Gaz Tedarik")	100% Zorlu Enerji Dağıtım	Wholesale of gaseous fuels and related products and other	Turkey
Zorlu Renewable Pakistan (Private) Limited ("Zorlu Renewable Pakistan")	99.70% Zorlu Wind Pakistan	Electricity generation and others	Pakistan
Zorlu Sun Power (Private) Limited ("Zorlu Sun Power Pakistan")	99.70% Zorlu Wind Pakistan	Electricity generation and others	Pakistan
Zorlu Industrial Pakistan (Private) Limited ("Zorlu Industrial Pakistan")	99.99% Zorlu Wind Pakistan	Engineering and consultancy activities for energy projects and other	Pakistan
Zorlu O&M Pakistan Limited ("Zorlu O&M Pakistan")	99.99% Zorlu Wind Pakistan	Operation and maintenance activities for energy projects and other	Pakistan
Zorlu Solar Pakistan Limited ("Zorlu Solar Pakistan")	99.70% Zorlu Enerji Asia	Charging station maintenance, repair, installation, sale and other	Pakistan
ZES Dijital Ticaret AŞ ("ZES Dijital") (*)	100% Electrip Global B. V	Wholesale trade in gas, liquid or electricity supply or production meters. Electrical equipment installation services and other	Turkey
Electrip Energy Solutions and Mobility Services Sasu	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	France
Electrip Bucharest SRL	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Romania
Electrip Albania SHPK	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Albania



Indirect Subsidiaries	Shareholder Direct Subsidiary and Share Rate	Main Field of Activity	Country
Electrip USA Inc.	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	United States of America
ZES Germany GmbH	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Germany
Electrip Dooel Skopje	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Macedonia
Electrip Italy S.r.l.	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Italy
Electrip Bulgaria EOOD	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Bulgaria
Electrip Hellas Single Member P.C.	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Greece
Electrip Mobility Service D.O.O.	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Croatia
Electrip Poland Spółka Z.O.O.	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Poland
Electrip Montenegro DOO	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Montenegro
Zorlu Energy Solutions (ZES) Israel Ltd	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Israel
Electrip Mobility Service L.T.D.	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	England
ZES Solutions, D.O.O	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Slovenia
Electrip Netherlands B.V.	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Netherlands
Electrip PTG, Unipessoal LDA	100% Electrip Global B.V.	Charging station maintenance, repair, installation, sale and other	Portugal

(*) As stated in the material event disclosure dated December 9, 2022, all shares representing the capital of ZES Dijital Ticaret AŞ in our Company's portfolio were transferred by our Company to our 100% subsidiary Electrip Global B.V.

The shares of the affiliates are accounted at cost in the first accounting using the equity method in the following periods. Investments in affiliates are accounted for using the equity method in the following periods over the acquisition cost on the date of initial recording.

AFFILIATES

The shares of the affiliates are accounted at cost in the first accounting using the equity method in the following periods. Investments in affiliates are accounted for using the equity method in the following periods over the acquisition cost on the date of initial recording. These are entities in which the Group generally has between 20% and 50% of the voting rights or over which the Group has significant influence, but not control, over the operations. Unrealized gains on transactions between the Group and its associates are adjusted to the extent of the Group's interest in the associate and unrealized losses are adjusted if the transaction does not indicate that the asset transferred is impaired. Under the equity method, the post-acquisition net profit/(loss) of associates, after tax, is reflected in the Group's net profit/(loss) to the extent of the Group's interest in the associate. These are companies over which the Group generally has less than 50% of the voting rights or over which the Group has

significant influence but does not control. Unrealized gains on transactions between the Group and its affiliates and unrealized losses where the transaction does not indicate that the assets transferred are impaired are adjusted to the extent of the Group's interest in the affiliates. Under the equity method, an affiliate's post-acquisition net profit/(loss) after tax is included in the Group's net profit/(loss) to the extent of the Group's interest in the affiliate. The equity method is terminated when the carrying amount of the investment in an affiliate is zero or when the Group loses significant influence, unless the Group has a present obligation or commitment to settle the investment. After the Group's interest in an affiliate is eliminated, provisions for additional losses and receivables are recognized when the Group has a present legal or constructive obligation to make a payment on behalf of the affiliate. As of December 31, 2021 and December 31, 2022, affiliates and their actual ownerships are shown in the table.

The Company's direct affiliates are as follows:

Direct Affiliates	Share Rate	Main Field of Activity	Country
Ezotech Electric Limited ("Ezotech")	42.15%	Electricity generation and others	Israel
Solad Energy Limited ("Solad")	42.15%	Electricity generation and others	Israel
Adnit Real Estate Limited ("Adnit")	42.15%	Solar power plant construction	Israel
Dorad Energy Limited ("Dorad")	25%	Electricity Generation	Israel

The Company's indirect affiliates are as follows:

Indirect Affiliates	Shareholder Indirect Affiliate and Share Rate	Main Field of Activity	Country
Ashdod Energy Limited ("Ashdod")	100% Ezotech	Electricity generation and others	Israel
Ramat Negev Energy Limited ("Ramat")	100% Ezotech	Electricity generation and others	Israel



The Value Creation Model

A LEADER IN TRANSFORMATION,
A VISIONARY IN DEVELOPMENT

WATER

Movement, Transformation, Adaptation

Zorlu Enerji, serving the purpose of creating a better world with competent human resources in its field and the strength it receives from its stakeholders, signs transformation-oriented practices in its business models by closely following regional and global trends to adapt to changing conditions.

Zorlu Enerji pioneers efforts to improve and develop social life in the areas where it operates, within the framework of its sustainability vision.





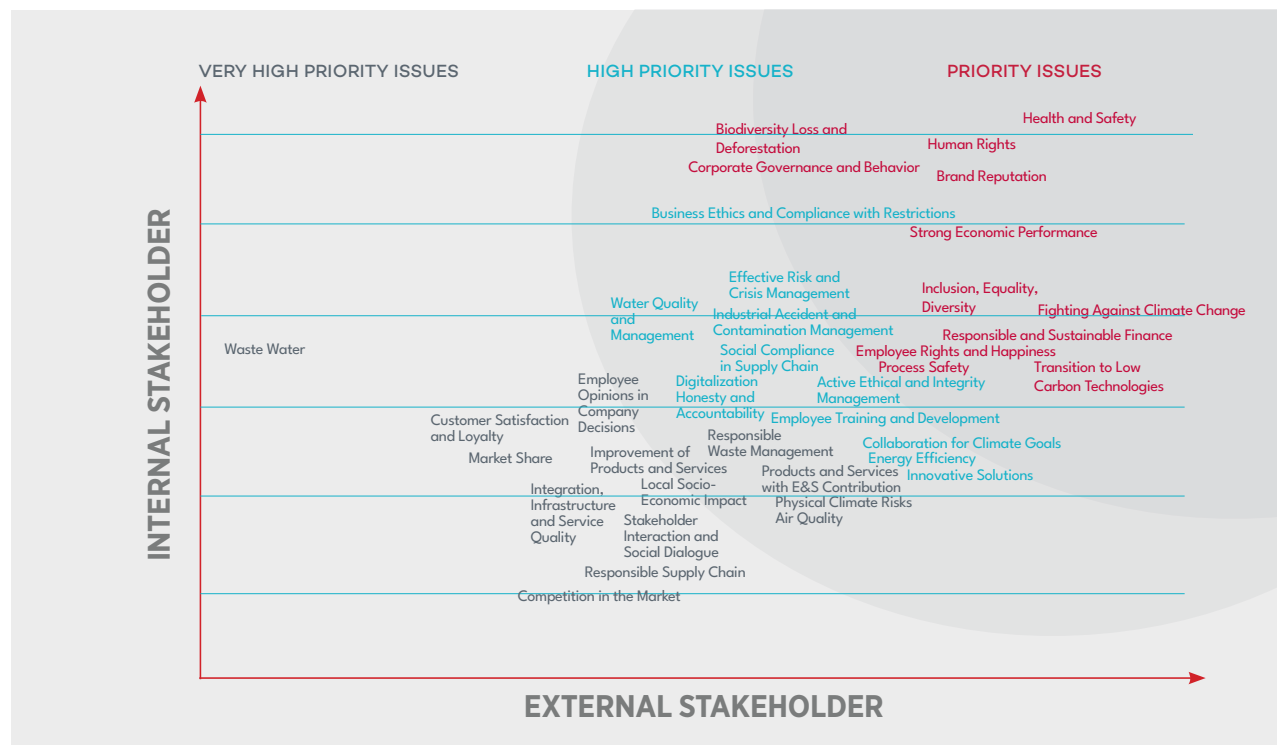
VALUE CREATION MODEL





SUSTAINABILITY MANAGEMENT AT ZORLU ENERJİ

MATERIALITY ANALYSIS



Zorlu Enerji received the support of consultants experienced in sustainability to identify global risks, conduct a survey and integrate very high priority issues into the strategy in the priority issue identification process.

In determining its sustainability strategy, Zorlu Enerji conducts an in-depth literature review as well as an annual update and materiality analysis of the most important issues that its stakeholders attach importance to and that

are relevant to its operations. In the process of identifying priority issues, the support of consultants experienced in sustainability was obtained for the identification of global risks, the survey process and the integration of very high priority issues into the strategy. Zorlu Enerji takes into account global trends, risks and the industry's leading standards on sustainability while determining priority issues, strictly adhering to its sustainability policy. In the materiality analysis, issues identified by international global risk reports

such as Deloitte – Future of Power Report and World Economic Forum - Global Risks Report, and sectoral issues identified by prominent institutions such as World Energy Outlook, IFRS and MSCI were included. Since many of the topics included in the 2021 materiality analysis are still relevant today, a detailed literature review was conducted, taking into account existing topics, and the number of topics in the 2022 analysis increased from 16 to 38 by reviewing the most important topics of today.

Taking into account all the inputs gathered through stakeholder analysis and desktop studies, and taking into account the Company's existing sustainability index gaps, a materiality matrix was created with the participation of stakeholders by distributing a questionnaire containing 38 topics in total to both internal and external stakeholders, 43% of whom were academics, 29% from the media sector, and 14% from NGOs and Zorlu Enerji's suppliers.

The Y axis of the materiality matrix shows priorities for Zorlu Enerji, while the X axis shows priorities for external stakeholders.

In total, out of the 38 topics in the materiality matrix, 12 were categorized as "very high priority", 12 as "high priority" and 14 as "priority".

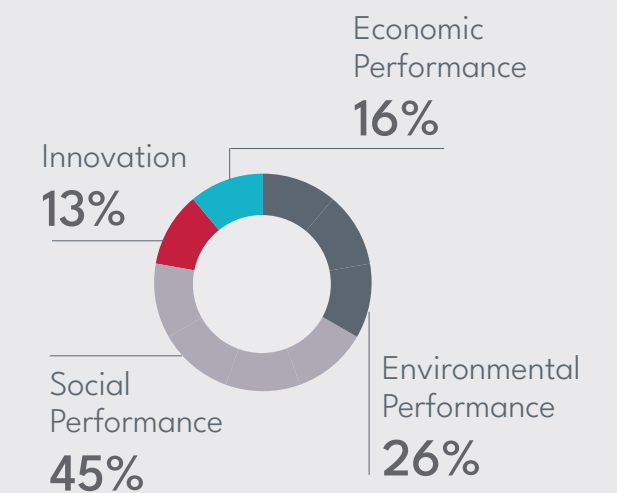
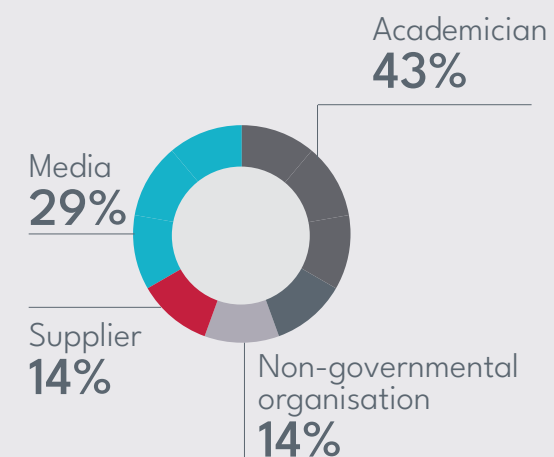
Within the framework of its Sustainability Policy, Zorlu Enerji strives to create sustainable added value in every region where it operates. Thanks to the results of the materiality analysis carried out in parallel with this policy, the organization evaluated the prominent topics with a holistic approach and identified the value areas to focus on in its long-term value creation journey. Accordingly, the priority areas of value creation are based on;

Economic Performance

Environmental Performance

Social Performance

Innovation





The list of material issues that develop the working areas of the Working Groups under the Sustainability Board and their comparisons with the material issues of the previous year are given in the table below:

	2022	2021	2022	2021
Related United Nations Sustainable Development Goals	Health and Safety Page: 156	Occupational Health and Safety Top Priority	Compliance with Human Rights Principles, Standards and Laws Page: 161	
	 		  	
Related United Nations Sustainable Development Goals	Strong Economic Performance Page: 96	-	Responsible and Sustainable Financing Investments Page: 97	Sustainable Finance and Responsible Investment Top Priority
			 	
Related United Nations Sustainable Development Goals	Inclusion, Equality and Diversity Culture Page: 161	Ethics, Compliance and Transparency Priority	Process Safety Page: 134	-
	 			

	2022	2021	2022	2021
Related United Nations Sustainable Development Goals	Brand Reputation Page: 168	Customer Orientation Priority	Fighting Against Climate Change Page: 124	Climate Action Top Priority
				
Related United Nations Sustainable Development Goals	Transition to Low Carbon Technologies Page: 144	Innovation and New Business Models Top Priority	Biodiversity Loss and Deforestation Page: 129	Biodiversity Top Priority
	 			
Related United Nations Sustainable Development Goals	Protecting Employee Rights and Increasing Employee Happiness Page: 164	Talent Management and Employee Happiness Top Priority	Corporate Governance and Behavior Page: 218	Corporate Governance and Behavior Priority
				



Zorlu Enerji Sustainability Strategy



FUNDAMENTALS

Integrated Risk Management

Corporate Governance and Behavior

Ethics, Compliance and Transparency

The identified material issues were evaluated holistically and the value areas that Zorlu Enerji will focus on in its long-term value creation journey were identified.

In line with this, areas under the headings of

- Nature Stewardship
- Impact Driven Growth
- People and Culture

have been identified.

Nature Stewardship addresses what needs to be done to ensure that the biosphere, which is the layer that ensures the existence of living life, can continue its cyclical functioning. In addition to direct planetary issues such as combating the climate crisis and improving biodiversity, green and reliable energy supply, which also contributes to the business model, is considered under this heading.

Under Impact Driven Growth, growth paths that aim to create a positive impact, especially in new generation business models such as digital, connected infrastructures, e-mobility, smart urbanization, etc., are addressed. Thus, while under biosphere protection we try to transform existing businesses from a regenerative framework, under this area we directly consider regenerative/repairing business model designs.

People and Culture focuses on talent management and healthy employees, which are the main resources required to ensure the regenerative transformation of existing businesses and the design of regenerative/repairing business models, while in the context of generating social benefits, local socio-economic development and ways of interacting with stakeholders in the regions where Zorlu Enerji operates are evaluated.

"Pioneer in Turkey's regenerative and restorative growth"

Facilitator of Turkey's regenerative and restorative growth

Disrupted ecological systems need to be restored and rehabilitated. The economic and social systems we have produced have fallen behind the requirements of the age. Beyond being sustainable, it has become inevitable to move to a new growth model by making a positive contribution to the systems that we have disrupted.

In the face of all these realities and complex challenges, the industry and business models we are in claim to produce the most appropriate solutions for the reality of the future. At Zorlu Enerji, we aim to be a facilitator of sustainable and regenerative growth in Turkey. With the strategy we have developed for this purpose, we offer a restorative business model and value chain proposal, contributing not only to our own operations but also to the decarbonization of our country and the development of biodiversity. With our approach based on impact-oriented growth, we contribute to the innovation ecosystem in our country and develop the business models of the future. Thus, we generate innovative and regenerative value propositions beyond our core business model. With our work in the field of human and cultural development, we both contribute to local development and increase the social welfare of our employees. Our transparent and ethical approach to doing business and our integrated point of view, distract us from the risks of today and the future, while facilitating us to create new opportunities and positive impact.

Nature Stewardship - Environmental Regeneration

Our first priority is to contribute to the renewal and restoration of the biosphere to which humanity and all life owes its existence. As Zorlu Enerji, we have long been contributing to the reduction of greenhouse gas emissions in the atmosphere by investing only in renewable resources. By separating our core business of power generation from fossil resources, we ensure clean and reliable energy supply. In this way, we enable the regenerative transformation of our existing business.

By 2030, we are pledging that all of the energy we produce will come from renewable sources. As a company that generates electricity and delivers it to consumers, we want to facilitate not only our own operations but also our customers' carbon-free growth. We contribute to the decarbonization of all sectors, starting with Zorlu Group companies, in order to stay close to the decarbonizing markets led by Europe and other major economies and to contribute to the competitive power of our country. Not only that, but we continue to create long-term positive value by working to make our entire value chain carbon neutral by 2040.

We are working to contribute to preventing the loss of biodiversity, which is as important an issue as the climate crisis. We make investments and carry out projects to protect biodiversity in the regions where our operations and facilities are located. By 2030, we aim to invest 10 million Turkish Liras in biodiversity conservation and development and be fully compliant with international frameworks. In this way, we not only prevent potential negative impacts arising from our operations, but also take concrete steps to protect species and improve the diversity of life in our country.

By 2030, we are pledging that all of the energy we produce will come from renewable sources. As a company that generates electricity and delivers it to consumers, we want to facilitate not only our own operations but also our customers' carbon-free growth.



Impact Driven Growth - Financial Innovation

The current crises and realities have led all countries, sectors and companies to different searches and solutions. We cannot eliminate the causes of crises with the same perspective. With our new business models and the power of our innovation, we are able to look at the areas we invest in through the lens of sustainability. Thus, we achieve our goal of creating environmental and social benefits through profitable business models and design the businesses of the future. Our investments in digitalization and e-mobility fields are growing exponentially. By 2030, we aim to increase the contribution of our innovation and impact-oriented businesses to 20% of our turnover. In this way, we not only make it easier to access clean and reliable energy in our country and region, but also aim to be a pioneer in the development of electric mobility infrastructure.

While access to financing is becoming more costly every day, we are increasing our access to sustainable financing instruments with the advantage created by our portfolio and our investments in innovative business models. We play a role in the utilization of sustainability-based resources in our country by responding correctly to the investor perspective that has differentiated with global developments. By 2030, we aim to meet all new project financing needs in Turkey through sustainable instruments. Thus, we will not only increase the utilization rate of these resources in our country, but also prove the validity of our business models that generate benefits by providing access to these resources that require meeting very different criteria.

People and Culture - Social and Organizational Innovation

İnsanlar ve topluluklar sürdürülebilir toplumun ana bileşenleri. People and communities are the main components of a sustainable society. Sustainability of societies and therefore humanity is essential for the sustainability of the world. During the global pandemic, we have seen once again that if we cannot build healthy systems, we will always remain fragile. Under the People and Culture heading, we aim to reach out to all stakeholders we interact with, from our employees to local communities, in the right way. Developing innovative business models to contribute to ecosystem restoration is only possible with sustainable societies. On the other hand, it is not possible to establish organizational structures that will meet the demands of individuals, the building blocks of society, with past organizational models. That is why we invest in the development of our employees and the future of the business.

We take steps to ensure the well-being of our employees in an inclusive environment where diversity is respected. We are pledging to increase our female executive ratio to 40%.

Therefore, we aim to build a healthy organizational structure consisting of healthy people in order to implement our strategy based on regenerative benefit creation.

It is important for us that not only our employees but all the communities we interact with are healthy. This is why we contribute to local socio-economic development in the regions where we have operations. In order to facilitate the realization of the Sustainable Development Goals, we implement social investments and make local communities, with whom we have neighborhood relations, a part of our decision-making processes.

At Zorlu Enerji, we aim to contribute not only to sustainability but also to our country's innovative growth and future competitiveness. With green and reliable energy supply, we not only realize clean production, but also contribute to the progress of our country by creating employment on the path to green growth. We add innovative tools to our future-oriented business models and help build the mobility infrastructure of the future world. As a business partner and supplier trusted by all our stakeholders and our ecosystem, we are taking firm steps towards the future.

We achieve our goal of creating environmental and social benefits through profitable business models and design the businesses of the future. Our investments in digitalization and e-mobility fields are growing exponentially. By 2030, we aim to increase the contribution of our innovation and impact oriented businesses to 20% of our turnover.

Sustainability Governance Structure

In 2022, as a result of the prioritization work carried out, the expanded topics for the working groups were formed as follows;



The relevance of work areas to the United Nations Sustainable Development Goals has been given



After Zorlu Enerji's value areas and strategic framework were revealed, ESG Strategy and strategic actions were defined, the best governance model was defined to manage the ESG strategy smoothly and effectively.

According to the model, it is proposed that a working group be established under each value area and be responsible for implementing actions to achieve the objectives under the relevant priority areas. At the same time, issues such as the basic governance structure, risk management and transparency required to create long-term value in these value areas are also addressed under the Strategic Foundations Working Group.

Working under the coordination of the OHS-E Directorate, the Sustainability Board convenes annually and is responsible for evaluating current activities, monitoring performance on the road to targets, and determining regulatory actions in areas where performance falls behind. Working Groups also provide content and support to the Sustainability Board within the framework of their responsibilities.

The Sustainability Board brings relevant issues to the agenda of the existing Corporate Governance Committee and ensures their reporting to the Board of Directors.

The Sustainability Board brings relevant issues to the agenda of the existing Corporate Governance Committee and ensures that they are reported to the Board of Directors.



Prominent issues are discussed on a subject-specific basis in Working Groups established under the umbrella of the Sustainability Board. A meeting was held by the Sustainability Board on 22.12.2022 and information was shared with the Zorlu Enerji Board of Directors by the Sector Head.

WORKING GROUPS

At a maximum, the Sustainability Board convenes once a year to share progress on both Zorlu Enerji sustainability targets and Zorlu Holding targets. In 2022, action plans for the detailed sustainability index gap analysis were assigned to the relevant working groups. Working groups continue to work on issues related to Zorlu Enerji sustainability strategy focus areas and materiality analysis results.

Working Groups



Zorlu Enerji reviews the policy studies corresponding to the value areas it has designed to realize its Sustainability Strategy by the relevant working group champions;

Value Area	Champion
Nature Stewardship	Director, QHSE & Sustainability
People& Culture	Director, Human Resources
Impact Driven Growth	General Manager, Trade
Strategic Foundations	General Manager, Financial Affairs



SUSTAINABILITY GOALS

Zorlu Enerji Sustainability Goals



Nature Stewardship and Value Chain

	Goals
Climate Action >>>	Achieving net zero in operations and energy production by 2030
	Achieving net zero across the entire value chain by 2040
Green and Reliable Energy Supply >>>	Increase the share of renewable energy in total generation to 100% by 2030.*
Biodiversity >>>	Investing 10 million TRY for the protection and improvement of biodiversity until 2030



People and Culture

Talent Management and Employee Wellbeing >>>	To be one of the top three most desired energy companies in our country and in our region
	Increase the proportion of women in management to 40% by 2030
	To be evaluated in the Bloomberg Gender Index
	Achieving a zero workforce loss accident rate by 2030
Local Socio-economic Development >>>	Continuously increase the local socio-economic benefit we create through our business model & social investments



Impact Driven Growth

Innovation and New Business Models >>>	Ensuring that 20% of turnover comes from innovative business models**
Sustainable Finance and Responsible Investments >>>	Providing all new project financing needs in Turkey from sustainable instruments by 2030

*Production in Turkey has been taken into account, production from thermal power plants that are operated due to the instructions of the Ministry of Energy and Natural Resources and maintenance processes have been excluded from the scope.

** Sales realized through Zorlu Solar, ZES and Electrip are taken into consideration.

You can access Zorlu Enerji's sustainability performance in line with Zorlu Holding Smart Life 2030 goals via the following [link](#).
You can find detailed information about Smart Life 2030 from the [link](#).

Akıllı Hayat
2030



Base Year	Progress		
	2020	2021	2022
2020	1.4 million tCO ₂ e	1.3 million tCO ₂ e	1.2 million tCO ₂ e
2020	4 thousand tCO ₂ e	500 thousand tCO ₂ e	200 thousand tCO ₂ e
2020	99.9%	99.9%	99.9%
2020	600 thousand TRY	575 thousand TRY	1,4 million TRY

2020	-	-	-
2020	19%	36%	22%
2020	-	-	-
2020	1.62	6.63	22.61
2020	5.8million TRY	2.5 million TRY	7.3 million TRY

2020	37 million TRY	114 million TRY	3.8 billion TRY
2020	N/A	157 million TRY	1,5 million TRY



STAKEHOLDER COMMUNICATION

We ensure continuity in our communication with our stakeholders through our periodic employee satisfaction survey, sustainability survey, customer satisfaction survey, reputation research, project-based stakeholder participation and information meetings, prioritization workshops, fairs, technical trips, meetings with various contents, our website, our transaction center, our call center, our social media accounts, e-mail, petitions and one-to-one visits.

As Zorlu Enerji, we have different complaint mechanism tools. Our contact information is available on our website at <https://www.zorluenerji.com.tr/en/contact/contact-details>

🌐 for all our stakeholders to communicate their complaints, suggestions and requests to our company.

Complaints regarding our 'Electricity and Gas Distribution' operations reach our company through the following communication channels:

- Corporate website
- Transaction centers
- 186 call center
- Social media accounts (Twitter, Facebook, Instagram, etc.)
- Complaint websites
- E-mail
- Written complaints received through government offices (public institutions)
- Petitions

At Zorlu Enerji, we consider it a corporate priority to create a modern, humane and respectful working environment that enables participation and respects human rights. Therefore, we implement a transparent process for receiving and resolving employee complaints. In case of any doubt regarding the content of our Code of Ethics and/or in case of witnessing a behavior or practice contrary to the rules, all of our employees who wish to communicate or consult the situation in question can reach the Ethical Principles Notification Line via e-mail (etik@zorlu.com 🌐) and at any time of the day by calling (0 212 456 23 23) or (0 850 226 23 23).

EXISTING METHODS OF COMMUNICATION WITH KEY STAKEHOLDERS

STAKEHOLDER GROUP	COMMUNICATION METHOD	FREQUENCY OF COMMUNICATION	STAKEHOLDER GROUP	COMMUNICATION METHOD	FREQUENCY OF COMMUNICATION
 Employees	Employee satisfaction survey	Every two years	 Local Society and Local Governments	Informative meetings	Several times a year
	Intranet 'I Have an Idea' corner	Continuously		Stakeholder engagement activities	Several times a year
	Employee suggestion and complaint mechanism	Continuously		Visits	Several times a year
 Clients	Customer satisfaction surveys	Every two years		Social responsibility projects	Continuously
	Reputation research	Every three years		Stakeholder suggestion and complaint mechanism	Continuously
	Website	Continuously		Reputation research	Every three years
	Call center	Continuously	 Media Members	Press conferences and announcements	Twice a month
	Market research	When necessary		Private meetings and briefings	Continuously
 Public and Regulatory Authorities	Consultation meetings	Several times a year		Press visits	Yearly
	Conference/Panel/Projects	Several times a year		Reputation research	Every three years
	Collaboration on legal regulations	Continuously	 Financial Institutions	Management and relevant department interviews	Continuously
	Reputation research	Every three years		Informative meetings	Several times a year
 Shareholders, Investors and Analysts	Public Disclosure Platform (KAP) statements	Continuously		Reputation research	Every two-three years
	Investor Relations e-mail	Continuously		Investment monitoring visits	Every six months
	Information exchange meetings	Yearly	 Non-Governmental Organizations	Social responsibility projects	Continuously
	Board meetings	Monthly		Meetings	Several times a year
	Phone calls	Continuously		Reputation research	Every three years
	Integrated activity report	Once a year	 Suppliers	Face-to-face meetings	Continuously
	Annual and interim financial tables and activity reports	Four times a year		Inspections	Several times a year
	Investor Relations website	Continuously		Fairs	Several times a year
	Investor Conferences and Roadshows	Several times a year		E-mail	Continuously
	Investor Presentations	Several times a year	 Students/Academics/Potential Employees	Scientific organizations	Several times a year
				R&D projects and technical trips	Several times a year
				University visits	Several times a year



MEMBERSHIPS, COLLABORATIONS and INITIATIVES

As one of the leading companies in the energy sector, we are aware of the importance of renewable energy investments for the allocation of a sustainable future in our country and the world, and we act as a spokesperson based on scientific foundations in public, civil society and private sector platforms to prioritize these investments. We take an active role in non-governmental organizations and carry

out competency-oriented work. In addition, we participate as speakers in workshops and seminars in cooperation with associations focusing on sustainable energy and share our expert opinion.

The non-governmental organizations of which we are a member and the table of internal representation are presented below.

Association Name	Representatives	Company Internal Role	Position
DEIK Israel Business Council	İ. Sinan Ak	CEO	Chairman of the Executive Committee
DEIK (Foreign Economic Relations Board)	İ. Sinan Ak	CEO	Representative Member
DEIK Energy Business Council	İ. Sinan Ak	CEO	Representative Member
DEIK American Business Council	İ. Sinan Ak	CEO	Representative Member
DEIK Russia Business Council	İ. Sinan Ak	CEO	Representative Member
DEIK Greece Business Council	İ. Sinan Ak	CEO	Representative Member
DEIK England Business Council	İ. Sinan Ak	CEO	Representative Member
TESAB (Turkish Electricity Industry Association)	İ. Sinan Ak	CEO	Representative Member
CIGRE Turkey National Committee (International Council on Large Electric Systems)	İ. Sinan Ak	CEO	Representative Member
ENVER (Energy Efficiency Association)	İ. Sinan Ak	CEO	Representative Member
ETD (Energy Traders Association)	İ. Sinan Ak	CEO	Representative Member
(EÜD) Electricity Generators Association	İ. Sinan Ak	CEO	Representative Member
GÜNDER (International Solar Energy Society)	İ. Sinan Ak	CEO	Representative Member
GÜYAD (Energy Investors Association)	İ. Sinan Ak	CEO	Representative Member
ÇATIDER (Roof Industrialists and Businessmen Association)	İ. Sinan Ak	CEO	Representative Member
INTES (Turkish Employers' Association of Construction Industries)	İ. Sinan Ak	CEO	Representative Member
DEK (World Energy Council Turkish National Committee Association)	İ. Sinan Ak	CEO	Representative Member
United Nations Global Compact Turkey	İ. Sinan Ak	CEO	Representative Member

Association Name	Representatives	Company Internal Role	Position
SMİ (Sustainable Mobility Initiative)	İ. Sinan Ak	CEO	Representative Member
IIEEC (Sabancı University İstanbul International Center for Energy and Climate)	İ. Sinan Ak	CEO	Representative Member
Energy Council of the Union of Chambers and Commodity Exchanges of Turkey	İ. Sinan Ak	CEO	Representative Member
E-MOD (Association of E-Mobility Operators)	İ. Sinan Ak	CEO	Vice Chairman of the Board
H2DER (Association of Green Hydrogen Producers)	İ. Sinan Ak	CEO	Representative Member
GENSED (Turkish Solar Energy Industry Association)	İ. Sinan Ak	CEO	Representative Member
ELDER (Association of Electricity Distribution Services)	İ. Sinan Ak	CEO	Board Member
Energy Working Group of the Turkish Industrialists and Business People Association	İ. Sinan Ak	CEO	Representative Member
TÜREB (Turkish Wind Energy Association)	Ali Kindap	General Manager Responsible for Investments, Operations, and Maintenance	Representative Member
JED (Geothermal Energy Association)	Ali Kindap	General Manager Responsible for Investments, Operations, and Maintenance	Chairman
BİYODER (Bioenergy Association)	Ali Kindap	General Manager Responsible for Investments, Operations, and Maintenance	Representative Member
Hydrogen Technologies Association	Ali Kindap	General Manager Responsible for Investments, Operations, and Maintenance	Representative Member
ENSİA (Energy Industry and Business People Association)	Ali Kindap	General Manager Responsible for Investments, Operations, and Maintenance	Representative Member
TÜRKOTED (Turkey Cogeneration and Clean Energy Technologies Association)	Ali Kindap	General Manager Responsible for Investments, Operations, and Maintenance	Representative Member
ERTA (Integrated Reporting Turkey Network)	Elif Yener	General Manager of Financial Affairs	Representative Member
GAZBİR (Natural Gas Distributors Association of Turkey)	Fuat Celepci	General Manager Responsible for Electricity and Gas Distribution Operations	Representative Member
SALES NETWORK	İnanç Salman	General Manager Responsible for Trade	Representative Member
TÜMAKÜDER (All Battery Importers and Manufacturers Association)	İnanç Salman	General Manager Responsible for Trade	Representative Member
EDİDER (Digitalization in Energy Association)	Burçin Açıan	Deputy General Manager, Smart Systems	Representative Member





Association Name	Representatives	Company Internal Role	Position
DEIK Bulgaria Business Council	Nihat Türksever	Deputy General Manager, ZES Business Development	Representative Member
DEIK Japan Business Council	Abdullah Çerekçi	Director, Zorlu Holding Strategy and Business Development	Representative Member
DEIK Foreign Investments Business Council	Abdullah Çerekçi	Director, Zorlu Holding Strategy and Business Development	Representative Member
DEIK Pakistan Business Council	Evren Evcit	Director of Zorlu Solar and Foreign Investments	Vice Chairman of the Executive Committee
DEIK Palestine Business Council	Evren Evcit	Director of Zorlu Solar and Foreign Investments	Representative Member
DEIK Indonesia Business Council	Evren Evcit	Director of Zorlu Solar and Foreign Investments	Representative Member
KİD (Corporate Communicators Association)	Funda Küçükosmanoğlu	Marketing and Corporate Communications Director	Representative Member
ÖSGD (Private Sector Volunteers Association)	Funda Küçükosmanoğlu	Marketing and Corporate Communications Director	Representative Member
SKD Türkiye (Business and Sustainable Development Association)	Funda Küçükosmanoğlu	Marketing and Corporate Communications Director	Representative Member
TÜHİD (Public Relations Association of Turkey)	Funda Küçükosmanoğlu	Marketing and Corporate Communications Director	Representative Member
Corporate Responsibility Association of Turkey	Funda Küçükosmanoğlu	Marketing and Corporate Communications Director	Representative Member
DEIK Italy Business Council	Özlem Gelbal Uluşık	Director of Legal Affairs	Representative Member
TRAI (Turkey Artificial Intelligence Initiative)	Adnan Çomakoğlu	Manager, New Generation Technologies Manager	Representative Member
DEIK Netherlands Business Council	Müge Dolay Giritli	Legal Affairs Manager	Representative Member
DEIK Montenegro Business Council	Müge Dolay Giritli	Legal Affairs Manager	Representative Member
KalDer (Turkish Quality Association)	Kaan Gençel	Director of QHSE and Sustainability	Representative Member
Environmental and Climate Change Working Group of the Turkish Industrialists and Business People Association	Kaan Gençel Tamer Soylu Berk Türkel	Director of QHSE and Sustainability, Sustainability Manager, Senior Assistant Manager of QHSE	Representative Member
DEIK Croatia Business Council	Zeynep Alemdaroğlu	Legal Affairs Manager	Representative Member

Partnerships within the scope of R&D Studies;

GECO Project partners

Project website: <https://geco-h2020.eu/>



Partner Name	Country	Field of Activity
ORKUVEITA REYKJAVIKUR SF	Iceland	Energy
ISLENSKAR ORKURANNSOKNIR	Iceland	Engineering
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	France	Research Center
GEORG-RANNSOKNARKLASI I JARDHITA	Iceland	Counseling
HASKOLI ISLANDS	Iceland	University
IFP Energies Nouvelles	France	Institute
UNIVERSITA DEGLI STUDI DI FIRENZE	Italy	University
GRAZIELLA GREEN POWER S.P.A.	Italy	Energy
STORENGY SA	Italy	Energy
FUNDACION CIRCE CENTRO DE INVESTIGACION DE RECURSOS Y CONSUMOS ENERGETICOS	Spain	Research Center
PLAN B CO ₂ BV		Engineering
UNITED KINGDOM RESEARCH AND INNOVATION	England	R&D and Innovation
MIDDLE EAST TECHNICAL UNIVERSITY	Turkey	University
CONSIGLIO NAZIONALE DELLE RICERCHE	Italy	Research Council
HOCHSCHULE BOCHUM	Germany	University
INSTITUTT FOR ENERGITEKNIKK	Norway	Institute
ASOCIACION DE INVESTIGACION METALURGICA DEL NOROESTE	Spain	Technology Center

GeoSmart Project partners

Project website: <https://www.geosmartproject.eu/>



Partner Name	Country	Field of Activity
TWI LIMITED	England	Institute
VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V.	Belgium	Institute
COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	France	Institute
ATLAS COPCO AIRPOWER NV	Belgium	Equipment Manufacturer
EUROPEAN GEOTHERMAL ENERGY COUNCIL	Belgium	Association
FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.	Germany	Institute
SPIKE RENEWABLES SRL	Italy	Engineering
ORKUVEITA REYKJAVIKUR SF	Iceland	Energy
HASKOLI ISLANDS	Iceland	University
MIDDLE EAST TECHNICAL UNIVERSITY	Turkey	University
BERTIN TECHNOLOGIES SAS	Belgium	Engineering
GEROSION EHF	Iceland	Counseling
KADIR HAS UNİVERSİTESİ	Turkey	University
TECHNOVATIVE SOLUTIONS LTD	England	Counseling
FLOWPHYS AS	Norway	Engineering
P.VALD EHF	Iceland	Engineering
CONSORZIO PER LO SVILUPPO DELLE AREE GEOTERMICHE	Italy	NGO
NYSKOPUNARMIDSTOD ISLANDS	Iceland	Innovation Center



SUCCEED Project partners

Project website: <https://www.imperial.ac.uk/energy-futures-lab/succeed/> 



Partner Name	Country	Field of Activity
IMPERIAL COLLEGE LONDON	England	University
MIDDLE EAST TECHNICAL UNIVERSITY	Turkey	University
DELFT UNIVERSITY OF TECHNOLOGY	Netherlands	University
SILIXA LTD	England	Engineering
SEISMIC MECHATRONICS BV	Netherlands	Engineering
ORKUVEITA REYKJAVIKUR SF	Iceland	Energy
ISTITUTO NAZIONALE DI OCEANOGRAFIA E DI GEOFISICA SPERIMENTALE	Italy	Institute

GEOPRO Project partners

Project website: <https://www.geoproproject.eu/> 



Partner Name	Country	Field of Activity
TWI LIMITED	England	Institute
HASKOLI ISLANDS	Iceland	University
EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH	Switzerland	University
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	France	Research Center
FLOWPHYS AS	Norway	Engineering
TECHNOVATIVE SOLUTIONS LTD	England	Counseling
ORKUVEITA REYKJAVIKUR SF	Iceland	Energy
EQUINOR ENERGY AS	Norway	Energy
NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU	Norway	University
PFALZWERKE GEOFUTURE GMBH	Germany	Energy
UNIVERSITAET ZU KOELN	Germany	University

eCharge4Drivers Project partners

Project website: <https://echarge4drivers.eu/> 



Partner Name	Country	Field of Activity
ABB BV	Netherlands	Energy
INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS	Greece	Institute
AVESTA BATTERY & ENERGY ENGINEERING	Belgium	Engineering and Counseling
BAYERISCHE MOTOREN WERKE AKTIENGESELLSCHAFT	Germany	Automobile Manufacturer
BUILDING FACILITY SERVICES PAROCHIYPIRESION ANONYMI ETAIREIA	Greece	Service
ROBERT BOSCH GMBH	Germany	Manufacturer
BARCELONA DE SERVEIS MUNICIPALS SA	Spain	Municipality
COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	France	Institute
CHARGER Y GMBH	Germany	Equipment Manufacturer
CENTRO RICERCHI FIAT SCPA	Italy	Research Center
ELECTROMAPS SL	Spain	Engineering
EUROPEAN ROAD TRANSPORT TELEMATICS IMPLEMENTATION COORDINATION ORGANISATION- INTELLIGENT TRANSPORT SYSTEMS & SERVICES EUROPE	Belgium	NGO
GRENOBLE-ALPES-METROPOLE METRO	France	Municipality
GREENPACK MOBILE ENERGY SOLUTIONS GMBH	Germany	Engineering
HUBJECT GMBH	Germany	e-Commerce
CONSORZIO INTERUNIVERSITARIO PER L'OTTIMIZZAZIONE E LA RICERCA OPERATIVA	Italy	Research Center
IDIADA AUTOMOTIVE TECHNOLOGY SA	Spain	Engineering
MOSAIC FACTOR SL	Spain	Software
NEXXTLAB SA	Luxembourg	Counseling
SCUTUM LOGISTIC SL	Spain	Logistics
POLIS - PROMOTION OF OPERATIONAL LINKS WITH INTEGRATED SERVICES, ASSOCIATION INTERNATIONALE	Belgium	NGO
POLITECNICO DI BARI	Italy	University
POWERDALE	Belgium	Engineering and Counseling
ROUTE220 SRL	Italy	Software
OPEN TECHNOLOGY SERVICES AE	Greece	Counseling
SMATRICS GMBH & CO KG	Austria	Software
UNIVERSITA DI PISA	Italy	University
THE UNIVERSITY OF SUSSEX	England	University
VERBUND AG	Austria	Energy
VOLVO PERSONVAGNAR AB	Sweden	Automobile Manufacturer
VRIJE UNIVERSITEIT BRUSSEL	Belgium	University



JIDEP (Joint Industrial Data Exchange Platform) Project partners

Project website: <https://www.jidep.eu/> 



Partner Name	Country	Field of Activity
FACHHOCHSCHULE VORARLBERG GMBH	Austria	University
ARTEEVO TECHNOLOGIES LTD	Israel	Software
UNIVERSITA DEGLI STUDI DI TRENTO	Italy	University
ADSCENSUS MB	Lithuania	Technology
ALMAS PARTECIPAZIONI INDUSTRIALI SPA	Italy	Engineering
CENTRO RICERCHE FIAT SCPA	Italy	Research Center
UNIVERZITA PARDUBICE	Czechia	University
TPI-KOMPOZIT KANAT SANAYI VE TICARET ANONIM SIRKETI	Turkey	Equipment Manufacturer

SmartWind Project partners

Project website: <https://smart-wind.eu/> 



Partner Name	Country	Field of Activity
ENFORMA TECHNOLOGIES	Turkey	Software
NETAS TELEKOMUNIKASYON AS	Turkey	Telecommunication
ISOTROL	Spain	Energy
TECNALIA	Spain	Research Center
RUHR UNIVERSITY BOCHUM	Germany	University

PlaMES Project partners carried out within OEDAŞ

Project website: <https://plames.eu/> 



Partner Name	Country	Field of Activity
RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN	Germany	University
FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.	Germany	University
ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA	Italy	University
OPTIT SRL	Italy	Software

FlexiGrid Project partners carried out within OEDAŞ

Project website: <https://flexigrid.org/> 



Partner Name	Country	Field of Activity
IMCG SWEDEN AB	Sweden	Counseling
TECHNISCHE UNIVERSITEIT EINDHOVEN	Netherlands	University
CHALMERS TEKNISKA HOEGSKOLA AB	Sweden	University
EMAX	Belgium	Software Counseling
SIVECO ROMANIA SA	Romania	Software Development
RISE RESEARCH INSTITUTES OF SWEDEN AB	Sweden	Institute
AKADEMISKA HUS AKTIEBOLAG	Sweden	Academic Real Estate Developer
ENERGO-PRO ENERGY SERVICES EOOD	Bulgaria	Energy
GOTEBORG ENERGI AB	Sweden	Energy
TECHNICAL UNIVERSITY OF SOFIA	Bulgaria	University
SMART CONSULTING	Bulgaria	Counseling
HAUTE ECOLE SPECIALISEE DE SUISSE OCCIDENTALE	Switzerland	University
L'ENERGIE DE SION-REGION SA, ESR	Switzerland	Energy
T4E ENERJİ ANONIM SIRKETİ	Turkey	Energy

BD4OPEM Project partners carried out within OEDAŞ

Project website: <https://bd4opem.eu/> 



Partner Name	Country	Field of Activity
UNIVERSITAT POLITECNICA DE CATALUNYA	Spain	University
WE PLUS SPA	Italy	Software and Counseling
Odit-e	France	Energy and Counseling
ATOS SPAIN SA	Spain	Digitalization
INSTITUT JOZEF STEFAN	Slovenia	Institute
INTRACOM SA TELECOM SOLUTIONS	Greece	Telecommunication
NUVVE DENMARK APS	Denmark	Electric Vehicle Charging Stations
VRIJE UNIVERSITEIT BRUSSEL	Belgium	University
ESTABANELL Y PAHISA ENERGIA SA	Spain	Electricity Distribution
ELEKTRO CELJE D.D.	Slovenia	Electricity Distribution
SUSTAINABLE INNOVATION I SVERIGE AB	Sweden	Counseling



BD4NRG Project stakeholders carried out within OEDAŞ

Project website: <https://www.bd4nrg.eu/>



Partner Name	Country	Field of Activity
ENGINEERING - INGEGNERIA INFORMATICA SPA	Italy	Digital Transformation
NATIONAL TECHNICAL UNIVERSITY OF ATHENS - NTUA	Greece	University
RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN	Germany	University
EUROPEAN DYNAMICS LUXEMBOURG SA	Luxembourg	Software
INTERNATIONAL DATA SPACES EV	Germany	Data Science
EUROPEAN NETWORK OF TRANSMISSION SYS. OPERATORS FOR ELECT.AISBL	Belgium	Association
PANEPISTIMIO DYTIKIS ATTIKIS	Greece	University
ATOS SPAIN SA	Spain	Digitalization
FUNDACION CARTIF	Spain	Technology Center
UNIVERZA V LJUBLJANI	Slovenia	University
ENEL X SRL	Italy	Energy
REN - REDE ELECTRICA NACIONAL SA	Portugal	Electric Transmission
CENTRO DE INVESTIGACAO EM ENERGIA REN - STATE GRID SA	Portugal	Research Center
UNINOVA-INSTITUTO DE DESENVOLVIMENTO DE NOVAS TECNOLOGIASASSOCIACAO	Portugal	Institute
ENERCOUTIM - ASSOCIACAO EMPRESARIALDE ENERGIA SOLAR DE ALCOUTIM	Portugal	Association
FIWARE FOUNDATION EV	Germany	Software
CENTRICA BUSINESS SOLUTIONS BELGIUM	Belgium	Energy
NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK TNO	Netherlands	Research Organization
ASM TERNI SPA	Italy	Waste Management
VIDES INVESTICIJU FONDS SIA	Lithuania	Investment Fund
COMSENSUS, KOMUNIKACIJE IN SENZORIKA, DOO	Slovenia	Digital Transformation
HOLISTIC IKE	Greece	Engineering and Counseling
INTERUNIVERSITAIR MICRO-ELECTRONICA CENTRUM	Belgium	Research Organization
TERRASIGNA SRL	Romania	Engineering and Counseling
UBIMET GMBH	Austria	Weather Forecasting
ELEKTRO LJUBLJANA PODJETJE ZADISTRIBUCIJO ELEKTRICNE ENERGIJE D.D.	Slovenia	Electricity Distribution
BORZEN, OPERATER TRGA Z ELEKTRIKO,D.O.O.	Slovenia	Electricity Market Operator
AJUNTAMIENTO DE SANT CUGAT DEL VALLES	Spain	Municipality
ELES DOO SISTEMSKI OPERATER PRENOSNEGA ELEKTROENERGETSKEGA OMREZJA	Slovenia	Electricity Transmission Company
E-LEX - STUDIO LEGALE	Italy	Law
VEOLIA SERVICIOS LECAM SOCIEDAD ANONIMA UNIPERSONAL	Spain	Energy
STICHTING EGI	Netherlands	NGO
CINTECH SOLUTIONS LTD	Cyprus	Engineering and Software
EMOTION SRL	Italy	Energy

Geothermal Energy Association (JED)

As Zorlu Enerji, in our association, of which we have been a founding member since 2020, our work continues intensively and continuously due to the fact that we rank 1st in the installed capacity of the sector. In this context, technical, legislative and communication studies are being carried out to explain the Geothermal Energy Resource in general in an accurate manner and to benefit from the resource with integrated uses such as

greenhouse cultivation, thermal tourism, health tourism, lithium extraction and district heating-cooling in addition to electricity generation. In terms of cooperation with the public sector, Zorlu Enerji is in close contact with the Ministry of Energy and Natural Resources, the Ministry of Environment, Urbanization and Climate Change, and the Energy Commission of the Grand National Assembly of Turkey, and Zorlu Enerji plays an active role in technical site visits with relevant delegations from these institutions.

OUR RESPONSIBLE LOBBYING APPROACH

As Zorlu Enerji, we embrace the values of trust, integrity, transparency, accountability, open and equal communication that are at the core of our corporate culture, and we see these values as a guarantee for the protection and strengthening of our reputation. By placing these values at the center of our way of doing business, in our relations with institutions and organizations, we respect their existence, ways of doing business, roles and responsibilities.

As one of the leading companies in the energy sector, we are aware of the necessity of renewable energy investments for the allocation of a sustainable future in our country and in the world, and we act as a spokesperson and collaborate on scientific grounds on public, civil society and private sector platforms to prioritize these investments.

Our full approach to responsible lobbying is available on the [website](https://www.zorluenerji.com.tr/en/sustainability/investment-and-production/stakeholder-participation-and-local-development).

STAKEHOLDER ENGAGEMENT

Zorlu Enerji attaches importance to becoming a part of the region in which it invests in its projects, ensuring that its investments are embraced by the local community and improving communication with its stakeholders in this direction. To this end, the Company organizes public information visits and meetings in the relevant locations prior to the commencement of projects.

In this context, Zorlu Enerji has completed the Gökçedağ Wind Power Plant and İkizdere Hydroelectric Power Plant projects, and while the investment processes of the Alaşehir

2 Geothermal Power Plant and Kızıldere 3 Geothermal Power Plant projects are ongoing, Zorlu Enerji informed its stakeholders by organizing Stakeholder Engagement meetings for these projects and incorporated the feedback received from stakeholders into its investment and operation plans.

Regular stakeholder consultation meetings continue for the investments in operation, and stakeholder participation is ensured in a way to include their requests, complaints and suggestions in operational plans.

SOCIAL IMPACT ASSESSMENT STUDIES

As part of its social impact assessments, Zorlu Enerji analyzes the social and economic impacts of its investment projects in an end-to-end manner. Management plans and programs are developed and implemented to mitigate or improve the potential impacts of the investment. Within plans and programs;

- Projects to improve the quality of life of local people,
- Stakeholder engagement plans,
- Stakeholder briefings and public participation meetings,
- Internal and external stakeholder complaint mechanisms,
- Historical, cultural and natural heritage incidental discovery procedures,
- Rural development supports,
- Providing scholarships to more than 300 university students under scholarship programs,
- Providing material and machinery support to local

authorities to strengthen local infrastructure,

- Supporting amateur sports in investment regions,
- Supporting traditional festivals that have an important place in agricultural, economic and cultural life,
- Depending on the priority problems of the investment region, developing, implementing and supporting projects in cooperation with local authorities to solve the problems,
- Supporting access to clean water in villages

and many other efforts are being made

For detailed information: <https://www.zorluenerji.com.tr/en/sustainability/investment-and-production/stakeholder-participation-and-local-development>



Zorlu Enerji Capital Elements

STRONG WITH OUR ROOTS,
RESPONSIBLE TO THE FUTURE

TREE

Life, Vitality, Development, Growth

Zorlu Enerji, which produces all of its energy from renewable sources, supports social life by prioritizing inclusivity and diversity in all of its investments for environmental, social, and economic sustainability, contributing to the healing power of nature.





ZORLU ENERJİ CAPITALS

FINANCIAL CAPITAL

Strong Economic Performance

Zorlu Enerji accelerated its access to various financial resources through innovative and sustainable investments. By managing its corporate capital in an integrated manner with its sustainability strategy, the Company creates long-term sustainable financial value for its shareholders and investors and continues to be a company that its customers prefer with confidence. In line with its strong financial structure and sustainable profitability strategy, Zorlu Enerji's consolidated turnover for 2022 was increased by 158% compared to last year to 30.1 billion TRY.

EBITDA grew by 121% to 8.2 billion TRY, a historical high, with an EBITDA margin of 27.2%. Net Financial Debt/EBITDA ratio declined to 3.8x.

In addition, the total investment amount in 2022 amounted to 2.412 billion TRY, while the amount of sustainable financing loan utilized amounted to 1.5 million TRY. Taking into account the changing and evolving energy sources and targets, it is aimed to increase the contribution of innovation and impact-oriented businesses to turnover to 20% by 2030.

Thanks to its renewable energy investments and digitalization-focused R&D projects, Zorlu Enerji contributes to the economic development, sustainable growth and uninterrupted energy supply not only in Turkey but also in the four countries in which it operates.

Summary Balance Sheet

(thousand TRY)	2018*	2019*	2020*	2021	2022
CURRENT ASSETS	3,538,069	4,268,896	4,047,594	6,471,306	13,561,557
FIXED ASSETS	13,715,762	14,417,983	17,354,975	28,955,112	53,866,128
TOTAL ASSETS	17,253,831	18,686,879	21,402,569	35,426,418	67,427,685
CURRENT LIABILITIES	6,267,576	8,364,884	8,027,850	9,501,761	22,654,559
NON-CURRENT LIABILITIES	8,586,386	8,653,736	11,077,499	19,742,764	27,164,488
SHAREHOLDERS' EQUITY	2,399,869	1,668,259	2,297,220	6,181,893	17,608,638
TOTAL LIABILITIES & SHAREHOLDERS' EQUITY	17,253,831	18,686,879	21,402,569	35,426,418	67,427,685
GROSS FINANCIAL DEBT	11,284,624	12,781,029	14,543,183	23,779,755	34,416,426
NET FINANCIAL DEBT	10,684,800	11,938,209	13,556,291	22,309,709	31,452,524

* Restated

Summary Income Statement

(thousand TRY)	2018*	2019*	2020*	2021	2022
REVENUES	5,970,314	8,204,197	8,579,113	11,634,808	30,067,398
GROSS PROFIT	1,486,057	1,425,508	1,516,723	1,863,112	3,896,220
OPERATING INCOME/(LOSS)	1,249,854	1,440,843	1,699,294	2,721,263	5,391,628
SHARE OF PROFIT/(LOSS) OF ASSOCIATES ACCOUNTED FOR USING THE EQUITY METHOD	44,923	64,302	50,679	29,491	93,177
OPERATING PROFIT/(LOSS) BEFORE FINANCIAL INCOME/(EXPENSES)	1,295,015	1,535,088	1,821,857	2,752,852	5,488,675
EBITDA*	1,853,991	2,053,858	2,419,756	3,708,673	8,178,122
NET FINANCIAL EXPENSES	-1,385,271	-1,575,626	-1,677,164	-2,947,924	-5,368,290
NET PROFIT/(LOSS) FOR PERIOD**	34,548	-118,645	73,851	-86,447	111,363
GROSS PROFIT MARGIN	24.9%	17.4%	17.7%	16.0%	13.0%
EBITDA MARGIN	31.1%	25.0%	28.2%	31.9%	27.2%

* Restated

**EBITDA calculation includes the interest income related to the revenue cap arising from the electricity and natural gas distribution activities and the fair value difference related to the service concession arrangements while excluding the depreciation expense reported under the operating expenses.

*** Net income/(loss) represents the income/(loss) attributable to the owners of the parent company.

Financial Indicators, The Company's consolidated financial statements, independent audit report, annual report and material disclosures for the fiscal period January 1, 2022 - December 31, 2022 have been published on the Public Disclosure Platform (KAP), and these disclosures and reports are also available on the Company's website at www.zorluenerji.com.tr

Zorlu Enerji makes effective use of financing instruments in the market. In parallel with the Company's activities and investments, the Company actively uses Green Financing instruments and strategically prioritizes sustainable financing and responsible investment. At this point, it diversifies its financing portfolio with instruments such as green loans and green bonds.

As a company that has pioneered many firsts in Turkey in terms of sustainability with its examples of sustainable financing, Zorlu Enerji aims to set an example for many other companies both in Turkey and around the world.

Zorlu Enerji attaches great importance to sustainable financing and responsible investment within the scope of economic, social, environmental and corporate governance practices. Pioneering many other companies in Turkey with its sustainable financing initiatives, Zorlu Enerji aims to actively utilize sustainable financing instruments in the future. In 2022, no sukuk financing was used.

[Click here](#) for 2020 Sukuk Report 1.

[Click here](#) for 2021 Sukuk Report 2

Responsible and Sustainable Finance

Zorlu Enerji diversifies its financing methods in order to align with market expectations, industry standards and regulatory requirements and to take advantage of opportunities arising from sustainable development. The Company uses carbon credit mechanisms in Voluntary Carbon Markets to guarantee that the financing collected within this framework is used for environmentally friendly initiatives.

Carbon offsetting is seen as an important mechanism that contributes to the solution in the fight against climate change. Paying someone else to prevent or absorb a ton of CO₂ emissions elsewhere is called carbon offsetting. The "Clean Development Mechanism", which is regulated in Article 12 of the Kyoto Protocol, is the cooperation of a country that has set an emission target with a developing country that has not set an emission target and participates in projects to reduce greenhouse gas emissions in that country and the greenhouse gas reduction achieved in return.

The Kyoto Protocol was signed in Kyoto in 1997 as an annex to the United Nations Framework Convention on Climate Change signed in New York in 1992. The Protocol aimed to reduce greenhouse gas emissions by 5% below 1990 levels and halt global warming. Flexibility mechanisms and carbon trading were introduced, while the UN Environment Organization and the World Meteorological Organization established the IPCC to study climate change.

Carbon credits have come to the agenda with the Kyoto Protocol, which includes actions to be taken on climate change. The Protocol initiated the exchange of carbon credits between the 40 developed countries that are parties to the Protocol, countries that want to avoid exceeding their national quotas for greenhouse gas emissions, and organizations that want to demonstrate their environmental sensitivity. Voluntary countries that have not signed the protocol, such as Turkey, can trade carbon credits in voluntary markets.

The global market for CDM (Clean Development Mechanism) carbon credits is valued at approximately \$7.3 billion in 2020 and is expected to grow at a compound annual growth rate of over 8% from 2021 to 2028.



Gold Standard is a certification program that sets high environmental and social standards for renewable energy and sustainable development projects. Some of the key advantages of Gold Standard projects include:

Sustainability: These projects are designed to promote sustainable development and support environmentally friendly practices.

Environmental responsibility: The projects demonstrate a commitment to reduce carbon emissions and protect the environment by adhering to the Gold Standard.

Local stakeholder acceptance: Projects need to involve local stakeholders, ensuring that they are accepted and supported by their communities.

Independent verification: Gold Standard projects are independently verified by third-party organizations to ensure they meet the highest environmental and social standards.

Increased reliability: Projects certified under the Gold Standard are considered more credible and reliable, attracting more investment and support.

Enhanced reputation: Companies and organizations involved in Gold Standard projects can benefit from increased brand recognition and a positive reputation as they demonstrate their commitment to sustainability and environmental responsibility.

Zorlu Enerji makes every effort to align its financing needs with guidelines that create environmental social value.

In 2009, Zorlu Enerji successfully realized Gökçedağ Wind Power Plant (WPP), Turkey's first carbon emission project, with the support of EcoSecurities Group. The project has been certified under the Gold Standard, which is based on sustainable development, environmental awareness and acceptance by local stakeholders.

Sale of Gokcedag WPP 6th Verification Credits

Within the scope of Gokcedag WPP 6th Verification, 590,224 tone CO₂ certification approval was received on 31.12.2021. The sale of the remaining 75,827 toneCO₂ credits is in progress. Within the scope of 7th Verification, 344,803 tone CO₂ approval process is targeted to be completed in April 2023, based on 2021-2022 production.

Gökçedağ WPP Carbon Credit Verification Periods

Transfer Year	Company	TONCO2	Progress
2022	Caley	50,500	Completed.
2022	Climax	104,990	Completed.
2022	EcoAct	120,000	Completed.
2022	İş Leasing	907	Completed.
2022	Garanti Bankası	25,000	Completed.
2022	Carbon Clear	213,000	Completed.

Facilities Certified with I-REC

In 2022, Zorlu Enerji met the electricity needs of the following facilities with renewable electricity generation from Alaşehir 1 GPP and Kızıldere 3 GPP and certified with the International Renewable Energy Certificate (I-REC) that the electricity provided for the relevant facilities is derived from clean and renewable energy.



Company Name	Total Electricity Consumption Certified (MWh)	Plant Produced
GAZDAŞ GAZİANTEP DOĞAL GAZ DAĞITIM AŞ	529	Kızıldere 3 GPP
KORTEKS MENSUCAT SANAYİ VE TİCARET AŞ	308,539	Kızıldere 3 GPP
ZORLU TESİS YÖNETİM AŞ LEVENT 199 BRANCH	7,006	Alaşehir GPP
TRAKYA BÖLGESİ DOĞAL GAZ DAĞITIM AŞ	1,529	Kızıldere 3 GPP
ZES DİJİTAL AŞ	3,800	Alaşehir GPP
ZORLU TESİS YÖNETİMİ AŞ	62,529	Alaşehir GPP
ZORLU YAPI YATIRIM AŞ	4,141	Alaşehir GPP
ZORLUTEKS TEKSTİL TİC. VE SAN. AŞ	52,423	Alaşehir GPP

UN Global Compact SDG Investment Commitment

The commitment to endorse the UN Global Compact CFO Principles on Integrated SDG Investments and Financing has been disclosed to the public and Zorlu Enerji aims to disclose its Corporate Governance performance through the CFO Communication on Progress through the metrics included in the Progress Measurement and Goal Setting KPIs and Definitions of the UN Global Compact CFO Principles with the aim of continuous improvement for the integration of Sustainable Development Goals into strategy. For CFO principles, Zorlu Enerji is the only representative from the Turkish energy sector, and there are 5 signatories from Turkey and 83 signatories representing related sectors from 26 countries worldwide.

You can visit the [website](#) for detailed information on the principles committed and the UN Global Compact [website](#) for Zorlu Enerji's commitment.





MANUFACTURED CAPITAL

End-to-End Service Oriented Approach

Zorlu Enerji aims to provide uninterrupted energy by intensively continuing its electricity and gas distribution activities in Turkey and electricity generation activities in four countries. Thanks to its high-capacity generation power, the Company carries out all of its operations as a pioneer and exemplary company in the sector. As stated in the Energy Access Commitment, Zorlu Enerji increases its investments for secure energy supply and contributes to ensuring energy supply security in all countries where it operates. In addition, it is committed to supporting the people of the region, who have difficulty in accessing affordable and clean energy, to access energy safely and shapes its investments accordingly.

Generation Capacity

Energy demand is increasing worldwide and in countries such as Turkey, where urbanization and population are increasing rapidly, and this increase in demand is expected to continue in the future. According to the World Energy Outlook 2022 (WEO) published by the International Energy Agency (IEA) in 2022, the share of renewables in electricity generation increases from 28% in 2021 to around 50% in 2030 and 80% in 2050. By the end of 2022, the share of renewable power plants in Turkey's installed power capacity had increased to 54.3%, according to TEİAŞ data. Zorlu Enerji continues to invest in the most efficient sustainable resources with the awareness of the importance of using renewable resources to ensure green and reliable energy supply. In addition to the projects for which preliminary licenses have already been obtained, it is aimed to increase renewable energy-oriented production capacity through national and international investments.



Zorlu Enerji's Installed Capacity in Turkey

Power Plant	Company	Location	Type	Electricity Generation Capacity (MW)	Steam Generation Capacity (Tons/Hour)	Direct or Indirect Stake (%)
Natural gas				83.83	98.00	
Lüleburgaz	Zorlu Enerji Elektrik Üretim AŞ	Lüleburgaz, Kırklareli	Cogeneration Natural Gas	49.53	98.00	100
Bursa	Zorlu Enerji Elektrik Üretim AŞ	Bursa OSB	Combined Cycle Natural Gas	34.30	-	100
Wind				13..00	-	
Gökçedağ (Rotor)	Rotor Elektrik Üretim AŞ	Osmaniye	Wind	135.00	-	100
Hydroelectric				118.94	-	
Tercan	Zorlu Doğal Elektrik Üretimi AŞ	Erzincan	Hydroelectric (With Reservoir)	15.00	-	100
Kuzgun	Zorlu Doğal Elektrik Üretimi AŞ	Erzurum	Hydroelectric (With Reservoir)	20.90	-	100
Ataköy	Zorlu Doğal Elektrik Üretimi AŞ	Tokat	Hydroelectric (With Reservoir)	5.50	-	100
Mercan	Zorlu Doğal Elektrik Üretimi AŞ	Tunceli	Hydroelectric (Run-of-the-River)	20.40	-	100
Çıldır	Zorlu Doğal Elektrik Üretimi AŞ	Kars	Hydroelectric (With Reservoir)	15.40	-	100
İkizdere	Zorlu Doğal Elektrik Üretimi AŞ	Rize	Hydroelectric (Run-of-the-River)	24.94	-	100
Beyköy	Zorlu Doğal Elektrik Üretimi AŞ	Eskişehir	Hydroelectric (Run-of-the-River)	16.80	-	100
Geothermal				305.00	-	
Kızıldere 1	Zorlu Doğal Elektrik Üretimi AŞ	Denizli	Geothermal	15.00	-	100
Kızıldere 2	Zorlu Doğal Elektrik Üretimi AŞ	Denizli	Geothermal	80.00	-	100
Kızıldere 3	Zorlu Doğal Elektrik Üretimi AŞ	Denizli-Aydın	Geothermal	165.00	-	100
Alaşehir 1*	Zorlu Jeotermal Elektrik Üretimi AŞ	Manisa	Geothermal	45.00	-	100
TOTAL				642.77	98.00	

Within the scope of solar auxiliary resource installation, the 3.588 MWp unit integrated to Alaşehir Geothermal Power Plant started commercial electricity sales as of 22.12.2022 and the 0.1663 MWp rooftop unit started commercial electricity sales as of 20.01.2023.



Zorlu Enerji's Installed Capacity Abroad

Power Plant	Company	Location	Type	Electricity Generation Capacity	Steam Generation Capacity (Tons/Hour)	Direct or Indirect Stake
Natural gas				(MW)		(%)
Dorad*	Dorad Energy Ltd.	Israel	Combined Cycle Natural Gas	210	-	25
Ashdod*	Ezotech Electric Ltd.	Israel	Cogeneration Natural Gas	27.20	16.86	42.15
Ramat Negev*	Ezotech Electric Ltd.	Israel	Cogeneration Natural Gas	53.28	29.51	42.15
Wind				56.4		
Jhimpir	Zorlu Enerji Pakistan Ltd.	Pakistan	Wind	56.4		100
Solar				1.5		
Dead Sea*	ZJ Strong Energy For Renewable Energy Ltd.	Palestine	Solar	1.5		75

*Adjusted for Zorlu Enerji's stakes in power plants

Licenses, Pre-licenses and Permits

Company	Power Plant	Type	Location	Electricity Generation Capacity** (MWp/MWe)
GENERATION LICENSES				
Zorlu Jeotermal Enerji Elektrik Üretimi AŞ	Alkan Geothermal*	Geothermal	Manisa	18.6
Zorlu Doğal Elektrik Üretimi AŞ	Kızıldere 1	Solar	Denizli	0.99
Zorlu Doğal Elektrik Üretimi AŞ	Kızıldere 2 Hybrid	Solar	Denizli	11.995
Zorlu Doğal Elektrik Üretimi AŞ	Kızıldere 3 Hybrid***	Solar	Denizli	24.75
Rotor Elektrik Üretim AŞ	Gokcedag Additional Capacity	Solar	Osmaniye	9.688
Rotor Elektrik Üretim AŞ	Gökçedağ WPP Additional Capacity***		Wind	
GENERATION PRE-LICENSES				
Zorlu Doğal Elektrik Üretimi AŞ	Tekkehamam 2	Geothermal	Denizli	35
Zorlu Doğal Elektrik Üretimi AŞ	Kızıldere 4	Geothermal	Denizli	60
Zorlu Jeotermal Elektrik Üretimi AŞ	Alaşehir 3*	Geothermal	Manisa	10
OPERATING LICENSES				
Zorlu Jeotermal Enerji Elektrik Üretimi AŞ	Simav-Yeniköy	Geothermal	Kütahya	-
Nemrut Jeotermal Elektrik Üretimi AŞ	Nemrut	Geothermal	Bitlis	-
EXPLORATION LICENSES				
Zorlu Jeotermal Enerji Elektrik Üretimi AŞ	Gedik	Geothermal	Ağrı	-
Zorlu Jeotermal Enerji Elektrik Üretimi AŞ	Mutlu	Geothermal	Ağrı	-
Zorlu Jeotermal Enerji Elektrik Üretimi AŞ	Nazilli Diracık	Geothermal	Aydın	-
Zorlu Jeotermal Enerji Elektrik Üretimi AŞ	Kuyucak	Geothermal	Aydın	-

**Electricity generation capacity is given as MWp for solar power plants and MWe for other power plants.

***License processes are ongoing for 31 MW of the total 46.6 MW additional capacity application of Kızıldere 3 Hybrid and Gökçedağ WPP.

Company	Power Plant	Type	Location	Electricity Generation Capacity** (MWp/MWe)
GENERATION LICENSES				
Zorlu Sun Power (Private) Limited ("Zorlu Sun Power Pakistan")	Solar Photovoltaic	Solar	QASP, Bahawalpur, Pakistan	100 MWp (DC)
Zorlu Sun Power (Private) Limited ("Zorlu Sun Power Pakistan")	Solar Photovoltaic	Solar	QASP, Bahawalpur, Pakistan	100 MWp (DC)
Zorlu Sun Power (Private) Limited ("Zorlu Sun Power Pakistan")	Solar Photovoltaic	Solar	QASP, Bahawalpur, Pakistan	100 MWp (DC)





ZORLU ENERJİ'S ACTIVITIES IN 2022



Electricity Generation and Sales

In 2022, gross electricity generation decreased by 1.8% year-on-year to 2,661 GWh. In 2022, generation from hydroelectric power plants increased, while the limited decline in generation from geothermal power plants and Gökçedağ WPP compared to the previous year had a negative impact on total generation. In parallel with the decrease in generation, electricity sales from generation decreased by 2.2% compared to 2021 to 2,397 GWh. Commercial electricity sales decreased by 22% to 6,687 GWh due to

the decline in electricity demand. Thus, total electricity sales in 2022 decreased by 18% to 9,084 GWh. In 2022, 3 geothermal power plants benefited from YEKDEM and sales to YEKDEM constituted a significant portion of sales from generation in Turkey. The dollar-denominated sales in YEKDEM had a positive impact on the Company's profitability and provided a hedging mechanism against losses arising from exchange rate differences.

Electricity Generation by Resource

The breakdown of net electricity generation by resource in Turkey, Palestine and Pakistan is given below. The generations are the actual generations of the power plants and are not the sales values. For this reason, it may differ from the actual sales values.

Net Generation Breakdown by Resource in Turkey, Palestine and Pakistan

RESOURCE	Unit	2020	2021	2022	ANNUAL CHANGE
Geothermal	kWh	1,824,752,500	1,962,960,747	1,611,787,740	-
Wind	KWh	457,395,000	457,317,667	436,812,230	-
Hydroelectric	kWh	318,291,930	272,966,815	303,174,551	+
Solar	kWh	671,883	3,159,872	3,181,709.00	+
Natural gas	kWh	675,447	12,010,428	243,160	-
TOTAL	kWh	2,601,786,760	2,708,415,529	2,355,199,390	-

Bursa thermal power plant was operated during maintenance and Lüleburgaz and Bursa thermal power plants were not operated for electricity generation during the rest of the time.

Electricity Distribution

Osmangazi Elektrik Dağıtım AŞ (OEDAŞ) distributed a net 6,810 GWh of electricity to approximately 1.98 million subscribers in 2022. The amount of electricity distributed decreased by 1.7% compared to 2021.

Natural Gas Distribution and Sales

In 2022, Trakya Bölgesi Doğal Gaz Dağıtım AŞ and Gazdaş Gaziantep Doğal Gaz Dağıtım AŞ distributed a total of 2,087 billion Sm³ of natural gas, of which 1,431 billion Sm³ was distributed to residential and eligible consumer subscribers and 656 million Sm³ to eligible consumers who purchase natural gas from other suppliers and to whom transportation services are provided. In 2022, natural gas sales to subscribers and eligible consumers increased by 6.5%, while sales to eligible consumers with transportation services decreased by 26.7%, resulting in a 6.7% decrease in the total amount of natural gas distributed.

GENERATION	2020	2021	2022	ANNUAL CHANGE
Electricity (kWh)*	2,601,786,760	2,708,415,530	2,660,930,111	-
Steam (ton)	355,642	378,487	339,421	-

*Gross electricity production value is given.

SALES /DISTRIBUTION	2020	2021	2022	ANNUAL CHANGE
Electricity (Generation) (kWh)	2,352,604,951	2,451,522,607	2,397,033,972	-
Electricity (Commercial) (kWh)	8,726,491,206	8,609,459,763	6,686,790,194	-
Steam (ton)	355,642	378,487	339,421	-
Tap Water and Cooling Water (m ³)	44,528	35,728	30,432	-
Carbon Dioxide Gas (m ³)	100,000	110,000	56,939	-
Net Distributed Electricity (kWh)	6,334,243,407	6,926,976,734	6,809,632,533	-
Natural Gas (Sales) (Sm ³)	1,185,429,220	1,343,950,182	1,431,103,605	+
Natural Gas (Including Transported, Distributed) (Sm ³)	1,927,494,297	2,237,646,906	2,086,617,550	-



Domestic Investments

Geothermal Energy

Zorlu Enerji, which accounts for 18% of Turkey's total installed capacity in geothermal energy, aims to reach at least 400 MW of installed capacity in this field by implementing geothermal power plant projects within the scope of its licenses and pre-licenses. Operating in the most productive fields of the Aegean Region, which has 87% of Turkey's geothermal energy resources, Zorlu Enerji continues its investments in the same region and focuses its growth on geothermal energy. In addition to the Aegean Region, the Company holds geothermal resource exploration licenses in the Eastern Anatolia Region, exploring the potential in these regions and continuing its project development activities. As Turkey's leading company in this field, Zorlu Enerji is one of the investors with extensive knowledge and equipment in geothermal energy. The high capacity factor in geothermal

energy and the 10-year purchase guarantee provided to geothermal power plants at a price of 10.5 US cents/kWh under the Renewable Energy Resources Support Mechanism ("YEKDEM") and the additional 5-year domestic component support for the use of domestic equipment are important incentives for prioritizing this strategically important field. Renewable power plants commissioned until June 30, 2021 benefit from the dollar-based price supports provided under YEKDEM, and a new support mechanism was announced on January 30, 2021 for renewable power plants to be commissioned after this date. Renewable power plants under the previous YEKDEM mechanism will continue to benefit from dollar-based price and domestic contribution support until their first 10-year term expires.



Kızildere 1, 2, 3 Geothermal Power Plants: In 2008, Zorlu Enerji won the ADÜAŞ privatization tender for Turkey's first geothermal power plant, the 15 MW Kızildere 1 Geothermal Power Plant, and took over the operating rights for 30 years. In addition to the existing Kızildere 1 GPP in the Kızildere geothermal field, Kızildere 2 GPP with an installed capacity of 80 MW was realized in 2013 with an investment of \$250 million. Subsequently, as a result of reservoir inspections and exploration activities, the investment for the Kızildere 3 GPP project with an installed capacity of 165 MW was initiated and the first unit of the project with an installed capacity of 99.5 MW was commissioned in August 2017 with an investment of \$320 million and the second unit with an installed capacity of 65.5 MW was commissioned in March 2018 with an investment of \$260 million, bringing Zorlu Enerji's total installed capacity in this field to 260 MW. Kızildere 3 GPP, one of the world's largest geothermal power plants, is the largest geothermal power plant in Turkey with an installed capacity of 165 MW. Zorlu Enerji also supports the development of local communities and social investments with its environmentally friendly and sustainable power plants, Kızildere 2 and Kızildere 3 GPPs. Kızildere 2 GPP, a first in Turkey thanks to its integrated use of geothermal energy, meets the heating needs of 2,500 houses in Sarayköy

district, which has no natural gas distribution line, in addition to electricity generation. It also provides carbon dioxide gas to the surrounding industrial gas plants supplying products to the beverage industry, geothermal water to thermal hotels and heating support to greenhouses totaling 500 acres.

Within the scope of the regulation published by EMRA on the installation of auxiliary energy sources in power plants, the applications made to EMRA for the installation of 0.99 MWp solar energy auxiliary source in Kızildere 1 GPP, 11.995 MWp in Kızildere-2 GPP and 24.75 MWp in Kızildere 3 GPP were approved. The obligations within the scope of Kızildere 1 and Kızildere 2 have been completed and licenses have been obtained. Following the completion of the Kızildere 3 EIA process, it is planned to obtain a production license tailored to the new capacity.

Kızildere 2 GPP and Kızildere 3 GPP sell all the electricity they generate at incentivized prices in dollar terms within the scope of YEKDEM. Zorlu Enerji, which uses locally produced ejectors in these power plants, was the first energy company to apply to the General Directorate of Renewable Energy and to be granted a local component incentive in geothermal energy. Kızildere 2 GPP has been selling the electricity it generates in YEKDEM since 2014 and Kızildere 3 GPP since 2018. In 2022, Kızildere 3 GPP sold its electricity at a total price of 11.2 USD cents/kWh, benefiting from the guaranteed purchase price of 10.5 USD cents/kWh for geothermal power plants plus the domestic component support of 0.7 USD cents/kWh, while Kızildere 2 GPP sold its electricity at a price of 10.5 USD cents/kWh due to the expiration of the 5-year period for the domestic component support. The period given to Kızildere 3 GPP for local component support expired in 2023, and both plants will continue to sell their entire generation in 2023 at a price of 10.5 USD cents/kWh within the scope of YEKDEM.

Alaşehir Geothermal Power Plant: Alaşehir Geothermal Power Plant with an installed capacity of 45 MW was established in Manisa Alaşehir geothermal field by Zorlu Jeotermal Enerji Elektrik Üretim AŞ ("Zorlu Jeotermal"), a 100% subsidiary of Zorlu Enerji. Realized with an investment of 178 million dollars, the construction of Alaşehir GPP started in June 2014 and was completed in a very short time. The plant's 33.73 MW steam turbine was commissioned on

September 12, 2015 and the 11.27 MW binary unit of the second phase was commissioned on January 15, 2016. Within the scope of the regulation on the installation of auxiliary energy source in the power plant published by EMRA, the applications made to EMRA regarding the installation of solar energy auxiliary source in the power plant were approved. Of the 3.75 MWp of additional solar capacity, 3.588 MWp of land-based installations have been commissioned and 0.1663 MWp of rooftop installations have been commissioned as of January 2023.

Alaşehir GPP sells all the electricity it generates at incentivized prices in dollar terms within the scope of YEKDEM. Within the scope of the guaranteed purchase price of 10.5 USD cents/kWh given to geothermal power plants, sales were made in 2022 and sales will be made at this price in 2023.





Ongoing and Planned Geothermal Energy Investments

Alkan Geothermal Power Plant Project: In November 2017, a production license valid for 22 years was obtained from EMRA for 24.9 MW installed capacity for Alkan GPP, which is planned to be established to utilize the additional geothermal potential in Manisa Alaşehir field. In December 2019, the installed capacity in the generation license of the project, for which drilling and construction activities are ongoing, was amended from 24.9 MW to 18.6 MW in order to properly manage the existing resource and reservoir.

Tekkehamam 2 Geothermal Power Plant Project: Within the scope of the geothermal operation license leased from Denizli Metropolitan Municipality in line with the tender won in September 2016, exploration and drilling activities have started in the relevant field in Sarayköy district of Denizli province. The application to EMRA for a preliminary license for the Tekkehamam 2 Geothermal Power Plant project, which will have an installed capacity of 35 MW, was approved in January 2020 and the project was granted a preliminary license valid for 30 months. In 2022, the pre-license extension application made to EMRA was approved and the pre-license period was amended as 57 months. Project development works are ongoing.

Alaşehir 3 Geothermal Power Plant Project: In addition to the Alkan GPP project, a 30-month preliminary license was obtained from EMRA in April 2016 for the Alaşehir 3 GPP project, which is planned to be established as the third phase, with an installed capacity of 50 MW. However, as a result of the resource exploration studies carried out later, since it was observed that the resource temperature of the project was lower than foreseen, and considering the geothermal power plants established and planned to be established in neighboring licenses in the relevant region, a trend towards a decrease in the pressure and flow rate of the geothermal resource was observed, an application was made to EMRA on January 3, 2022 to amend the installed capacity in the preliminary license of the project from 50 MW to 10 MW and it was approved.

Kızıldere 4 Geothermal Power Plant Project: As a result of the resource exploration studies conducted for the 24.9 MW Kızıldere 4 GPP project, which Zorlu Doğal plans to establish as the fourth phase in the Kızıldere geothermal field, the application to EMRA to amend the installed capacity of the project's preliminary license to 60 MW was approved in July 2017 and the project was granted a preliminary license for 30 months. The pre-license period was first extended to 54 months based on the application made in May 2018, and then to 78 months based on the application made in February 2020.

Geothermal Energy Resource Exploration and Operation Licenses

In addition to its ongoing investments and existing pre-licenses in geothermal, Zorlu Enerji participates in tenders for new geothermal fields with the aim of continuing to grow in this field. Zorlu Jeotermal, a 100% subsidiary of Zorlu Enerji, participated in the geothermal resource exploration license tender organized by Kütahya Special Provincial Administration on October 27, 2016 and won the tender by accepting and undertaking to pay a fee of 450,000 TRY plus VAT. Within the scope of the tender, Zorlu Geothermal was awarded the right to conduct geothermal resource exploration in the Yeniköy geothermal field located in Yeniköy, Simav district, Kütahya province, covering 4,950 hectares. On November 11, 2020, Zorlu Geothermal was granted a geothermal operating license as a result of the application made to Kütahya Special Provincial Administration. The operating license expires on November 11, 2050. Geophysical and geological studies were carried out in the field and well locations were determined. Zorlu Geothermal won the tender held by Ağrı Special Provincial Administration on July 24, 2020 for the licensing of geothermal resource exploration sites numbered AR-30 and AR-31 by accepting and undertaking to pay 175,000 TRY and 155,000 TRY plus VAT, respectively. Within the scope of the tender, Zorlu Jeotermal has been awarded the right to explore for geothermal resources in the Gedik geothermal field located in Gedik village, Diyadin district of Ağrı province, covering 4,949 hectares, and in the Mutlu geothermal field located in Mutlu village, Diyadin district of Ağrı province, covering 4,345 hectares. The relevant resource exploration licenses are valid for 3 years until August 31, 2023. On April 12, 2021, Zorlu Jeotermal has won the tender organized by Ayter Aydın Termal Turizm ve Jeotermal Sistemleri AŞ for the Kuyucak geothermal resource exploration license area of 3,144.23 hectares with the number 2019-A/6 by accepting and undertaking to pay 6,250,000 TRY + VAT and the tender organized for the Nazilli/Diracik geothermal resource exploration license area of 3,403.14 hectares with the number 2019-A9 by accepting and undertaking to pay 600,000 TRY + VAT.



Wind Power

Gökçedağ Wind Power Plant (Rotor): With an installed capacity of 135 MW, Gökçedağ Wind Power Plant (WPP) is the eighth largest wind power plant in Turkey and Zorlu Enerji's first domestic wind power plant. In 2013, Gökçedağ WPP was awarded the Sustainability Award in the "Environmental and Social Performance" category by the European Bank for Reconstruction and Development (EBRD) for its contribution to sustainable development and greenhouse gas reduction achieved through clean energy. Since 2016, Gökçedağ WPP has been included in YEKDEM and sold all the electricity it generated in 2020 at the guaranteed purchase price of 7.3 USD cents/kWh given to wind power plants within the scope of YEKDEM. The power plant started to operate in the free market in 2021 due to the expiration of the utilization period of YEKDEM.

In 2018, the term of Gökçedağ WPP's generation license was extended from 30 years to 49 years, effective from December 19, 2013. As a result of the efforts to increase the installed capacity of the power plant, the 15.6 MW additional capacity project submitted to EMRA was approved. Within the scope of the capacity projection announced by TEİAŞ in the region, the development of an additional 31 MW wind project has been approved by EMRA and the EIA process is ongoing. Following the completion of the EIA process, it is planned to obtain a production license tailored to the new capacity. An application has been made to EMRA for the installation of a 9,688 MWp solar power plant as an auxiliary source for the power plant and the related obligations have been completed. Project development phases are ongoing.



Hydroelectricity

Zorlu Enerji won the ADÜAŞ privatization tender in 2008 and acquired the operating rights of seven hydroelectric power plants (three run-of the river type, four reservoir type) for 30 years and currently has an installed capacity of approximately 119 MW in this field.

İkizdere Regulator and HEPP: İkizdere Regulator and Hydroelectric Power Plant is located in the İkizdere district of Rize and is one of the first milestones in hydroelectric power generation in Turkey. İkizdere HEPP was technologically strengthened with new turbines and generators within the scope of the rehabilitation works that started in July 2016 and completed in March 2018 to increase the installed capacity from 18.6 MW to 24.94 MW, and thanks to the renewed and expanded transmission tunnels, it has become a power plant that can generate more from the same resource. With its responsible investment approach, Zorlu Enerji preferred to proceed with a lower capacity in line with the principle of respect for the local community and nature, even though it could have increased the capacity of the power plant more considering the electricity potential. In addition, fish passages were added to the plant for the first time to contribute to biodiversity conservation.



Natural Gas

Zorlu Enerji has 2 natural gas power plants in Turkey with an installed capacity of approximately 84 MW electricity and 98 tons of steam/hour.

Lüleburgaz Natural Gas Power Plant Fluidized Bed

Steam Boiler: A fluidized bed steam boiler with a capacity of 2x40 tons/hour was installed at the Lüleburgaz Natural Gas Cogeneration Plant in Kırklareli, which has a capacity of 49.53 MW, and the steam generation capacity was increased to 98 tons/hour. Apart from this unit, there is a natural gas steam boiler with a capacity of 18 tons/hour at the power plant. With the commissioning of the new steam boiler, electricity generation and steam generation were separated from each other, enabling Lüleburgaz Natural Gas Power Plant to operate in a more flexible way.



Hybrid Power Plant Projects in Solar Energy

Kızıldere 3 Combined Renewable Electricity Generation Facility (Main Source GPP + Auxiliary Source SPP)

Project: In order to establish a Combined Renewable Electricity Generation Facility (Main Source GPP + Auxiliary Source SPP) to generate electricity from solar energy integrated with Kızıldere 3 Geothermal Power Plant with an installed capacity of 165 MWm/165 MWe in Buharkent district of Aydın province, the necessary application has been made to the Energy Market Regulatory Authority to amend the existing electricity generation license of the power plant as 189.75 MWm/165 MWe. The EIA (Environmental Impact Assessment) process is ongoing within the scope of the relevant legislation.

Kızıldere 2 Combined Renewable Electricity Generation Facility (Main Source GPP + Auxiliary Source SPP)

Project: In order to establish a Combined Renewable Electricity Generation Facility (Main Source GPP + Auxiliary Source SPP) to generate electricity from solar energy integrated with Kızıldere 2 Geothermal Power Plant with an installed capacity of 80 MWm/80 MWe in Sarayköy district of Denizli province, the application made to the Energy Market Regulatory Authority to amend the existing electricity generation license of the power plant as 91,995 MWm/80 MWe was approved in September 2022.

Kızıldere 1 Combined Renewable Electricity Generation Facility (Main Source GPP + Auxiliary Source SPP)

Project: In order to establish a Combined Renewable Electricity Generation Facility (Main Source GPP + Auxiliary Source SPP) to generate electricity from solar energy integrated with Kızıldere 1 Geothermal Power Plant with an installed capacity of 15 MWm/15 MWe in Sarayköy district of Denizli province, the application made to the Energy Market Regulatory Authority to amend the existing electricity generation license of the power plant as 15.99 MWm/15.00 MWe was approved in July 2022. The Project is exempt from Environmental Impact Audit.

Gökçedağ Combined Renewable Electricity Generation Facility (Main Source WPP + Auxiliary Source SPP)

Project: In order to establish a Combined Renewable Electricity Generation Facility (Main Source WPP + Auxiliary Source SPP) to generate electricity from solar energy integrated with Gökçedağ Wind Power Plant with an installed capacity of 135 MWm/135 MWe and a license power of 150.6 MWm/150.6 MWe in Bahçe district of Osmaniye province, the application to the Energy Market Regulatory Authority to amend the existing electricity generation license of the power plant to 160.209 MWm/150.6 MWe was approved in October 2022.



Overseas Investments

Pakistan Wind Power Plant

Pakistan is one of the most productive wind corridors in the world. Zorlu Enerji Pakistan Ltd., a wholly-owned subsidiary of Zorlu Enerji, has a wind power plant with an installed capacity of 56.4 MW in Jhimpir in Pakistan's Sindh region, which started operations in July 2013.

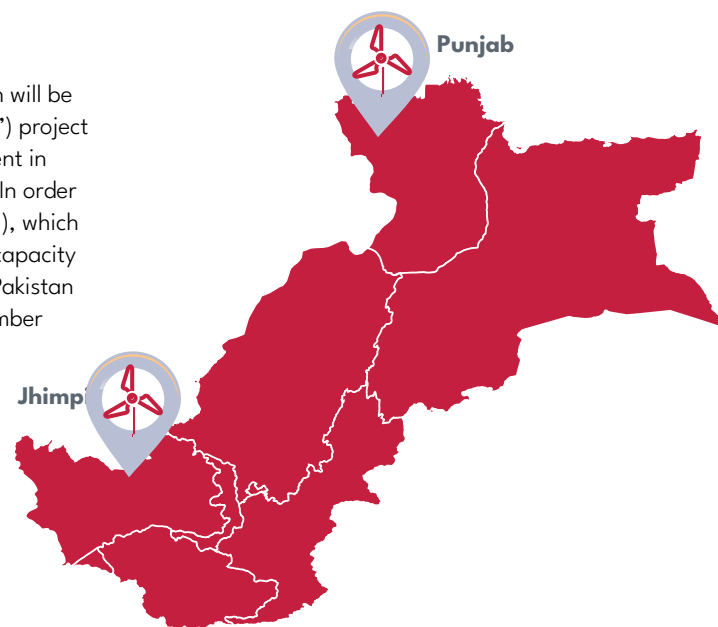
The Gharo-Kheti Bandar-Hyderabad wind corridor, where the power plant operates, is one of the most productive corridors in the region with wind 12 months of the year, and studies show that there is a wind potential of 50,000 MW in this region.

According to the agreement with the relevant authorities, the plant benefits from a 20-year power purchase guarantee. In addition, there is a production guarantee from the Pakistani government against risks that may affect the electricity production of the power plant, such as changes in legislation and possible fluctuations in wind speed. In 2011, Zorlu Enerji was awarded the "Best Renewable Energy Financing in the Middle East Award" by Project Finance Magazine for its Pakistan Wind Power Plant. In 2016, Zorlu Enerji met the requirements of the "Gold Standard Certificate" for issuing carbon credits and became the first company in Pakistan to receive this certificate..

Ongoing and Planned Projects in Pakistan

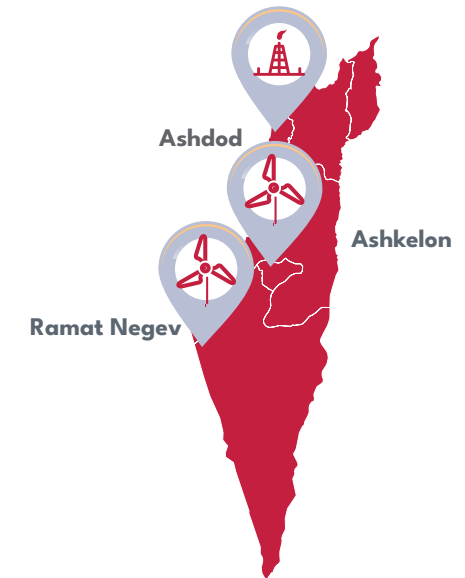
Zorlu Enerji's first venture in solar energy in Pakistan will be introduced under Quaid-e-Azam Solar Park ("QASP") project planned to be developed by the Pakistani Government in Punjab province with a total capacity of 1,000 MW. In order to realize the Bahawalpur 1 Solar Power Plant ("SPP"), which will be built in this region and will have an installed capacity of 100 MW, Zorlu Enerji participated in Zorlu Solar Pakistan Limited, a company established in Pakistan in November

2016, as a founding partner with a 99.7% stake. The pre-license application filed by Zorlu Solar Pakistan for the 100 MW Bahawalpur 1 Solar Power Plant project was approved by Punjab Power Development Board in December 2016. This is the first renewable energy pre-license application approved by the Government of Pakistan after a period of 3 years. A generation license valid for 25 years was obtained from Pakistan National Electric Power Regulatory Authority for the project in August 2017. The generation license was renewed in 2022. Negotiations with various banks are going on for the financing of Bahawalpur 1 SPP, for which project development studies were launched in 2017, and the power plant is planned to be commissioned in 2024. Zorlu Enerji signed a Letter of Intent with the Government of Pakistan in February 2017 for 2 other solar power plant projects, each of which will have an installed capacity of 100 MW and will be developed in QASP region. The projects have been put out to tender by the Pakistani government in 2022.



Natural Gas Power Plants and Projects in Israel

Zorlu Enerji is one of the major players in the electricity sector in Israel, with an installed capacity of 290 MW, which is its share of three natural gas power plants with a total installed capacity of 1,031 MW. With an installed capacity of 840 MW, Dorad Natural Gas Combined Cycle Power Plant, in which Zorlu Enerji holds a 25% stake, is the largest private sector power plant in Israel and meets 7% of the country's electricity demand. The power plant is also supported by the Israeli Ministry of Energy and Water Infrastructures for its contribution to reducing electricity costs and its environmentally friendly nature, and the electricity generated from this plant is sold to public and private institutions in Israel. The Ashdod and Ramat Negev Natural Gas Cogeneration Power Plants, realized by Ezotech Electric Limited, in which Zorlu Enerji holds a 42.15% stake, have a total installed capacity of 191 MW and both plants were commissioned in December 2015. Located in the northern part of the city of Ashdod and commissioned in December 2015, the Ashdod Natural Gas Cogeneration Power Plant was built with an investment of approximately \$110 million and has an electricity generation capacity of 64.54 MW and steam generation capacity of 40 tons/hour. Zorlu Enerji's third project in Israel, Ramat Negev Natural Gas Cogeneration Power Plant, which became operational on December 31, 2015 with an investment of \$230 million in the Neot Hovav region, has an electricity generation capacity of 126.4 MW and steam generation capacity of 70 tons/hour. Both power plants located in the industrial zone sell both electricity and steam to the industrial facilities around them. It has natural gas supply agreements with Delek Group and Noble Energy for the Dorad, Ashdod and Ramat Negev power plants. In addition, in 2017, a "Natural Gas Purchase" agreement was signed with Energean Israel Ltd. ("Energean") to supply natural gas from the Karish and Tanin fields developed by Energean in the Israeli territorial waters. The agreements signed with Energean help to diversify natural gas supply sources, reduce average gas purchase costs of power plants and increase security of supply. Natural gas production from Energean's Karish and Tanin fields started in 2022 as planned. Existing loans amounting to 332,862 thousand Israeli shekels for Ashdod and 687,566 thousand Israeli shekels for Ramat Negev, totaling 1,020,428 thousand Israeli shekels, were refinanced in March 2019 at a more favorable interest rate. The loan interest rate will vary depending on the rating of the projects. Feasibility studies for Solad Natural Gas Cogeneration Power Plant, planned as a fourth project in Israel, are ongoing.



Existing Power Plants and Planned Projects in Palestine

In 2017, Zorlu Enerji, in line with its goal of deepening and diversifying its investments in solar energy as a clean energy source, signed a "Goodwill Agreement" with Jerusalem District Electricity Company ("JDECO"), which distributes electricity in and around Jerusalem and provides 25% of Palestine's electricity, for the establishment and operation of solar power plants. A "Joint Venture Agreement" was signed in 2018 to take more concrete steps in this regard. Within the framework of the agreement, it is planned to build solar power plants with a total installed capacity of 100 MW, 30 MW in the first phase, in different regions of the country to meet Palestine's electricity needs. The first of the first phase projects, the Dead Sea Solar Power Plant with an installed capacity of 2x0.999 MWp (1.998 MWp in total), established in the Jericho region of Palestine by ZJ Strong Energy For Renewable Energy Ltd. Co. in which Zorlu Enerji holds a 75% stake and JDECO a 25% stake, was commissioned in November 2020. The power plant will sell the electricity it generates to JDECO under a power purchase agreement (PPA) for 25 years.

Other International Project Development Activities

In 2023, Zorlu Enerji will continue its project development activities in the Middle East, CIS (Uzbekistan and Kazakhstan) and South Asia.





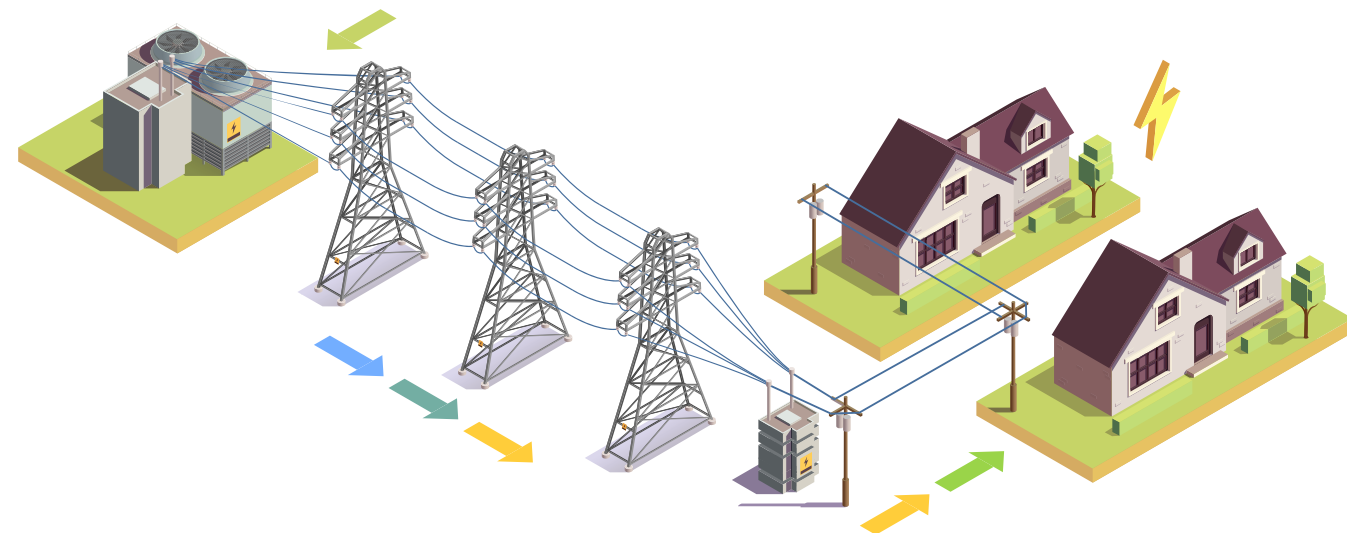
Electricity Distribution and Retail Sales

Zorlu Enerji, which has nearly 30 years of experience and expertise in the energy sector and has implemented the concept of an end-to-end service energy company with its infrastructure in sales and distribution, took over the management of Osmangazi Elektrik Dağıtım AŞ (OEDAŞ) and Osmangazi Elektrik Perakende Satış AŞ (OEPSAŞ) on February 2, 2017. The Osmangazi distribution region, which covers Afyon, Bilecik, Eskişehir, Kütahya and Uşak, provides electricity distribution services to 1.98 million subscribers.

OEDAŞ

Serving approximately 1.978 million subscribers as of the end of 2022, OEDAŞ is responsible for the operation of the electricity distribution network in the Osmangazi Electricity Distribution Region, necessary maintenance, repair and renewal operations, expansion, R&D, power increase and technology investments, reading and maintenance of meters of distribution system users in the region, preparation of demand forecasts and investment plans, lighting of boulevards, streets, avenues, alleys, underpasses, bridges, squares, crossroads, walkways and pedestrian crossings for the general use of the public, except for motorways and privatized access-controlled highways located in settlements

in the distribution region, and for the installation and operation of the necessary lighting and metering systems thereof, and for the purchase of electricity to compensate for the loss and illegal use of electricity in the region. OEDAŞ, which attaches great importance to supply and aims to provide the best service to consumers, realized 159 network investment projects within the scope of 1.820 billion TRY worth of investments made in 2022 to eliminate the deficiencies in the Osmangazi region, where it provides electricity distribution services, and established approximately 900 km of underground network and approximately 460 km of power transmission lines.



Line Length of OEDAŞ 2022

PROVINCE	Existing Line Length (Km)							
	INSTITUTION				PRIVATE			
	LV		MV		LV		MV	
	Overhead	Underground	Overhead	Underground	Overhead	Underground	Overhead	Underground
AFYONKARAHİSAR	6,008.61	1,460.40	4,992.79	565.25	60.35	30.88	3,077.69	172.54
BİLECİK	1,217.56	740.02	1,514.81	239.91	52.19	2.63	645.14	98.24
ESKİŞEHİR	3,630.09	1,743.91	3,754.50	857.84	180.89	189.07	3,675.12	260.99
KÜTAHYA	4,096.79	1,167.37	3,548.56	365.78	60.70	11.50	830.13	128.07
UŞAK	3,184.16	1,132.39	2,271.92	490.46	81.12	21.70	594.94	49.52

PROVINCE	Transformer Capacity (Installed Power MVA)			
	INSTITUTION		PRIVATE	
	LV		MV	
	636.02		1,879.73	
AFYONKARAHİSAR	196.52		769.25	
BİLECİK	751.44		1,657.23	
ESKİŞEHİR	456.25		695.28	
UŞAK	385.31		483.53	

OEPSAŞ

OEPSAŞ, the incumbent supply company in the Osmangazi Electricity Distribution Region, sells electricity to regulated consumers in the region based on retail sales tariffs approved by EMRA. In addition, electricity is sold to eligible consumers throughout Turkey without any regional restrictions. OEPSAŞ has two types of customers in its portfolio, namely the customer group (K1), which uses energy at regulated tariffs, and the customer group (K2), which purchases energy through bilateral agreements by exercising its right as

an eligible consumer, and energy is supplied from different sources for each customer group. For the K1 portfolio, energy purchases are mainly from EÜAŞ and EPIAŞ, while for the K2 portfolio, energy is purchased from other suppliers and EPIAŞ through bilateral agreements. In 2022, OEPSAŞ sold a total of 4.6 TWh of electricity to approximately 1.95 million eligible and non-eligible consumers. While the Company's electricity sales decreased by 21.5% compared to 2021, 82% of the sales were made to the K1 portfolio and 18% to the K2 portfolio.



Electricity Trade and Electricity Sales to Eligible Consumers

Zorlu Elektrik

Established in 2000, Zorlu Elektrik Enerjisi İthalat İhracat ve Toptan Ticaret AŞ ("Zorlu Elektrik") aims to procure electricity from the domestic market and free trade zones and to sell it directly or wholesales in Turkey and export it to foreign

countries. Zorlu Elektrik sells electricity to eligible consumers under the "Supply License" issued by the Energy Market Regulatory Authority.



Zorlu Elektrik's main operations consist

Retail electricity sales to individuals and institutions deemed "eligible"



Buying and selling electricity in the Organized Wholesale Electricity Markets operated by EPIAŞ,



Wholesale electricity trading on Over-the-Counter ("OTC") and Derivatives Market ("VIOP"),



Export and import of electricity,



Sales of I-REC and YEK-G renewable energy certificates to customers and the management of the group in charge of balance*.

* Group in charge of balance: Refers to the group formed by market participants to reduce imbalance costs. The group notifies the Market Operator (EPIAŞ) about the group and selects one of its market participants to assume the balancing related responsibility/obligations on behalf of the group.

Zorlu Elektrik carries out demand and price forecasts, generation planning, pricing, sales, risk and portfolio management, settlement and billing operations within the scope of its core activities. In addition to large corporate customers and industrial customers, Zorlu Elektrik sells electricity directly to a wide range of individuals and institutions that fall within the scope of eligible consumers, from households to SMEs. Consumers are offered hourly, periodic and market-adjusted alternative pricing options through bilateral agreements. Offering a strong service infrastructure with its specialized sales and IT teams, Zorlu Elektrik enables customers to save money by preparing special offers where they can choose the most suitable price package for their consumption habits. Eligible consumers are consumers who consume more than the annual minimum electricity consumption amount (eligible consumer limit) set by EMRA each year and thus have the right to choose their supplier. Consumers who fall within the scope of eligible

consumers can procure their electricity needs from the supplier of their choice under more favorable conditions through bilateral agreements without any provincial or regional restrictions. In line with the privatization process in the electricity sector that started in 2001, the eligible consumer limit has been gradually lowered every year since 2002, thereby expanding the scope of the eligible consumer practice and enabling a larger number of electricity subscribers, including households, to become eligible consumers. The eligible consumer limit is determined and announced by EMRA every year. In 2023, this limit is set at 1,000 kWh, a 9% decrease compared to 2022. Accordingly, all consumers who pay a monthly electricity bill of approximately 145 TRY for residential subscribers and 278 TRY or more for commercial subscribers have the right to choose their supplier. The annual consumption limit for customers to be covered by the End-Source Supply Tariff, which was set at 3 million kWh in 2022, was reduced to 1 million kWh on July 1, 2022.

Distribution, Trading, and Sales of Natural Gas

Through its 100% subsidiary Zorlu Enerji Dağıtım AŞ, Zorlu Enerji acquired 90% of the shares of Trakya Bölgesi Doğal Gaz Dağıtım AŞ and Gazdaş Gaziantep Doğal Gaz Dağıtım AŞ, operating in the field of natural gas distribution for a total consideration of 293 million TRY in June 2018.

Trakya Bölgesi Doğal Gaz Dağıtım AŞ

Established in 2005, Trakya Bölgesi Doğal Gaz Dağıtım AŞ ("Trakya Doğal Gaz") is engaged in the distribution of natural gas to homes and industrial facilities.

Trakya won the tender held by EMRA on June 23, 2005 for the Edirne, Kırklareli, Tekirdağ Natural Gas Distribution Region, with an offer of zero subscriber connection fee for the first five years, zero-unit service amortization fee for the first eight years, and license fee of 2.5 million TRY. The company received its distribution license on January 25, 2006 and started natural gas distribution in the region. Within the scope of this license, the company will be responsible for the planning, project design, construction, operation, maintenance and expansion of the distribution network in accordance with the applicable legislation, and for the transportation of natural gas to subscribers and eligible consumers through this network to the distribution region, which encompasses Lüleburgaz, Çerkezköy, Muratlı, Kavaklı, Evrensekiz, Büyükkarıştıran, Kızılıpınar, Kapaklı, Karaağaç, Veliköy, Ulaş, Misinli, Velimeşe and Babaeski districts in the provinces of Edirne, Kırklareli and Tekirdağ for a period of 30 years. Trakya Doğal Gaz expanded its distribution license area to include Keşan, İpsala and Süloğlu districts of Edirne province in 2015, Süleymanpaşa, Şarköy, Malkara, Hayrabolu, Ergene (Ulaş, Velimeşe and Misinli Neighbourhood) and Saray districts in 2016, Uzunköprü, Lalapaşa, Havsa, Meriç and Enez districts and Yenimuhacir Subaşı, Küplü and Yenikarpuzlu towns in Edirne province and Pınarhisar in Kırklareli province in 2017, Pehlivan köy district and the towns of Üsküp, Alpulu, Büyükmandıra, and Kaynarca in Kırklareli province, and Esetçe and Beğendik towns in Edirne province in 2018.

Fulfilling its obligations specified in its distribution license on time and in full, Trakya reached a line length of 5,112 km by the end of 2022.

In 2022, a total of 1,287 billion Sm³ of natural gas was consumed in Trakya's operational region. Of this amount, 909 million Sm³ was sold directly to customers by Trakya, while transportation services were provided to wholesale companies for the remaining 378 million Sm³. With the investments to be

made and new subscribers, natural gas consumption in the distribution region of Trakya is expected to reach 1,481 billion Sm³ in 2023.

By the end of 2022, 669 km of steel, 4,443 km of polyethylene lines, 35 City Entrance Stations (RMS-A), 15 CNG, 1 LNG discharge stations, 158 District Regulators, 463 Customer Stations and 108,988 service boxes have been installed.





Gazdaş Gaziantep Doğal Gaz Dağıtım AŞ

Gazdaş Gaziantep Doğal Gaz Dağıtım AŞ was established in 2005 and operates to distribute natural gas to residential and industrial organizations.

Gazdaş, in the tender organized by the Energy Market Regulatory Authority (EMRA) on July 28, 2005, for the natural gas distribution area of Gaziantep, Kilis, and Nizip, won the bid by offering a subscriber connection fee of 30 USD for the first five years and zero unit service depreciation fee for the first eight years. On February 24, 2006, the company obtained the distribution license and started its natural gas distribution operations in the relevant region. Under this license, the company is responsible for the planning, design, construction, operation, maintenance, expansion, and transportation of natural gas to subscribers and eligible consumers through the distribution network in the distribution area for a period of 30 years.

In 2015, Gazdaş expanded its distribution license to include the districts of Oğuzeli, İslahiye, and Nurdağı, which are affiliated with Gaziantep province. In 2017, the company added the districts of Araban and Yavuzeli, followed by the district of Karkamış in 2018. In early 2020, Gazdaş included the district of Polateli, which is affiliated with Kilis province, further expanding its distribution license.

In 2022, a total of 800 million Sm³ natural gas consumption was realized in Gazdaş Gaziantep's operational area.

Of this amount, 522 million Sm³ was sold directly to customers by Gazdaş, while transportation services were provided to the wholesale company BOTAŞ for the remaining 278 million Sm³. With the investments to be made and new subscribers, natural gas consumption in Gazdaş Gaziantep distribution region is expected to reach 883 million Sm³ with transportation service in 2023 and at least 2 billion Sm³ in 2036.

By the end of 2022, 374 km of steel lines, 3,765 km of polyethylene lines, 6 city entry stations (RMS-A), 7 CNG stations, 106 regional regulators, 94 customer stations and 98,887 service boxes have been installed.



Zorlu Doğal Gaz Tedarik Ticaret AŞ

Zorlu Doğal Gaz Tedarik Ticaret AŞ was established in 2010 after obtaining a 10-year Import (Spot) License from the Energy Market Regulatory Authority in order to purchase natural gas directly and/or as compressed natural gas (CNG) via transmission line and/or wholesale natural gas in the form of liquefied natural gas (LNG) from domestic production, importer and other wholesale companies for resale; to sell directly to licensed wholesale and distribution companies, eligible consumers, to export or to wholesale to exporter companies. Within the framework of the "Import (Spot)" license obtained from EMRA, Zorlu Doğal Gaz Tedarik can trade by purchasing natural gas imported from abroad and domestically produced natural gas, as well as engage in "wholesale" activities in Turkey. Within the framework of these business lines, Zorlu Doğal Gaz Tedarik operated in line with its license between 2010 and 2020, and at the end of 2020, it applied to the Energy Market Regulatory Authority and extended its license for 30 years until 2050. In December 2020, Zorlu Enerji Dağıtım AŞ, a wholly-owned subsidiary of Zorlu Enerji, acquired all shares of Zorlu Doğal Gaz Tedarik from Zorlu Holding and Zorlu Group companies for 208.5 million TRY. In 2022, Zorlu Doğal Gaz Tedarik traded 150 million m³ of natural gas with the natural gas supplied from domestic natural gas production companies. Zorlu Doğal Gaz Tedarik, which operates in natural gas trade with the aim of leading the sector and becoming one of the most respected companies in the natural gas market, offers natural gas to eligible consumers through transmission and distribution lines in an uninterrupted, high quality and environmentally friendly manner.



PV MODULE PRODUCTION AND SALES ACTIVITIES

Zorlu Enerji continues its research and investment efforts in solar energy, one of the areas where our country has high potential in terms of clean, green and sustainable energy. Established in the first quarter of 2016, Zorlu Solar Enerji Tedarik ve Ticaret AŞ (Zorlu Solar) is engaged in generating electricity from solar energy in Turkey and abroad, selling, purchasing, exporting, installing solar photovoltaic (PV) panels on rooftops, providing all kinds of installation services and consultancy services, and engaging in the wholesale purchase and sale of electricity and/or capacity in Turkey. In 2017, Zorlu Solar entered into a special cooperation agreement with First Solar, Inc. ("First Solar") developing next generation technologies in this area to offer innovative solutions in solar energy, becoming the exclusive distributor of high-performing thin-film photovoltaic solar panels manufactured by First Solar in 26 countries located in Eastern Europe, Eurasia and Eastern Mediterranean regions for five years. At the end of 2019, Zorlu Solar also signed a deal with Solar Edge, Inc. ("Solar Edge") from Israel, which is listed in NASDAQ and is the inventor of the panel management system with an optimizer in the field of inverters and one of the leaders in the respective sector, becoming the largest distributor of Solar Edge in Turkey for inverter and optimizer systems as of the end of 2021. Zorlu Solar added two big names to its distributorship brands in 2021. Signing high-capacity commercial agreements

with Jinko Solar Co. Ltd. ("Jinko Solar") which employs the bifacial, half-cut Mono-PERC cell technology in the solar panel market as an A quality (Tier 1) 100% "bankable" firm, Zorlu Solar became the leading supplier of products equipped with the crystalline silicone technology besides the thin-film technology. In addition to Jinko Solar, it signed an agreement with a global-giant partner for microinverter technology, which will play an important role in emerging residential installation and self-consumption segment of the solar panel market, with the prediction that the end consumer market will significantly develop throughout 2022 and 2023. A distribution agreement was signed with Enphase Inc. ("Enphase") controlling 60% of the current US inverter market and standing out as the leader of the microinverter technology, the Turkish market being the initial location for this partnership. In addition, a distributorship agreement was signed with Ginlong Solis, the UK inverter market leader, and a sales plan with a capacity of 1 GW was made for 2023.

As of the end of 2022, Zorlu Solar has reached a portfolio of over 485 MW of panel sales and 180 MW of inverter and accessories sales with solar energy products sold in Turkey and countries in the region, and continues to consolidate its leading position in the sector.



Domestic and Imported Solutions in Solar Power Plant Components



Zorlu Enerji, one of Turkey's leading companies in the field of renewable and clean energy, has started selling and distributing solar panels and inverters in cooperation with global solar panel manufacturers and inverter manufacturers for solar energy systems applications on industrial roofs. In addition to this activity, Zorlu Enerji has completed the first contracts with Tier 1 companies for the production of domestic solar panels under the ZES brand, and with these contracts, it has reached its 100 MW production plan and target set for 2022. The component list in the panels produced is of equivalent quality to the companies producing in the Phase 1 class and mono-PERC half-cut cell technology is used. In 2022, in addition to the market opening with Turkey, efforts are underway to make the first sales in the emerging solar markets in Europe and the USA.



Vestel Solar Power Plant Project

In the end of summer 2021, the first solar power plant installation was completed at Vestel City Auxiliary Facilities in Manisa as part of the pilot project. In this 150 kW capacity power plant, Jinko Solar panels and Solar Edge inverters were used. As a continuation of the project, the SPP installation contract for the Utilities Facility Phase 2 and Air Conditioning/ Oven/Dishwasher (KFB) facilities is at the signing stage. Scope of the contract points to a capacity of 1,152 kW, and it is planned that the products used will be ZES branded domestically produced solar panels with a power output of 450 W and Solar Edge inverter and optimizer systems that guarantee safety in roof installations. These projects are planned to be implemented in 2023. Negotiations for a solar power plant with a capacity of up to 30 MW planned to be implemented at Vestel between 2022 and 2023 are ongoing. Domestically manufactured ZES panels are planned to be used in these projects.

Forward-looking Clean Transportation Vehicles

Vehicles on the road have a significant impact on carbon emissions, accounting for around 20% of global human-induced carbon emissions. According to the IEA's Sustainable Development Scenario, the share of electric vehicles in vehicle sales is projected to reach 41% by 2030. On the other hand, when net zero emission targets by 2050 are taken into account, this rate increases to 52%. As an organization that acts with the mission of being the green and clean energy company of the future, Zorlu Enerji is making significant investments to expand the use of electric vehicle charging stations in Turkey and abroad. In line with the widespread use of electric vehicles, Zorlu Energy Solutions (ZES), which was launched in 2018, installs fast charging stations in the city and on intercity roads.

In addition to the fast charging service it offers on urban and intercity roads, ZES also installs charging stations at homes and workplaces in line with the demands of users. Launched in 2020 in all 81 provinces of Turkey, ZES provided charging services with clean electricity from renewable energy sources certified with I-REC at a total of 934 points in 81 provinces by the end of 2021, and increased this number to 1,570 points and 2,840 sockets (vehicle charging capacity) in 81 provinces in 2022. In the coming period, the Company aims to reinforce its leading position in this field by increasing the number of standard charging stations in residential areas with a high density of residences and workplaces through collaborations with municipalities in addition to fast charging stations. As part of its operations in Northern Cyprus, ZES serves end-users at approximately 15 locations, while in Montenegro, ZES continues to install 15 double-socket electric vehicle charging stations in 13 different cities of the country within the scope of the UNDP tender won. In addition, Zorlu Enerji also launched Turkey's first electric vehicle sharing platform "Electrip", thus creating a fleet of only electric vehicles. With Electrip, the electric vehicle rental era was launched in Turkey and the pioneering of a low carbon emission and environmentally friendly transportation alternative was undertaken. With a total of 45 electric vehicles in its fleet as of 2021, Zorlu Enerji continues to work to support the reduction of emissions in transportation with the goal of increasing this number to 53 in 2022 with the ongoing procurement process.

Operational Excellence Practices

"We are working to improve our products and services"

In addition to being the first company among domestic energy companies in Turkey to receive ISO 9001 Quality Management System certification, we have an Integrated Management System that fulfills the requirements of the standards related to ISO 9001 Quality Management System, ISO 45001 Occupational Health and Safety Management Systems, ISO 14001 Environmental Management System, ISO 27001 Information Security Management System and SA 8000 Social Responsibility Management System certifications.

<https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/quality-management-systems>



The certification performance of Zorlu Enerji facilities and enterprises is given below;

Certifications (2022)		Operation Facility Coverage Percentage
1	ISO 9001	71%
2	ISO 14001	76%
3	ISO 45001	76%
4	SA 8000	48%
5	ISO 27001	19%



Goals

Zorlu Jeotermal Enerji Elektrik Üretimi AŞ plans to continue the procurement of plant equipment and project financing processes for the 18.6 MWe Alaşehir 2 GPP project.

Domestic solar panel production and trade is also planned under the ZES brand, with Turkey as the primary target market. ZES projects aim to accelerate the installation of charging stations while maintaining its position as a leading player in the e-mobility sector in Turkey. Within the scope of overseas activities, it is aimed to expand the Electrip brand in Southern Europe & Balkans by continuing or starting operational activities in countries such as Italy, Greece, Bulgaria, Montenegro, Croatia, Israel, etc. In 2022, the Electrip platform was reorganized with a more user-friendly interface. In 2023, Electrip aims to expand its vehicle fleet, develop business models, increase the number of locations served and serve more customers.



NATURAL CAPITAL

Zorlu Enerji recognizes the importance of protecting natural resources in an ever-changing and evolving economic environment. Considering the growing global climate crisis with the effect of rapid population growth and industrialization, it is evident that both states and companies need to take actions to develop effective solutions in order to make our world livable and to ensure its sustainability for future generations. Zorlu Enerji closely monitors the effects of all global developments on the energy sector, in which it operates, and takes necessary actions by adapting to the changes. Zorlu Enerji carries out all its activities with the aim of making a positive contribution to systems that are out of balance, beyond reducing environmental impact. In addition, it contributes to all other sectors and business partners it interacts with by taking important steps towards the sustainable development of the sector with pioneering practices.

Zorlu Enerji is engaged in power generation, sales and distribution of electricity and natural gas, installation of solar roof panels, operation of electric vehicle charging infrastructure and leasing of electric vehicles. While carrying out these activities, it uses innovative and sustainable financing tools to diversify its capital resources and pays attention to supporting sustainable development in the regions where it invests.

Zorlu Enerji takes an environmentally conscious approach by evaluating local and global environmental risks and opportunities in its investment decisions. It examines environmental risks and opportunities on a local and global scale during the investment decision-making process, and evaluates the economic, social and environmental impacts of the investment in accordance with international standards.

In 2022, Zorlu Enerji revised its Biodiversity Policy in line with global requirements and regional needs and updated the Zorlu Enerji Biodiversity Commitment. You can review Zorlu Enerji's Biodiversity Commitment at [link](#).

Zorlu Enerji analyzes sustainability risks based on the results of its assessments and makes the final investment decision by performing a SWOT analysis and planning the mitigation and management of potential negative environmental and social impacts. In this context, it closely monitors the impact of its activities on biodiversity in the areas where it operates and/or invests and makes its decisions in a manner that

meets the requirements for sustainable management of comprehensive biodiversity and living natural resources that meet the standards set by international financial institutions such as IFC and EBRD.

Wind power plants are analyzed and monitored especially in terms of their ornithological and mammalogical effects, while hydroelectric power plants are analyzed and monitored on the widest scale, especially including wetland ecosystems. The impact of geothermal power plants on semi-natural agro-ecosystems is also comprehensively analyzed to ensure that all investments are made with environmental and ecological factors in mind.

Our commitment to renewable energies is available at [link](#).



Environmental Investments

2020 - TRY
1,451,022*

2021 - TRY
10,172,624**

2022 - TRY
7,838,884***

* Environmental investments of OEDAŞ and OEPSAŞ are not included.
** Calculated based on the CBRT's USD exchange rate of 31.12.2021.
*** Calculated based on the CBRT's USD exchange rate of 31.12.2022.



Goal

Zorlu Enerji emphasizes the protection of biodiversity in all its investments within the framework of its sustainability strategy "Smart Life 2030", and aims to invest at least 10 million TL in biodiversity by 2030 in order to improve and protect the habitats of living creatures in Turkey putting to use the business model it has developed. The company conducts environmental and social impact assessments, research and conservation activities and taking into account biodiversity in the regions where investments are made, and contributes to the UN Sustainable Development Goals: "Affordable and Clean Energy", "Life on Land" and "Partnerships for the Goals".

Supporting Sustainable Development through Environmental Sensitivity and Innovative Financing

One of the United Nations Sustainable Development Goals, Goal 7: Affordable and Clean Energy, aims to promote clean energy and invest in clean energy sources such as solar, wind and thermal energy to ensure that all people have access to affordable energy by 2030.

In line with this extremely important goal, which contributes to environmental protection while promoting growth, Zorlu Enerji is continuing its research and investment activities in solar energy, one of the high-potential areas, by evaluating the potential in the Asian and Middle Eastern markets, where energy demand is growing rapidly and the liberalization process continues, to expand the clean energy infrastructure and promote technological advances in all developing countries.

Accordingly, Zorlu Enerji began investing in solar power in Pakistan, having previously built a 56.4 MW wind power plant in Jhimpir, which is also the country's first wind farm developed with foreign investment, through its wholly-owned subsidiary, Zorlu Enerji Pakistan. Zorlu Enerji received a 25-year production license from Pakistan's National Electric Power Regulatory Authority (NEPRA) and started its solar energy operations in Pakistan's Punjab province.

According to NEPRA's State of the Industry 2021 report, Pakistan's total electricity consumption is 115,441.40 GWh per year. According to the World Bank, the total population of Pakistan in 2021 is 231,402,117 and the per capita electricity consumption is 548.64 kWh per year. Zorlu Enerji's wind power plant in Jhimpir, which has a benchmark generation value of 115,431,836.00 kWh and meets the requirements of the "Gold Standard" certificate, supplies electricity to 179,242 people annually.

In line with its targets to deepen and diversify its renewable energy investments, Zorlu Enerji commissioned the Dead Sea Solar Power Plant with an installed capacity of 2 MW in the Jericho region of Palestine, established by ZJ Strong Energy for Renewable Energy Ltd. Co., of which it owns 75% of the shares.

According to the Palestinian Central Bureau of Statistics for 2020, Palestine's total electricity consumption is 6,475,000 GWh. According to the World Bank website, the total population of Palestine in 2021 is 4,922,749 with a per capita electricity consumption of 1,146 kWh. Based on this data, the Dead Sea solar power plant with a benchmark generation value of 3,159 MWh provides electricity for 2,757 people annually.



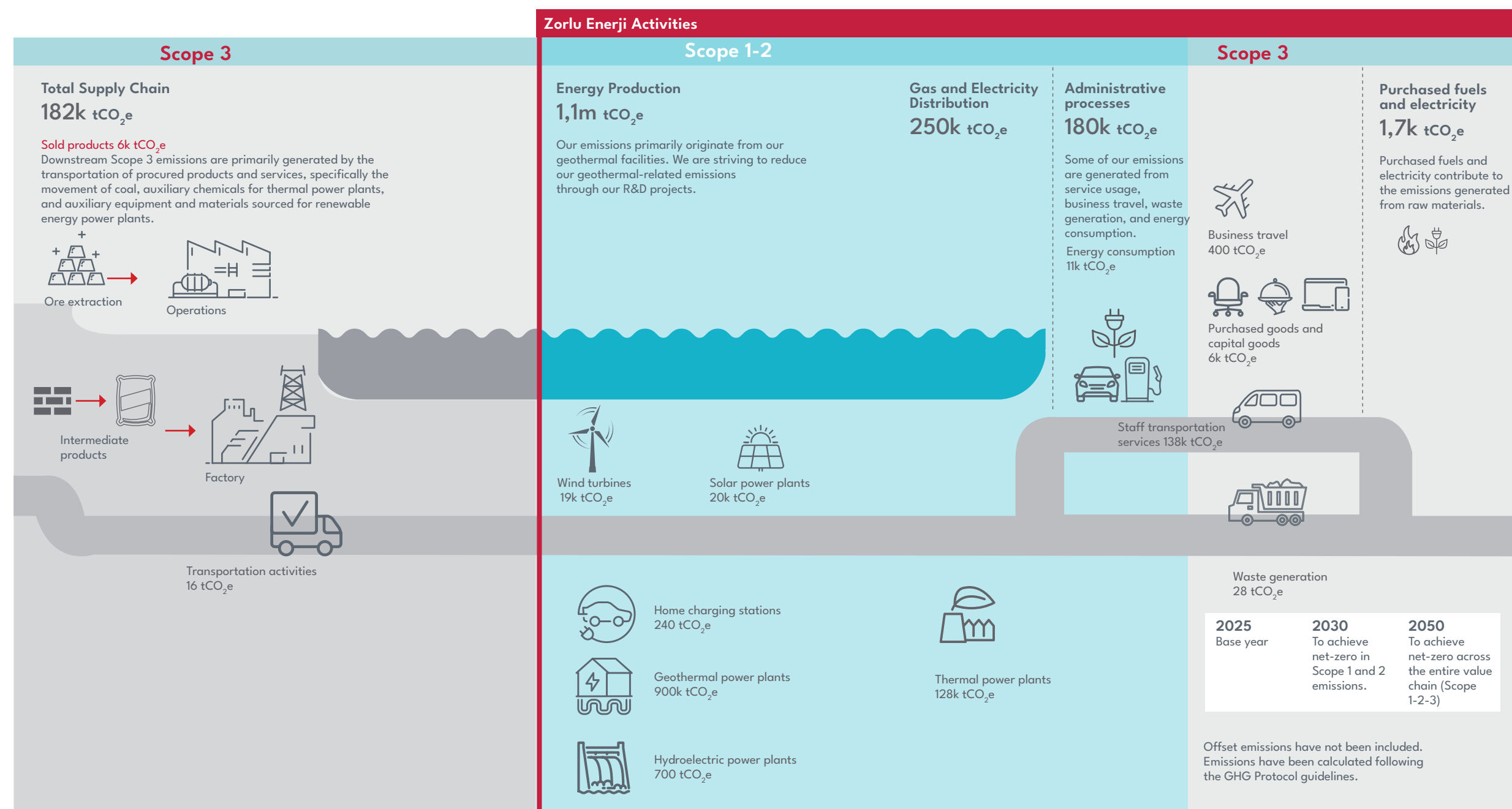
<https://nepra.org.pk/publications/State%20of%20Industry%20Reports/State%20of%20Industry%20Report%202021.pdf>
https://www.pcbs.gov.ps/Portals/_Rainbow/Documents/Energy_Consumption_2020_E.html
2021 data not available.
<https://data.worldbank.org/country/PS>



Combat the Climate Crisis

"Decarbonization of our value chain"

We should start with our own activities for a world that operates solely on green energy. Every day, we strive to decarbonize our energy production and operations (Scope 1-2) and aim to achieve a net-zero emissions target throughout our entire value chain (Scope 1-3) by 2040.



Zorlu Enerji recognizes the importance of reliable and sustainable energy supply for all sectors and places great emphasis on conserving energy resources, optimizing energy consumption in all business areas, and promoting awareness of responsible energy use. In line with this goal, the company measures energy consumption, evaluates the results and strives for improvements wherever possible.

Zorlu Enerji is committed to using energy resources efficiently and promoting responsible energy consumption. The company regularly measures its energy consumption and strives to make improvements wherever possible. Zorlu Enerji consumes natural gas, diesel, gasoline, LPG and coal as non-renewable energy sources.

Zorlu Enerji complies with all environmental regulations in line with its environmental awareness and regularly conducts environmental risk assessments. The company places great emphasis on minimizing environmental impacts in all its operations, including construction, maintenance and repair processes, and takes measures to prevent or minimize direct and indirect impacts on the environment and human health. These measures include waste management through appropriate disposal procedures, efficient use of natural resources, and preparation for accidents and disasters that could harm the environment.

As part of its sustainability policy and strategy, Zorlu Enerji invests in domestic, renewable and clean energy while pursuing the goal of energy efficiency by investing in high technology to combat the climate crisis. Thanks to investments in renewable energy by Zorlu Enerji in recent years, the share of renewable energy in Turkey's power generation portfolio reached 87% by the end of 2022. The company continues its efforts to become the most effective, visionary and technologically advanced player in Turkey in the field of wind, hydro, solar and geothermal energy.

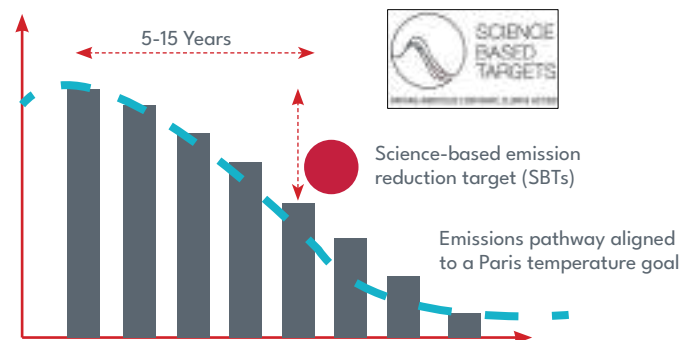


Our important steps in the fight against the climate crisis

Science-Based Targets Project (SBTi)

We continue to work on improving our targets to become "net zero"!

At Zorlu Enerji, we are committed to improving the "net zero emissions targets" set for 2030 and 2040 in line with "Science Based Targets**" with reference to "Restorative Operations & Value Chain" value area, which includes steps to combat the climate crisis under the Sustainability Strategy set to pursue our vision of "becoming the energy company of the future".



With the commitment shared with the public under the Science Based Targets Initiative (SBTi)**, which is a first in the Turkish energy sector, Zorlu Enerji acknowledges that it will set the roadmap in a traceable manner by establishing its corporate responsibility on a science-based foundation to limit the increase in global greenhouse gas emissions to 1.5°C by 2024, as stipulated by the Paris Climate Agreement.

See the [website](#) for SBTs of Zorlu Enerji and other companies on the path to SBT.

More than 1,300 companies from 60 countries and nearly 50 sectors, including one-fifth of the Fortune Global 500 companies, have already begun work on SBTi. For more information on Science Based Targets, visit the [website](#).



*Targets set by companies to reduce greenhouse gas (GHG) emissions are considered "science-based" if they are consistent with the necessary conditions identified by climatology to enable them to achieve the goals of the Paris Agreement. The main goal of the Paris Agreement is to keep global warming below 2°C compared to pre-industrial levels and limit it to 1.5°C. Science-based targets help companies determine how much and in what timeframe they need to reduce their emissions.
**The Science Based Targets initiative (SBTi) is a partnership between CDP, the United Nations Global Compact, the World Resources Institute (WRI), and the World Wide Fund for Nature (WWF) that advocates for science-based targets to increase companies' competitive advantage in the transition to a zero-carbon economy.



Carbon Disclosure Project (CDP-Carbon Disclosure Project)

Zorlu Enerji was the first Turkish energy company to join the Carbon Disclosure Project (CDP) in 2010, reporting its corporate policies and targets related to climate change, the amount of carbon emissions and reduction targets.

Under the project, Zorlu Enerji has transparently disclosed its carbon footprint to the public every year since 2011.



Verification of greenhouse gas emissions according to ISO 14064

As the first energy company (Zorlu Enerji) in Turkey to conduct verification of emissions in accordance with the ISO 14064 greenhouse gas verification standard, we regularly review the amount and measurement methods of our greenhouse gas emissions as we conduct activities to monitor, control and reduce greenhouse gas emissions resulting from our operations. Zorlu Enerji performs Greenhouse Gas Calculation and Verification in accordance with the ISO 14064 standard in its emission-intensive power generation plants and power distribution regions and certifies its activities.



United Nations Global Compact

Zorlu Enerji joined the United Nations Global Compact (UNGC) in 2019, institutionalizing the principles we have adopted since our establishment in the framework of an international commitment..

Signatory to the 2°C Declaration and the Climate Platform

Zorlu Enerji is a signatory to the 2°C Declaration, an initiative of COP 17 in Durban, and a founding member of the Climate Platform-Turkey Climate Change Leaders Group.



Gold Standard Practices

Launched in 2010 in Osmaniye, the Gökçedağ Wind Power Project is the first carbon emission project in Turkey to receive Gold Standard certification and be integrated into the voluntary carbon market. With an installed capacity of 135 MW, the annual emission reduction of the Gökçedağ Wind Power Plant is approximately equivalent to 300,000 metric tons of CO₂.

Zorlu Enerji undertook the design, installation and operation of the 56.4 MW plant, which is the first wind power plant in Pakistan, and was the first company in Pakistan to be certified with the Gold Standard. The plant, which saves 100,000 metric tons of CO₂ equivalent annually, is considered an important step for countries like Pakistan in terms of building capacity for renewable energy investment and technology transfer.

The Gold Standard Certificate is considered the most prestigious global program that evaluates renewable energy projects on various criteria such as reducing carbon emissions, protecting nature and contributing to social development. The program, supported by more than 80 non-governmental organizations around the world and promotes the development of 1100 projects, is run by the Gold Standard Foundation.



Zero Carbon Footprint Forests Project

Zorlu Enerji is also implementing the Zero Carbon Footprint Forests Project at the micro level to combat the climate crisis and ensure a sustainable future. To raise awareness of climate change, the company calculates the carbon footprint of its booths and visitors who visit its booths at all trade shows and summits in which it participates, and initiates reforestation activities in the regions where the activities are held. This project, which began as a social/environmental responsibility project, was expanded in 2017 in collaboration with the General Directorate of Forestry of the Ministry of Agriculture and Forestry.

Zorlu Enerji carried out reforestation works planting 520,000 seedlings in the regions where the company operates, within the framework of the regulation of the General Directorate of Forestry Memorial Forests as of the end of 2022. Under the project, which was launched with a target of 1,150,000 seedlings, 90,000 seedlings are to be planted every year.



- 2017: 35,000** saplings in Yeğenli/Tire-İzmir
- 2018: 70,000** saplings Yenicekent/Buldan-Denizli
- 2019: 90,000** saplings Salihli/Manisa
- 2020: 90,000** saplings in Nurdağı/Gaziantep
- 2021: 90,000** saplings in Nurdağı/Gaziantep
- 2022: 90,000** saplings in Erzincan



"Our Energy is For Children" Project

In 2010, the Enerjimiz Çocuklar İçin (Our Energy is for Children) project, another social responsibility project initiated in our investment regions for children who we rely upon to solve the energy problems of the future, reached more than 300,000 children and youngsters to inform and raise their awareness about renewable and clean energy resources and the climate crisis. In collaboration with the provincial directorates of national education, the support of our country's leading non-governmental organizations (TOÇEV, TEGV and LÖSEV) was also enlisted to increase the impact.

21 March World Forestry Day Activities

Every year on 21 March, World Forestry Day, a tree planting activity is held near one of our power plants attended by local stakeholders and non-governmental organizations. At the event, which involves spending a day in nature, employees and managers of the power plant as well as local residents, pupils from neighboring schools and volunteers spend a day in nature together in a festive atmosphere.

After the planting of seedlings, the plant manager of the power plant where the event is held gives information and answers questions about the power plant, Zorlu Enerji's power generation and its environmental and social activities. Books prepared for children about the environment and energy are given to the pupils and children who attend the event.

Internal communication emails with detailed information are designed, prepared and sent to our employees, and quiz competitions are organized to raise their awareness about climate change, important carbon sinks and the importance of forests. Employees who give the correct answers in the quiz competitions are allowed to participate in the seedling planting event on 21 March, World Forestry Day.

GECO Project

Electricity generation from geothermal resources in our country generates significant emissions due to the unique structure of the reservoir. In this context, we are conducting studies on the capture and underground storage of emissions from geothermal sources within the framework of the project initiated in cooperation with international institutions and organizations under the EU Horizon 2020 program. The pilot carbon capture and storage plant was established at the Kızıldere III Geothermal Power Plant with studies on capture and storage were initiated. We expect the final report of the project to be published in 2023 and we will be part of an important step to combat the climate crisis by reducing emissions from geothermal power plants in our country.

Internal awareness-raising and training activities

In order to raise awareness and strengthen the skills of Zorlu Enerji employees on the issues of sustainability and the environment, especially the climate crisis, mailing and themed quiz competitions are organized on special occasions, training programs are conducted through internal online training channels, and external training support is provided for employees who need additional training due to the nature of their work.



Biodiversity Loss and Deforestation

Zorlu Enerji has focused its operations on promoting environmental responsibility and conservation as a critical aspect of its sustainability strategy. In this regard, the company has committed to allocating 10 million TL to biodiversity and nature conservation activities by 2030 under the "Nature Management" pillar of its strategy. In 2022, the company spent a total of 1.5 million TL on these activities. In addition to its financial commitment, Zorlu Enerji also demonstrated its commitment to the protection of biological and natural life by renewing its commitment to biodiversity protection in 2022. The company committed to develop and implement various activities to protect biological and natural life in the regions where its power plants are located.

Zorlu Enerji's commitment to protect biodiversity can be found at [link](#).

At Zorlu Enerji, we believe that we all have a duty to prevent the gradual depletion of diversity in nature and the rapid deterioration of the ecological balance.

Zorlu Enerji, which sources 87% of its national power generation portfolio from indigenous and renewable energy sources, attaches great importance to protecting biodiversity for all its investments under its Smart Life 2030 sustainability strategy. Zorlu Enerji established a Biodiversity and Ecosystem Management System to achieve its nature management goals. This system provides the company with a framework to identify and manage the environmental impacts of its operations and to develop and implement measures to minimize these impacts.

At each site, endangered species were identified, action plans were prepared and communicated to the relevant agencies through the QDMS. Progress on these actions is reported annually to senior management and the sustainability board.

Zorlu Enerji conducts environmental and social impact assessments and research and conservation studies that take into account biodiversity in its investment regions. Through these efforts, Zorlu Enerji contributes to the UN Sustainable Development Goals of "Affordable and Clean Energy," "Life on Land," and "Partnerships for the Goals".

New Approach to Conservation: Toward a Regenerative Future: Zorlu Enerji's Environmental Commitment Environmental responsibility and nature management play a crucial role in Zorlu Enerji's sustainability strategy, which focuses on three main value areas. The concept of "nature stewardship" forms the basis for exercising environmental responsibility and is one of the top priorities in this value area. Zorlu Enerji recognizes the urgent need for ecological regeneration and restoration

to ensure the sustainability of our planet's ecosystems. The negative impacts of human activities, especially since the Industrial Revolution, have contributed significantly to the degradation of these systems. Nevertheless, current operating systems are unable to provide effective solutions to these ecological challenges. In light of these challenges, Zorlu Enerji believes that it is necessary to adopt a business model that prioritizes sustainability while making a positive contribution to systems destabilized by human activities. With this awareness, the company aims to contribute to Turkey's sustainable and renewable growth by offering a regenerative business model and value chain based on its sustainability strategy. Zorlu Enerji is committed to contributing not only to the sustainability of its own operations, but also to decarbonization and biodiversity in Turkey as a whole. The company recognizes the important role it plays in shaping the future of our planet and strives to make a significant impact through its business practices and initiatives.

Zorlu Enerji is strongly committed to the environmental responsibility and nature management, as reflected in its environmental policy. This policy emphasizes the protection of natural resources and the minimization of environmental impact in all of the company's operations and investments. To achieve these goals, Zorlu Enerji carefully selects materials and technologies that minimize negative environmental impacts while placing great emphasis on the efficient use of energy and resources. This includes monitoring waste and emissions and setting targets for their reduction through various projects. Zorlu Enerji also takes steps to raise environmental awareness among its stakeholders and transparently shares information about its environmental impacts. This helps build trust and strengthen accountability among stakeholders and supports the company's overall commitment to sustainability. Zorlu Enerji is committed to complying with the Commitment to Environmental, Social and Governance Principles issued by the company. These include specific actions to promote sustainability and reduce the company's overall impact on the environment. By adhering to these principles, Zorlu Enerji demonstrates its strong commitment to environmental responsibility and nature management.

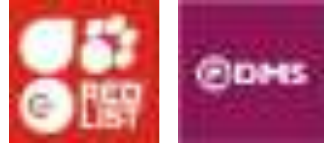
Projects:

- Zorlu Enerji Biological Diversity and Ecosystem Management System
- Gökçedağ WPP Monitoring System for Birds and Mammals
- Kızıldere GPP Biological Diversity Study
- Project for Identifying the Agricultural Impacts of Kızıldere Geothermal Power Plants



“WE MANAGE OUR RISKS ON BIODIVERSITY”

As Zorlu Enerji, we determine the effects on endemic and non-endemic species in relevant region due to our domestic operations through periodic observation studies. We generate follow up activities and supervise our biodiversity action plans..



A. Some Species at Risk According to the World Union for Conservation of Nature and Natural Resources (IUCN) for Mercan Regulator and HEPP Operations

Anatolia Newt (Neurergus strauchii munzurensis)



Egyptian Vulture (Neophron percnopterus)



European Turtle-dove (Streptopelia turtur)



You can access the Biodiversity Action Plan for Mercan Regulator and HEPP and influenced species by here [link](#).

B. Some Species at Risk According to the World Union for Conservation of Nature and Natural Resources (IUCN) for Tercan HEPP Operations

Tortoise (Testudo graeca)



Egyptian Vulture (lynx lynx)



You can access the Biodiversity Action Plan for Mercan Regulator and HEPP and influenced species by here [link](#).

C. Some Species at Risk According to the World Union for Conservation of Nature and Natural Resources (IUCN) for Beyköy Regulator and HEPP Operations

Redwing (Turdus İliacus)



Bearded Vulture (Gypaetus Barbatus)



Red-footed Falcon (Falco Vespertinus)



Eastern Imperial Eagle (Aquila Heliaca)



Eurasian Otter (Lutra lutra)



You can access the Biodiversity Action Plan for Beyköy Regulator and HEPP and influenced species by here [link](#).

D. Some Species at Risk According to the World Union for Conservation of Nature and Natural Resources (IUCN) for Çıldır HEPP Operations

Carp (Cyprinus carpio)



Bulatmai Barbel (Luciobarbus capito)



The white-headed duck (Oxyura leucocephala)



Common Pochard (Aythya ferina)



Steppe Eagle (Aquila nipalensis)



You can access the Biodiversity Action Plan for Çıldır HEPP and influenced species by here [link](#).

E. Some Species at Risk According to the World Union for Conservation of Nature and Natural Resources (IUCN) for İkizdere Regulator and HEPP Operations

Crimean Barbel (Barbus tauricus)



Baran Viper (Vipera barani)



You can access the Biodiversity Action Plan for İkizdere Regulator and HEPP and influenced species by here [link](#).

You can access the Biodiversity Action Plan for Kuzgun HEPP and influenced species by here [link](#).

You can access the Biodiversity Action Plan for Ataköy Regulator & HEPP and influenced species by here [link](#).

G. Some Species at Risk According to the World Union for Conservation of Nature and Natural Resources (IUCN) for Kızıldere 2 & 3 GEPP Operations

Lesser White-fronted Goose (Anser erythropus)



You can access the Biodiversity Action Plan for Kızıldere 1 GEPP and influenced species by here [link](#).

G. Some Species at Risk According to the World Union for Conservation of Nature and Natural Resources (IUCN) for Kızıldere 2 & 3 GEPP Operations

Ferruginous Duck (Aythya nyroca)



Northern Lapwing (Vanellus vanellus)



You can access the Biodiversity Action Plan for Kızıldere 2&3 GEPP and influenced species by here [link](#).

You can access the Biodiversity Action Plan for Alaşehir GEPP and influenced species by here [link](#).

H. Some Species at Risk According to the World Union for Conservation of Nature and Natural Resources (IUCN) for Osmaniye WPP Operations

Wild Goat (Capra aegagrus)



Brown Bear (Ursus arctos)



Stripped Hyaena (Hyaena hyaena)



Greater Spotted Eagle (Clanga clanga)



You can access the Biodiversity Action Plan for Osmaniye WPP and influenced species by here [link](#).

You can access the Biodiversity Action Plan for Bursa NGPP and influenced species by here [link](#).

You can access the Biodiversity Action Plan for Lüleburgaz NGPP and influenced species by here [link](#).



Management of industrial accidents and environmental pollution

Zorlu Enerji fulfills its responsibilities regarding industrial accidents under the SEVESO legislation for the Kızıldere 3 GPP and keeps its stakeholders informed according to the studies conducted. The effectiveness of measures taken under the "SMS" Safety Management System established for occupational accidents is regularly reviewed.

You can access our critical studies and public information at [Link](#).



Water Management

Zorlu Enerji has integrated natural resource management into its value chain and sustainability strategy. The company's environmental policy guides all activities and investments, prioritizing the protection of natural resources and minimizing environmental impacts. Water is an important element of Zorlu Enerji's sustainability strategy, and efficient use of water resources is a priority. In line with its concept of environmental responsibility, Zorlu Enerji emphasizes the protection of water resources and the reduction of environmental impacts. The Company uses appropriate technologies and methods to reduce waste and pollution and strives to raise awareness of the importance of water conservation. The Company transparently discloses and shares its water consumption and environmental impact data with its stakeholders through the CDP Water Program by auditing it at power plants with high water consumption, in accordance with the ISO 14046 standard.

Water is a vital resource for all living things and also a fundamental component of power generation processes. Given its critical importance, Zorlu Enerji prioritizes responsible and efficient water management as part of its sustainability strategy. The company aims to optimize the use of natural resources and minimize water consumption in line with Zorlu Holding's Smart Life 2030 vision.

To achieve this goal, Zorlu Enerji integrates water-related risks and opportunities into its business plan and closely monitors water consumption, particularly at natural gas, geothermal and hydropower plants. In the case of geothermal power plants, the company uses renewable groundwater to generate electricity. The water-steam mixture is separated in separators to produce steam, which is then sent to turbines to generate electricity. After the steam condenses in the condenser, the resulting water is sent to cooling towers and the geothermal fluid used in the production process is injected back underground. The water used in administrative buildings, reverse osmosis (RO) system, cooling tower, fire tanks and irrigation is supplied from the water mains.

According to the Aqueduct Water Risk Atlas, most water is abstracted from areas classified as medium-high and high risk. In the Aqueduct Water Risk Atlas, this overall assessment of water risk takes into account physical risks such as water stress, water scarcity and inter-annual fluctuations in water balance, groundwater levels, drought, as well as water quality variables such as eutrophication potential, untreated water and other impacts such as access to drinking water and health. Detailed information on the risk assessment methodology for water facilities and the risks associated with water facilities at Zorlu Enerji's operational sites can be found at [Link](#).

Zorlu Enerji is taking decisive steps to protect a valuable resource and ensure its sustainability for future generations by prioritizing efficient water use.



Water Consumption (m³)	2020	2021	2022
Surface water	67,916	22,666	875
Groundwater	76.158,612	89.479,983	95.617,391
Tap water	10,414	63,139	14,025
TOTAL	76.236,942	89.565,788	95.632,291

Wastewater Treatment

Wastewater from Zorlu Enerji's domestic and foreign plants is considered household waste. Domestic wastewater from the Kızildere 3 GPP and İkizdere HEPP is treated with biological package treatment, while domestic wastewater from the other plants is managed by discharge to the sewer system

or temporary storage. In 2022, the domestic wastewater generation is 153,802 m³ and compliance reporting is done through the CDP water program, ISO 14046 water footprint verification and statutory inspections conducted by the Environmental Officer.



Waste Data(Metric tons)	2020	2021	2022
Hazardous Wastes	21.268,16	19.456,57	1,072
Non-Hazardous Wastes	46.157,18	38.451,63	40.393,75

Waste Data By Institution (Metric tons)	Hazardous Waste		Non-Hazardous Waste	
Şirket	2021	2022	2021	2022
Zorlu Enerji	18.087,195	144,812	25.581,376	34.198,887
OEDAŞ	1.368,786	925,58	12.866,97	3.948,53
OEPSAŞ	0,015	0,021	0,342	0,514
GAZDAŞ*	0,572	1,587	2,945	2,819

* Includes Gaziantep Doğal Gaz and Trakya Doğal Gaz.

Lüleburgaz power plant and Zorlu Teks wastewater integration project

Lüleburgaz Power Plant, which has been sensitive to water issues since its establishment, put to service a wastewater recovery plant project in 2012, the first of its kind in Turkey. The project recycled wastewater from the ZorluTeks factory wastewater treatment plant using a reverse osmosis plant with a capacity of 110 m³/hour to produce cooling water for the power plant. This project saved 950,400 m³/year of underground water reserves. When the heat recovery boiler, commissioned as part of the new investment, is operating at full capacity with the rotation closed, condensate from the steam turbine return is not returned to the system, recovering 467,856 m³/year of water. Plant effluents consist of regeneration and backwash effluents from desalination plants, boiler effluents, and domestic effluents. Process and domestic wastewaters are discharged to ZorluTeks' wastewater treatment plants. The wastewater chemically and biologically treated in the plant is discharged to the receiving water body within the framework of the Water Purification Ordinance. In 2010, 50,000 m³ of wastewater was transferred to ZorluTeks' treatment plants. After completion of the new investment project, the water discharged from the plant at a flow rate of 80 m³/hour is of better quality than the water discharged from the textile factory's wastewater treatment plant, reducing the negative impact of waste on the environment. The water saving to be achieved with the new investment is 110 m³/hour. This will also reduce the burden on the groundwater resources of the Ergene basin, which are intensively used due to the increasing industrial activities in the region.

Responsible Waste Management

Waste management is another important pillar of Zorlu Enerji's environmental management. All waste, including electrical and electronic waste, packaging waste, and waste contaminated with chemicals, generated by the company's operations is collected and temporarily stored before being disposed of by approved companies. Cable waste generated during the installation of charging stations for electric vehicles under ZES is reused, and metal waste is recycled as scrap and fed into the circular economy. Recyclable waste such as polyethylene pipes and plastics is regularly collected and recycled. The company has also developed and approved industrial waste management plans for power plant operations.

"We contribute to the circular economy"

With its JIDEP research and development project, Zorlu Enerji is leading efforts to reuse wind turbine blades that have exceeded their service life or have been damaged and become waste.

In this regard, the "Blade Repair and Maintenance Workshop" has been established in the region where the Kızildere power plants are located to repair and maintain the blades.

Detailed information about the JIDEP project can be found on the [website](#).

Air Quality & Greenhouse Gas Emissions

Emission levels including environmental risks of Zorlu Enerji's power plants are monitored and reported according to local and international expectations.

The mercury content of coal in our thermal power plants is monitored regularly. In the future, we plan to separately determine the amount of mercury remaining in the bottom ash, fly ash and gas phase of the thermal power plant. The amount of mercury in the coal phase was measured at 0.12 mg/kg on 08.10.2021.

The ash analysis for the Lüleburgaz thermal power plant was

carried out on 24.11.2022 and the mercury value was measured below 0.0002 mg/l.

On 04.11.2021 the result of PM10 measurement was maximum 0.77 mg/Nm³, which is below the legal limit of 40µg/m³. The measurements are carried out on a regular basis. You can access all measurement reports at [Link](#).

There is a SEÖS monitoring system for thermal and geothermal power plants, and immediate measurements are carried out and reported to the relevant Provincial Directorate of Environment.

The measurements and realizations for direct emissions are as follows;

Direct emission measurement results					
Parametre	Birim	2020	2021	2022	Değişim
NOx	metric tons/year	207,6	296,70	367,76	+
SO₂	metric tons/year	578,1	1.075,25	1.335,42	+
Toz	metric tons/year	1,23	8,85	9,89	+
CO	metric tons/year	14,98	52,75	54,06	+
PM10	mg/nm³	-	0.77	-	N/A
H₂S	kg/h	-	24,9	41*	

*Sum of the annual average values determined by the SEÖS with reference to geothermal power plants.



Our GHG Emissions

Zorlu Enerji always acts with an environmental responsibility approach and goes beyond legal obligations, and focuses on energy efficiency, sustainable energy generation, distribution and consumption, the efficient use of water resources and reducing greenhouse gas emissions in all its activities.

Zorlu Enerji strives to achieve net zero carbon emissions by 2050 under the responsibility of doing its part by complying with the targets set, especially within the Paris Climate Agreement as the energy industry in which it operates causes high greenhouse gas emissions and for the purpose of reducing the negative effects of the climate crisis. It is working on "Science-Based Targets (SBTi)", which supports sustainability goals and is indexed to the 1.5oC compliance target on a global scale, and the implementation of which was initiated on a global scale by the UN Global Compact and plans to issue its goals by 2024.

There is no item excluded in the ISO 14001 Standard, and direct and indirect greenhouse gas emissions resulting from Zorlu Enerji's operational activities, encompassing all group companies, have been calculated and verified. Measuring and

certifying its carbon footprint within the sector and sharing it with the CDP platform as well as its investors and all other stakeholders through its Sustainability and Integrated Annual Reports, Zorlu Enerji became the first company to have calculated and certified its carbon footprint in the Electricity Distribution Sector with the acquisition of OEDAŞ.

In 2022, total Scope 1 and 2 greenhouse gas emissions resulting from the operations of Zorlu Enerji companies were calculated as 1.063.477,93 tCO₂e and 232.456,77 tCO₂e, respectively. Scope 3 emissions, which covers emissions from fuel-related activities, production waste, purchasing, business trips and personnel shuttles that are not covered in Scope 1 and 2, were calculated as 212,703.06 tCO₂e in 2022. OEDAŞ's Scope 1 and Scope 2 emissions amount to 202,718 tCO₂e, Scope 3 emissions amount to 30,291 tCO₂e. Emissions from losses and leakages that occur during electricity distribution are reported under Scope 2.

"Be Sensible project"

The "Be Sensible" project aims to save resources by raising awareness in work areas. It explores actions our employees can take at an individual level in areas such as waste management, water management, energy management and the impact of environmentally friendly decisions on the transformation of natural resources. The project, which is expected to complete its first phase by the end of 2023, aims to save water and energy, reduce waste and set an example for the company and stakeholders by raising employee awareness. An important outcome of the Be Sensible project is that our employees recognize how their impact on natural resources also affects the financial value created by their individual preferences.



Details on energy consumption	Unit	2020	2021	2022
Direct Energy Consumption (Natural gas, Diesel, Gasoline, LPG, Coal)	GJ	1,095,860	2,721,435	4,391,438*
Indirect Energy Consumption (Electricity, Heating, Cooling, Steam)	GJ	52,346	149,906	132,242**
Energy Intensity (Total consumed energy / Total generated energy)	kWh	0,592	0,09	0,47

*OEDAŞ-based consumption is included.

**Steam production is not included.



Total GHG Emissionsı (tCO ₂ e)	2020	2021	2022	Change
Scope 1	1,209,770	1,093,383	1,063,477.93	-
Scope 2	213,410	240,699	232,456.77	-
Scope 3	4,008	466,473	212,703.06	-
TOTAL	1,427,188	1,800,555	1,508,637.76	-



2022 Emissions by Sector (tCO ₂ e)	Zorlu Enerji	OEDAŞ	GAZDAŞ
Scope 1	1,049,209.38	3,552.02	10,716.51
Scope 2	32,402.46	199,163.19	891.12
Scope 3	181,292.20	30,291	1,119.85
TOTAL	1,262,904.05	233,009	12,727.49



INTELLECTUAL CAPITAL

Zorlu Enerji focuses on continuous improvement of its operations and carries out all its initiatives in the field of digitalization. The company shapes its activities within the framework of technology and innovation in collaboration with all its stakeholders. Zorlu Enerji is aware of its environmental, social and governance responsibility and focuses its investments on power generation from renewable energy sources and safe and sustainable energy supply. With this awareness, Zorlu Enerji contributes to Turkey's transformation into a low-carbon and self-sufficient economy by utilizing the country's rich renewable energy resources. In line with the Smart Life 2030 vision formulated by Zorlu Holding and meticulously pursued by Zorlu Enerji, the company carries out innovation activities based on its sustainability policy. As a pioneer of innovative change in the industry, the company is adapting to the evolving and changing world thanks to its innovative and smart solutions, excelling not only at the national level but also at the international level.

Aiming to become the "energy company of the future", Zorlu Enerji is taking the necessary initiatives and making the necessary investments to utilize the new generation technologies in our country.

The establishment and operation of intelligent systems to drive the transformation of the industry are carried out through innovation activities. While investing in innovative and smart products and services, the company also evaluates and monitors the issue through innovation-based performance indicators. Thanks to this approach, the company strives to integrate innovation into its corporate culture.



Innovative Solutions

One of the most important components of the transition to a low-carbon economy is the increased use of renewable energy. Following the principle of maximizing the use of our country's renewable energy resources, Zorlu Enerji contributes to the local economy by paying attention to the use of domestic resources. The company leads the industry with its R&D activities based on sustainable solutions and smart technologies.

Research and development (R&D) and innovation activities, one of the basic building blocks of Zorlu Enerji's corporate vision, are of great importance so that employees can adopt the R&D and innovation culture at all levels of the company. The company aims to create a research and development ecosystem that is embraced by all stakeholders and continuously improves its activities. In this context, the company strives to support ideas and projects within the organization and to take advantage of opportunities for collaboration. The R&D and Innovation Commitment Letter, which was put into effect in 2021 and includes provisions regarding the company's R&D and innovation activities to reach the targeted level, can be accessed at [link](#). Zorlu Enerji is committed to;

- Increasing information exchange and interaction in different areas of the company
- Making the best possible use of natural and corporate resources
- Reducing emissions and waste
- Attaining a prominent position in the sector with innovative practices and
- Achieving development in clean energy, smart grids, user-specific solutions and digital transformation.

The company conducts its innovation activities conscientiously by establishing governance structures to conduct R&D activities, restructuring its R&D center as R&D Directorate in 2021. In 2022, the company continued to work on the issue addressed by the Sustainability Board's sub-working group on impact-based growth. All R&D activities are carried out in line with global standards and serve sustainability development goals. National and international cooperation opportunities are closely monitored to increase the efficiency of operations and production, further develop the company portfolio

with innovative processes, and create a well-equipped and skilled workforce profile for future investments. In addition to the strong governance structure, project proposals that add value to Zorlu Enerji in environmental and social terms are evaluated within the framework of evolving corporate experience. It attaches great importance to energy storage technologies, carbon capture and storage technologies, efficient and flexible power plant technologies, recycling and environmentalist approaches, and digitalization and shapes its activities accordingly.

One of the main objectives is to bring the electricity and natural gas distribution systems in Turkey up to the level of global quality standards and to develop the latest technologies for the operation of the systems. In line with this goal, studies are conducted to generate knowledge, create a favorable environment for innovative ideas and applications, increase efficiency and quality of services, and reduce costs and service losses. Zorlu Enerji complies with the EMRA legislation, which sets out the rules for supporting and promoting research, development and innovation activities of legal entities with licenses for electricity and natural gas distribution, and continuously improves its business models within the framework of this legislation.



We are shaping our investments to utilize new generation technologies in our country with the vision of 'becoming the energy company of the future'.



Digitalization of business processes

Zorlu Enerji Bilgi Teknolojileri ve İş Geliştirme Direktörlüğü tarafından iş süreçlerinin dijitalleştirilmesi üzerine çalışmalar Zorlu Enerji's Information Technologies and Business Development Directorate conducts studies on the digitalization of business processes. In this context, the activities carried out in 2022 are listed below;

ZEG Information Technologies & Business Operations Directorate - 2022 Activities

Our Focus Areas and Staffing Status

Business Strategies that are taken as Basis

Digitalization, Electrification, Sustainability/Efficiency

IT Strategy

- Supporting Growth with Digital Transformation
- Rapidly Positioning New Generation Technologies When Necessary
- Working Cost-Effectively
- Ensuring Service Continuity and Increasing Efficiency
- Establishing an Agile IT Team

Prioritized Business Initiatives

- ZES/electrip Global Digitalization
- Initiating digitalization projects that will support the growth of the solar business unit
- Successfully supporting vehicle rental projects
- Developing applications that work on current, flexible and cost-effective infrastructure (Top Management Mobile, RPA, Data Analytics, etc.)
- Taking over online transactions and mobile applications.

11

Monthly average number of employees (2022)

13

Number of employees at the end of December

7

Number of open positions

Information Technologies and Business Development Directorate Budget

Cumulative January - December (TRY)

₺	ELECTRIC	GAS	TOTAL
Budget*	39.413.079	21.029.223	60.442.301
Actual*	39.060.182	17.547.592	56.607.774
Difference	352.897	3.481.631	3.834.527

* The transferred figures are included.

Services for Business Units

ZES / Electrip

- Almost all of Turkey's processes have been digitized, including many processes such as sales, field installations, material planning, cost estimation, and reporting. A digitization initiative has been implemented.
- A strategy and technical infrastructure have been established for ZES overseas.
- The first phase of platform integrations (invoice and payment infrastructure) has been completed. • Call center numbers have been activated.
- A total of 17 projects have been successfully launched.

Smart Systems & Energy Trade

- A test system was established to enable Uptecra to develop a more stable structure in the vehicle rental project, and the platform's system architecture is being improved.
- Online and mobile trading applications have been launched, and support infrastructure has been established.

Solar

- Digitization projects have been planned. The first phase, which includes basic functions, has been successfully completed, and new phases have been planned.

Natural Gas

- With the established team, a project-based, more efficient, accountable, and tariff-supported IT management structure has been implemented. A 41% reduction in SAP support costs has been achieved, and consultant dependence has been reduced.
- Process improvement efforts, regional infrastructure improvements, and EMRA and BOTAŞ regulatory compliance efforts have been made.

Human Resources

- In the scope of HR digitization efforts, recruitment and performance evaluation projects that have been prioritized to increase the efficiency of HR processes have been completed.

Finance

- Projects focused on increasing efficiency through digitization have been completed.

RPA

- Automation has been provided by RPA technology for 6 new processes in Electrip and Finance.
- Support processes have been brought under the Energy IT.

Power Plants

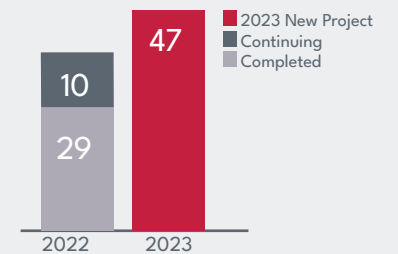
- NETAŞ İoN - Gökçedağ RES Preventive Maintenance R&D studies have been completed.

IT Operations Services

7820
Number of Closed Calls

%99
Call Response Rate

Project Management Services



IT Service Development Activities

As part of the New Technology Adaptation efforts,

- Energy KokpIT mobile application was redeveloped and most manual data entries were automated.
- Digital Business Card application was introduced to senior management.
- Desk Reservation Application was determined.

With detailed call analysis conducted,

- Resolution time for problems was reduced. (%27)
- Cost optimization was achieved. (Gas %41, Electricity %13)
- Infrastructure analysis and pricing studies based on data analytics were completed.
- After organizational changes, OEDAŞ and OEPSAŞ IT Management were taken over, and ZES IT Management is being transferred.



The Sustainability and Occupational Health and Safety & Environment Directorate continues to work on digitalizing our sustainability processes. While processes are monitored through the QDMS platform, whose infrastructure is designed to manage the relevant processes, performance is monitored monthly using the Ensemble platform and OHS-E corporate scorecards.

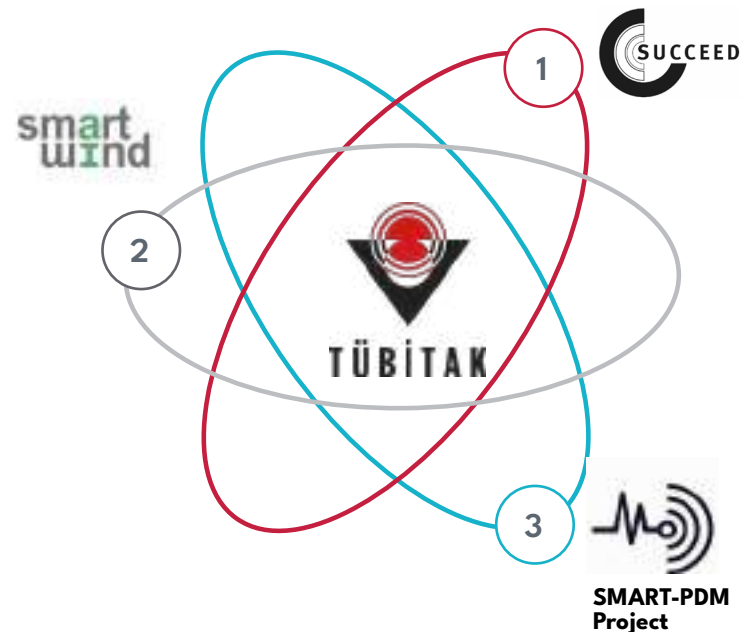
Products and services with environmental and social contribution

Zorlu Enerji strives to raise its position to a higher level with its quality, success and achievements it has achieved today, together with all its stakeholders, not compromising on the principle of human and environment-oriented management. By placing sustainability at the core of its business model, Zorlu Enerji strives to contribute to solving the world's fundamental problems together with all its stakeholders, including its employees, and to create added value for society and the world by managing all environmental and social risks.

In addressing environmental, social and governance issues, Zorlu Enerji is committed to the following:

- Giving priority to the United Nations Framework Classification (UNFC),
- Making plans in accordance with the United Nations Sustainable Development Goals (SDGs),
- Prioritizing environmental responsibility and human rights in all countries where we operate and in our relationships with our stakeholders,
- Minimizing our impact on the environment and society,
- Always considering the human factor in the pursuit of growth,
- Creating a strong and successful business model for the future by sharing long-term value with customers, employees, shareholders and all stakeholders in the locations where we operate,
- Establishing an effective management structure for analyzing business impacts and risks, and maintaining a sustainable governance structure to achieve sustainability goals through continuous improvement,
- Continuously improving the company's ESG performance through accurate compliance with national and international standards,
- Leading the industry, and working with all its might "for a sustainable future".

Our commitment to environmental and social governance principles can be found at [Link](#).



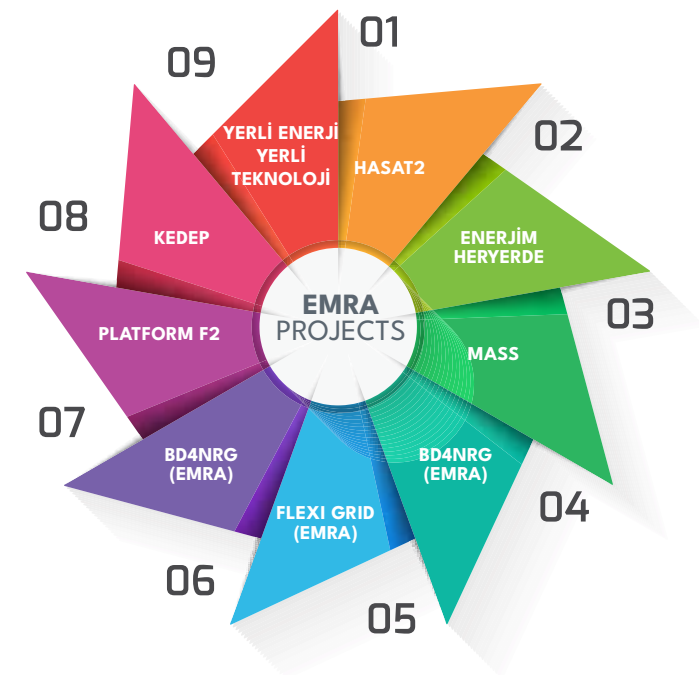
Zorlu Enerji conducts 4 Horizon 2020, 1 HorizonEurope and 4 TÜBİTAK-funded R&D projects, while OEDAŞ, a 100% indirect subsidiary of Zorlu Enerji, conducts 4 Horizon 2020 and more than 15 EMRA-funded R&D projects. Reporting on projects funded by the European Union's Horizon2020 and HorizonEurope framework programs is carried out by the projects' main coordinators through the European Commission's portal. TÜBİTAK projects are also reported through the ARBİS portal and financially, technically and administratively supported by Zorlu Enerji. With EMRA-supported projects, reports to EMRA at six-monthly intervals.

Driven by the motivation to make clean and reliable energy accessible, the company is also playing a pioneering role in the development of electric vehicle charging stations in our country through renewable power plants and electricity distribution services it operates. In line with its vision, which prioritizes innovation, the company aims to increase the contribution of its regenerative and impact businesses to 20% of its turnover by 2030. In 2022, investments in R&D spending reached 25 million TL. The Horizon 2020 and Horizon Europe programs provide significant support for strengthening and developing R&D capabilities through national and international projects carried out in collaboration with EMRA and TÜBİTAK. Zorlu Enerji and its indirect subsidiary OEDAŞ are high on the "List of Most Successful Turkish Industrial Companies in Horizon 2020".

2022 R&D expenditures

Zorlu Enerji Elektrik Üretim AŞ
16,173,841.95 TRY

Osmangazi Elektrik Dağıtım AŞ
9,680,703.68 TRY





R&D projects

Horizon 2020 Projects



GeoSmart Project

The GeoSmart project aims to deploy high-performance renewable technologies in cogeneration plants, test new equipment and technologies by conducting field applications between countries, and transfer know-how. Within the project, tests are planned at the Kızildere geothermal power plant and the Insheim field in Germany. Goals of the project include the storage of geothermal fluid in liquid and vapor phase, the investigation of the impacts of Concentrated Solar Power (CSP) and biomass technologies that can be integrated into geothermal power plants on power plant performance and the reduction of reinjection temperatures.

GEOTHERMAL
EMISSION
CONTROL

GECO Project

The GECO (Geothermal Emission Control) project has been implemented to reduce carbon emissions to zero in areas where geothermal activities are carried out, knowing that "a sustainable future depends on leaving no trace in our environment". The project, carried out under the umbrella of Zorlu Enerji Elektrik Üretim A.Ş., aims to reduce the carbon footprint and increase the share of green energy to 100%.



GEOPRO Project

In the project, renewable energy sources play a key role for a low-carbon and climate crisis-resistant future. Within the GEOPRO project, research is focused on improving field development and operating conditions to better understand the chemical and physical properties of geothermal energy. The project, carried out under the auspices of Zorlu Enerji Elektrik Üretim A.Ş., aims to expand the use of geothermal energy and to develop and introduce new methods into the sector.



PlaMES Project

The Integrated Planning of Multi Energy Systems (PlaMES) project was launched with the aim of creating and shaping the low carbon market of the future. It aims to increase efficiency through integrated planning and operation of transmission and distribution networks, as well as generation and storage systems. Thanks to this project, the flexibility of the distribution network and the required capacity will be analyzed by using the flexibility of energy to reduce the carbon footprint and increase green energy. Different energy generation and consumption sources in OEDAŞ's service area will be used for developing a planning tool that will shed light on how the distribution of energy generation in Osmangazi Electricity Distribution Region should be structured at the lowest cost by focusing on distributed energy systems. The relevant model will be created by considering all players of the energy industry (electricity, gas, transport, oil and heating) with the aim of increasing the project efficiency.



BD4OPEM Project

Launched as an R&D project of OEDAŞ, the Big Data Solutions for Open Energy Marketplace (BD4OPEM) Project is carried out in order to ensure the efficient integration of related digital technologies into the energy sector. The need for grid-connected and integrated systems is one of the most important issues in the energy sector in order to minimize the effects of emerging technologies in our lives and changes in energy generation and consumption profiles on the grid. To solve this problem, a project consortium was founded with the aim of creating an open innovation market where all stakeholders can come together. The consortium partners want to develop an "Analytic Toolbox" in which data generated in the energy sector is collected and processed. An innovative market environment is to be created through analyses and calculations to be obtained from the collected data. It is envisaged that the grid monitoring, operation, maintenance, planning, theft and loss tracking, smart ecosystem, energy management and blockchain applications to be developed under the project should serve a flexible market structure. It is expected that these practices will increase total efficiency and ensure the maximum engagement of end users in the system.



FlexiGrid Project

Developed as an R&D project of OEDAŞ to bring flexibility to the distribution grid of the future, the project aims to create a flexible market system between local generation and consumption points by using cutting-edge energy storage, distributed energy systems and demand-side engagement equipment and to form a low-cost, flexible and measurable distribution network. While creating this system, a transparent data management system will be developed by using digital smart grid technologies, vehicle- to-grid energy transfer technologies, Internet of Things (IOT) and Blockchain technology. Four pilot countries, namely Bulgaria, Sweden, Switzerland and Turkey, were selected for the execution of the project. The region where the project will be carried out in Turkey is the region under the responsibility of OEDAŞ. Acting as the work package leader, OEDAŞ carried out field installations including a charging station and battery storage system compatible with Electric Vehicle to Grid (V2G) in order to offer flexibility in Eskişehir region.



BD4NRG Project

The BD4NRG project, one of the OEDAŞ research and development projects, aims to facilitate these processes by harnessing the potential of Big Data and AI (artificial intelligence) technologies to improve decision-making for the management and optimization of distributed energy systems. The project will develop a data-driven "reference architecture" for AI-based Big Data management and analytics in smart energy grids. A semantic and commercially interoperable system for cross-domain analytic end-uses, cross-context learning and datasets covering the entire value chain for electrical power and energy systems will be developed. The impact of the data economy at EU level will be maximized by laying the foundation for a trusted and certifiable live data ecosystem for smart grids across Europe. A TRL 7 (Technology Readiness Level) technology for advanced AI-based Big Data management, learning and analytics will be adapted, developed, scaled and deployed. Under the project, OEDAŞ will mainly focus on predictive maintenance in the medium voltage range.



eCharge4Drivers Project

As an R&D project of Zorlu Enerji Elektrik Üretim A.Ş., ZES, the network of electric vehicle charging stations, and electrip, the hourly electric vehicle sharing platform, are among the partners of eCharge4Drivers Project launched for the same purpose in Europe as investments made by the company to introduce next generation technologies. Drivers of electric vehicles, the sales of which are increasing rapidly throughout Europe, still have difficulties in finding suitable charging options, which limits the ease of use of electric vehicles. Aiming to significantly improve the electric vehicle charging experience in urban and intercity journey, the eCharge4Drivers Project is intended for developing pilot projects in 10 areas within Europe including cities and the Trans-European Transport Network in line with the expectations of users on charging options, mobility and parking habits.



JIDEP Project

Continuing its growth strategy on the axis of innovation and R&D, Zorlu Enerji received 100% support for the JIDEP (Joint Industrial Data Exchange Pipeline) project for which it applied under the Horizon Europe program. Horizon Europe is the continuation of the Horizon 2020 funding program established by the European Union to support research, development and innovation projects. The project, which aims to recycle composite materials used in many different sectors, especially automotive and marine, is expected to contribute directly to the circular economy and waste management.



TÜBİTAK Destekli Projeler



ACT ERA-NET Program SUCCEED Project

Introduced as an R&D project of Zorlu Enerji Elektrik Üretim A.Ş., ERA-NET ACT is a project which is supported under the umbrella heading "Reliable, Clean and Efficient Energy" of the Horizon 2020 Program and of which TÜBİTAK is a partner. The project aims to coordinate national programs in the field of dissemination and acceleration of carbon storage and capture technologies, ensure unity in research priorities and the exchange of data. ERA-NET ACT Project will support R&D and innovation activities intended for accelerating the development of carbon capture and storage (CCS) technologies. Synergetic Utilization of CO₂ Storage Coupled with Geothermal Energy Deployment (SUCCEED) Project, for which an application was filed within the scope of this program, was entitled to receive grant support and entered into force as of September 2019. The project aims to contribute to sustainability by injecting carbon dioxide back into the geothermal reservoir under supercritical conditions in order to reduce carbon dioxide emissions originating from geothermal power plants.



ITEA3 Programı – SMART-PDM Project

Developed as an R&D project of Zorlu Enerji Elektrik Üretim A.Ş., EUREKA covers Turkey as one of the founders and is an international cooperation platform established so as to encourage the development of advanced technologies, products and services which will improve the competitiveness of industrial and research institutions in European countries for global markets and the creation and execution of joint projects between countries. The grant support required for Turkish partners is provided by TÜBİTAK. The predictive maintenance technology used in SMART-PDM project aims to increase the benefits obtained from these power plants by reducing operating costs and generation losses in wind power plants. The project will be implemented with predictive maintenance technology at Gökçedağ Wind Power Plant.



Eurogia2020 Programı – Smart Wind Project

Developed as an R&D project of Zorlu Enerji Elektrik Üretim A.Ş. and encompassing 6 companies and institutes from 3 countries, namely Turkey, Germany and Spain, the project aims to develop a decision-making support mechanism for increasing the efficiency of Gökçedağ Wind Power Plant and decreasing its unit electricity costs.

EMRA-Supported R&D Projects

OEDAŞ's research and development department continues to work on energy storage in electromobility, digitalization and innovative topics. It is planned to introduce innovative practices in the distribution sector together with other EMRA- supported projects included in the report.



2nd Phase of HASAT (Harvest of Energy Efficiency in the Electricity Distribution

2nd Phase of HASAT project aims to engage in the pilot implementation of the methods which were examined and the feasibility study of which was conducted during the first phase. In this context, pilot practices were performed on energy efficiency, energy storage, compensation, DC network, voltage level conversion, agricultural irrigation and general lighting in 18 transformers operated by EDAŞ.

The 2nd work package encompassing OEDAŞ aimed to investigate the impact of distributed generation on technical losses. In this respect, first of all, the effect of distributed generation plants in two EDAŞ regions on technical losses was investigated, and an algorithm was developed for the optimum positioning of the distributed generation systems within the distribution grid. By means of the algorithm, distribution companies will be able to position their distributed generation systems by considering the reduction of technical losses, and thus areas will be created where

investments falling under the scope of unlicensed generation will be prioritized. This mobile energy system formed the infrastructure of micro-grid installation in remote terminals with both renewable energy system integration and energy storage integration. Thus, it was planned to reduce costs such as line renewal and installing new lines at remote terminals, to consolidate these costs and shift them to priority areas.

At the same time, the innovative system to be developed within the scope of the maintenance mobilization initiated by the Ministry of Energy and Natural Resources of the Republic of Turkey will both reduce the operating cost pressure within distribution companies and increase customer satisfaction, as it will reduce the number of interruptions while reducing operating costs. During the last stage of this work package, the energy efficiency to be achieved by using the existing distributed generation plants located in the regions of the two electricity distribution companies in reactive power control was

measured. These studies aim to measure the energy efficiency that will emerge as a result of these practices, to study the energy efficiency potential that will emerge as a result of the widespread use of pilot practices, and to calculate the energy efficiency potential of the electricity distribution sector for Turkey in general. As an output of the project, suggestions were presented to the regulatory body for positioning distributed generation systems, studying the micro-grid structure in remote units and comparing this with line investments, as well as increasing the benefits to be attained from existing distributed generation plants within the scope of ancillary services. The project was completed in October 2022.



Infrastructure Development and Pilot Implementation Project for Electricity Distribution Service Independent from Infrastructure

In this project, which was coordinated by the My Energy Is Everywhere: Electricity Distribution Services Association ("ELDER"), consensus was reached for the inclusion of OEDAŞ in the project and necessary activities were initiated. The My Energy Is Everywhere project aimed to develop a system infrastructure which is independent from installation, is offered by the distribution company and the use and payment methods of which are offered in mobile form for the cases where electric energy is required in public areas (electric vehicle charging stations, etc.), to develop a joint electricity and technology infrastructure for different service providers, to enable users to supply electric energy at the place and time of their own choosing through this infrastructure and to support the development of new business models for distribution companies, supply companies and consumers with rooftop SPP in the future. The project was completed in January 2022.



Domestic Energy - Domestic Technology Project

The fact that foreign software forms the backbone of distribution companies causes foreign dependency in the energy sector which is critical for our country. In addition, such software has high procurement, subscription renewal and maintenance fees. The costs incurred are reflected in energy costs in the energy sector and cause the users of energy to bear these high costs. Considering the annual maintenance costs and the continuity of the distribution sector, the maintenance costs accrued in a continuous manner cause a large current account deficit and foreign dependency for our country. In order for us to become a self-sufficient country to a large extent in this field, our country aimed to achieve domestic software solutions specific to electricity distribution companies through due diligence and domestication analyses to be conducted in 21 EDAŞs (Distribution System Operators) in line with the development goals of our country and the efficient use of national resources. The project was completed in June 2022. The complementary project "Domestic Software Ecosystem", which was applied for and granted acceptance in July 2022 under the coordination of ELDER, aims to create a domestic software pool in the sector according to the results of the localization analysis.



National Smart Meter Systems (MASS) Project

Turkey Smart Grids (TAŞ) 2023 Project aims to set the minimum characteristics of smart meter systems to be developed within the scope of smart grid transformation, to ensure country-wide application unity, to identify the effect thereof on the tariff and to draw up the legislation and specifications related to smart meter systems in order to spread the application thereof.

Along with all these activities, the main objectives of the project completed in October 2022 were to develop the Domestic and National Smart Meter System with all its components, from the communication protocol to the modem and the development of meters according to different user groups, to carry out pilot practices with prototypes to be produced in accordance with these criteria, and to make measurement, analysis and reporting under the coordination of ELDER. Work will then start in July 2022 on the DOMİ (Distribution Specific National Processor) and MASS (Integrated Independent PLC and RF Communication Protocol and Product Development) projects, which were applied for and accepted under the coordination of ELDER.



Next Generation Network Design Project/ ENH

The Next Generation Network Design Project started in March 2022 under the coordination of Elder and with the support of EMRA, Toroslar Elektrik Dağıtım A.Ş. and with the support of the stakeholders of all electricity distribution companies. The project aims to develop solutions for existing transmission line structures, taking into account meteorological and geographical conditions, especially climate change, in order to prevent distribution problems and occupational health and safety accidents caused by pole-related overturning, collapse, and line breaks experienced by distribution companies in power transmission lines. The project aims to update existing wind load and ice load maps and power transmission line designs, identify distribution companies' problems with existing line designs, conduct comparative studies with new technologies and foreign examples, and identify new generation pole designs in light of developments

in material technologies. As part of the route modeling and structural analyses, the route modeling was completed and the loads were entered into the program. In the SAP program, the peak forces are simulated for each pylon and the bearing capacity and exceedance points can be displayed. During the simulations, which were performed by entering loads independent of the route, capacity exceedances were found at some points, especially for the BER (3/0 AWG) mast type. There were 477 mast models completed. After the SAP transfer, the studies for 2 pilot routes will be completed and it was decided to start the studies for the swallow route.



Study of the Turkish electricity distribution network against earthquakes and other natural disasters, performance analyses after a possible earthquake and development of emergency plans Project

The project, coordinated by Elder with support from EMRA, led by TRAKYA Elektrik Dağıtım A.Ş. and involving stakeholders from all electricity distribution companies, began in March 2022. The project aims to identify the seismic readiness requirements of the electricity distribution network, taking into account natural disasters with a focus on earthquakes, and to create an information flow that can help organize activities during and after an earthquake. It is envisaged that the plans for managing the network during and after the disaster situation will be automatically generated by the software to be developed and presented to the user. Furthermore, in addition to the electrical data related to the network operation, it is planned to include the seismic earthquake analyses offered as an option and the results to be obtained from them in the analyses within the software.



R&D Platform Design and Development Project - Phase 2 (Platform P2)

There is a platform where the views of the public as well as the persons and institutions involved in research and development receive information about the sector's needs in particular and the interim and final reports of the EMRA projects that are approved and implemented are published. The R&D Platform Design and Development Project launched by Zorlu Enerji considering that only the publication of reports does not suffice aims to introduce an EMRA R&D Platform through which all project processes will be evaluated and managed over a professional electronic platform from a holistic perspective as in OFGEM, the European Union Horizon 2020 and TÜBİTAK, etc. and they will be monitored and reported by both EMRA and distribution companies in a systematic way. The project was completed in June 2022. Subsequently, in July 2022, the project studies of Argenerji PRO (R&D Platform Development Phase 3), applied for and accepted under the coordination of ELDER, will start. The objective is to further develop this structure established under the "R&D Platform Design and Development Project Phase 2 (Platform P2)" and provide a common and standardized project management system to all utility companies.



R&D project on vehicle-mounted radio frequency partial discharge detection (Mobile RFKD)

This project, accepted by EMRA in January 2022, will develop a product for rapid detection of partial discharges to prevent faults caused by partial discharges in medium-voltage overhead power lines. The system to be installed under the project will be developed entirely with domestic equipment, reducing dependence on foreign countries. It will also provide the sector with information on the use of measuring equipment that can provide objective, comparable and easy-to-interpret results for the detection of partial discharges. The goal is to reduce interruptions by avoiding faults caused by partial discharges. There are financial benefits for electric utilities willing to implement the project results, and their reputation will be enhanced by quality and continuous power supply. Domestic raw materials will be used in the project. It is expected that this will also benefit the national economy.

As of July 2022, the following 10 projects have been accepted by the EMRA R&D Commission and the contracting process is underway.

- 1-** ArcOS (Arc Flash Safety Operation System) Enhanced Safety System against Arc Flash Hazards during Maintenance and Operation Project.
- 2-** Argenerji PRO (R&D Platform Development Phase3) Project
- 3-** Digital Maturity Assessment Model and Development Roadmap Project
- 4-** DÖMİ (Distribution Specific National Processor) Phase-1 Project
- 5-** Development of a test device to detect faults in the primary and secondary windings of distribution transformers (DTR-SAFE project)
- 6-** Remote Safe Activation System for Rural Street Luminaires R&D Project
- 7-** Noca Platform Code-free application development platform
- 8-** MASS Integrated Independent PLC and RF Communication Protocol and Product Development Project
- 9-** Development of a data-centric security and compliance platform
- 10-** Domestic Software Ecosystem Project



Integration, Infrastructure and Service Quality

Digital Transformation Approach and Practices

Zorlu Enerji and Smart Systems Approach Zorlu Enerji continues to engage in various activities on digitalization, R&D and innovation including electric vehicles in particular under the Smart Systems Department established in 2017 for the goal of becoming the energy company of the future. Thanks to the Smart Systems Department, the needs of customers and the age are better understood, and ideas about next generation solutions are integrated with technology and launched. Pursuing the main objective of generating innovative ideas and focusing on processes that can be digitalized, the Smart Systems Department continues to work on developing platforms and mobile applications necessary for customers to carry out their transactions entirely on digital platforms.

Projects carried out in parallel with the heading "Innovation and New Business Models", which are among the priority topics for the Smart Systems Department, are organized for offering innovative solution in different areas such as electric vehicle sharing, electric vehicle charging stations, smart home systems and smart energy management systems. The department continues to work in the digitalization of the energy industry, electric vehicle rental/electric vehicle charging stations the examples of which are increasing day by day and various alternatives for energy storage in parallel with the developments across the world.

Considering the evolving and developing alternative energy resources and the goals specified in the Paris Climate Agreement, the use of emerging technologies is essential for offering uninterrupted service. In this sense, the introduction of new practices with uninterrupted and accurate information from the field is of high importance for Zorlu Enerji and its subsidiaries. Owing to the energy monitoring project implemented in 2020, electricity generation and consumption can be monitored using IoT (Internet of Things) devices, thus contributing to the fight against the climate crisis and sustainability by digitalizing both energy generation and consumption tracking and reporting processes. In addition, the details of all other R&D and digitalization projects carried out to contribute to both the Company and the country's economy are given below.



We are designing business processes focused on digital transformation.

Digital Subscription Services Project

Through the Digital Subscription Services Project, which was commissioned by breaking another new ground in the sector, remote subscription transactions from all transaction channels (customer service centers, e-government, online transactions, call center) can now be easily performed for consumers who purchase retail electricity and gas services from Zorlu Enerji. Aiming to speed up business processes and increase customer satisfaction, this service enables Zorlu Enerji customers to perform subscription transactions without any signature, view all their contracts in digital format and digitally complete many subscription processes. Digitalization also enables consumers to access all subscription and invoice details online, perform subscription and termination transactions, manage all their requests, and pay their bills.

In this sense, it is expected that 80% of over 250,000 subscription transactions for electricity subscription services will be performed through digital channels in 2022. Mobile subscription services for gas distribution were completed under the project. As a result of the introduction of digital subscription services, significant gains were achieved in the fight against the climate crisis by saving paper, water and fuel.

Electrip



Guided by its vision to offer energy solutions of the future, Zorlu Enerji brought together technology and innovation and founded electrip, the electric vehicle sharing platform, to introduce hourly electric vehicle rentals in Turkey. Zero-emission solutions are developed with electrip's fleet only composed of electric vehicles. Electrip, available only through a mobile app, eliminates processes associated with car rental system, such as having to visit the rental offices in person and signing contracts and diverges from conventional car rental systems in this respect. Users of the app can subscribe to the service, find and rent an electric vehicle nearby their location, start the vehicle in a keyless manner via the app, and at the end of the rental term, return the vehicle to the location they collected it from. In this way, conventional car rental procedures can be handled in a more practical way, without any extra effort, through a single application.

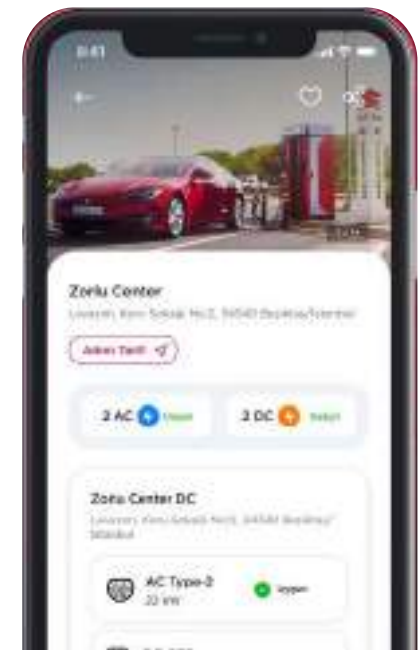
ZES Mobile App

In order to offer environmentally friendly and innovative solutions, charging processes could only be performed with physical ZES cards at the fast-charging stations installed along urban and intercity roads. As a result of the efforts made for the digitalization of processes, all users can now complete their charging processes digitally from anywhere on the ZES mobile application, which was launched in 2019 as a dynamic version. .



Goals

Zorlu Enerji aims to increase the approximately EUR 3 million budget received by Zorlu Enerji and OEDAŞ under the Horizon 2020 Program and Horizon Europe Program to around EUR 15-20 million and expand the budget of around 14 million TL from EMRA to 40 million TL as an R&D dissemination budget. In this way, Zorlu Enerji is committed to setting an example in the sector while creating value for the environment and society by multiplying its innovative projects.





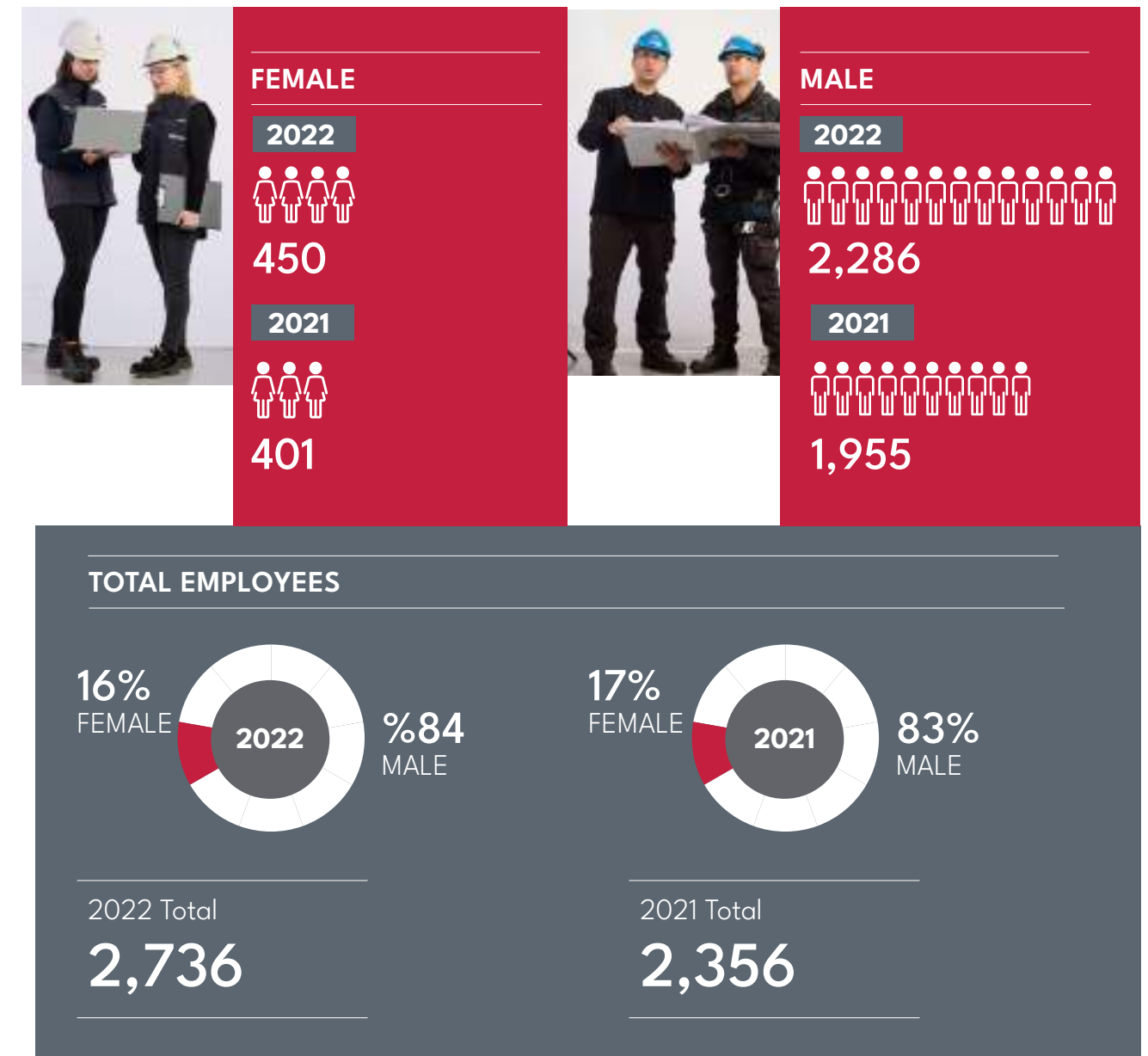
HUMAN CAPITAL

Employees are key to companies' adaptation to a changing world and thus to sustainable success. In this context, Zorlu Enerji considers its employee profile as one of the most important components of its value chain. In line with Zorlu Holding's Smart Life 2030 vision, Zorlu Enerji is integrating sustainability into its business model and expanding the circle of positive impact for the company and the environment it affects. While taking decisive steps towards the future by investing in clean energy from renewable resources, the company strengthens its position as a contributor to the world and our country with its competent employee profile.

It strives to create a suitable working environment where employees can realize their dreams by giving free rein to their creativity, taking initiative and driving the company forward with the spirit of entrepreneurship. Thanks to the work atmosphere that ensures continuous development, the company aims to ensure that employees create value not only for their own development, but also for the society in which they live.

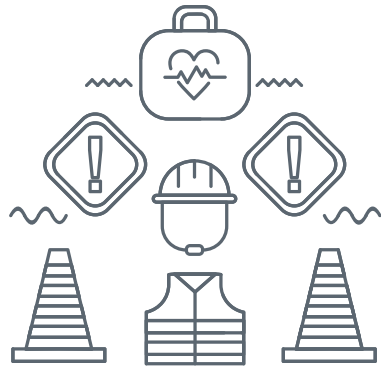


Employees by Gender



The world is changing rapidly and Zorlu Enerji places development at the heart of its business environment to keep up with this pace. By integrating development culture into its business model, the company strives for an innovative and entrepreneurial employee profile, engaging all employees and society with an egalitarian approach, leaving no one behind and accepting no discrimination. The company sets

targets to ensure gender equality and measures its own performance. Thanks to the inclusive work environment it offers its employees, the company continuously improves the well-being of its employees and strives to become the most desirable energy company to work for. Considering the company's sustainability goals, it follows a continuous development path by investing in its employees and society.



Health and Safety

For Zorlu Enerji, employees are the most important component in adapting to a changing world. For this reason, employee health and safety is always given the highest priority and all activities are carried out with the aim of preventing any possible occupational accidents.

All business practices follow rules and guidelines that focus on health and safety in the workplace. Under the guidance of Zorlu Enerji's Occupational Health and Safety Policy, all activities are carried out in accordance with the ISO 45001 Occupational Health and Safety Management System. In this context, work processes are continuously assessed in terms of OHS risks, necessary measures are taken, precautions are taken and improvements are made. All employees receive information on occupational health and safety before they start work on site and are equipped accordingly. In this way, employees are informed of all measures to be taken. In addition, employees' compliance with the guidelines is closely monitored on the basis of the training they have received. Not only national legal obligations, but also current developments in the field of occupational health and safety are closely followed, and managers on the field are constantly informed of changes. To ensure that employees can act safely, hazards are identified, risks are assessed and corrective measures are taken at all sites where activities are carried out.

Operations are closely monitored by Zorlu Enerji to ensure that employees internalize occupational health and safety, and there is a reward system for employees who contribute. In this way, cooperation between the company's divisions in the area of occupational health and safety is improved. In the event of an incident or accident, the situation is reported and action is taken quickly to prevent a recurrence and improve OHS performance. Work areas such as construction and production, where the frequency and risk of occupational accidents are high, are identified and treated with extreme care. In order to identify occupational hazards and mitigate risks, the hierarchy of controls set in ISO 45001 is applied and the results are regularly evaluated at management review meetings.

At OEDAŞ, the OHS End of Day Report, which is daily drawn up on a provincial basis for provincial enterprise managers in a way to cover the entire field of activity, is reported to the senior management every day. On a weekly basis, clear irregularities and cases requiring action are communicated to the relevant managers, again by informing the senior management. The directorate's annual report on the OHS performance of Zorlu Enerji, which is drawn up and published monthly, is evaluated at the meetings attended by senior management at the level of General Manager and Director, allowing OHS to be addressed across the entire business. In addition, in cases such as the development of new business processes and the opening of new facilities, occupational diseases and risks are taken into account at the project planning stage to create a safer working environment.

Zorlu Enerji's stakeholders are involved in occupational health and safety development processes in the belief that these processes can be further improved through collaboration. Worker and trade union representatives invited to the monthly OHS committees contribute to the company-specific development of OHS issues, and Zorlu Enerji closely monitors the issues raised. Union representatives can meet with the senior management and convey their wishes whenever they desire to do so. As part of the occupational health and safety management system, work procedures and practices are reviewed at least once a year by the internal audit department and independent certification bodies.

At Zorlu Enerji, stations are set up in provincial and district operating buildings where employees can report near misses via the QDMS with near misses detected and disseminated via the video confirmation system. The detected reports are followed up by the Occupational Health and Safety - Environment Directorate and forwarded to the necessary persons for evaluation and taking action. In the instructions for OEDAŞ applications, there are sections indicating that such near misses should be avoided and no further work should be done if they are noticed.

In addition to the instructions, staff competence on the subject is improved and regular and technical training is provided to staff, with reference to the relevant article of the Occupational Health and Safety Act No. 6331. All employees are entitled to refuse jobs they deem risky within the framework of the law. In the event of an accident, the accident investigation procedure is applied to prevent a recurrence, and a root cause analysis of the accident is carried out by setting up dedicated accident research groups. In this way, corrective and remedial actions are carried out by designing proactive measures in accordance with the management systems for health and safety at work.

Starting from 2020, subcontractors are obliged to employ an independent Class C expert in areas not covered by legal obligation, to be implemented within the OHS activities of Trakya Gaz and Gaziantep Gaz. The full-time expert is expected to contribute to the improvement of OHS performance by preventing occupational accidents, "dangerous situations" and "near misses" that may occur in the company.

All these measures are aimed at improving Zorlu Enerji's occupational health and safety performance, setting an example in the industry in terms of conditions for employees, identifying areas for improvement, and taking swift action. Recognizing that the health of employees is the basis for their performance, regular health examinations for employees are conducted by occupational physicians available at all workplaces. Health risk assessments are conducted through the QDMS platform, which is accessible to all employees.

Health and Safety performance Metrics by gender for the total workforce of Zorlu Enerji

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Frequency of Total Reportable Incidents	0	1.62	1.59	3.01	0	2.23
Frequency Rate of Total Accident	0	1.62	1.59	3.01	0	2.23
Total Accident Weight Ratio	0	0.01	0.05	0.05	0	39.57
Frequency Rate of Accidents with Lost Days	0	1.62	1.59	3.01	0	2.23
Occupational Disease Frequency Rate	0	0	0	0	0	0
Total Number of Accidents with Lost Days	0	3	1	6	0	8
Total Number of Accidents	0	3	1	6	0	8
Total Number of Lost Days	0	14	30	96	0	142
Work-Related Fatalities	0	0	0	0	0	0
Total Number of Occupational Diseases	0	0	0	0	0	0



Health and Safety Performance Metrics by Gender for All Contractors Controlled by Zorlu Enerji

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Frequency of Total Reportable Incidents	0	10.18	0	2.78	0	2.05
Frequency Rate of Total Accident	0	10.18	0	2.78	0	2.05
Total Accident Weight Ratio	0	0.02	0	0.02	0	3.76
Frequency Rate of Accidents with Lost Days	0	7.4	0	1.39	0	2.05
Occupational Disease Frequency Rate	0	0	0	0	0	0
Total Number of Accidents with Lost Days	0	8	0	2	0	3
Total Number of Accidents	0	11	0	4	0	3
Total Number of Lost Days	0	25	0	29	0	5.5
Work-Related Fatalities	0	0	0	0	0	0
Total Number of Occupational Diseases	0	0	0	0	0	0

- Frequency of Total Reportable Incidents: (Number of Fatal Work Accidents + Number of Work Accidents with Lost Time + Number of Work Accidents without Lost Time) * 10⁶ / (Total working time)
- Frequency Rate of Total Accident: (Number of Work Accidents with Lost Time + Number of Work Accidents without Lost Time) * 10⁶ / (Total working time)
- Total Accident Weight Rate: Days lost due to work accident with lost time * 10⁶ / (Total working time)
- Frequency Rate of Accidents with Lost Days: (Number of Work Accidents with Lost Time) * 10⁶ / (Total working time)
- Occupational Disease Frequency Rate: (Number of Occupational Accidents) * 10⁶ / (Total working time)

*Calculations for 2020 include OEPSAŞ and exclude OEDAŞ.

*Calculations for 2021 and 2022 include OEPSAŞ and exclude OEDAŞ.

Health and Safety Performance Metrics by Gender for OEDAŞ Total Workforce

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Frequency of Total Reportable Incidents	0	1.62	1.59	3.01	0	6.65
Frequency Rate of Total Accident	0	1.62	1.59	3.01	0	6.65
Total Accident Weight Ratio	0	0.01	0.05	0.05	0	0.01
Frequency Rate of Accidents with Lost Days	0	1.62	1.59	3.01	0	1.56
Occupational Disease Frequency Rate	0	0	0	0	0	0
Total Number of Accidents with Lost Days	0	3	1	6	0	4
Total Number of Accidents	0	3	1	6	0	17
Total Number of Lost Days	0	14	30	96	0	38
Work-Related Fatalities	0	0	0	0	0	0
Total Number of Occupational Diseases	0	0	0	0	0	0

Health and Safety Performance Metrics by Gender for All Contractors Controlled by OEDAŞ

	2020		2021		2022	
	Kadın	Erkek	Kadın	Erkek	Kadın	Erkek
Frequency of Total Reportable Incidents	0	10.18	0	2.78	22.28	32.44
Frequency Rate of Total Accident	0	10.18	0	2.78	22.28	32.44
Total Accident Weight Ratio	0	0.02	0	0.02	0	0.39
Frequency Rate of Accidents with Lost Days	0	7.4	0	1.39	0	11.89
Occupational Disease Frequency Rate	0	0	0	0	0	0
Total Number of Accidents with Lost Days	0	8	0	2	0	22
Total Number of Accidents	0	11	0	4	1	60
Total Number of Lost Days	0	25	0	29	0	729
Work-Related Fatalities	0	0	0	0	0	0
Total Number of Occupational Diseases	0	0	0	0	0	0

Raising awareness and developing employees is one of Zorlu Enerji's priorities. Accordingly, the OEDAŞ Academy department was established. The Academy provides both practical and theoretical training. The practical and theoretical training field of OEDAŞ Academy, where employees can practice all hazardous situations and behaviors they may encounter in practice and see their application in the environment, was continued in 2022. The training official in the OHS Department visits the sites and offers training on main subjects such as safe working at height and rescue, LV-HV maneuvering, grounding, electricity risks in the distribution sector, and the use of PPE.

In 2022, an average of 6.15 hours of training was provided to all employees under the Regulation on the Procedures and Principles of Occupational Health and Safety Training of Employees. All these efforts are aimed at increasing employees' OHS awareness, reducing the number of accidents and lost days, and achieving improved OHS performance.

In 2022, Zorlu Enerji employed an average of 684 contractor staff per month in its operations. The contractor staff received a total of 6,590 hours of OHS training. The average number of training hours per person is 9.63 hours.

The following average training sessions were organized for OEDAŞ:

THE AVERAGE TRAINING HOURS EMPLOYEES RECEIVE ON OHS



	2021		2022	
	Female	Male	Female	Male
Blue Collar	1	14.8	20.32	34.01
White Collar	1.5	0.7	20.32	20.2
Senior Management	0.5	0.9	0	20



OCCUPATIONAL HEALTH AND SAFETY PROJECTS



Video Confirmation System

In the context of occupational health and safety, the prevention of dangerous attitudes and behaviors that may cause occupational accidents, lost days, injuries and near misses is key to a healthy and safe working environment. With this in mind, Zorlu Enerji has introduced the video confirmation system from June 2019 onwards. The system, which was initially used by the OEDAŞ System Operations Department and the Distribution Services Department, was expanded in 2022. The system, whose license was acquired during the reporting period, ensures staff communication and shares live images of the work being done. In this way, staff contact the Main Control Center before starting work and obtain authorization for the operation in question, carrying out all the necessary health and safety measures. In turn, the employees of the Main Control Center have developed their skills through various training courses and hold a Work Certificate for Working under High Voltage in High Current Electrical Installations (EKAT).

Zorlu Enerji imposes various sanctions on employees who do not comply with the rules and guidelines of occupational health and safety. A situation report or non-compliance report with appropriate action will be sent to the Operations Manager for the employee who is not working properly and to their own supervisor for the Main Control Center employee who authorizes inappropriate working conditions. The use of the Video Confirmation System is mandatory in all work areas where activities such as working at heights, working on low and high voltage power lines and working on highways are carried out. In addition, adequate OHS conditions are ensured in all outdoor operations for network operation and distribution services that involve

risk situations. OHS conditions are closely monitored in workplaces where accidents or near-accidents are more frequent, and the positive impact of the project is reflected in OHS performance. At the sites where the video confirmation system is used, the number of grid-related work accidents such as electrocutions and arcs has decreased significantly, and OEDAŞ is a role model for other power utilities in terms of occupational health and safety.

Independent Site Inspection and the Preparation of Action Plans

The Independent Field Audit and Action Plans project was launched in 2021 to audit OEDAŞ within the framework of relevant occupational health and safety legislation, the targets set by the company, and international guidelines, to prepare proposals and action plans to improve the system in accordance with the audit results, and to obtain advice for the continuity of the system. In 2021, the results of the audits carried out by 20 employees*days were communicated to the company senior management on 31/03/2022.

The project aimed to have third parties observe the site and identify areas for system development. Action plans were prepared for identified development areas. It is expected that independent field audits will be conducted at regular intervals in the coming years and contribute to OEDAŞ occupational health and safety processes.

Measurement of Occupational Health and Safety Culture Level of Employees and the Preparation of an Action Plan

The efforts of employees are also very important in achieving OHS goals. Measurement of Occupational Health and Safety Culture Level of Employees and Preparation of Action Plan aims at measuring the OHS culture level of employees and creating action plans for improvement based on the results. Interviews were conducted by approaching employees in person, online, and through a survey. This project, which began in 2021, assessed the OHS culture level of all employees in 2022 through these interviews and established improvement plans.

The scope of the assessment, which considered criteria such as technical and management assessment, leadership and commitment, safety culture, corporate and social behavior, responsibility and ownership, communication, consultation, participation, training, competence, performance, continuous improvement and psychosocial risks, is expected to continue with further improvement in the coming years.



Human Rights

Zorlu Enerji acts with the awareness that people are building blocks for the steps the company takes with a view to sustainable growth. Zorlu Enerji attaches importance to ensuring that employees are not adversely affected in business processes and bases its human resources policy on the opinions of employees and the principle of people-oriented management. In this sense, going beyond legal provisions on working life, Zorlu Enerji undertakes to conduct all its activities within the framework of the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work and the United Nations Global Compact, to which it is a signatory. Zorlu Enerji strives to respect and uphold human rights for all its employees and stakeholders in the various regions in which it operates. More detailed information on the Company's Human Rights Policy and Corporate Reorganization & Human Rights Charter can be accessed through the links below.

Human Rights Policy

Human Resources Policy

Corporate Restructuring & Human Rights Commitment

One of the most important components of a sustainable growth approach is to have a positive impact on the region and society in which the company operates. Zorlu Enerji follows a responsible corporate structure and contributes to local employment and the national economy through its value-added growth model. With the aim of improving the quality of life of locals, the company always evaluates local human resources when hiring, except for positions that require special skills.



Inclusion, Equality, Diversity

Zorlu Enerji acts on the belief that growth and development can only be achieved together. In line with Smart Life 2030, the company adopts a progressive approach to foster an innovative and creative corporate culture that promotes diversity and inclusion in both work and social life. It is about implementing practices that support gender equality and equal opportunities not only within Zorlu Enerji, but also throughout the value chain. Zorlu Enerji positions itself in the industry as a company that promotes gender equality and equal opportunities and fights against prejudice. To this end, it implements projects to strengthen the presence of women in business and create jobs for disadvantaged groups of employees. The Company's way of doing business is shaped around Zorlu Holding's The Manifesto of "An Equal Life", which is applicable to all Zorlu Group companies. Through this manifesto, Zorlu Enerji is committed to:

- Increasing the rate of participation of women in workforce as well as empowering them in social and economic life,
- Making gender equality a corporate policy and managing all human resources processes accordingly,
- Increasing the representation of women in senior management,
- Spreading the awareness of gender equality in discourses and in all areas of internal and external communication, and
- Contributing to the process of raising the awareness of all stakeholders

from suppliers to customers on this issue. You can access the relevant manifesto via [link](https://www.zorluenerji.com.tr/en/career/employee-profile)

The company acts with a sense of responsibility for gender equality and addresses gender equality with a different and sustainable approach. The Company's gender equality approach is managed in three main focal axes: discourse, working environment and collaborations. Zorlu Enerji places great emphasis on promoting equal discourse inside and outside the company and not using discriminatory terms. Zorlu Enerji provides an equal and fair working environment regardless of gender, age, language, race, ethnicity, physique, nationality, sexual orientation, political opinion, philosophical belief, religion, and sect, without allowing any discrimination in working conditions. It is important to spread this awareness not only within the company but also to all stakeholders in its sphere of influence and to cultivate cooperation under these conditions. Social media accounts, where the company's image is reflected and the target group of stakeholders is widely addressed, publish diversity, inclusion and equality awareness posts and conduct awareness-raising activities. yürütülmektedir.

For Zorlu Enerji's employee profile: <https://www.zorluenerji.com.tr/en/career/employee-profile> 



Title Group Ratio of Female Employees

Senior Management	Supervisor and Above	Employees
2021 36.6%	2021 21.57%	2021 16.81%
2022 21.1%	2022 16.36%	2022 16.44%

Within the framework of the Equal Opportunities Certification Project organized by KAGİDER to promote women's employment, eliminate inequalities in business and ensure equal opportunities, Zorlu Enerji received the FEM certificate as a result of an independent audit as a testimony to its efforts in this field.

Zorlu Enerji conducts its activities through the Gender Equality Working Group. In cooperation with the Gender Equality Committee under Zorlu Holding, the working group meets regularly to develop projects that improve the company's gender equality position. In order to monitor gender equality and equal opportunities from the employees' perspective, many equal opportunities questions have been included in the employee engagement surveys. The Gender Equality Manifesto published by Zorlu Holding serves as a guide for all HR practices.

Zorlu Enerji focuses on the principle of equal opportunities in all areas of activity. In the recruitment process, the company creates equal opportunities for every applicant and does not discriminate based on gender, religion, language, political opinion or race. The principle of equal opportunities is integrated into in job postings and job application forms, and applications are evaluated by considering this principle. Equal opportunity is continuously monitored from the employees' perspective through first and second Onboarding Interview Forms for new employees joining Zorlu Enerji, Retention Surveys for current employees, and Exit Interview Forms for departing employees. As part of workforce equality, the goal is to increase the percentage of female employees at all levels to 40% and the percentage of women in the company's decision-making mechanisms, the Board of Directors and senior management to 30% by 2030. Gender equality training was organized for all employees in 2022. In

addition, a practical workshop on gender equality was held for managers and particularly for employees involved in hiring, promotions, and performance management.

Zorlu Enerji places great emphasis on developing a work environment and employee culture characterized by diversity and inclusion criteria. To this end, the Eşit Bi' Hayat (an equal life) program was introduced. Promotion activities, workshops, seminars, and training sessions are organized to inform and raise awareness on gender equality under the program. The company carries out projects to raise awareness and increase satisfaction among employees by guiding their careers within the framework of equal opportunities. In addition, activities have been carried out to encourage female students to enter the sector and to raise awareness of gender equality among young people.

One of the projects launched in 2022 under Eşit Bi' Hayat is the Women Technician Program, which aims to empower women in all aspects of social life and increase women's employment in the energy sector. The project was launched in Gaziantep with the aim of empowering women and securing the future. On 23 June, the International Day of Women Engineers, the company met with aspiring female engineers studying at the engineering faculties of various universities. The participants who won the quiz competitions organized during the event were given the right to participate in the SENERJİ Young Talent Program and were mentored by Zorlu Enerji Female Leaders. Zorlu Enerji will continue to implement projects to support women and fight discrimination in the coming years.

Believing in the importance of collaboration for an innovative working environment free of sexist discourse and improved working conditions, the company partners with civil society, academia and the business community. In this journey, under



the motto "An Equal Life is Possible for All", new practices are implemented with strength drawn from stakeholders. Zorlu Enerji, a signatory of WEPs (Women's Empowerment Principles) since 2020, a joint initiative of UN Women and UN Global Compact encompassing principles that provide a roadmap to companies on gender equality and women's empowerment in the workplace and in society, also cooperates with many institutions including the Women in Geothermal (WinG) Platform, the Turkish Women in Renewable Energy (TWRE) Group and EBRD. In 2022, Zorlu Enerji supported TWRE's mentoring program for industry professionals for the 2nd time with 7 female engineers.

"Bizenerji" events are organized through internal communication to spread the issue of gender and equal opportunity throughout the supply chain and to ensure more female presence in the supply chain. In addition, every year on Women's Day, handcrafted products purchased from women are presented to our employees as gifts to support regional women's cooperatives. On 2021 International Women Engineers Day, we participated in the "Female Engineers with Endless Energy" panel with TWRE and provided guidance to women wishing to work in the field.

Zorlu Enerji supports the adaptation of employees who became new mothers to work life after giving birth. Part-time work or unpaid leave options are offered to provide opportunities for employees who become parents. After 6

months of leave, female employees are offered a fixed-term employment contract in order to ensure a balanced and gradual adaptation to business life. By doing so, we ensure that employees who are mothers go through the processes more comfortably, while the requirements of business life are also met. In addition, the Superpower of Motherhood Mentorship program was launched, which aims to enable managers who are mothers to be role models in the careers of new mothers returning from maternity leave. In 2021, 9 out of 11 employees who went on maternity leave returned to work, while in 2022, 10 out of 26 employees who went on maternity leave returned to work. For 2022, the rate of employees returning from maternity leave is 38%. In addition, based on the principle of equal opportunity, employees who become mothers can continue their performance, backup, and training processes from where they left off after returning to work. At the same time, all employees who are or are preparing to become new parents can participate in programs run by experts and psychologists through the "Parent School" included in our Corporate Wellbeing Program "Together We Are Good".



Employee Rights and Happiness

It is an important value for the Company that employees are fairly compensated for their labor. The Company shapes its remuneration principles around rewarding fair, competitive and high performance. In addition, the Company acts without discrimination based on religion, language, race, gender in its remuneration principles, in line with the principle of "equal pay for equal work". Zorlu Enerji bases all its remuneration and side-benefit processes on the wage market, industry standards, Zorlu Holding practices, and national and global macroeconomic indicators. Regardless of title and function, a performance evaluation system based on the content of the job is applied and the remuneration policy is shaped by segmentation into levels of job roles according to their size and content. In addition, remuneration and benefit strategies are revisited via salary surveys every year.

Zorlu Enerji rewards the performance of its employees with the goal of a fair remuneration system that can keep their motivation high. The remuneration strategy is based on individual performance evaluation, salary surveys, national and global economic indicators, and internal balances. Based on the evaluations made at the end of each year, wage increases are determined for all employees. For managers and above, bonuses based on company and individual performances are also implemented once a year. In addition, in order to increase employee happiness, the Company switched to a hybrid working model in 2022.

Opportunities and fringe benefits such as Private Health Insurance are provided to improve and support employees' experience not only in business life but also in social life and health. Zorlu Enerji also continues to pay the current salary of its employees who are on paid maternity leave or on medical leave, not within the limits set by the Social Security

Institution. In addition, employees receive meal allowances, marriage, maternity and death leaves, cash benefits, the right to use the fitness center in the office, discounts on Zorlu Group branded products, and extra pay for holders of post-graduate diplomas. There is also a "Parenting School" program for employees and their spouses who are preparing to become parents or who are new parents, covering pregnancy, birth, and postpartum processes.

Communication activities with employees, who are the most important stakeholders of the Company, are meticulously carried out. Recognizing the value created by strong communication, the Company makes various efforts to bring employees together. In addition, the Company provides its employees with a work environment where they can do what is good for the world and enables them to work on social issues. The "We Are Good Together" platform established under Zorlu Holding aims to provide proactive support in solving problems that affect employees' performance as well as minimizing problems that may arise in related issues. Through the "Wellbees" app that can be downloaded on mobile phones, this platform offers support on psychological consultancy, healthy nutrition (dietician) and healthy living for employees and their families and contributes to the permanent solution of the problems that may be experienced in relevant matters. Staff receive support in the areas of resilience, anxiety management, stress management, healthy living, sports, child psychology, personal development and well-being, and joint activities are offered to promote communication and cohesion among each other.

Employee training and development

For Zorlu Enerji, employees are the most effective and important components in the value chain, playing a key role in achieving the company's goals. The company is aware that the road to uninterrupted energy supply is through the strength and commitment of its employees, and so shapes its human resources policy according to the vision of "valuing people". The company strives to recruit qualified employees and to increase the competencies, welfare, and loyalty of existing employees. In this context, the company conducts a transparent and standardized recruitment process and ensures that no applicant is discriminated against. Throughout the process, candidates' propensity for professional and personal development is evaluated only on the basis of their suitability for the position and their qualifications, and a fair recruitment process is executed without any discrimination based on their religion, language, race, gender, etc. After the recruitment process, employee satisfaction, happiness and motivation become one of the organization's priorities, embracing business practices that protect the balance between employees' work and lives.

Employee satisfaction and loyalty

At Zorlu Enerji, employee satisfaction, happiness and motivation are considered an integral part of individual and corporate development. Based on this understanding, methods and solutions are developed to solve problems that may affect employees' performance and quality of life. Not content with that, it also offers its employees with the opportunity of working on social issues by providing a work environment where they can do what is good for the world.

The employee loyalty survey, which is conducted every two years, was also conducted in 2021, and the employee loyalty rate increased compared to the previous survey conducted in 2019. Until the next survey planned for 2023, the results were communicated with all business units in 2021 and improvement actions were planned especially for development areas. In this context, plans on the management and human resources side and the actions to be taken by the departments are regularly monitored. The Company recognizes the value that employees add to business processes, appreciates their achievements, and supports their motivation through rewarding tools.

The "Management Employee Ambassador" program was initiated to ensure that employees working at different locations are heard within the Company. Thanks to this program, employees can communicate all their demands and problems through the Employee Ambassador assigned to their region. In addition, communication between the field and the headquarters is kept at a high level through regular monthly meetings, incoming messages are evaluated, and necessary actions are taken.

The Human Resources Policy, based on the opinions of employees and people-oriented management principles, ensures that employees are not adversely affected by possible corporate restructuring processes (company sales, mergers, spin-offs, changes in business processes, etc.). As mentioned before, introducing the "Corporate Reorganization & Human Rights Charter" in addition to the Human Resources Policy and the legislation regulating the working life, care is taken to fulfil and comply with the requirements of the United Nations Universal Declaration of Human Rights and the basic principles of the International Labour Organization, as well as the international conventions to which our country is a party in this regard.

Right of Organization

Tüm çalışanların hakları ve menfaatleri 4857 sayılı İş While the rights and interests of all employees are protected within the scope of the Labor Law No. 4857, the organization of employees within the Company is supported and the right to unionize is respected. The Company's 100% indirect subsidiary Osmangazi Elektrik Dağıtım A.Ş. has 721 employees working under the Collective Labor Agreement (CLA) and these employees benefit from their union rights. The agreement, which is re-signed every two years between the union in question and OEDAŞ managers under the roof of human resources, covers all union members. In addition, the CLA is legally prepared on the basis of the Trade Union and Collective Labor Agreement.

Zorlu Enerji carries out activities and projects to instill a sense of responsibility in its employees, which is an important part of the corporate culture. The corporate volunteering movement "Kıvılcımlar", created in line with Zorlu Holding's Smart Life 2030 vision and covering all group companies across the holding, supports Zorlu Enerji employees' participation in social responsibility projects and aims to strengthen the bond between Zorlu Enerji and society. Targeting the development of employees and placing employees at the center of value, Training and Talent Management ensures that employees' personal and professional competencies are enhanced. In addition, studies and training sessions are carried out to ensure that the corporate culture in environmental, social and governance areas spreads from employees to the general public. Plus, development plans are made by taking into account the skills and competencies of employees in order for them to consciously climb the career ladder and increase their competencies on this journey. While making training plans, corporate sustainability needs are also taken into consideration in addition to areas of individual development identified during the performance evaluation period. This approach aims to maximize the contribution of employees to the Company by progressing in their career journeys in the most efficient way.

At Zorlu Enerji, all activities are carried out with the goal of zero work accidents.



Activities Contributing to Employee Development

Within the scope of talent and career management, employees are provided with training courses that are complementary to their job descriptions to improve their professional competencies. Zorlu Enerji also cares about the personal development of its employees and contributes to employee loyalty by providing training for different hobbies and interests. In-class and online training courses are planned with Zorlu Academy and third-party training companies, and management days are organized for management level. In this context, a total of 31,665 hours of training was provided in 2022 and 1,705 Zorlu Enerji employees participated in online training via Zorlu Academy. In 2022, 75% of all employees were trained and the budget spent on training was 1,791,895 TL.

In 2021 and 2022, 1,568 employees of Zorlu Enerji received online training on environment and sustainability. The online training courses were organized through the e.nokta platform. The most important training courses were as follows

With respect to biodiversity;

- The impact of the climate crisis on ecosystems and biodiversity,
- Ecosystems and biodiversity on a global scale,
- Ecosystems and biodiversity in Turkey

With respect to sustainability management;

- Corporate Sustainability,
- Sustainability for Managers,
- Basic Sustainability,
- ESG Components,
- Basic Environmental Education,
- Training was organized on the EU Green Deal and its potential impact on the energy sector.

In 2022, the managers of the Sustainability & Occupational Health and Safety - Environmental Directorate received training to become IASE ESG advisors level 1. 3 managers participated in the training and the training lasted 3 months. In 2022, 259 person*hours of basic sustainability training were organized for key suppliers and contractors. Other topics of the training offered on a routine basis are as follows:

Other topics of the training offered on a routine basis are as follows:

- Employee Representative Training
- Employer Representative Training
- OHS Committee Training
- Basic Environmental Training
- OHS Training for Remote Working
- H&S Support Contact Employee Training
- SA8000 Awareness Training
- Work Permits System Training
- Mandatory Basic OHS Training

In 2022, various leadership training courses were held for the executive staff at the level of manager and above.

- Management Academy with Boğaziçi University

After the pandemic, Zorlu Enerji digitalized its training in tandem with technology to prevent interruptions in the training process. All employees can access Zorlu Academy Training Portal, which is designed to monitor the professional and personal development training courses offered to employees in accordance with their career planning. In addition, an online library of Harvard Business Review publications was put together in 2021, which staff can access via the Zorlu Academy platform.

Average Training Hours by Employee Table



	2021		2022	
	Female	Male	Female	Male
Blue Collar	0.68	9.40	0.44	5.80
White Collar	2.84	2.60	11.47	14.76
Senior Management	8.33	8.61	3.49	17.29

Zorlu Enerji acts in the knowledge that a well-equipped and professionally competent employee profile is the greatest value for a company. With this understanding, the company closely monitors employee competencies and performance and aims to increase the value created. It conducts fair and transparent performance management to reward success and maximize employee satisfaction. Employee loyalty and satisfaction, gender equality, occupational health and safety, environmental, social and governance indicators, which are included in the target pool for managers, are incorporated into the evaluation of our employees' performance at management level. The performance assessment system, which focuses on the strengths and development areas of employees, is applied at least once a year to all employees who have completed their sixth month at the company. While 95% of employees underwent a performance evaluation in 2021, this rate was maintained at 95% in 2022. As a result of the evaluations, information on employee performance is provided and development plans are drawn up. In addition, these evaluations are taken into account in annual salary increases, appointments and promotions. In 2022, 71 employees were promoted. 30% of the promoted employees were women.

Zorlu Enerji not only supports its employees with training courses for the development of their talents and careers, but also organizes itself to cultivate its own managers within the Company. The technical and managerial competencies required by the position are put forth through the Development Center, which is applied to Assistant General Manager and higher levels, into which the manager level was added in 2020. Within the scope of talent management covering all white-collar employees, employees' potentials and performance results are brought together with the nine-box method. On that basis, the criticality of the roles is examined, contingency plans are made, and organizational changes and promotions are planned through succession plans. Thus, the sustainability of human resources is ensured by backing up senior executives.

While the professional competencies and career development of employees at all levels are supported by training, special leadership training is provided for employees in management positions. From 2020, the scope of training has been extended to deputy general managers and beyond to the management level. Technical and managerial activities are improved through training at the Development Center. Also, contingency plans are created, organizational changes and promotions are planned through succession plans. This practice ensures not only the sustainability of corporate human resources but also the formation of a talent pool. In addition, online leadership programs are prepared in line with the needs based on the results of the Development Center.



Focal Competencies for Talent Assessment

Adaptation to Change and Innovation
Cooperation
Curiosity
Learning Agility
Resilience
Managing Performance and Talent
Coaching and Mentoring
Strategic Leadership
Leading Change

Employees Subjected to Regular Performance and Career Development Evaluations



	2021		2022		2022	
	Female	Male	Female	Male	Female	Male
Blue Collar	100%	94%	100%	100%	100%	98%
White Collar	94%	95%	94%	94%	94%	95%
Senior Management	100%	94%	75%	94%	100%	100%



Employee Participation in Management Processes

Employees are involved in the following management processes;



Social Performance Team
Meetings conducted within the
scope of SA 8000



OHS Committee Meetings
conducted within the scope of
Occupational Health and Safety



Meetings conducted within the
scope of sustainability working
groups

Parlak Bi'Fikir (A Bright Idea) Project

Zorlu Enerji pays attention to taking part in activities that will showcase the talents of its human capital, support the entrepreneurial spirit, and strengthen its innovative corporate culture. Accordingly, open innovation activities are supported through Zorlu Holding's intrapreneurship program, Parlak Bi' Fikir. More than 1,000 ideas were submitted to the program, which was carried out in two cycles, and Zorlu Enerji employees supported the program with 49 ideas. One of the 15 ideas selected after the evaluation of the jury, including the senior management, was submitted by Zorlu Enerji employees. Zorlu employees, who have a bright idea for the development of an innovation culture and entrepreneurial spirit, offer a solution proposal by combining problems with technology. These ideas are supported for implementation by receiving investment from Zorlu Group, following a series of evaluations.

Brand Reputation

Zorlu Enerji is among the pioneering companies in the industry in many respects with its sustainability-oriented management and business model. Zorlu Enerji aims to be an exemplary company that creates value not only internally but also externally, values the society it lives in, conducts its business practices in integrity and harmony with the environment, creates value for all stakeholders, especially employees, and updates its business practices at the technology level.

Communication activities are carried out with all stakeholders in order to protect the brand reputation and promote the corporate culture. Employee satisfaction is monitored through biannual surveys, and we act with the awareness that employees, one of our most important stakeholders, are the biggest representatives in society and the industry. In line with this goal, activities are carried out to increase the welfare and happiness of employees and contribute to their personal and professional development.

Spreading the positive impact created by Zorlu Enerji to customers and suppliers with whom the Company cooperates

is one of the issues that the Company attaches great importance to. In this context, customer satisfaction is monitored through surveys, and communication channels with customers are improved to increase the value they add to the company. The supply chain is meticulously monitored, and the sustainable and ethical business model is disseminated throughout the value chain.

With the vision of a socially responsible company, the Company undertakes social responsibility projects in which all stakeholders play a role. In this way, activities that contribute to society and strengthen the company's ties with the community are carried out. The amount invested in social responsibility projects in 2022 exceeded 14.5 million TL.

The main goal of all efforts and endeavors is to position Zorlu Enerji as a strong brand in the industry and make it the first name that comes to mind within the framework of renewable and clean energy. Zorlu Enerji continues to work meticulously to create a strong future shoulder to shoulder with all its stakeholders and to be recognized for the value it creates on the national and international stage.

ZORLUENERJİ

GELECEĞİN ENERJİSİ

Accountability and Ethics

Zorlu Enerji places ethical values at the center of its corporate operations and shapes its culture based on these values. Zorlu Enerji follows not only corporate culture but also legal regulations and international standards and conducts its business processes in compliance with the Turkish Labor Law No. 4857 and the International Labour Organization (ILO). In this respect, the Company puts employee rights at the forefront in all its activities, particularly the prohibition of child labor, the fight against forced labor, collective bargaining, and the freedom of association of employees. The Company protects and manages the rights of its employees within the framework of applicable legislation, labor contracts concluded between employees and employers, and ethical rules. The Company provides guidance and supervision not only within Zorlu Enerji, but also to all suppliers it cooperates with to ensure that they observe the relevant issues. The Company holds all its stakeholders responsible for acting in accordance with the rules based on employee rights and ethical issues and encourages them to organize their business conduct accordingly. In the event of any ethical or rights violations, supervisory and regulatory actions are taken based on the Zorlu Holding Code of Ethics, which also incorporates Zorlu Enerji. Zorlu Holding Code of Ethics is available at [link](#).

The Code of Ethics is designed to include the "Anti-Money Laundering, Anti-Bribery and Anti-Corruption" provision, incorporated into company policies, values and principles and covering all Zorlu Group employees, members of the Board of Directors, suppliers and business partners, intermediaries, contractors, proxies and all third parties with whom we have a business relationship. Therefore, all activities (hotline, training, audits and reporting, ethics committee, etc.) to disseminate and develop a culture of business ethics, as well as internal control and internal audit activities to prevent and detect violations of business ethics, are designed to cover all transactions. No corruption was identified during the risk assessment (for 2022).

No reports of "child labor", "forced labor", or "disregard for the right to organize" were received from employees and/or third-party stakeholders in 2022. In addition, no cases were uncovered in this context.

In 2022, the hotline did not receive any reports of "violation of the rights of the local population". In addition, no cases were uncovered in this context.

Zorlu Enerji underpins the importance it attaches to workers' rights with documents and respects their rights in this sense. Zorlu Doğal Elektrik Üretimi A.Ş. received SA 8000 (Social Accountability 8000) Certificate in 2017, which



aims to guarantee the fundamental rights of employees at its power generation plants. SA 8000 certification, which is important for the company to assess and improve itself, addresses occupational health and safety, forced labor, child labor, discrimination, working hours and wages, disciplinary practices, and management systems. Ethical principles play an important role in all relationships with customers, suppliers, and other stakeholders, both inside and outside the company. Furthermore, these principles are implemented with the aim of creating a corporate structure that is responsible towards society and that focuses on business ethics at all levels. In addition, by involving all stakeholders in this cooperation, the ethical awareness of stakeholders is strengthened not only inside but also outside the company, thus improving service quality and protecting assets and resources. To ensure that employees, who are the key stakeholders in the company's culture, are aware of ethical principles and their rights, training is provided through the ENOCTA platform as part of the Zorlu Academy.

We involve our stakeholders who form the value chain of our brand reputation.



Within Zorlu Holding, there is an "Ethics Hotline" where employees can report their complaints. All complaints received by this hotline are analyzed and reported. In addition, the "Employee Ambassador" program was launched to listen to employees at all locations. With this program, employees can contact the Employee Ambassador responsible for their region for any problems they experience in their working lives and any messages they would like to convey. Field and headquarters coordination is kept at the highest level through regular monthly meetings where incoming requests are evaluated and necessary actions are taken.

Employees' personal data is carefully protected within the framework of confidentiality principles, and the requirements of the Personal Data Protection Act are applied. In accordance with the same principles, employees are expected to maintain the complete confidentiality of all technical information, including the company's own applications, company names and information contained in the database.

Zorlu Enerji strives to build strong relationships based on trust with all stakeholders and create sustainable value. Zorlu Enerji strives to extend an honest and accountable business model not only within the company, but also to the components with which it works. In this context, the company considers it one of its main tasks to observe and ensure compliance with environmental, social, and ethical standards by suppliers who are important business partners. To this end, the Company

adopts a responsible supply chain approach by reflecting its sustainability approach to all its suppliers and subcontractors.

In line with this approach, Zorlu Enerji has a strong presence in the entire value chain to work towards fulfilling its commitments in

- Organizing informative and awareness raising events as well as training courses that raises awareness about sustainable supply chain management,
- Evaluating suppliers in terms of their environmental and social performance in procurement processes
- Prioritizing suppliers that manage their environmental and social impacts, care about the development of their employees and society, and develop sustainability practices,
- Prioritizing local suppliers if they meet the requirements
- Making regular reviews and reorganizations in order to continuously improve procurement processes,
- Ensuring and improving supplier communication continuously through different communication channels.

with its sustainable supply chain policy, compliance of suppliers and business partners with the Zorlu Holding Procurement Principles, which are prepared in light of all applicable national laws and regulations, especially the International Labour Organization (ILO) and United Nations



Conventions, covering the procurement operations of all Zorlu Group Companies and containing the basic rules of conduct expected from suppliers, is observed. In this context, in order to promote an honest and accountable business approach that puts people at the center, suppliers and business partners are required to

- act in compliance with all policies of Zorlu Enerji,
- not to employ child labor below the minimum working age as defined in Article 138 of the International Labour Organization Convention,
- not to employ young workers in hazardous work and not to hinder their education,
- not to employ forced or compulsory labor,
- not to employ any employee without security,
- not to accept the payment of debts with labor under any circumstances,
- not to discriminate on the grounds of race, ethnic origin, gender, gender identity, sexual orientation, color, religion, country of birth, marital status, pregnancy, dependents, age, position, disability, social class, trade union membership or political opinions,
- observe human rights and operate with a business approach befitting human beings and human dignity,
- not to accept any form of physical abuse, sexual, verbal or physical harassment or intimidation in the work environment,
- act fairly in all business relationships in accordance with basic moral and human value judgements,
- remunerate their employees in accordance with at least the minimum wage, ensure that all fringe benefits are in accordance with the rules determined by laws and regulations, and ensure that payments are made regularly and on time,
- ensure that employees are provided with holidays and days off in accordance with laws and regulations and that working hours are in accordance with regulations,
- respect the rights of its employees to join, belong to, and be represented by trade unions and to participate in works councils as established by local law,
- observe occupational health and safety rules in the workplace, take all necessary precautions, provide regular occupational health and safety training to their employees,
- comply with all applicable environmental laws, regulations and legislations, monitor and manage the environmental impact of their operations, reduce carbon emissions and consumption of natural resources and increase the amount of recycled waste,
- demonstrate absolute compliance with Zorlu Holding and Zorlu Holding Code of Ethics in the fight against bribery and corruption, refrain from giving and receiving gifts for business facilitation purposes, avoid situations that may cause conflict of interest, refrain from engaging in undertakings aimed at distorting, preventing, or limiting competition, and observe the intellectual property rights of business partners,
- transparently share documents showing compliance with the principles within the scope of supplier audits, when necessary, and cooperate in these matters.

The wet signed version of this commitment can be accessed at [link](#).

For access to Zorlu Holding procurement principles; [Zorlu Holding Supply Chain Principles](#)





SOCIAL CAPITAL

Guided by the mission of being an energy company with a focus on impact-driven growth, Zorlu Enerji performs awareness-raising activities on climate change, which is a global threat, and the use of renewable resources, and supports movements with a focus on environmental and social impact. By identifying its material issues and designing its business processes accordingly, it maintains careful and regular communication with all its stakeholders.

Local Socio- economic Impact

In addition to a successful business model and strong financial capital, a company's approach to environmental and social issues is equally effective in its sustainable growth. Zorlu Enerji believes that investing in future generations and the society in which it operates is an investment in both the Company and the future of our country. Under the social responsibility projects launched in line with the needs of local community, the Company attaches more importance and gives more support to social development each and every year and continues to add value to human life.

The development of all communities with which the company interacts is of critical importance for the company. For this reason, Zorlu Enerji contributes to local socio-economic development in the regions where it operates and always

plans to continue working in this direction. In light of its corporate strategy, it aims to launch social investments and put Sustainable Development Goals at the center to continue to make local communities a part of Zorlu Enerji's decision-making processes by establishing neighborly relations with them. The company strives to continue to be a trusted business partner and supplier for all stakeholders and the entire ecosystem.

When investing, it is important that the projects are part of the respective region and owned up by the local people. Before starting the projects, public information visits and meetings are organized in the relevant places to strengthen the communication. Versatile solutions for the needs of society are implemented and social investments are made

for various needs. Some of the investments made in this sense are: Support to local non-governmental organizations, sponsorships for the continuity of activities that are part of the local culture, improvement of community spaces, protection of natural resources, reduction of inequalities, social services such as technology and support for scholarships. In 2022, Zorlu Enerji provided around 14.5 million TL in funding for social investment projects.

Social impact assessments are performed for all the activities of Zorlu Enerji, and, within the scope of these assessments, the social and economic impacts of the investments planned to be made are examined in detail. Impacts arising from the investment are identified and management plans and programs are developed and implemented to prioritize the removal or mitigation of these impacts.

Zorlu Enerji pays attention to protecting the environment and the health of the local people during the construction and operation phases of its investments, and closely monitors potential impacts throughout this process. In relation to such projects, it cooperates with various national and international institutions and organizations on soil conservation, noise, dust and vibration, air quality, solid waste management, visual impact, occupational safety, the interaction of wildlife and conservation of natural habitats and has regular reports drawn up in this respect. As a result of the activities of Zorlu Enerji, there was no case where local people were forced to "relocate" or to be physically or economically displaced during the reporting period.

Zorlu Enerji actively participates in the coordination groups created by local governments covered by its electricity and gas distribution licenses to ensure both grid safety and user safety. In this context, the Company contributes to the activities of the Governor's Office Investment Monitoring Coordination Boards, AFAD and Municipal AYKOME committees.

Within the framework of socio-economic harmonization, solution mechanisms are implemented for the company's employees, customers, public institutions and local communities based on the needs in the regions where investments are made. Educational activities are carried out with the support for village schools and children in the catchment area of the power plants, especially in relation to climatic conditions. As part of the awareness and education campaign on the use of natural gas, materials on the safe use of natural gas and the use of the hotline were developed and distributed to citizens living in the operating region in cooperation with public institutions. Education programs were developed to thousands of children to ensure that they know and experience renewable energy resources as they are the ones who will shape the future. Regional investments continue to implement practices based on SDGs and social needs assessments and seek to expand activities that contribute to the professional and social development of young people who make up a significant part of society.

The values of trust, integrity, transparency, accountability, open and equal communication, which are at the core of the company's culture, ensure the protection and enhancement of its reputation in its regions of operation, creating a responsible corporate approach. As one of the leading companies in the energy sector, efforts continue to prioritize investments in renewable energy to ensure a sustainable future. In its economic, social and environmental activities, the company acts on the principle of being on an equal footing with relevant public institutions and organizations, non-governmental organizations and political parties, and strives to increase its development index in the areas of human rights, labor conditions, environment and ethics.





Cooperation for climate goals

Zorlu Enerji is a member of numerous associations and organizations operating in various fields and strives to be a pioneer in the industry through its presence on various platforms and initiative. The company's memberships are listed below:

World Business Council for Sustainable Development (WBCSD)

Electricity Generators Association (EÜD)

Energy Economics Association (EED)

Energy Trade Association (ETD)

Natural Gas Distribution Companies Association of Turkey (GAZBİR)

Turkish Solar Energy Industry Association (GENSED)

International Solar Energy Society - Turkey Section (GÜNDER)

Energy Investors Association (GÜYAD)

Turkish Employers' Association of Construction Industrialists (İNTES)

Marketing Turkey C Level Club

Middle East Solar Industry Association (MESIA)

Petroleum and Natural Gas Platform Association (Petform)

TOBB Energy Assembly

All Battery Importers and Manufacturers Association (TÜMAKÜDER)

Quality Association of Turkey (KaLDeR)

Turkish Cogeneration and Clean Energy Technologies Association (TÜRKOTED)

Turkish Wind Energy Association (TWEA)

TÜSİAD Energy Working Group

TÜSİAD Environment and Climate Change Working Group

International Competitiveness and Technology Association (URTEB)

Ethics and Reputation Society (TEİD)

Business Council for Sustainable Development Turkey (BCSDT)

Corporate Governance Association of Turkey (TKYD)

Stakeholder Engagement and Social Dialog

Zorlu Enerji defines its stakeholders as individuals and organizations that are affected by its activities and that have or may have a major impact on the success of the company. Throughout all its operations, Zorlu Enerji prioritizes establishing transparent and two-way communication with all its stakeholders and strives to create value. In its relations with its stakeholders, it observes the principles of diversity and inclusion, trust and open communication, accessibility and taking quick action. It also aims to render the benefits offered to all its key stakeholders sustainable for a sustainable growth.

The Company cares about the feedback of its stakeholders and offers a strong and transparent communication process. It offers this process through periodical employee satisfaction surveys, sustainability priorities survey, customer satisfaction survey, reputation research, project-based stakeholder engagement and information meetings, environmental impact assessment studies, public engagement meetings, prioritization workshops and one-on-one visits. The feedback and suggestions that Zorlu Enerji receives from its stakeholders are effective in its ways of doing business and all suggestions for improvement are always taken into consideration.

Accordingly, there is a prioritization analysis study in which Zorlu Enerji sets its priority topics by taking the opinions of its stakeholders. In order to identify the issues evaluated under the analysis, global ESG assessment bodies, the priorities of competitors in the private sector, the European Green Deal and the forecasts, studies and reports of various international institutions were taken into consideration. The list of material topics was created in light of external trend analysis, stakeholder analysis, executive survey, 4-stage impact analysis and corporate strategy.

Zorlu Enerji groups its stakeholders under 3 headings:

- Those with direct impact: employees, customers, business partners and suppliers, shareholders, investors and analysts
- Those with indirect impact: financial institutions and organizations, public bodies and regulators, local authorities, trade unions, media, non-governmental organizations, international organizations and initiatives
- Those introducing new opportunities, knowledge and mentality: universities



Eşit bi' hayat

Existing communication methods and communication channels with stakeholders are shared in detail in the "Stakeholder Governance" section of the Company's corporate website.

Corporate Social Responsibility Projects

The scholarship program awards 9-month scholarships to more than 300 university students each year. The Power of Women, Power of the Future program, which aims to increase women's employment in technical areas of the energy industry to promote gender equality in all sectors of society, provides theoretical and practical training to female students at vocational schools in Gaziantep. Universities in investment regions are supported with student-oriented grants; various grants are given in the form of seminars, special events, and technological equipment support. The R&D and innovation-oriented activities of Maveria Technology Team, the first electric vehicle team of Osmangazi University, are supported, and the primary sponsorship of



İTÜ Solar Car Team, which aims to combine alternative energy sources and advanced automotive technologies, is undertaken to support young people producing the technology of the future.

The "My Energy is for Our Region" project supports local festivals and celebrations through sponsorship activities, provides access to clean water in villages, meets the energy needs of schools, and



promotes technology products that meet the needs of the region. To promote sports in all areas, sports clubs in the investment regions are sponsored. Children in disadvantaged climates are regularly provided with winter clothing. Corporate supplies for special occasions are sourced from women's cooperatives in the investment regions, promoting local women's production and economic development.

The Can Dostlar project treated more than 3,000 stray animals in 5 provinces, including surgeries such as for tumors and eye diseases, and performed more than 900 sterilization surgeries. An awareness and education campaign on the use of natural gas was conducted in Gaziantep. In cooperation with public institutions, materials on the safe use of natural gas and the use of the hotline were prepared and distributed to citizens living in the operation area. Under the project, awareness activities are conducted for all age groups with the support of all public institutions in the province. The campaign will be extended to other provinces where the company has a presence after the pilot application in Gaziantep.



With the vision of a sustainable future, the company pays attention to environmental issues and cooperates with various national and international institutions and organizations in the fields of soil protection, noise, dust and vibration, water quality, solid waste management, visual impact, occupational safety, interaction with wildlife and natural habitats. The company became a member of the TÜSIAD Environment and Climate Change Working Group to contribute to decision-making mechanisms in the field of environment and climate change. Since 2017, a total of 520,000 saplings have been planted as part of the Zero Carbon Footprint Forests project. As part of the promotion of the environment and alternative energy sources, science-based studies and conferences have been supported and sponsorship activities for a sustainable world have been carried out. Solar Vision Congress, Eco Love Festival, Energy Summit and IRENEC are among the most important sponsorship activities in this field.

Zorlu Enerji received the "Zero Waste Certificate" first for the Kars Çıldır HEPP, as well as for the natural gas distribution spots



in the Thrace region. The Zero Waste Management System established in the Gaziantep region, which is an exemplary work, was awarded the Zero Waste Certificate by the Ministry of Environment and Urbanization. OEPSAŞ participated in the "Be Sensible" project initiated by BCSDT, which aims to introduce sustainable consumption habits in the business world in order to create a culture of sustainable consumption while ensuring that the company's employees act responsibly with resource consumption and recycling in their daily lives. With volunteering employees, forest cleanups are conducted regularly to raise environmental awareness among employees.

The projects, donations and sponsorships in the area of social development in relation to the SDGs are shown in the following table. In 2022, social investments amounted to 14.5 million TL.



Social Investments	Associated SDGs	Amount (TL)
Student Scholarships (MZV)	4 Quality Education	1,628,500
Our Energy is for Our Region Project	11 Sustainable Cities and Communities	1,373,679
Natural Gas Awareness Campaign	4 Quality Education	157,500
Gender Equality Education and Women Technician Training Program	5 Gender Equality	59,472
KAGİDER Equal Opportunity Model Certification	5 Gender Equality	50,000
Zero Carbon Footprint Forests Project	15 Life on Land	1,080,000
Can Dostlar Social Responsibility Project	17 Partnerships for the Goals	104,160
Energy Saving Social Responsibility Project	12 Responsible Consumption and Production	22,010
Conditional Scholarship for Employees' Children	4 Quality Education	31,500
MZV Disabled Children Donation	3 Good Health and Well-being	2,800
Tohum Autism Foundation Electricity Support	7 Affordable and Clean Energy	60,000
Darüşşafaka Mother's and Father's Day Donation	4 Quality Education	90,000
Alaşehir Women's Cooperative Cooperation	10 Reducing Inequalities	28,300
Educational Institutions Donation	4 Quality Education	63,270
Supporting Women's Work Collaborations	10 Reducing Inequalities	8,974
University Sponsorships	4 Quality Education	747,476
IICEC Support	13 Climate Action	480,000
Sponsorship of the Women Empowering Energy Awards Ceremony in Turkey	10 Reducing Inequalities	1,312,749

The Company attaches importance to collaborations with NGOs and supports activities intended for embracing each group in the society. In-house events are held with non-governmental organizations while aid campaigns are carried out with volunteering staff. In this sense, the NGOs which the Company cooperates with are as follows:

- Tohum Autism Foundation
- Tüvana Foundation for the Education of Children Willing to Receive an Education (TOÇEV)
- Hope Foundation for Children with Cancer (KAÇUV)

- TEMA Foundation
- Educational Volunteers Foundation of Turkey (TEGV)
- Darüşşafaka Society
- Business Council for Sustainable Development Turkey (BCSDT)
- Private Sector Volunteers Association (ÖSGD)
- Women Entrepreneurs Association of Turkey (KAGİDER)
- Foundation for the Utilization of Women's Labor (KEDV)
- Alaşehir Women's Cooperative



Social Compliance in Supply Chain

Zorlu Enerji conducts its relations with its suppliers, which it considers as important business partners, based on the principle of openness and trust. It pays attention to the compliance of its suppliers with environmental, social, and ethical standards, and considers contributing to their continuous development among its main responsibilities. Zorlu Enerji adopts a responsible supply chain approach by reflecting its sustainability approach to all its suppliers and subcontractors.

It carries out its procurement operations with central and local procurement organizations and evaluates the performance of its suppliers based on the relevant national and international standards (ISO 26000) in line with its sustainability approach. Sustainability approach of supplier companies is followed by Zorlu Enerji simultaneously.

Compliance with Zorlu Holding Supply Chain Principles (Principles), which has been prepared in light of all applicable national laws and regulations, is sought for the selection of suppliers. In order to ensure that suppliers comply with these principles, regular information is provided, awareness is raised, and training courses are offered if needed. Zorlu Holding Supply Chain Principles cover the procurement operations of all Zorlu Group companies and include the essential code of conduct expected from suppliers. Suppliers are expected to communicate these Principles to their supply chains and ensure that they are implemented by their own suppliers.

With its way of doing business that focuses on the environment and society, Zorlu Enerji expects its business partners to act in light of the same approach, and in this sense, it offers training courses to its suppliers as well as informing them about sustainability. During these training sessions, general concepts, the history of sustainability, other risks, especially the global climate crisis, SDGs, ESG governance, sustainability reporting and indices are addressed, and awareness is raised on these topics. In addition, OHS training courses are offered to contractor

companies that act as service providers regarding the risks in the fields they operate. In 2021, a total of 192 person*hours of sustainability training were offered to suppliers that were considered critical. The compliance of 15 of 49 suppliers assessed as critical in 2021 and 16 in 2022 with the ISO 26000 Social Responsibility Standard was evaluated in terms of ESG criteria. At the end of the evaluation process, 13 companies fulfilled the relevant ESG criteria.

In addition to being a signatory to the United Nations Global Compact, Zorlu Enerji will fulfill the requirements of international financial institutions funding its investments and the relevant national legislation and protect human rights by making them a part of the contracts in a way to cover its suppliers and contractors along the value chain of the Company.

YEAR	Total Number of Suppliers	Ratio of Local Suppliers
2020	1,399	11.9%
2021	1,481	33.5%
2022	1744	24.9%

Zorlu Enerji evaluates the performance of its suppliers under ISO 26000 Social Responsibility Standard and IFC Performance Standards and creates action plans for the development of low-performing suppliers. While conducting this performance assessment, topics such as OHS and environment, self-improvement and innovation, material, service quality, timely delivery, price, payment terms, pre- and after-sales service, cost and sustainability are among the main parameters. As a result of meticulous evaluations, suppliers are expected to show due diligence at areas with room for improvement and support is offered for their development.

Suppliers included in the 2022 assessment;



Customer Experience and Call Center

To achieve the goal of sustainable service quality under the principle of unconditional customer satisfaction, the company prioritizes customer satisfaction and provides sustainable and innovative services to its customers and generates effective solutions by evaluating potentially remediable problems with the relevant units. Relations of the company with customers, who have a great impact on the Company's success and are also one of the most important key stakeholders affected by its activities, are regulated by the Customer Relations Manifesto.

Customer satisfaction is of utmost importance for Zorlu Enerji, which also operates in the fields of electricity, charging stations and natural gas. As part of the management of customer perceptions and expectations, customer surveys are conducted, and necessary actions are taken according to the survey results. In addition to the surveys conducted, customers can also submit their complaints and suggestions through the 24/7 open call center, the sales-operations teams' group email addresses, and the company website.

With a 24/7 functioning call center, the company assists its customers at all times by maintaining its customer service approach based on environment, technology, and changing customer needs. Customers can convey their opinions and suggestions through the call center and the communication forms available on the corporate website of the Company and convey complaints and suggestions for areas that have room for improvement through the satisfaction surveys organized every 6 months. In order to keep customer satisfaction at the highest level, customer feedback is evaluated in line with the business strategy and the Company pays attention to constantly improving itself.

Launched in order to increase customer satisfaction in electricity call centers as the first EMRA-approved R&D project, Satisfaction 4.0 renewed Zorlu Enerji's CRM and smart IVR infrastructure and was developed specially for the energy sector. In this context, the satisfaction score collected from customer satisfaction surveys in 2022 was 86%. Under the Satisfaction 4.0 project, which also focuses on digitalization, 35% of incoming calls are resolved using intelligent IVR technologies.

Introduced in 2020, the Customer Experience Project measures the customer satisfaction for all channels of Zorlu Enerji touching the customers through various methods. Customer feedback, the number of which reaches 11,000 per month, is not only monitored instantly, but also leads to the creation of projects that will improve the customer experience by regular reporting. Thanks to the project, customer experiences are designed from scratch.

A call center service was set up in Montenegro, Bulgaria and Italy for the charging stations that have been set up in Montenegro,

Italy and Bulgaria as part of the Electrip Global company. Customer inquiries and complaints are handled by customer representatives who speak English, as well as the local language of the countries where the service is offered.

The KPIs measured in the call center, the satisfaction results, as well as digitalization efforts are discussed below on a brand basis.

In order to achieve the target regarding all yearly quality factors, Eskişehir call center was commissioned in August 2021 and the 2022 targets were achieved at the highest level. In addition, Zorlu Enerji's call center service is located in Eskişehir and Adıyaman and can be available around the clock in the event of a disaster in line with organizational and technological investments.

In 2022, Zorlu Enerji received the following awards due to the work done by all customer contact departments in the field of customer experience and call center management.

- 16th Stevie® Awards' Sales and Customer Service Awards "Contact Center of the Year" gold award,
- Bronze award at the CXA customer experience awards,
- At the 5th A.C.E. Awards Excellent Customer Satisfaction Achievement Awards organized by Şikayetvar, the only platform that measures customer satisfaction in Turkey, the Company won the "Diamond" award, achieving the highest customer satisfaction rate among 18 companies in the energy sector in 2018, 2019 and 2021.





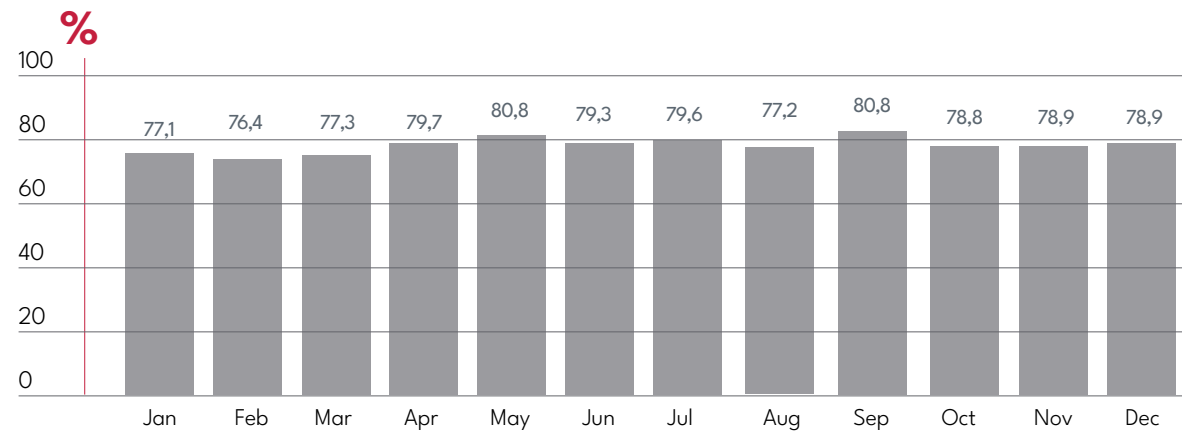
OEDAŞ Customer Experience and Call Center;

OEDAŞ customer experience and call center provides 24/7 service to all people in the region through the 186 line, which electric utility customers in Eskişehir, Uşak, Afyon, Kütahya, and Bilecik provinces call to report power fault messages, planned outages, lighting messages, and meter reading messages. The operation is in accordance with the regulatory rules issued by EMRA.

Increasing customer satisfaction and creating customers loyal to the brand under Zorlu Enerji are among OEDAŞ's most important goals. The field operations discussed here

are the issues of power cut-off/activation, and the resolution of requests from the call center by the field team. Thanks to the project, channel-based satisfaction rates in 2022 can be calculated instantly via dashboards, so customer feedback is analyzed and used as a lever for creating various improvements.

In 2022, a total of 53,560 customer feedback was collected and the average satisfaction level stood at 79% for OEDAŞ. The trend chart for 2022 based on all channels is shown below.



Although most enquiries and complaints submitted to OEDAŞ concern issues that affect customers' daily lives, such as power outages, planned outages and lighting notifications, the satisfaction level is developing at a level that makes a difference in the industry, at 80% per year. An average of 1,691,115 customer interactions occur annually through

the Call Center and the interaction is finalized thanks to the communication policy carried out with a focus on customer satisfaction. In this context, accessibility parameters, which constitute the most essential goal, are closely monitored and we strive to ensure that customers can reach the Company

The target parameters given by EMRA to electricity distribution companies and the data for realizations in 2022 are as follows:

Service Level » refers to the ratio of customers who connect to customer representatives within 20 seconds.

The Target Service level for 2022 is » **%96**, and the level realized for 2022 is

and the level realized for 2022 is » **%97,8**. The target has been achieved at the highest level.

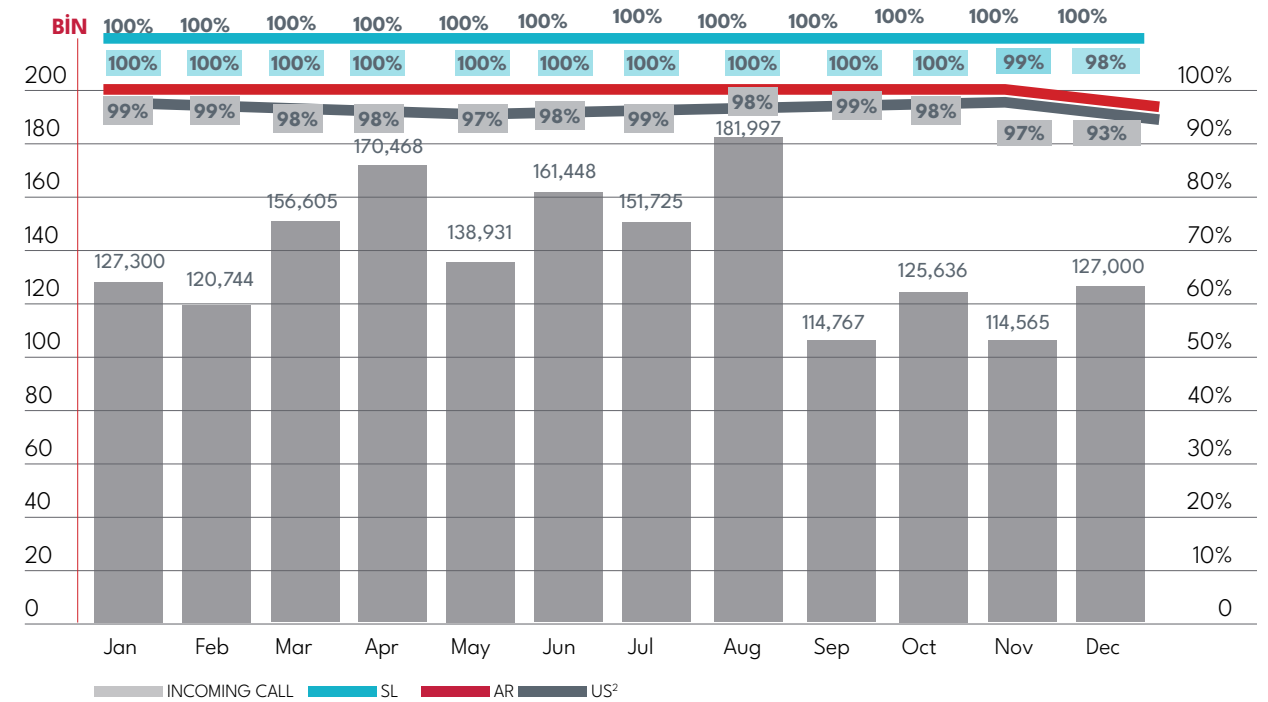
Response Level (AR) » refers to the ratio of customers who can connect to customer representatives.

The Target Response level for 2022 is » **%99** and the level realized for 2022 is » **%99,70**

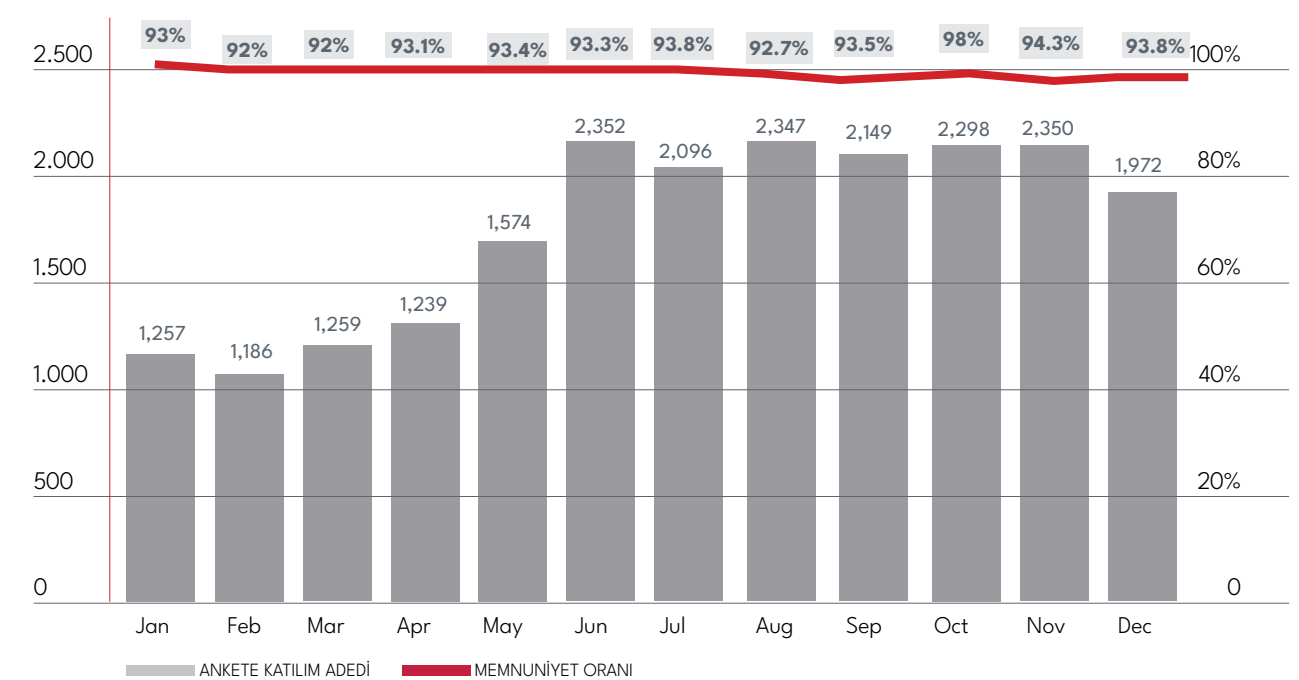
Accessibility Level » represents the percentage of customers who can reach the call center.

The Target Accessibility Level (US2) for 2022 » **100%**, and the level realized for 2022 » **100%**.

The monthly trend of Service Level, Response Rate and Accessibility Level results are shown below.



EMRA Satisfaction Rate » According to the quality factors set by EMRA, EMRA satisfaction target is **%95**. EMRA satisfaction calls are placed automatically by the interactive voice response system between 02:00 p.m. and 04:00 p.m. after talking to the customers.. In 2022, EMRA satisfaction rate was 93.21%.



During January-December 2022, a total of 24,741 customer feedback forms were collected through call center and the satisfaction level stood at 86.2%.



Satisfaction Ratio of OEDAŞ Call Center

January
83% ↓

February
83,8% ↑

March
83,4 ↓

April
86,2% ↑

May
87,3% ↑

June
85,7% ↓

July
87,3% ↑

August
85,2% ↓

September
87,3% ↑

October
87,2% ↓

November
86,9% ↑

December
89,7% ↑

In addition to these goals, effort for the call center and customer experience are listed below.

In a satisfaction survey conducted by "Eltemtek" to measure satisfaction with electric utility services, OEDAŞ ranked third among 21 utilities. The call center continues to focus on customer satisfaction, evaluating calls according to various quality criteria. Accordingly, an annual average of 20,000 calls are evaluated, and the quality rating is 90%.

Digitalization efforts were accelerated for OEDAŞ, and the Company started billing customers by reading out their meters remotely, if the meters could not be read on-site. Considering the year in general, the meters of 77,393 customers were read out using the remote reading method, the bills issued amounted to 34 million TL on average and added value was created.

With the introduction of the OEDAŞ 186 mobile application, 349,086 customers who called the call center by March 2022 were informed via SMS about the mobile application and measures were taken to increase digitalization. Thus, 5% of customer inquiries and complaints were communicated via the mobile application.

OEPSAŞ Customer Experience and Call Center

OEPSAŞ Customer Experience and Call Center provides electricity sales and after-sales services to retail electricity customers in the provinces of Eskişehir, Uşak, Afyon, Kütahya, and Bilecik, as well as to eligible customers throughout Turkey. The Electricity Call Center performs subscription transactions, sales, billing, and fee collection. OEPSAŞ conducts customer experience and call center activities in compliance with EMRA regulations.

With the customer experience project, OEPSAŞ measures satisfaction with fee collections, subscription transactions, and websites. In addition, to measure the overall experience, kiosks are used to measure the satisfaction of customers who visit the customer services. The monthly satisfaction trend for all channels of the OEPSAŞ brand is shown in the graph below. In 2022, a total of 47,704 customer feedback forms were collected for OEPSAŞ while the satisfaction level rose to 92% in 2022 from 90% in 2021.



Satisfaction Ratio OEPSAŞ Customer Experience and Call Center 2022

January
87,3% ↓

February
87,9% ↑

March
90,4% ↑

April
90,3% ↓

Mayıs
89,5% ↓

June
90,7% ↑

July
87,3% ↓

August
%93,6 ↑

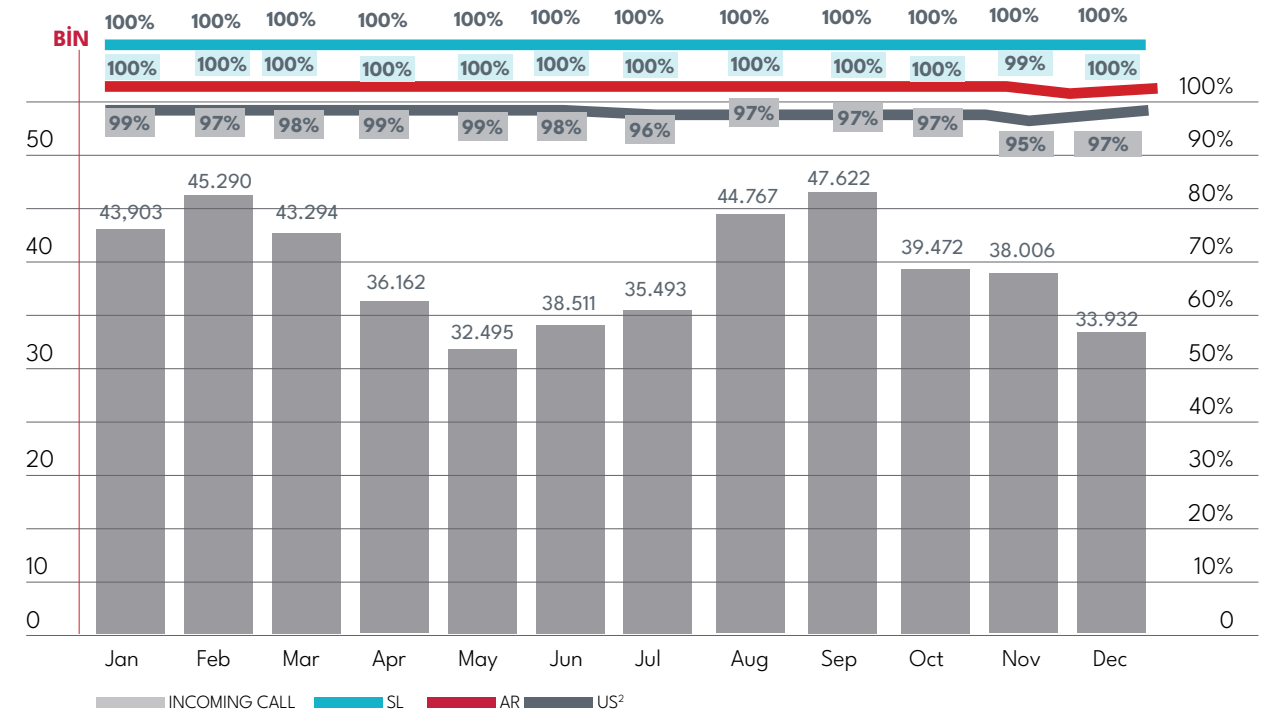
September
93% ↑

October
92,8% ↓

November
93% ↑

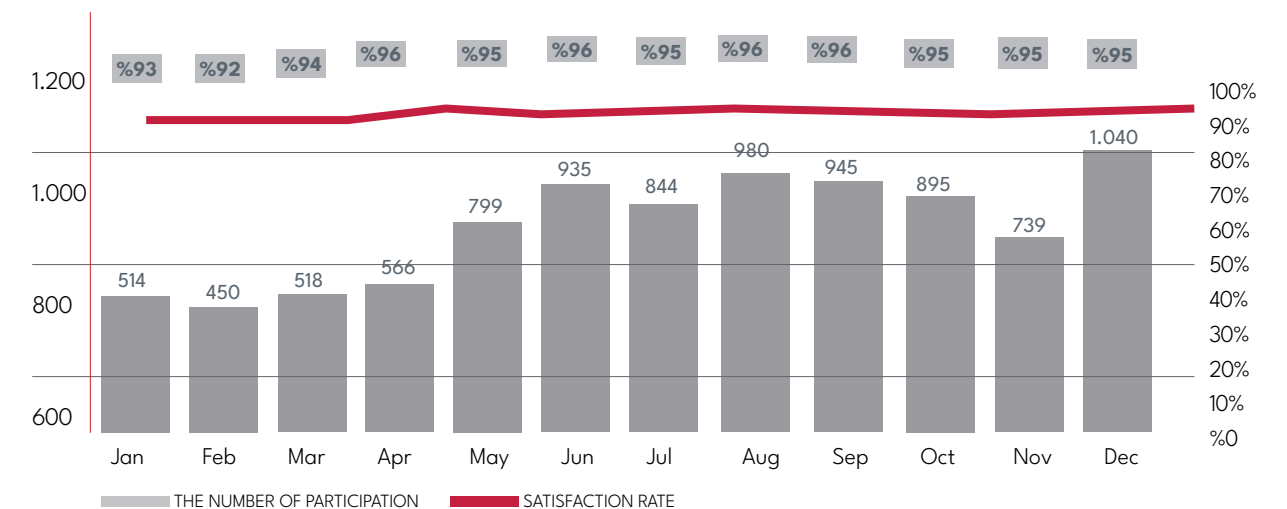
December
91,7% ↓

EMRA Satisfaction Rate



EMRA satisfaction calls are placed automatically by the interactive voice response system after talking to the customers. In 2022, EMRA satisfaction rate was 95%.

OEPSAŞ Customer Satisfaction Survey



The OEPSAŞ call center satisfaction level in the customer satisfaction surveys stood at 92% according to the results obtained from 9,187 annual customer feedback forms, and it is at a level that makes a difference in the sector.

**Customer
Demand Tracking
Rate**January
91%February
90,7% March
92,1% April
91,2% May
93,4% June
92,5% July
91,7% August
93,6% September
92,6% October
92,8% November
90,9% December
93,2%

Through the CRM (Customer Relations Management System) Project launched at the beginning of 2020, all requests and complaints can be managed through a single channel, the entire performance of the call center can be monitored systematically, and all subscription and billing processes can be completed from a single screen. In order to adapt to digitalization, which is among the missions of the company, new processes are added to the CRM project every day. Thanks to the renewed digital systems, the processes of initiating and terminating subscriptions remotely via the call center were put into practice as of June 2021. Thus, all customers calling the call center can complete their subscription transactions digitally in a very short time without the need for a wet signature.

In this context, 13% of subscription transactions in 2022 were handled digitally via the call center. The ratio of subscription and discharge transactions in 2022 that were processed through the call center is shown in the chart below:

In addition, customers who called the call center were informed about the Zorlu Enerji Online Transactions mobile application launched in September 2022 allowing the mobile application to be introduced. Of the customers who downloaded the mobile application, 42% downloaded the mobile application through

**Call Center
Digital
Subscription
Trend
January
9%**February
10% March
11% April
11% May
10% June
12% July
15% August
13% September
13% October
%12 November
16% December
11% **Natural Gas Distribution Call Center**

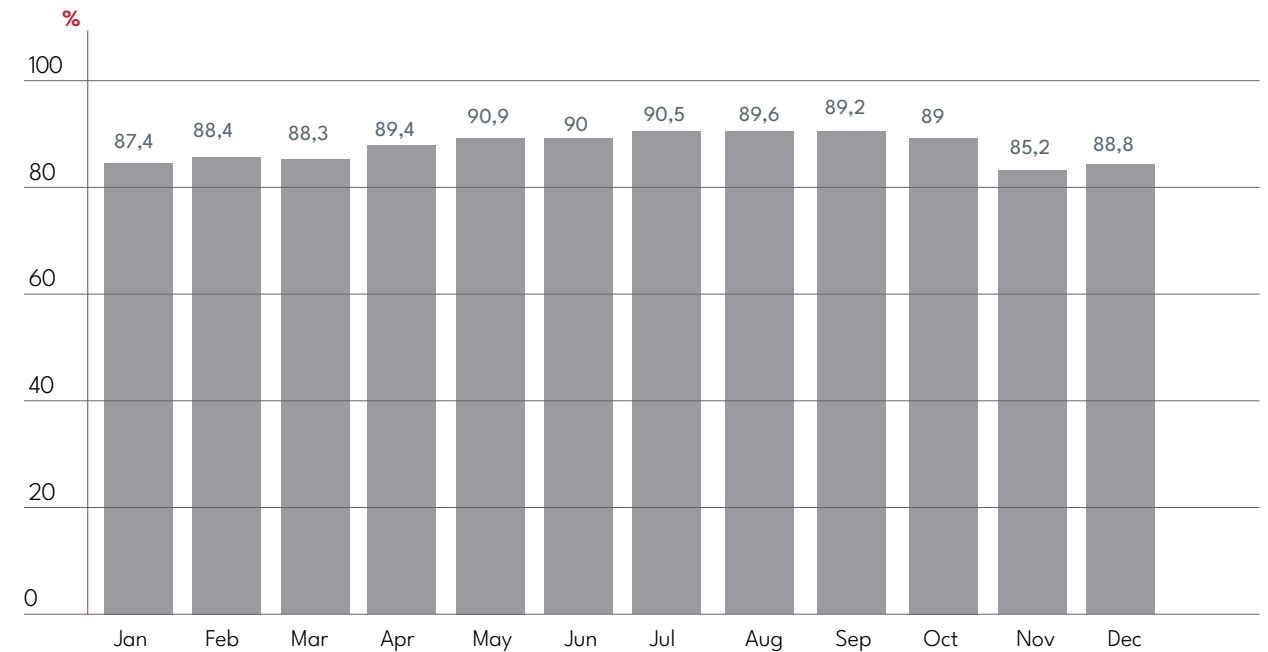
The Natural Gas Distribution Call Center performs after-sale services for gas supply and sales in the provinces around the Thrace and Gaziantep regions. The Gas Call Center responds to reports of gas leaks and similar hazardous work in the field by providing fast and accurate service and monitoring the area in question. It also carries out operations such as subscription transactions, billing and fee collection.

Zorlu Enerji Natural Gas Dağıtım Call Center offers services to both natural gas distribution regions. Equipped with the latest technologies, the Call Center operates on a 24/7 basis, responding to emergency calls received by the 187 hotline as well as to the customer requests received by the 0850 222 9 429 Call Center from the distribution regions of Trakya Doğal Gaz and Gaziantep Doğal Gaz.

The number of calls to the call center for natural gas distribution was 538,873. In 2022, the response rate for call center operations was 96%, while the service level was 79%.

In 2022, calls from our customers who called us on 187 Gas Emergency were answered within 3 seconds.

The call center service satisfaction level was 88.8% in 2022, as indicated by the results of 18,403 pieces of customer feedback annually, and the monthly call center satisfaction trend is shown below.

Call Center Satisfaction Trend

Thus, all customers calling the call center can complete their subscription transactions digitally in a very short time without the need for a wet signature. 11% of customers who subscribed to natural gas in 2022 conducted their subscription transactions through the call center.



ZES Call Center

Customers who call the ZES call center can remotely start, continue, or end the charging process. This way, personal assistance is provided where customers experience difficulties during their journey. This service is not only available at certain times, but around the clock, so that a solution can also be offered immediately in the event of any emergencies.

In addition, potential customers or those who do not yet have a membership account can be informed and their transactions can be initiated both verbally and in writing to obtain a ZES card. Since ZES cards are also delivered through the call center, a smooth process is guaranteed.

For questions about the location of charging stations, a link is sent to the customer's mobile device via the written channel. This way, directions are entered into their vehicles' navigation systems so that they can easily reach charging station locations.

In some cases, customers report that when they drive to the station to charge their vehicle, there are vehicles parked at the station that are not charging. In such cases, the vehicle owner is contacted and informed of the situation based on the information provided by that vehicle to the station.

From time to time, it is reported that customers cannot start

charging because they cannot make a payment. The necessary checks are made at the call centers, and in most of these cases it is determined that the previous payment was not received. In some cases, an exception may be made, and the charging process initiated to prevent inconvenience to customers and to allow them to start charging.

In addition, customers may submit requests to purchase charging stations through the call center, as well as reporting mobile application errors and requests, handled by specific departments. In such cases, the necessary information is conveyed, and customers are assisted in getting a response to their queries.

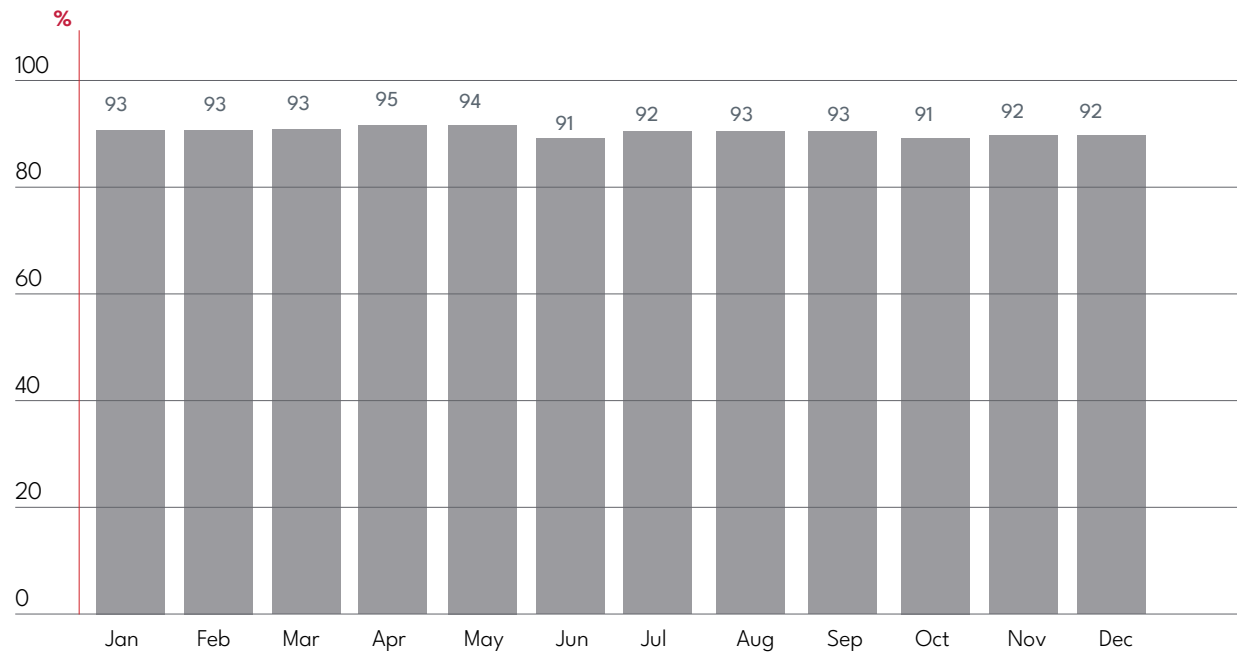
In 2022, the number of calls to the ZES call center was 54,890. The realized data for 2022 is as follows;

Service Level » refers to the ratio of customers who connect to customer representatives within 20 seconds. In this context, the rate in 2022 was 97%.

Response Level » refers to the ratio of customers who can connect to customer representatives. Accordingly, the rate in 2022 was 98.4%.

The satisfaction of our customers calling the call center is measured after the call, and the satisfaction rate fluctuates between 92% and 95% in 2022. The monthly satisfaction trend is shown below.

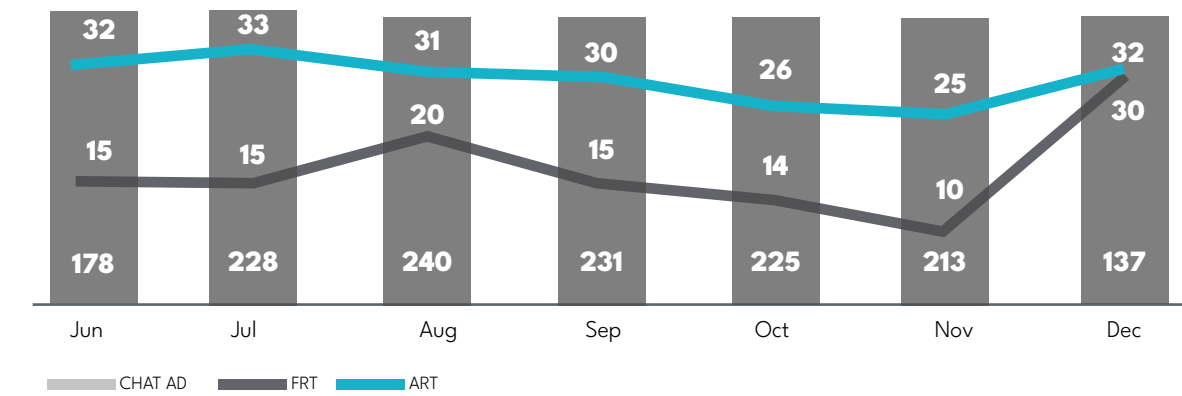
ZES the Monthly Satisfaction Trend



The call center, which provides not only voice but also written services, supports customers through live chat on the website and platforms such as mobile devices via WhatsApp. This written channel, which provides 24/7 support, is available to customers around the clock to resolve any inquiries and complaints immediately and to allow us to take the necessary action. To improve the service quality of the written channel, a survey is sent to customers after the calls to investigate the reasons for any dissatisfaction and take action.

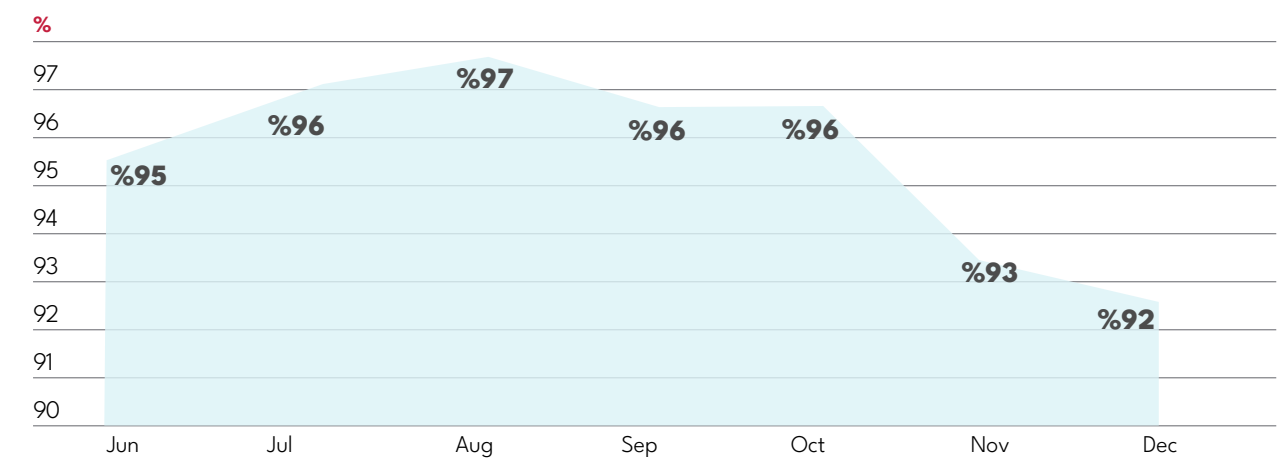
A total of 1,452 customers were served through the written channel, which was launched in May 2022. In this context, the first response time via the written channel was 17.3 seconds and the average response time was 29.5 seconds. The trend graph of KPIs for 2022 is given below.

The Trend Graph of KPIs



A total of 1,500 surveys were sent out this year and 552 people participated. Survey results showed our customer satisfaction rate was 95.75.

Satisfaction Rate



In addition, the call center has taken charge of sending ZES cards to customers, which enable easy transactions at electric vehicle charging stations. Thus, ZES card requests from customers are tracked by the pool and delivered to the courier to reach the customer on the same day. Since each step can be tracked individually, the time from receipt of a customer request to delivery of the card to the customer can be reported. In addition, once a customer request is received, cards are delivered to customers in less than 2 days



Electrip Call Center

Electrip is a carsharing platform founded by Zorlu Enerji. Unlike other carsharing platforms, it has a fleet of all-electric vehicles. It is the first carsharing platform for electric vehicles in Turkey and, as a contact center, provides solutions such as instant remote vehicle start, opening and closing the doors, unlocking the engine, and starting the charging of the vehicle

during the vehicle rental and subsequent processes.

In 2022, the number of calls to the electrip call center was 668. The data for 2022 is as follows.

.

Service Level » refers to the ratio of customers who connect to customer representatives within 20 seconds. In this context, a rate of **96,3%** was achieved in 2022.

Response Level » refers to the ratio of customers who can connect to customer representatives. In this context, the rate in 2022 was **98,7%**

The satisfaction of our customers after calling the call center is measured. In 2022, the satisfaction rate was **80,7%**.

Number of customers in 2022 (number)

	Zorlu Elektrik*	OEDAŞ	OEPSAŞ
Residential	102	1,617,865	1,606,565
Commercial	287	310,132	302,322
Agricultural Irrigation	1	34,744	34,525
Lighting	0	12,235	316
Industrial	26	3,626	3,397

*Active meters in portfolio as of 31/12/2022 are included. In 2022, 12,900 active meters were served on a meter basis, but due to market conditions, the number of customers in the portfolio as of December 31, 2022 is shown in the table.

Zorlu Enerji resolves the complaints from customers by directing them to the teams through the 187 Hotline, which it has established to ensure the sustainable and safe supply of natural gas, which is a clean, environmentally friendly, and affordable fuel.

A total of 3,531 excavation control calls and 24,118 emergency calls were received in Gaziantep Region and the average period of access to priority notifications stood at 12.2 minutes. There are 13 Emergency 187 teams, 7 Maintenance and Repair teams and 1 Excavation Control teams throughout the region.

A total of 8,621 excavation control calls and 17,789 emergency calls were received in Thrace Region and the average period of access to priority notifications stood at 9 minutes. There are 23 Emergency teams, 9 Maintenance and Repair teams and 4 Excavation Control teams throughout the region.

Gazdaş Gaziantep Doğal Gaz Dağıtım A.Ş.- Number of Customers*

Subscription Group	2021	2022
Residential	351,572	391,034
Commercial and Public O.	6,988	8,320
Industrial	36	35
Usage for Elec. Prod.	2	3
OIZ	1	2
TOTAL	358,599	399,394

Trakya Bölgesi Doğal Gaz Dağıtım A.Ş.- Number of Customers*

Subscription Group	2021	2022
Residential	376,606	424,213
Commercial and Public O.	12,847	14,456
Industrial	321	350
Usage for Elec. Prod.	30	28
OIZ	-	-
TOTAL	389,804	439,047

*Subscribers are expressed in meter-based

STATEMENT OF COMPLIANCE WITH SUSTAINABILITY PRINCIPLES

Zorlu Enerji leads the industry with its sustainable solutions developed through stakeholder, community and planet-focused investments and R&D efforts based on smart technologies. As part of its sustainability policy, Zorlu Enerji strives to create value in every region in which it operates. Thanks to the efficiency at identifying material issues (materiality analysis) in parallel with this policy, the Company looked at prominent topics with a holistic approach and identified the areas of value to focus on along its long-term value creation journey. Zorlu Enerji strives to bring the economic, social and environmental progress it has achieved to society together with all of its stakeholders, by involving them in focus areas listed under the headings of Economic Performance, Environmental Performance, Social Performance and Innovation.

Zorlu Enerji works hard to adhere to these principles and is a leader in the industry and among its stakeholders. On the other hand, Zorlu Enerji continuously works on some principles that have not been complied with or not fully complied with and strives to make progress in areas open to development. As required in the energy industry, Zorlu Enerji conducts studies on strategic issues such as energy conversion, energy efficiency, and emission reduction, and communicates its progress to the public through an integrated annual report and CDP statements.

Zorlu Enerji disclosed whether its B.22 operations or activities are included in any carbon pricing system (Emission Trading System, Cap & Trade or Carbon Tax). The Organization supports ministries working on the creation of a carbon market while supporting the process of creating a national carbon market in Turkey. However, there is currently no mandatory carbon pricing system in the regions where Zorlu Enerji operates.

Again, details were released to the public when the company implements a carbon pricing system within B.24 Partnership. Zorlu Enerji is working on implementing an internal carbon pricing system. Zorlu Enerji is aware that by implementing an internal carbon price, it will be more resilient to national and international regulations and legislative changes, as it is also a part of the energy sector. Accordingly, in the coming periods, Zorlu Enerji plans to share its internal carbon price with the public and aims to integrate the study especially into the key areas of the company.

The Sustainability Principles Compliance Report, prepared in accordance with the formats set forth in the CMB Resolution dated 23.06.2022 numbered 34/977 and approved by the Company's Board of Directors, is included in the Appendix of the Integrated Annual Report (starting on page 161), and the relevant documents are also available on the Company's page on the Public Disclosure Platform.



SUSTAINABILITY PRINCIPLES COMPLIANCE STATEMENT

If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
A. General Principles							
A1. Strategy, Policy and Goals							
A1.1	Material environmental, social and corporate governance (ESG) issues, risks and opportunities were identified by the board of directors of the partnership	✓				Thanks to the results of the activities to identify material issues in 2021 in parallel with Zorlu Holding's Smart Life 2030 vision, material issues were evaluated with a holistic approach and the areas of value to focus on in Zorlu Enerji's long-term value creation journey were identified. Prioritizing environmental and social sensitivity in line with the roadmap developed under Zorlu Holding in 2020, Zorlu Enerji also updated its Sustainability Strategy accordingly and reviewed its strengths, weaknesses, risks and opportunities with the help of a SWOT analysis. In light of the results obtained from these activities, an inclusive Sustainability Policy was drawn up. Detailed information on Zorlu Enerji's Sustainability Strategy, Sustainability Policy and Sustainability Goals is available in the relevant sections of the Company's corporate website: https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-policy-and-our-commitments https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/our-sustainability-strategy	
	ESG policies (e.g. environmental policy, energy policy, human rights policy, labor policy, etc.) were established by the board of directors of the partnership and disclosed to the public.	✓				ESG policies were established in accordance with Zorlu Enerji's sustainability strategy. These policies can be viewed in the relevant sections of the Company's website. https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-policy-and-our-commitments - https://www.zorluenerji.com.tr/en/ca-reer/human-r-policy	
A1.2	Short- and long-term goals set under the ESG policy are disclosed to the public.	✓				Zorlu Enerji has targets based on Zorlu's own sustainability strategy and Zorlu Holding's Smart Life 2030 strategy, which are communicated to the public on the company's website. https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/our-sustainability-strategy https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-performance	

If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
A2. Implementation/Monitoring							
A2.1	The committees and/or units responsible for implementing the ESG policy, as well as the highest level of responsibility in the partnership in relation to ESG issues and their roles, were identified and disclosed to the public.	✓				Units represented on the Company's Sustainability Board ("Board") play an important role in monitoring and developing the targets and actions in the sustainability strategy, and in identifying and managing material sustainability issues. The Board is also responsible for developing tools and communication channels that will enable employees to contribute to sustainability activities and identifying and assessing risks and opportunities. Zorlu Enerji Sustainability Board convenes periodically under the presidency of the CEO of Zorlu Enerji Group, with the participation of relevant units, and reports its activities to the Corporate Governance Committee affiliated to the Board of Directors. More detailed information is available in the relevant section of Zorlu Enerji's corporate website:	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/our-sustainability-strategy
	Activities carried out by the relevant committee and/or unit under the policy were reported to the Board of Directors at least once a year.	✓				The Sustainability Board reported directly to the Board of Directors regarding the ESG activities carried out in 2022.	See Corporate Governance
A2.2	Implementation and action plans were prepared and publicly disclosed in accordance with the ESG goals.	✓				Implementation and action plans were prepared in line with the ESG goals and tasks were delegated. Implemented practices are disclosed in the relevant sections of the integrated annual report.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports
A2.3	ESG Key Performance Indicators (KPIs) and the level of achievement of these indicators on an annual basis were disclosed to the public.	✓				Implementation and action plans were prepared in line with the ESG goals and tasks were delegated. Implemented practices are disclosed in the relevant sections of the integrated annual report.	See Sustainability Goals
A2.4	Activities to improve the sustainability performance of business processes or products and services were disclosed to the public.	✓				Progress towards ESG targets is published in the integrated annual report for 2022 by year.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports





If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
A3. Reporting							
A3.1	Information on the partnership's sustainability performance, targets and measures is provided in the annual reports in a comprehensible, accurate and sufficient manner.	✓				Zorlu Enerji's Environmental, Social and Governance (ESG) performance was disclosed to the public through sustainability reports in biennial periods until the end of 2019, and the related reporting has been performed annually since 2020. The Company sets its ESG Key Performance Indicators (KPI) and discloses them comparatively on a yearly basis.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports
A3.2	The Partnership has publicly disclosed information on which of the United Nations (UN) 2030 Sustainable Development Goals its activities are related to.	✓				Sustainability reports provide information on which of the United Nations (UN) 2030 Sustainable Development Goals the Company's activities are related to	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports
A3.3	Litigation filed and/or concluded in connection with ESG issues that are relevant to ESG policy and/or will significantly impact activities were disclosed to the public.	✓				Zorlu Enerji follows the UN's Women's Empowerment Principles (WEPs) indicators and makes a statement regarding the lawsuits filed there against and/or concluded on environmental, social and corporate governance issues.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports
A4. Verification							
A4.1	The partnership's ESG key performance measurements have been verified by an independent third party and made available to the public	✓				The information contained in the 2021 Sustainability Report has also been independently verified with 2022 studies (materiality analysis and integrated annual report) subject to 2AA1000 and ISEA3000 audit procedures..	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/awards
B. Environmental Principles							
B1	The partnership disclosed its policies and practices, action plans, environmental management systems (known as the ISO 14001 standard) and programs for environmental management.	✓				Under its Environmental Policy, Zorlu Enerji selects appropriate materials and technologies in order to reduce negative environmental impacts in all its operations and pays attention to the efficient use of energy and resources. Waste and emissions are monitored regularly and assessments for reduction are carried out, and the environmental impacts of activities are shared with all stakeholders in a transparent manner. Zorlu Enerji has an Integrated Management System that fulfills the ISO 14001 Environmental Management System standard.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/quality-management-systems

If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
B2	Restrictions on the scope of the report, the reporting period, the reporting date, the reporting deadline and the reporting conditions for environmental reports intended to provide information on environmental management were disclosed to the public.					The data regarding the Sustainability Principles is disclosed in the sustainability reports published by Zorlu Enerji before 2022 and in the integrated annual report for 2022. Detailed information about the report's boundaries, scope, reporting period, reporting date, data collection process and reporting conditions are available in the relevant section of the integrated annual report.	See About the report
B3	AGiven in A2.1. (The committees and/or units responsible for implementing the ESG policy, as well as the highest level of responsibility in the partnership in relation to ESG issues and their roles, were identified and disclosed to the public.)	✓				For information on our governance structure in relation to environmental performance, please refer to the "Zorlu Enerji Sustainability Strategy, Governance Structure and Sustainability Objectives" and "Natural Capital" sections of the Integrated Annual Report.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/our-sustainability-strategy
B4	Environmental targets incorporated into reward criteria under stakeholder-based performance incentive schemes (such as board members, managers and employees) were disclosed to the public.	✓				Performance indicators for energy and emission reduction are also included in the performance targets of the Sector President (CEO) of Zorlu Enerji Group and the Occupational Health, Safety and Environment Manager. Details of the related incentives are available in Zorlu Enerji's CDP Climate Change reports	https://www.zorluenerji.com.tr/files/uploads/surdurulebilirlik/emisyon/ZORLU_ENERJİ%CC%87_ELEK-TRİ%CC%87K_U%CC%88RETİ%C-C%87M_A.S%CC%A7.-.CDP_Climate_Change_Questionnaire_2022_-_20220728173142.pdf
B5	The company disclosed how environmental problems are integrated into its business goals and strategies.	✓				All environmental impacts of Zorlu Enerji are managed within the scope of the Integrated Management System and assessed in targets and strategies in accordance with the Environmental Policy. Thanks to the results of the activities to identify material issues in 2021, material topics were evaluated with a holistic approach and a sustainability strategy was developed in parallel with Zorlu Holding Smart Life 2030 vision. In line with its Sustainability Strategy, Zorlu Enerji has set the sustainability goals it will focus on along its long-term value creation journey. Detailed information is available in "Zorlu Enerji Sustainability Strategy, Governance Structure and Sustainability Goals" and "Natural Capital" sections of the integrated annual report.	See Natural Capital



If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
B6	Given in A2.4. (Activities to improve the sustainability performance of business processes or products and services were disclosed to the public.)					Regarding our activities to improve the environmental performance of our business processes, products and services The Sustainability Reports published by Zorlu Enerji before 2022 and the Integrated Annual Report for 2022 include information under the sections "Natural Capital and Intellectual Capital - Innovative Solutions and Environmentally and Socially Sustainable Products and Services".	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports
B7	It was disclosed to the public how environmental issues are managed and integrated into business objectives and strategies, including suppliers and customers along the partnership's value chain, including the operational process.	✓				Zorlu Enerji plays an important role in reducing the impacts of the climate change and environmental impacts throughout its value chain by supplying sustainable energy to all its customers via the electricity it generates from renewable energy sources. In addition to its electricity generation, sales and distribution, natural gas distribution and trade operations, the Company also offers sustainable solutions in different segments of the value chain through Electrip, the electric vehicle sharing platform, ZES, which provides charging services for electric vehicle users all around Turkey, and through provision of all kinds of consultancy services for the sale, production and installation of photovoltaic (PV) panels under ZES brand for solar power generation in Turkey and abroad. Sustainability criteria is also taken into account in supplier evaluation and selection processes, and the company acts in line with the "Sustainable Supply Chain Policy". In this context, the company pays attention to working with suppliers that manage environmental and social impacts and have existing sustainability practices that regard the rights of their employees and the society. Detailed information on sustainability in the value chain is available in the relevant sections of Zorlu Enerji's integrated annual report and on its website.	https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/taahhut%20ve%20politikalar/EN/Sustainable%20Supply%20Chain%20Policy.pdf https://zes.net/en_gunes-panelleri-satis-ve-kurulumu-en bkz. Sorumlu Tedarik Yaklaşımı,
B8	It was disclosed to the public whether the relevant institutions and non-governmental organizations are involved in the policy-making processes and whether there is ongoing cooperation with these institutions and organizations.	✓				Zorlu Enerji is an active member of many associations, institutions and working groups operating in different fields such as TUSIAD Energy Working Group, TUSIAD Environment and Climate Change Working Group, the Foreign Economic Relations Board (DEİK), the Turkish Electricity Industry Association (TESAB), the Geothermal Energy Association (JED), the Turkish Cogeneration Association, Solarbaba Platform, the Turkish Wind Energy Association (TWEA) and the Business Council for Sustainable Development Turkey (BCSDT) and is involved in policy-making processes on environmental issues. The full list of the company's memberships can be found in the integrated annual report.	See Social Capital

If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
B9	With regard to the environmental indicators (greenhouse gas emissions (Scope-1 (direct), Scope-2 (energy indirect), Scope-3 (other indirect), air quality, energy management, water and wastewater management, waste management, impact on biodiversity), information on environmental impacts was made available to the public in a regularly comparable manner.	✓				All environmental indicators of Zorlu Enerji until 2022 are reported in sustainability reports in a way that is comparable to previous years. All environmental indicators for 2022 can be reviewed in the "Natural Capital" section of the integrated annual report. All performance indicators related to the climate change and water security are also publicly reported on the CDP platform on an annual basis.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/message-from-ceo https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports
B10	The company disclosed the standard, protocol, methodology, and the base year details used to collect and calculate its data.	✓				Full details on environmental indicators can be found in the Integrated Annual Report and CDP reports. Greenhouse gas emissions are measured according to the ISO 14064 Standard, and water footprint is measured and undergoes external audit according to the ISO 14046 Standard.	https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/emisyon/ZORLU_ENERJİ%CC%87_ELEKTRİ%CC%87K_U%CC%88RETİ%C-C%87M_A.S%CC%A7.-CDP_Cli-mate_Change_Questionnaire_2022-20220728173142.pdf https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/emisyon/ZORLU_ENERJİ%CC%87_ELEKTRİ%CC%87K_U%CC%88RETİ%C-C%87M_A.S%CC%A7.-CDP_Wa-ter_Security_Questionnaire_2022-20220728153025.pdf
B11	The increase or decrease in environmental indicators in the reporting year compared to previous years was disclosed to the public.	✓				All environmental indicators of Zorlu Enerji until 2022 are reported in sustainability reports in a way that is comparable to previous years. All environmental indicators for 2022 can be reviewed in the "Natural Capital" section of the integrated annual report and the relevant CDP reporting.	https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/emisyon/ZORLU_ENERJİ%CC%87_ELEKTRİ%CC%87K_U%CC%88RETİ%C-C%87M_A.S%CC%A7.-CDP_Cli-mate_Change_Questionnaire_2022-20220728173142.pdf
B12	All environmental indicators of Zorlu Enerji until 2022 are reported in sustainability reports in a way that is comparable to previous years. All environmental indicators for 2022 can be reviewed in the "Natural Capital" section of the integrated annual report and the relevant CDP reporting.	✓				Zorlu Enerji has direct climate change mitigation and specific emission reduction targets. In addition, there are plans to update the targets under the Science Based Targets Initiative in the next two years. Details of Zorlu Enerji's current targets and progress towards them can be found in Zorlu Enerji's Sustainability and CDP Climate Change Reports.	https://www.zorluenerji.com.tr/tr/surdurulebilirlik/surdurulebilirlik-yonetimi/surdurulebilirlik-raporlari https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/emisyon/ZORLU_ENERJİ%CC%87_ELEKTRİ%CC%87K_U%CC%88RETİ%C-C%87M_A.S%CC%A7.-CDP_Cli-mate_Change_Questionnaire_2022-20220728173142.pdf



If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
B13	A strategy for combating the climate crisis was established and planned actions were disclosed to the public.	✓				Zorlu Enerji's initiatives such as emission reduction, renewable energy generation, sustainability in the value chain and increasing the use of renewable energy resources and its strategy to combat the climate crisis are transparently shared with all stakeholders under the section "Manufactured Capital" of the integrated annual report and the CDP Climate Change Report.	https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/emisyon/ZORLU_ENERJİ%CC%87_ELEK-TRİ%CC%87K_U%CC%88RETİ%C-C%87M_A.S%CC%A7.-CDP_Climate_Change_Questionnaire_2022-20220728173142.pdf
B14	Programs or procedures were established and disclosed to the public to prevent or minimize potential negative impacts of products and/or services on the environment.	✓				Zorlu Enerji plays an important role in reducing the impacts of the climate change and environmental impacts throughout its value chain by supplying sustainable energy to its customers via the electricity it generates from renewables. Zorlu Enerji's wind power plants develop emission reduction units according to the United Nations Framework Convention on Climate Change Clean Development Mechanism (UNFCCC CDM) methodology. The voluntary emission reduction (VER) from renewable energy sources in the 2022 reporting period took place with Gold Standard certificates.	https://www.zorluenerji.com.tr/tr/surdurulebilirlik/surdurulebilirlik-yonetimi/surdurulebilirlik-raporlari
	Measures were taken to reduce GHG emissions from third parties (e.g. suppliers, subcontractors, traders, etc.) and these measures were disclosed to the public.	✓				In addition to its electricity generation, sales and distribution, natural gas distribution and trade activities, Zorlu Enerji also offers sustainable solutions in different segments of the value chain through Electrip, the electric vehicle sharing platform, ZES, which provides charging services for electric vehicle users all around Turkey, and Zorlu Solar, which offers all kinds of consultancy services for the sale, export and installation of photovoltaic (PV) panels under ZES brand for solar power generation in Turkey and abroad and helps its customers reduce their greenhouse gas emissions.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports
B15	The environmental benefits/gains and cost savings resulting from initiatives and projects to reduce environmental impacts were disclosed to the public.	✓				Zorlu Enerji's activities to mitigate its environmental impacts are explained in detail in the integrated annual report and CDP Climate Change reports.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/emisyon/ZORLU_ENERJİ%CC%87_ELEK-TRİ%CC%87K_U%CC%88RETİ%C-C%87M_A.S%CC%A7.-CDP_Climate_Change_Questionnaire_2022-20220728173142.pdf

If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
B16	Energy consumption data (natural gas, diesel, petrol, LPG, coal, electricity, heating, cooling, etc.) was disclosed to the public as Scope-1 and Scope-2.	✓				All details regarding the performance on environmental indicators are explained in detail in the integrated annual report and CDP reports.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/emisyon/ZORLU_ENERJİ%CC%87_ELEK-TRİ%CC%87K_U%CC%88RETİ%C-C%87M_A.S%CC%A7.-CDP_Climate_Change_Questionnaire_2022-20220728173142.pdf
B17	The company provided information to the public on the electricity, heat, steam and cooling generated during the reporting year.	✓				All details regarding the performance on environmental indicators are explained in detail in the integrated annual report and CDP reports.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/emisyon/ZORLU_ENERJİ%CC%87_ELEK-TRİ%CC%87K_U%CC%88RETİ%C-C%87M_A.S%CC%A7.-CDP_Climate_Change_Questionnaire_2022-20220728173142.pdf
B18	The company conducted studies on increasing the use of renewable energy and the transition to zero- or low-carbon electricity, and disclosed these studies.	✓				Zorlu Enerji plays an important role in reducing the impacts of the climate change and environmental impacts throughout its value chain by supplying sustainable energy to its customers via the electricity it generates from renewables. In addition to its electricity generation, sales and distribution, natural gas distribution and trade activities, the Company also offers sustainable solutions in different segments of the value chain through Electrip, the electric vehicle sharing platform, ZES, which provides charging services for electric vehicle users all around Turkey, and Zorlu Solar, which offers all kinds of consultancy services for the sale, export and installation of photovoltaic (PV) panels under ZES brand for solar power generation in Turkey and abroad and helps its customers reduce their greenhouse gas emissions.	See Natural Capital
B19	The company disclosed its renewable energy production and usage data	✓				Data on the generation and use of renewable energy is explained in detail in the integrated annual report and CDP Climate Change reports on annual basis.	See Natural Capital





If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
B20	Energy efficiency projects were implemented and the amount of energy consumption and emission reductions achieved through energy efficiency projects were made public.	✓				As a company operating in the energy sector, safe and sustainable energy supply and generation from renewables is among extremely important material issues for both the Company's stakeholders and Zorlu Enerji. Aware of the importance of sustainable and uninterrupted energy for all sectors, the Company attaches importance to conserving energy resources, increasing efficiency in all its activities, and raising awareness about responsible energy consumption.	See Natural Capital
B21	Water consumption, the amount of water withdrawn from underground or above ground, if any, recycled and discharged, sources and procedures were publicly disclosed.	✓				The amounts, sources and procedures of water drawn, used, recycled and discharged from underground or above ground during Zorlu Enerji's operations are shared annually in the integrated annual report and CDP Water Security reports (Zorlu Enerji 2022 Integrated Annual Report, Natural Capital). Zorlu Enerji measures and reports its water footprint in accordance with the ISO 14046 standard.	https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/emisyon/ZORLU_ENERJİ%CC%87_ELEKT-Rİ%CC%87K_U%CC%88RETİ%C-C%87M_A.S%CC%A7.-_CDP_Wa-ter_Security_Questionnai-re_2022_-_20220728153025.pdf
B22	The company disclosed whether its operations or activities are included in any carbon pricing system (Emission Trading System, Cap & Trade or Carbon Tax).		✓			Zorlu Enerji's operations are not included in any carbon pricing system.	
B23	The company disclosed information on the carbon credits accumulated or purchased during the reporting period.	✓				The VER Gold Standard (Voluntary Emission Reduction) certificates received in the 2022 reporting period for the electricity generated by Zorlu Enerji from renewable energy sources are stated in the report in metric tons of CO ₂ e.	See Financial Capital

If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
B24	The company disclosed the carbon pricing details, if applicable within the partnership.			✓		Zorlu Enerji is preparing to apply internal carbon pricing for Scope 1 emissions. In this respect, infrastructure activities are going on.	
B25	The platforms on which the partnership publishes its environmental information were made public.	✓				Zorlu Enerji voluntarily discloses its environmental information through sustainability and CDP reports on public platforms. Zorlu Enerji is also a member of the United Nations Global Compact (UNGC) and publishes its UNGC Progress Report annually.	See Social Capital
C. Social Principles							
C1. Human Rights and Employee Rights							
C1.1	A corporate policy on human rights and workers' rights was established covering the Universal Declaration of Human Rights, ILO Conventions ratified by Turkey and other relevant legislation, the persons responsible for implementing the policy were identified, and the policy and the persons responsible were made known to the public.	✓				Zorlu Enerji complies with the Universal Declaration of Human Rights, the International Labour Organization (ILO) Conventions ratified by Turkey, and the legal framework and legislation regulating human rights and working life in Turkey, and published the Corporate Reorganization & Human Rights Charter, which commits to full compliance, on its website in 2021.	https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/p3.pdf https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/Anteti%20Ka%C4%9F%C4%B1t_Corporate%20Restructuring%20and%20Human%20Rights%20Commitment.pdf



If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
C1.2	Taking into account the impact on the supply and value chain, fair working conditions, improvement of labor standards, employment of women and inclusion issues (e.g. non-discrimination based on gender, race, religion, language, marital status, ethnic identity, sexual orientation, gender identity, family responsibilities, trade union activities, political opinion, disability, social and cultural differences, etc.) were included in the policy on workers' rights.	✓				Zorlu Enerji advocates for equal opportunities in every field. Accordingly, equal opportunities are created for all employees, regardless of gender, religion, language and race. In addition, the human rights of employees are observed in all activities, particularly preventing discrimination, not employing child labor, and preventing forced labor in line with the International Labour Organization (ILO), the Turkish Labor Law No. 4857 and all relevant legislation. Zorlu Enerji attaches importance to these principles throughout its entire value chain and follows a responsible supply chain approach. Zorlu Enerji's publicly available Sustainable Supply Chain Policy is available on the corporate website. Zorlu Enerji pays special attention to gender equality and supports the empowerment of women in all areas of life. Launched within the Company in 2018, Eşit Bi' Hayat Program focuses on gender equality in discourse, working environment and collaborations. The Company supports and develops projects that encourage women's contribution to the energy sector, where the number of male employees is predominant. Results of the projects launched are regularly followed up in terms of figures (ratio of women; recruitment, promotion, succession, etc.) through human resources data. Detailed information on Zorlu Enerji's Human Resources Management is available in the relevant section of the corporate website.	https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/taahhut%20ve%20politikalar/EN/Sustainable%20Supply%20Chain%20Policy.pdf https://www.zorluenerji.com.tr/en/career/career-opportunities - https://www.zorlu.com.tr/assets/files/pdf/zorlu-holding-etik-ilkeler-en.pdf - https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/Antetli%20Ka%C4%9F%C4%B1t_Corporate%20Restructuring%20and%20Human%20Rights%20Commitment.pdf

If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
C1.3	The company disclosed the measures taken along the value chain for the protection of groups sensitive to particular economic, environmental, social factors (low-income groups, women, etc.) or minority rights/equality of opportunity.	✓				Human rights are respected and incorporated into contracts throughout the entire value chain (employees, suppliers and contractors) so that international commitments and best practices, lender expectations and national regulatory requirements are fulfilled. Human rights principles are incorporated into risk analysis in all operations and investments. All necessary internal and external audits, social impact assessments and training courses required as per compliance with the legislation and international commitments are conducted along the entire value chain and published in sustainability reports, integrated annual reports and on public platforms such as the United National Global Compact (UNGC) statement. The Company undertakes to cooperate for taking measures across the entire value chain to protect vulnerable groups and ensure equal opportunities. Accordingly, business partners are expected to comply with Zorlu Holding Supply Principles drawn up in light of Zorlu Enerji Responsible Supply Chain Policy and all applicable national and international laws and regulations especially including the conventions of the International Labour Organization (ILO) and the United Nations (UN), encompassing the procurement processes and operations of all Zorlu Group companies and containing the main code of conduct expected from suppliers.	https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/taahhut%20ve%20politikalar/EN/Sustainable%20Supply%20Chain%20Policy.pdf
C1.4	The company disclosed developments regarding preventive and corrective practices for discrimination, inequality, human rights violations, forced labor, and child labor.	✓				Zorlu Enerji observes the human rights of employees in all activities, particularly not employing child labor, and preventing forced labor in line with the International Labour Organization (ILO), the Turkish Labor Law No. 4857.	See Social Capital



If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
C1.5	Investment in employees (training, development measures), compensation, fringe benefits, the right to unionize, work-life balance solutions and talent management issues were included in the policy on workers' rights.	✓				An approach based on "valuing people" has been adopted in the Human Resources Management, which the Company shares transparently with all its stakeholders through its corporate website. Within the framework of the policy implemented at all companies of Zorlu Enerji, practices are carried out to recruit qualified employees and to ensure and increase the commitment of employees who adopt a high-performance culture and are open to development. For this reason, all candidates are treated equally in the recruitment process, and the recruitment process is completed if they have the appropriate competencies for the position. At Zorlu Enerji, there is no discrimination between male and female employees in terms of wages and fringe benefits within the scope of gender equality. As long as they are employed, training courses are offered to support the professional, technical and personal development of employees, and competency and performance reviews are carried out at least once a year. Review results form the basis for employees' wages, career planning and development opportunities. In line with the goal of training managers from within the company, a pool of manager candidates is created by identifying succession for managers, and action planning is performed to prepare such candidates for the relevant positions.	See Social Capital
		✓				Being aware of the fact that success of the Company is only possible with the satisfaction and loyalty of its employees, the Company focuses on employee satisfaction. Organized by an independent company every two years, the "Employee Engagement and Satisfaction Survey" receives and evaluates the opinions of employees on various areas from the working environment to corporate management, performance assessment system, internal communication and wages/fringe benefits. In addition, employee opinions and complaints are collected and evaluated within the scope of SA8000 process. Performance data on all human resources practices of Zorlu Enerji are published annually in the integrated annual report.	See Social Capital

If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
	The activities carried out during the reporting period to ensure employee satisfaction were made public.	✓				Being aware of the fact that success of the Company is only possible with the satisfaction and loyalty of its employees, the Company focuses on employee satisfaction. Organized by an independent company every two years, the "Employee Engagement and Satisfaction Survey" receives and evaluates the opinions of employees on various areas from the working environment to corporate management, performance assessment system, internal communication and wages/fringe benefits. Performance data on all human resources practices of Zorlu Enerji are published annually in the integrated annual report.r.	See Social Capital
C1.6	The company established occupational health and safety policies and announced them to the public.	✓				Zorlu Enerji Occupational Health and Safety (OHS) Policy is published on the Company's corporate website.	https://www.zorluenerji.com.tr/en/occupational-health-and-safety https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/quality-management-systems
	It disclosed the accident statistics and the precautions taken to prevent work accidents and to protect health.	✓				All practices regarding OHS performance and accident statistics are published in the integrated annual report on an annual basis.	See Social Capital
C1.7	It created and publicly disclosed personal data protection and data security policies.	✓				Zorlu Holding and Zorlu Enerji's Privacy Policy is published on the Company's corporate website.	https://www.zorlu.com.tr/en/default https://www.zorluenerji.com.tr/en/privacy-statement
C1.8	Ethics policy was established and disclosed to the public	✓				As an affiliate of Zorlu Holding, Zorlu Enerji implements Zorlu Holding Ethical Principles. Zorlu Holding Ethical Principles are available on the website of Zorlu Enerji.	https://www.zorlu.com.tr/assets/files/pdf/zorlu-holding-etik-ilkeler-en.pdf
C1.9	The company discloses its work within the scope of social investment, social responsibility, financial inclusion and access to finance.	✓				Zorlu Enerji's sustainability reports published before 2022 and the integrated annual report for 2022 include information under the section "Social Capital".	See Social Capital
C1.10	The company organized information meetings and training programs for employees on ESG policies and practices.	✓				The company organizes information meetings and training programs for employees on ESG policies and practices. Zorlu Enerji organizes regular training courses for its employees as part of its ESG policies. In addition, workshops are held at specified periods in order to identify material sustainability issues.	See Social Capital



If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
C2	Stakeholders, international Standards and Initiatives						
C2.1	The company developed a customer satisfaction policy regarding the management and resolution of customer complaints and announced it to the public.	✓				Customer satisfaction is of utmost importance for Zorlu Enerji, which also operates in the fields of electricity and natural gas distribution and retail sales. Zorlu Enerji was rewarded with the "Diamond" Award in 2018, 2019 and 2021 by achieving the highest customer satisfaction score among 18 companies in the energy sector at the 5th A.C.E. Awards Excellent Customer Satisfaction Achievement Awards organized by Şikayetvar, the only platform measuring customer satisfaction in Turkey. Zorlu Enerji Customer Relations Manifesto is available on the Company's corporate website. You can access customer satisfaction performances in the "Call Center" section of the integrated annual report.	https://www.zorluenerji.com.tr/en/corpo/our-policy
C2.2	Information on communication with stakeholders (which stakeholders, topic and frequency) was made available to the public.	✓				The methodology of communication with stakeholders is accessible on the relevant page of the integrated annual report.	See Social Capital
C2.3	International reporting standards for reporting were explained.	✓				Zorlu Enerji's sustainability and integrated annual reports drawn up in accordance with the GRI Sustainability Reporting Standards are available on the Company's corporate website. International guidelines and standards are considered while reporting on sustainability and ESG.	https://www.zorluenerji.com.tr/en/sustainability/sustainability-management/sustainability-reports
C2.4	Principles adopted in relation to sustainability, international organizations, committees and principles of which the Company is a signatory or member were disclosed to the public.	✓				Zorlu Enerji is a signatory to the United Nations Global Compact (UNGC) and publishes UNGC statements annually. The Company also reports to the CDP Climate Change and Water Security Programs on an annual basis.	See Combat the Climate Crisis

If compliance with the Principles is rated as "Yes" or "Partial", the report should include information/link to the information made available to the public. Explanations of compliance with the Principles should be included in the "Explanation" column. The "Explanation" column should indicate the extent to which the required information is presented on a consolidated or individual basis.		COMPANY COMPLIANCE STATUS				EXPLANATION	REPORT /LINK ON PUBLICLY DISCLOSED INFORMATION
		YES	NO	PARTIAL	NOT APPLICABLE		
C2.5	Developments were made and studies carried out in order to be included in the sustainability indices of Borsa Istanbul and/or international index providers.	✓				Zorlu Enerji was included in the BIST Sustainability Index voluntarily for the first time on November 1, 2016 and continued to be included in the index for the 6th time in 2022. In 2023, it is planned to be listed in the Dow Jones SI.	See ESG Index Performance
D1	It considered the opinions of its stakeholders when determining measures and strategies in the field of sustainability.	✓				Zorlu Enerji acts by putting sustainability at the center of its business model. The Company implements all of its investments by using renewables to the maximum extent in light of a sustainability approach based on energy supply security, competition and environmental protection, and contributes to our country's transition process to a low-carbon and self-sufficient economy. Zorlu Enerji Environmental and Social Governance Principles Commitment is disclosed to the public on the Company's corporate website:	https://www.zorluenerji.com.tr/fileuploads/surdurulebilirlik/taahhut%20ve%20politikalar/TR/C%CC%A7evresel%20ve%20Sosyal%20Yo%CC%88netis%C-C%A7im%20l%CC%87lkeleri%20Taahhu%CC%88tnamesi%2C%20Tu%C-C%88rk%C%CC%A7e.pdf
D2	The company worked to raise awareness on the issue of sustainability and its importance through social responsibility projects, awareness activities and training.	✓				Under the social responsibility projects launched especially in the regions where it operates in line with the needs of local community, Zorlu Enerji attaches more importance and gives more support to social development each and every year and continues to add value to human life. Multi-faceted solutions developed by Zorlu Enerji for the needs of the community include social investments intended for different needs, especially social services such as improving common areas, responding to environmental and social needs, conserving natural life, reducing inequalities, technology and scholarship support. Aiming to develop innovative solutions to social, cultural, economic and environmental problems together and to accelerate social innovation and development, Zorlu Enerji supports "İmece Platform", a social innovation initiative that aims to create a great solution ecosystem in cooperation with the society guided by Zorlu Holding's Smart Life 2030 vision. Under Egit Bi' Hayat program, the Company contributes to gender equality both within the company and in the regions where it operates. It carries out projects on equal opportunities for women and cooperates with schools to raise awareness for children about gender equality. As of 2020, Zorlu Enerji Volunteers continue to perform activities based on social volunteerism, under the umbrella of Zorlu Holding Kuvımlar, through the projects that encourage development in different fields such as education, health, sports and the environment since 2013.	See Social Capital





Corporate Governance

PURSuing TECHNOLOGY WITH CONTINUOUS IMPROVEMENT

METAL

Resilience, Agility, Leadership, Justice

Zorlu Enerji contributes to the development of its industry with exemplary practices that lead its sector, within the framework of its flexible management approach, which is agile, resilient and keeps pace with global transformation trends.

While Zorlu Enerji conducts all its processes in accordance with ethical principles and legal standards, with the accountability principle, it exhibits an approach that is fair and equitable among its employees and stakeholders with whom it interacts



ADDITIONAL DISCLOSURES REQUIRED BY THE LEGISLATION

Additional Disclosures made within the scope of the Regulation on the Determination of the Minimum Content of Annual Report of Companies numbered 28395 and dated August 28, 2012

GENERAL INFORMATION

Reporting Period:	1 Ocak – 31 Aralık 2022
Legal Name:	Zorlu Enerji Elektrik Üretim AŞ
Trade Registry Information:	Bursa Ticaret Sicil Müdürlüğü, No: 33550
Registered Capital Ceiling:	6.000.000.000 TL
Paid-in/Issued Capital:	2.500.000.000 TL
Number of Employees:	2.645
Corporate Website:	www.zorluenerji.com.tr
Contact	Istanbul Head Office Levent 199 Büyükdere Caddesi No: 199 34394 Şişli - İSTANBUL Tel: (0212) 456 23 00 Bursa (Central) Organize Sanayi Bölgesi, Pembe Cadde, No: 13 16159 - BURSA Tel: (0224) 242 56 16

SHAREHOLDING STRUCTURE AND CAPITAL DISTRIBUTION

As of December 31, 2022, Zorlu Enerji's paid-in capital is TL 2.5 billion. The Company's shareholding structure and capital distribution are as follows:

SHAREHOLDERS	NOMINAL VALUE OF SHARES (TL THOUSAND)	SHARE IN CAPITAL (%)
Zorlu Holding AŞ	1,152,143.32	46.09
Korteks Mensucat Sanayi ve Ticaret AŞ	438,686.44	17.55
Free Float (*)	899,170.24	35.97
Other	10,000.00	0.4
TOTAL	2,500,000.00	100,00

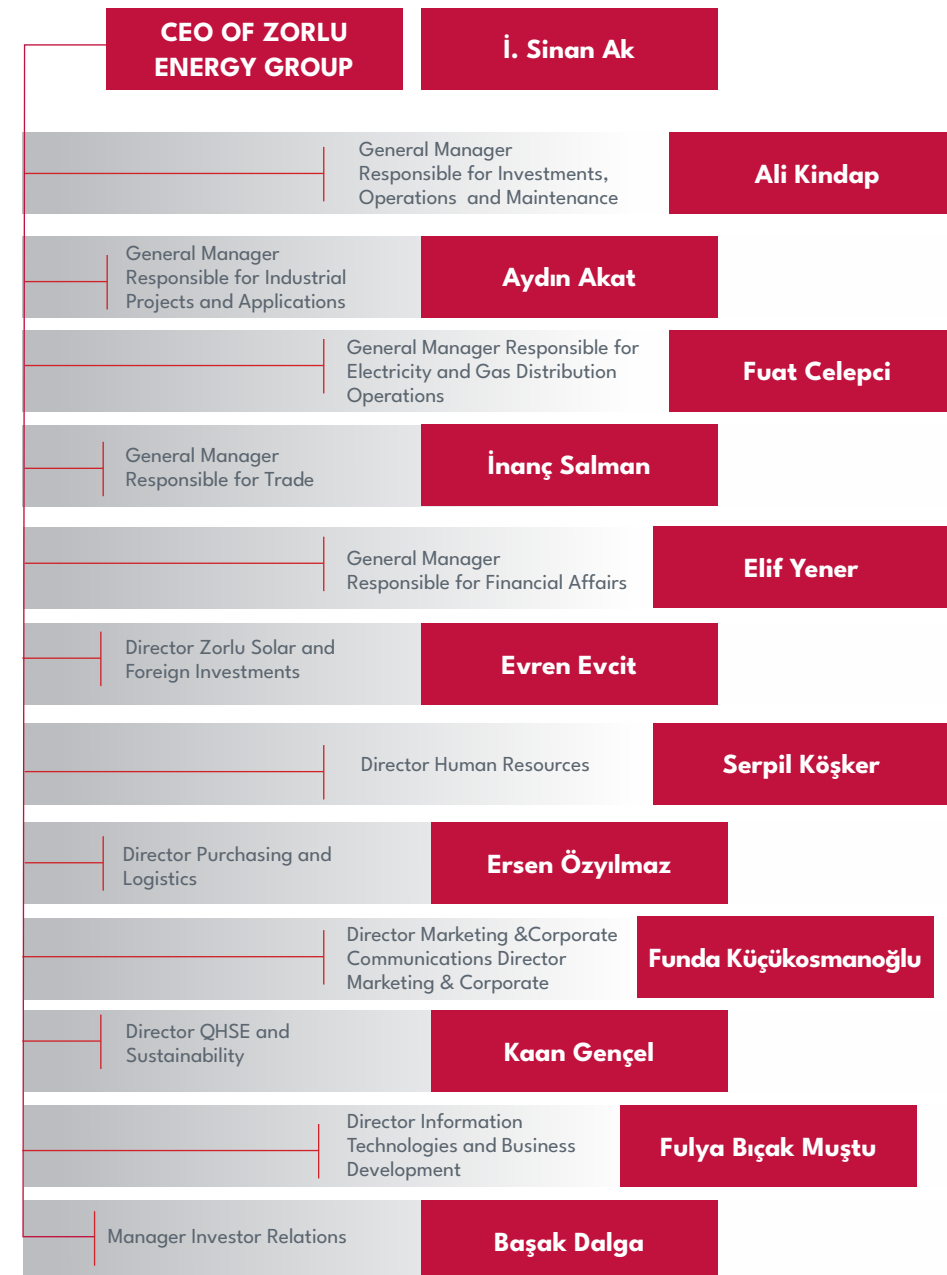
(*) Shares in free float with a nominal value of TL 204,486 thousand and representing 8.18% of total share capital are held by Zorlu Holding AŞ.

As a result of the share sales of Zorlu Holding AŞ to institutional investors through special orders in Borsa Istanbul in 2022, its share in the Company's capital decreased from 61.29% to 54.27%.

PRIVILEGED SHARES AND VOTING RIGHTS OF SHARES

Pursuant to the Article 7 of the Company's Articles of Association, Group A shareholders have a privileged right in the election of the members of the Board of Directors. Accordingly, the Board of Directors consists of at least five (5) and at most eleven (11) members, all of whom will be elected by the General Assembly from among the Group A shareholders or among the candidates nominated by these shareholders.

ORGANIZATIONAL CHART





THE BOARD OF DIRECTORS

The Board members, who have been elected at the 2020 Annual General Meeting held on April 27, 2021 and have served during the reporting period and their tenure are presented in the table below.

MEMBER	DUTY	TERM OF OFFICE		STATUS		MEMBER STATUS
		Beginning Date	Ending Date	Other Positions Held Within Zorlu Group	Positions Held Outside The Zorlu Group	
Zeki Zorlu	Chairman	April 27, 2021	Until 2023 Annual General Meeting	Chairman and Vice Chairman at Zorlu Group Companies	-	Non-executive
Bekir Ağırdır	Vice Chairman	April 27, 2021	Until 2023 Annual General Meeting	Vice Chairman at Vestel Elektronik San. ve Tic. AŞ, Board Member at Vestel Beyaz Eşya San. ve Tic. AŞ	Board Member at KONDA Araştırma ve Danışmanlık Limited Şirketi	Independent
Ahmet Nazif Zorlu	Board Member	April 27, 2021	Until 2023 Annual General Meeting	Chairman and Vice Chairman at Zorlu Group Companies	-	Non-executive
Olgun Zorlu	Board Member	April 27, 2021	Until 2023 Annual General Meeting	Board Member at Zorlu Group Companies	-	Non-executive
Selen Zorlu Melik	Board Member	April 27, 2021	Until 2023 Annual General Meeting	Board Member at Zorlu Group Companies	-	Non-executive
Mehmet Emre Zorlu	Board Member	April 27, 2021	Until 2023 Annual General Meeting	Board Member at Zorlu Group Companies	-	Non-executive
Bekir Cem Köksal	Board Member	April 27, 2021	Until 2023 Annual General Meeting	Head of the Financial Affairs Group at Zorlu Holding AŞ, Member of the Executive Committee at Vestel Group of Companies	-	Executive
Ayşegül İldeniz	Board Member	April 27, 2021	Until 2023 Annual General Meeting	Board Member at Vestel Beyaz Eşya San. ve Tic. AŞ and Vestel Elektronik San. ve Tic. AŞ	COO at Silver Spring Networks, Board Member at Doğan Şirketler Grubu Holding AŞ and Pegasus Hava Taşımacılığı AŞ	Independent
Cem Mengi	Board Member	April 27, 2021	Until 2023 Annual General Meeting		Founding Chairman of CM Capital Management Company	Independent

Changes Made to the Board of Directors during the Year

There has been no change in the Board of Directors elected at the Annual General Meeting during the year.

Duties and Authorities of the Members of the Board of Directors

The Chairman and the members of the Board of Directors have the duties and authorities set forth in the relevant articles of the Turkish Commercial Code and the Company's Articles of Association. Sözleşmesi'nde belirtilen görev ve yetkileri haizdir.

Number of Board Meetings Held During the Year and the Attendance Rate of Board Members

The Board of Directors convened 11 times in 2022. The meetings were held simultaneously in physical and virtual environments. Majority of the members of the Board of Directors regularly attended the meetings to a large extent, and the average attendance rate of the Board members was 76%.

SENIOR MANAGEMENT (*)

NAME AND SURNAME	POSITION
İ. Sinan Ak	CEO
Fuat Celepci	General Manager Responsible for Electricity and Gas Distribution Operations
Aydın Akat	General Manager Responsible for Industrial Projects and Applications
Ali Kındap	General Manager Responsible for Investments, Operations and Maintenance
Elif Yener	General Manager of Financial Affairs
İnanç Salman	General Manager Responsible for Trade
Serpil Köşker	Director of Human Resources
Evren Evcit	Director of Zorlu Solar and Foreign Investments
Ersen Mustafa Özyılmaz	Director of Purchasing and Logistics
Funda Küçükosmanoğlu	Director of Marketing and Corporate Communications
Kaan Gençel	Director of Occupational Health, Safety & Environment and Sustainability
Fulya Bıçak Muştu	Director of Information Technologies and Business Development
Başak Dalga	Investor Relations Manager

(*) Only managers directly reporting to the CEO are included in the table.

**Changes Made to the Senior Management during the Year**

Corporate Communications Group Manager Funda Küçükomanoğlu was appointed as the Director of Marketing and Corporate Communications in July 2022.

Occupational Health, Safety and Environment Manager Kaan Gençel was appointed as the Director of Occupational Health, Safety & Environment and Sustainability in July 2022.

Information on the Number of Employees

As of 31.12.2022, the Company has 2,736 employees.

Information on the Transactions of Board Members Conducted with the Company on Behalf of Themselves or of a Third Party and their Activities within the Scope of Non-Competition

At the Annual General Meeting held on April 28, 2022, the members of the Board of Directors were granted permission to

transact within the framework of the Articles 395 and 396 of the Turkish Commercial Code for the year 2022. Members of the Company's Board of Directors did not take any action in this regard during the year.

Personnel and Labour Movements, Collective Bargaining Practices and Rights and Benefits Provided to Employees

Osmangazi Elektrik Dağıtım AŞ, the indirectly wholly-owned subsidiary of the Company, has 721 employees working under the Collective Bargaining Agreement, and they benefit from union rights as a union member. All employee rights and benefits are protected and enshrined under the Labor Law No. 4857.

Amendments to the Articles of Association

No changes were made to the Company's Articles of Association during the reporting period.

COMPENSATION AND MONETARY BENEFITS PROVIDED TO BOARD MEMBERS AND SENIOR EXECUTIVES

At the Company's 2021 Annual General Meeting held on 28 April 2022, decision was taken to pay a net monthly remuneration of TL 30,000 to each independent Board member and not to make any payment to other Board members for the year 2022.

In the twelve-month period ending on 31.12.2022, the total compensation and monetary benefits provided to the Chairman, the members of the Board of Directors and senior executives, including allowances, amounted to TL 47,933 ths. in total.

Throughout the reporting period, no debt was given to any member of the Board of Directors or to the senior management, no loan was extended under the name of personal loans directly or through a third party, or no guarantee such as surety was granted in their favor.

THE ACTIVITIES OF THE COMPANY AND IMPORTANT DEVELOPMENTS REGARDING THE ACTIVITIES**Investments and Investment Incentives**

Total capital expenditures amounted to TL 2,412 million in 2022.

Zorlu Enerji benefits from some incentives for its investment expenditures undertaken within the scope of the Investment Incentive Certificates obtained from the General Directorate of Incentive Practices and Foreign Capital of the Ministry of Industry and Technology of the Republic of Turkey. As of December 31, 2022, the amount of investment allowances accrued and carried over under these incentive certificates is TL 619,755 thousand.

Zorlu Doğal Elektrik Üretim AŞ received the Investment Incentive Certificate no. C-121896 and dated December 23, 2021 (This certificate was issued to replace the incentive certificate no. B-121896 and dated July 26, 2017) for its Kızıldere 3 GPP investment realized on the provincial border between Denizli and Aydın. The relevant incentive certificate grants 100% customs duty exemption and VAT exemption in the procurement of new machinery and equipment, and stamp duty exemption for the contracts to be concluded within the scope of the incentive certificate pursuant to the provision of the Article 29 of the Law on the Improvement of the Investment Environment No. 6728.

Trakya Bölgesi Doğal Gaz Dağıtım AŞ received the Investment Incentive Certificate no. 507209 and dated December 16, 2019 for its natural gas distribution investment in Thrace Region. The relevant incentive certificate grants VAT exemption in the procurement of new machinery and equipment, and stamp duty exemption for the contracts to be concluded within the scope of the incentive certificate pursuant to the provision of the Article 29 of the Law on the Improvement of the Investment Environment No. 29.

Gazdaş Gaziantep Doğal Gaz Dağıtım AŞ received the Investment Incentive Certificate no. 507211 and dated December 16, 2019 for its natural gas distribution investment in Gaziantep and Kilis provinces. The relevant incentive certificate grants VAT exemption in the procurement of new machinery and equipment, and stamp duty exemption for the contracts to be concluded within the scope of the incentive certificate pursuant to the provision of the Article 29 of the Law on the Improvement of the Investment Environment No. 29.

OEDAŞ received the Investment Incentive Certificate no. D-137424 and dated November 10, 2022 (This certificate was issued to replace the incentive certificate no. C-137424 and dated September 14, 2022) for its prospective grid and facility investments in the electricity distribution region comprising Eskişehir, Bilecik, Kütahya, Afyon and Uşak provinces. The relevant incentive certificate grants 100% customs duty exemption and VAT exemption in the procurement of new machinery and equipment, and stamp duty exemption for the contracts to be concluded within the scope of the incentive certificate pursuant to the provision of the Article 29 of the Law on the Improvement of the Investment Environment No. 6728.

ZES Dijital Ticaret AŞ received the Investment Incentive Certificate dated April 28, 2022 and no. 536058 for its electric vehicle charging station installation investments in various domestic provinces and districts. The incentive certificate provides VAT exemption for the purchase of new machinery and equipment and stamp duty exemption for contracts to be made within the scope of incentive certificate pursuant to the provision of Article 29 of the Law No. 6728 on the Improvement of the Investment Environment.

The sections following subparagraph (b) of Provisional Article 69 of the Income Tax Law were amended by the Article 5 of the Law No. 6009 to apply the investment incentive exemption amounts that taxpayer could not benefit from in previous years to their 2010 earnings, effective as of August 1, 2010. The subsequent section provides that the amount to be deducted as an investment allowance exemption cannot exceed 25% of the relevant income. According to these provisions, the tax advantage from which the Company can benefit regarding the amount of deferred investment allowance has been extended indefinitely. However, the Constitutional Court of the Republic of Turkey has canceled the rule to limit the investment allowance exemption to 25% of corporate income, and a stay order has been issued because the Court's decision has not yet been published. Currently, the Company can benefit from 100% of the investment allowance exemption in case it records a corporate income.



Information on Direct and Indirect Subsidiaries and Ownership Interests

As of December 31, 2022, the details of the subsidiaries and affiliates of the Company are as follows:

Direct Ownership Interest Of Zorlu Enerji (%)

Subsidiaries	December 31, 2022	December 31, 2021
Zorlu Yenilenebilir Enerji AŞ ⁽¹⁾	100,00	100,00
Zorlu Enerji Pakistan Ltd.	99,99	99,99
Zorlu Wind Pakistan (Private) Ltd. ⁽²⁾	99,70	99,70
Zorlu Solar Enerji Tedarik ve Ticaret AŞ	100,00	100,00
Zorlu Elektrik Enerjisi İthalat İhracat ve Toptan Ticaret AŞ ⁽³⁾	100,00	100,00
Zorlu Osmangazi Enerji Sanayi ve Ticaret AŞ ⁽⁴⁾	100,00	100,00
Zorlu Enerji İsrail Ltd.	100,00	100,00
Zorlu Enerji Dağıtım AŞ ⁽⁵⁾	100,00	100,00
Zador Israel Limited ⁽⁶⁾	100,00	-
Zorlu Enerji Asia Holding Ltd. (Tasfiye halinde) ⁽⁷⁾	100,00	100,00
ZJ Strong Energy for Renewable Energy Ltd. Co.	75,00	75,00
Electrip Araç Kiralama Ticaret AŞ	100,00	100,00
ZES Dijital Ticaret AŞ ⁽⁸⁾	-	100,00
ZES N.V. ⁽⁹⁾	-	100,00
Electrip Global B.V. ⁽⁹⁾	100,00	-
Nemrut Jeotermal Elektrik Üretimi AŞ ⁽¹⁰⁾	100,00	75,00
Rarik Turkison Enerji AŞ ⁽¹⁰⁾	100,00	-
Alkan Jeotermal Enerji Elektrik Üretimi AŞ ⁽¹¹⁾	100,00	-

- (1) Zorlu Yenilenebilir Enerji AŞ was established on August 27, 2020 as a wholly-owned subsidiary of Zorlu Enerji, and, on the same date, took over all the shares of Zorlu Doğal Elektrik Üretimi AŞ ("Zorlu Doğal"), Zorlu Jeotermal Enerji Elektrik Üretimi AŞ ("Zorlu Jeotermal") and Rotor Elektrik Üretim AŞ ("Rotor") from Zorlu Enerji, which owned all the shares of these companies, and became the sole owner of Zorlu Doğal, Zorlu Jeotermal and Rotor.
- (2) The shares of Zorlu Solar Pakistan Limited, Zorlu O&M Pakistan Limited, Zorlu Industrial Pakistan (Private) Limited, Zorlu Sun Power Pakistan (Private) Limited and Zorlu Renewable Pakistan (Private) Limited were transferred to Zorlu Wind Pakistan (Private) Limited.
- (3) Pursuant to the Board resolution dated December 29, 2021, Zorlu Enerji transferred all of its shares (100%) in Zorlu Trade Elektrik Toptan Satış AŞ to Zorlu Elektrik. Zorlu Trade merged with Zorlu Elektrik as of February 28, 2022.(
- 4) Zorlu Osmangazi Enerji Sanayi ve Ticaret AŞ holds 100% of the shares of Osmangazi Elektrik Dağıtım AŞ and Osmangazi Elektrik Satış Perakende AŞ.
- (5) Zorlu Enerji Dağıtım owns 90% of the shares of Trakya Bölgesi Doğal Gaz Dağıtım AŞ and Gazdaş Gaziantep Doğal Gaz Dağıtım AŞ while it owns 100% of the shares of Zorlu Doğal Gaz Tedarik Ticaret AŞ.
- (6) Zorlu Enerji participated in "Zador Israel Ltd.", which was founded with an initial capital of NIS 1 in Israel on February 16, 2022, as the sole founding partner.
- (7) Pursuant to the material event disclosure dated May 20, 2021, decision was taken to liquidate Zorlu Enerji Asia Holding Limited company, the shares of which are fully owned by Zorlu Enerji and established in Dubai International Finance Center, due to a change in business plan. The liquidation procedures were initiated within the framework of the laws and rules of the country to which the company is subject.
- (8) Pursuant to the material event disclosure dated December 9, 2022, all the shares representing the entire share capital of ZES Dijital Ticaret AŞ were transferred to Electrip Global B.V., a wholly-owned subsidiary of Zorlu Enerji.
- (9) The title of ZES N.V. based in the Netherlands was changed to Electrip Global B.V.
- (10) Pursuant to the material event disclosure dated August 11, 2022, all the shares of Rarik-Turkison Enerji AŞ, which owns 25% shares of Nemrut, were acquired by Zorlu Enerji on August 11, 2022, in order to establish a full ownership structure in Nemrut.
- (11) Pursuant to the material event disclosure dated October 4, 2022, it has been decided to establish a company with the title of "Alkan Jeotermal Enerji Elektrik Üretimi Anonim Şirketi" under full ownership of Zorlu Enerji.

Direct Ownership Interest Zorlu Enerji (%)

Affiliates	December 31, 2022	December 31, 2021
Dorad Energy Ltd.	25,00	25,00
Ezotech Electric Ltd. ⁽¹⁾	42,15	42,15
Solad Energy Ltd.	42,15	42,15
Adnit Real Estate Ltd.	42,15	42,15

(1) Ezotech Electric Ltd. owns 100% of the shares of Ashdod Energy Ltd. and Ramat Negev Energy Ltd.

Information on the Company's Acquisition of its Own Shares

The Company did not acquire its own shares in 2022.

Information on Special Audit and Public Audit

Within the framework of the regulations of the Capital Markets Board regarding financial reporting and independent audit, the Company's semi-annual and yearly financial statements are audited by an independent audit firm. KPMG Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik AŞ was selected as the independent auditor for auditing the Company's accounts and transactions for the fiscal year 2022 in accordance with the Capital Market Law, the Turkish Commercial Code and the related legislation in the Annual General Meeting held on 28 April 2022. There were no special or public audits carried out throughout the accounting period.

Information on Legal Action Taken against the Company which could Affect the Company's Financial Status and Activities and the Possible Consequences of such Legal Action

No material lawsuit, which could affect the financial status and activities of the Company, was filed against the Company in 2022.

Administrative or Judicial Sanctions Imposed against the Company or the Board Members Due to Practices Violating the Legislation

There is no administrative or judicial sanction applied against the Company or the members of the Board of Directors.

General Meetings of Shareholders

The decisions taken in the Company's Annual General Meeting held on 28 April 2022 were implemented.

Donations and Social Responsibility Projects

In 2022, the total sum of donations and aids made in line with the Company's Donation and Charity Policy amounted to TL 4,313,912.

Conclusion Section of the Affiliation Report Prepared Pursuant to the Article 199 of the Turkish Commercial Code

In accordance with the provisions of the Turkish Commercial Code, Zorlu Enerji was an affiliated company of Zorlu Holding AŞ during the fiscal year 2022.

Pursuant to the Article 199 of the Turkish Commercial Code, Zorlu Enerji's Board of Directors issued the following statement in its affiliation report, which was prepared regarding the Company's relationship with the controlling company or an affiliated company of the controlling company:

"Our Company's legal actions taken with the controlling company, or the companies affiliated to the controlling company for the benefit of the controlling company, or a company affiliated to it under the direction of the controlling company and any and all measures taken or avoided in favor of the controlling company, or a company affiliated to it in the 2022 operating year were evaluated based on the circumstances and conditions known to us. As a result of this evaluation, we declare that in all transactions in the 2022 operating year, an appropriate remuneration was received by our Company in accordance with the circumstances and conditions known to us, and that there was no measure taken or avoided that could harm the Company."

Information on Transactions

No transaction was taken within this scope.



FINANCIAL POSITION

Determination of the Adequacy of the Company's Capital and Assessment of the Board of Directors

The Company has neither suffered capital impairment nor is insolvent according to the calculation performed by taking into account the ratios specified in the Article 376 of the Turkish Commercial Code.

Information on the Capital Market Instruments Issued

The information on the debt instruments issued by Zorlu Enerji is provided in the tables below.

Corporate Bonds & Commercial Papers

ISIN Code	Issuance Date	Term (Days)	Maturity Date	Nominal Value (TL)	Type of Interest	Interest Rate (%)	Coupon Payments	Principal Payment
TRSZORN22313	11.11.2021	448	02.02.2023	243.320.000	Floating rate	TLREF* + 4.50%, min. 24.00%	Quarterly	At maturity
TRSZORN12314	12.01.2022	366	13.01.2023	54.300.000	Floating rate	31.5% for the first coupon payment, the greater of 31.5% and 2-year benchmark bond yield + 5.0% for other coupon payments	Monthly	At maturity
TRSZORN32312	24.02.2022	385	16.03.2023	99.750.000	Floating rate	31.0% for the first coupon payment, the greater of 31.0% and 2-year benchmark bond yield + 4.5% for other coupon payments	Monthly	At maturity
TRSZORN52310	7.04.2022	406	18.05.2023	42.810.000	Floating rate	31.0% for the first coupon payment, the greater of 31.0% and 2-year benchmark bond yield + 4.5% for other coupon payments	Quarterly	At maturity
TRSZORN52328	27.04.2022	386	18.05.2023	38.460.000	Floating rate	31.0% for the first coupon payment, the greater of 31.0% and 2-year benchmark bond yield + 4.5% for other coupon payments	Quarterly	At maturity
TRSZORN62327	18.05.2022	393	15.06.2023	40.200.000	Floating rate	34.0% for the first coupon payment, the greater of 34.0% and 2-year benchmark bond yield + 4.5% for other coupon payments	Monthly	At maturity
TRSZORN72318	23.06.2022	399	27.07.2023	72.790.000	Floating rate	40.0% for the first coupon payment, the greater of 40.0% and 2-year benchmark bond yield + 4.5% for other coupon payments Getiriden Yüksek Olanı	Monthly	At maturity
TRFZORN12329	11.08.2022	155	13.01.2023	62.440.000	Discounted fixed rate	35,00%	-	At maturity
TRFZORN12337	2.09.2022	133	13.01.2023	80.060.000	Discounted fixed rate	33,50%	-	At maturity
TRSZORN92324	2.09.2022	390	27.09.2023	40.230.000	Floating rate	38.5% for the first coupon payment, the greater of 38.5% and 2-year benchmark bond yield + 4.5% for other coupon payments	Quarterly	At maturity
TRFZORN32319	29.09.2022	168	16.03.2023	62.010.000	Fixed rate	35,00%	-	At maturity
TRSZORNE2312	29.09.2022	392	26.10.2023	51.030.000	Floating rate	39.0% for the first coupon payment, the greater of 39.0% and 2-year benchmark bond yield + 4.5% for other coupon payments	Quarterly	At maturity

ISIN Code	Issuance Date	Term (Days)	Maturity Date	Nominal Value (TL)	Type of Interest	Interest Rate (%)	Coupon Payments	Principal Payment
TRFZORN22310	13.10.2022	127	17.02.2023	230.570.000	Fixed rate	36.0%	-	At maturity
TRSZORNE2320	13.10.2022	378	26.10.2023	87.700.000	Floating rate	40.0% for the first coupon payment, the greater of 40.0% and 2-year benchmark bond yield + 4.5% for other coupon payments	Monthly	At maturity
TRFZORN42318	10.11.2022	160	19.04.2023	71.430.000	Fixed rate	36.0%	-	At maturity
TRSZORNA2316	10.11.2022	399	14.12.2023	106.570.000	Floating rate	40.0% for the first coupon payment, the greater of 40.0% and 2-year benchmark bond yield + 4.5% for other coupon payments	Monthly	At maturity
TRFZORN42326	24.11.2022	146	19.04.2023	106.000.000	Fixed rate	36,00%	-	At maturity

LREF: Turkish Lira Overnight Reference Interest Rate

On June 1, 2021, Zorlu Yenilenebilir Enerji AŞ, a wholly-owned subsidiary of Zorlu Enerji, issued a USD 300,000,000 Eu-robond with a maturity of 5 years and an annual interest rate of 9% with semi-annual coupon payments to qualified investors abroad. There will be two separate principal payments of USD 37,500,000 on 03.06.2024 and 02.06.2025, respectively and the remaining USD 225,000,000 will be redeemed at maturity on 01.06.2026. The bond is traded on the Irish Stock Exchange (Euronext Dublin).

Dividend Distribution Policy

Zorlu Enerji Elektrik Üretim AŞ distributes dividends within the framework of the provisions of the Turkish Commercial Code, Capital Market Regulations, Tax Regulations and other relevant regulations, as well as the article on profit distribution of the Articles of Association. The amount of dividend to be distributed and the date of distribution are approved and decided upon by the General Assembly in line with the proposal of the Board of Directors.

The Company has adopted the Dividend Distribution Policy of distributing at least 25% of its distributable profit in cash and/or as bonus shares. This policy is reviewed annually by the Board of Directors, by taking into account the domestic and global economic conditions, the Company's growth and investment plans, and financial position. Amendments made to the policy are submitted to the approval of shareholders at the first General Assembly meeting following the amendment and published on the Company's website.

Distribution of profit shall begin on the date determined by the General Assembly, it is no later than the end of the year in which the General Assembly Meeting is held. Subject to the provisions of the legislation in force, the Company may consider distributing advance dividends or paying dividends in equal or in varying installments.

There was no profit distribution in 2022 due to the net loss recorded in the Company's consolidated financial statements prepared pursuant to the CMB legislation and the presence of accumulated losses from previous years in the Company's statutory financial statements.

OTHER MATTERS

Information on Conflicts of Interest between the Company and the Institutions from which the Company Obtains Investment Consultancy, Rating and Similar Services, and the Measures Taken to Prevent Such Conflicts of Interest

None.

Information on Legislative Changes that could have a Significant Impact on the Company's Activities

There were no legislative changes in 2022 that could significantly affect the Company's activities.

Information on Cross-Shareholdings where Direct Participation in Share Capital exceeds 5%

None.



CORPORATE GOVERNANCE

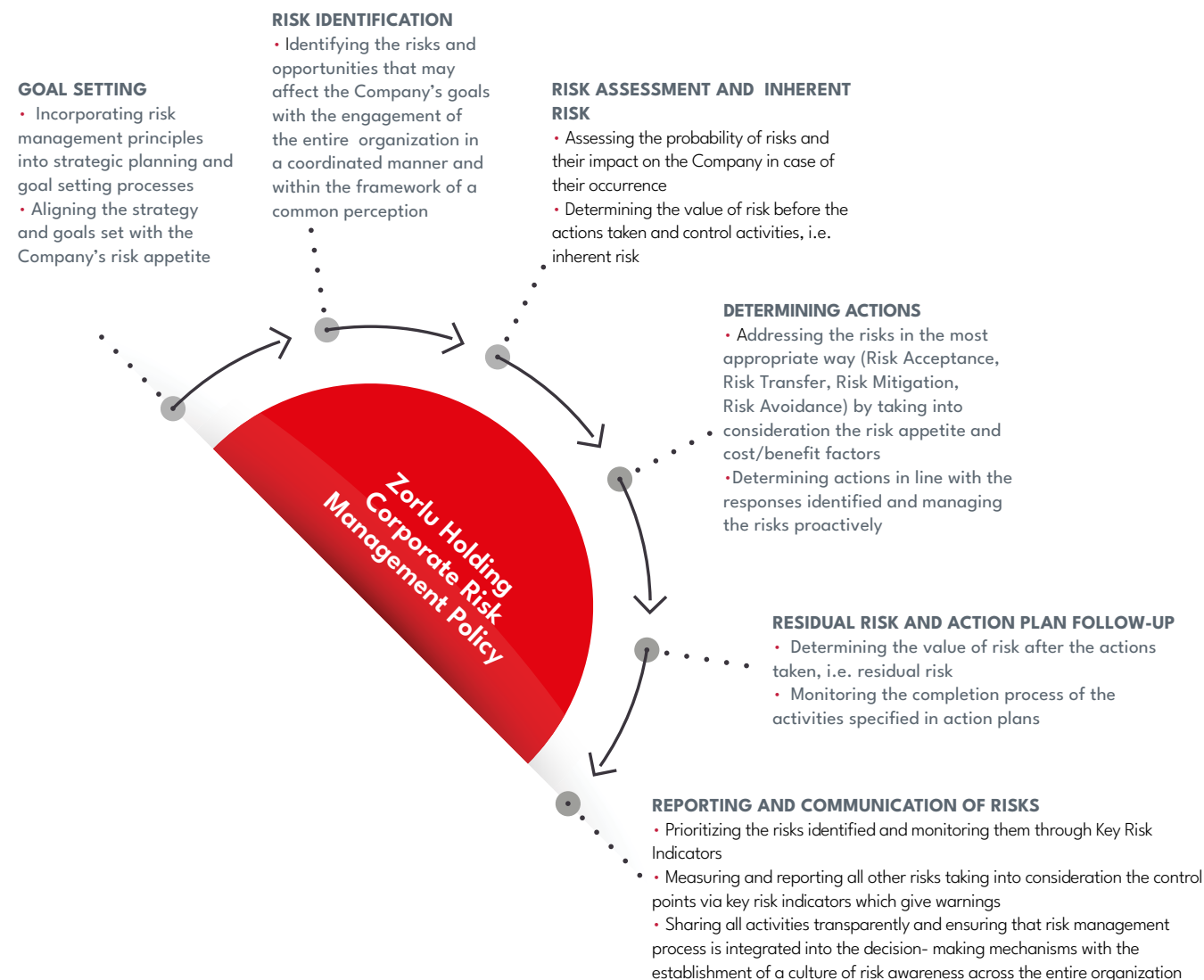
Risks and the Assessment of the Board of Directors

RISK MANAGEMENT

Zorlu Holding's Enterprise Risk Management Department continues its activities for the early detection of risks which could jeopardize the existence, development and continuity of Zorlu Energy Group companies ("Group Companies"), implementation of necessary measures against identified risks and management of risks in a centralized structure.

In this regard, the Zorlu Holding Risk Policy and Procedure and Enterprise Risk Management Framework have been prepared to apply to all Zorlu Group companies.

Zorlu Holding Enterprise Risk Management Policy is summarized below:



CONTINUOUS MONITORING

Zorlu Enerji's Early Detection of Risk Committee was established pursuant to the Turkish Commercial Code, the Company's Articles of Association and the Communiqué on Corporate Governance of the Capital Markets Board with the aim of early detection of risks which could jeopardize the existence, development and continuity of the Company, implementation of necessary measures against the risks identified and the management of risk. The Committee conducts studies for the early detection of threats which may have a negative impact on the continuity and development of the Company, devises action plans to tackle such threats and works to effectively manage these risks.

The Early Detection of Risk Committee convened 6 times in 2022 to ensure adequate oversight of corporate risk management processes. The resolutions taken as a result of the Committee's investigations were presented to the Board of Directors. The Committee prepared the following 6 reports in 2022:

- Results of Zorlu Energy Group's Risk Assessment Survey 2021
- Russia - Ukraine Crisis and the Sanctions Imposed
- Post-Pandemic Future of the World and the Economy
- Risks Threatening the Global Economy in the Framework of the Global Risks Report
- Energy Crisis in Europe and its Impacts on the Turkish Economy
- The Global Economic Outlook and the Expectations for the Turkish Economy in 2023

The Company's vision is defined as creating sustainable value for all parties by ensuring operational efficiency, growth and legal compliance. During the activities carried out in line with this vision, the current and potential 6 main risk categories that may affect the achievement of the Company's goals and the actions taken are summarized as follows.

STRATEGIC RISKS

Strategic risks refer to the inadequacy of the Company's strategies and inability to remain competitive and achieve targets due to failure to accurately identify external factors, employment of an outdated business model, incorrect composition of the business portfolio, inefficient organizational structure, inconsistency of performance measures with business strategies and insufficient resource allocation.

As a company which constantly undertakes investments in domestic and international markets, investment risk is considered to be the most important risk item for Zorlu Enerji within the scope of strategic risk factors. Every factor that may cause such investments to not perform well in line with the long-term strategies of the Company is also considered as a separate risk item.

Actions taken regarding these risks are as follows:

- Conducting of coordinated feasibility studies, benefit-cost analysis and budgeting studies by the relevant departments in relation to new investment decisions,
- Diversification of the generation portfolio by investing in different energy sources,
- Evaluation of the legal, political, etc., risks before and after the investment by obtaining consultancy services as and when necessary,
- Adoption of investment-specific management styles,
- Monitoring the return on investments undertaken,
- Formulating innovative strategies with respect to sales and marketing.



SECTOR RELATED RISKS

The sector related risks mainly result from the delays in adapting to changes in short- and long-term supply and demand balances that may occur as a result of changing production and consumption patterns. It is inevitable for these changes to have an impact on price predictability. Moreover, sector related risks also include adaptation to the climate change-related shifts in the industry.

- Zorlu Enerji strives to mitigate the negative impacts of such risks by diversifying its areas of operation as much as possible.

FINANCIAL RISKS

The financial risks category includes risks related to interest rates, exchange rates, capital, financial derivative instruments, energy and commodity prices, stock prices, liquidity, funding, cash flow management and receivable collection.

The following actions are taken against these risks:

- Use of alternative financing methods,
- Ensuring the asset-liability balance within the balance sheet,
- Making use of various derivative instruments for hedging purposes, when necessary,
- Following up the budget targets and realizations on a monthly basis and making revisions when necessary,
- Establishing lending and collateral structure in line with credit risk policies.

OPERATIONAL RISKS

Operational risks refer to the inability of the Company's business model to secure and sustain operational efficiency over the course of its operations towards achieving customer satisfaction and the Company's performance targets in relation to quality, cost and time. The operational risks category includes risks in relation to decision making with respect to operational processes such as supply, capacity, business interruption, customer satisfaction, human resources, environmental health and safety, information capital, authorization, information processing and technology, contractual obligations and pricing and risks related to financial reporting processes and budgeting and fraud risks.

The following actions are taken against these risks:

- Supervision of all operational activities by the Directorate of Internal Audit and Ethics, Financial Audit and Tax Audit Departments set up under the organization of Zorlu Holding,
- Monitoring the operational risks that Zorlu Holding Corporate Risk Management Department deems to be important through key risk indicators via the information technology system and informing the relevant business units about risk levels when necessary,
- Measuring, reporting and tracking customer satisfaction,
- Regularly providing compulsory training programs on occupational health and safety to all Zorlu Holding employees in accordance with the related regulations,
- Following up the recommendations offered by insurance companies to companies following risk inspections in a centralized structure,
- Following the policies and procedures related to compliance with legal standards regarding environmental health, stakeholder safety and stakeholder health,
- Tracking and recording the repair and maintenance of machinery and equipment,
- Carrying out annual planned maintenance and repair at electricity distribution facilities, cutting down of trees under power lines installed in forests in coordination with the Regional Directorates of Forestry to prevent risk of fire, redesigning the networks that have completed their economic life in such a way that they do not pose the aforementioned risks,
- Committing to comply with the United Nations Global Compact and principles such as human rights, environment, society, ethics and the fight against corruption.

REPUTATION RISK

The Company's performance in other risk areas naturally poses a reputation risk for the Company. Apart from this, reputational risk in general is the negative impact the company has on the environment, society and internal and external stakeholders while performing its activities.

The following actions are taken against these risks:

- Establishing a multi-faceted, consistent and continuous communication with all stakeholders of the company,
- Protecting the brand value and credibility; ensuring that all communication processes are managed in an integrated manner in line with the strategic business objectives and in this context representing Zorlu Holding Corporate Communications Department at the General Directorate level.

EXTERNAL RISKS

External environment risks are cases where external factors arise which may affect the continuity of the Company's business model and the core values which drive the overall targets and strategies that set this model in motion.

The external risks cover risks concerning access to capital, shareholder relations, natural disasters, competition, customer demands, sector risks, legal risks and risks in relation to regulatory compliance, political situation and technological innovation.

The following actions are taken against these risks:

- Developing necessary plans for recovering and resuming critical systems, technical infrastructure and facilities in alternative sites in case of a natural disaster or contingency, regularly monitoring business continuity and emergency action plans and conducting drills,
- Setting a comprehensive insurance coverage within the company by considering risks related to natural disasters and terror incidents, transferring potential risks to insurance companies and minimizing their potential financial impacts,
- Managing regulatory changes, legal cases, tax disputes, the infringement of intellectual property rights, unfair competition and related risks by communicating with all the relevant units within the company in a coordinated manner,
- Carrying out specific short-lived rehabilitations and works to integrate into emerging technologies,
- Taking appropriate measures against adverse geographical and climatic conditions.

Apart from the actions specified under the aforementioned risk headings, insurance policies are also used extensively as a risk transfer mechanism. The list of major insurance policies purchased is given below.

1. Fire, Machinery Breakdown and Loss of Profit
2. Employer's Liability
3. Directors and Officers (D&O) Liability
4. Professional Indemnity
5. Third Party Liability
6. Product Liability
7. Marine/Cargo
8. Fidelity Guarantee, Cash in Transit and Cash in Safe
9. Hazardous Goods
10. Personal Accident
11. Construction/Installation Policy



Internal Audit Activities and Internal Control System

THE AUDIT DEPARTMENT AND ITS ACTIVITIES

The internal audit of Zorlu Group companies is carried out by the centralized Internal Audit Department operating within Zorlu Holding since 2000. Relying upon International Internal Audit Standards, the Internal Audit Department conducts its audits in line with official regulations as well as the audit programs approved by the Board of Directors and shares the audit results for the year with the Board of Directors through both the audit reports drawn up following each audit and the annual reports prepared on an annual basis.

In addition to the Internal Audit Department, the Financial Audit and Tax Audit Departments were established in 2011 in order to perform financial audits across all Group companies, which commenced their activities in 2012. In the last quarter of 2013, the Internal Audit and Financial and Tax Audit Departments were gathered under the umbrella of Zorlu Holding General Directorate of Audit and Internal Control. In accordance with the evolving needs of Zorlu Group, the Tax Audit Department was restructured as Tax Audit Directorate as of 1 December 2015 while the Internal Audit Department was restructured into two distinct Directorates, namely, the Internal Audit Process Oversight and Internal Audit Inspection Oversight as of 1 January 2016. Following the completion of the organizational restructuring process in the General Directorate of Audit and Internal Control for the execution of internal control activities separately in 2017, the General Directorate of Internal Control has started to carry out its activities as an independent department as of 1 January 2018. As of July 1, 2021, an organizational change was made within the General Directorate of Audit. In this context, the tax consultancy function of the Tax Directorate, which performs tax consultancy and audit functions, was transferred to the Office of Chief Financial Officer. As of December 1, 2021, the activities of the Internal Audit Process and Internal Audit Review Directorates were gathered under the umbrella of the Directorate of Internal Audit and Ethics with the addition of the ethics function.

As of June 1, 2022, the General Directorate of Audit has been restructured as Audit Department to report directly to the Board of Directors of Zorlu Holding as a result of the increasing importance of audit within the scope of the structuring of Zorlu Group towards corporate governance systems.

The purpose, authorities and duties and the operating principles and structure of the Internal Audit Department have been defined by a series of board-approved documents circulated across Group companies, such as the “Audit Regulation” and the “Internal Audit Working Principles”.

INTERNAL AUDIT ACTIVITIES

Process audit activities are carried out in line with a board-approved, risk-based annual audit program to evaluate the effective and efficient use of resources, compliance to written rules (laws, regulations, internal policies and directives), and the accuracy, security and reliability of information.

Prior to each audit, internal auditors meet with senior management for risk assessment during which the risks that could jeopardize the Company’s targets are positioned on a risk matrix based on their potential impact and probability of occurrence. During audit field work, the effectiveness of internal controls for high-impact and high-probability risks are evaluated through tests. The results of the observations are shared with company executives in a draft report, which is then detailed with executives’ feedback and delivered to senior management in its final form. As a result, the department provides consultancy services with reasonable assurance while offering best practices drawing from synergy within the Group. One month after the issuance of the final report, actions taken (Treat, Terminate, Transfer, Tolerate) are reported to the Board of Directors in line with the 4T approach.

Internal Audit Department organizes periodic meetings with the Audit Committee throughout the year. In these meetings, participants evaluate planned and actual audits, consultancy activities and special audits, etc. for the year ahead, share findings, review action plans, follow-up results based on these findings, and review plans for the upcoming period.

Zorlu Group supports and encourages the professional development of the Zorlu Group Internal Audit Team, which consists of 9 people, as they seek to advance their knowledge, skills and competencies through further training, become a member of relevant organizations (such as the Institute of Internal Auditors, Turkey – IIA Turkey), and obtain international certification. The team holds 3 CFEs (Certified Fraud Examiner License) and 1 CRMA (Certification in Risk Management Assurance) License.

FINANCIAL AUDIT AND TAX AUDIT ACTIVITIES

Finansal Denetim ve Vergi Denetimi Bölümleri tarafından The Financial Audit and Tax Audit Departments have been carrying out their activities at Zorlu Group companies since 2012. Currently, these departments have 8 and 4 employees, respectively.

These departments ensure that the Group companies’ balance sheet and income statement accounts used for financial and tax reporting purposes are in conformity with the uniform chart of accounts, tax legislation and audit standards and provide reasonable assurance to the Board of Directors in these areas.

Audit findings are reported to the Company executives and senior management.

In addition, the Financial Audit Team reviews the CMB-compliant financial reports of the publicly listed companies of Zorlu Group and shares its comments with the relevant departments.

The Financial Audit Team includes 4 CPAs (Certified Public Accountant), while the Tax Audit Team includes 3 CPAs..

THE GENERAL DIRECTORATE OF INTERNAL CONTROL AND ITS ACTIVITIES

The internal control function at Zorlu Enerji is carried out in a structure which is centrally coordinated within Zorlu Holding AŞ, as in other Zorlu Group companies.

The purpose, duties and authorities and the working principles of the Internal Control Department and the professional and ethical rules to which it adheres, are defined in a series of documents such as the “Internal Control Regulation” and the

“Internal Control Manual”, which were shared with the relevant managers.

The mission of the Internal Control Department is to establish and sustain an internal control system to ensure efficient, effective, integrated and consistent risk management at Group companies in line with the pre-set targets, and to share, disseminate and promote “best practices” across companies.

The Internal Control Department assists executives and employees in identifying areas of improvement in existing processes and the internal control system as well as the actions to be taken in this context, utilizing information technologies in the aforementioned activities, implementing the specified actions, and monitoring their progress on a regular basis. In addition, the department provides continuous guidance to executives and process owners with regard to these activities. It provides support in internal control, risk management and process development by taking part in the working groups of important projects that will improve process and information technologies. All relevant executives and employees of Group companies take part in the activities to establish, monitor and evaluate internal control system and implementing necessary measures.

The Internal Control Department prepares an annual, risk-based internal control plan and carries out its activities in a systematic, consistent, and disciplined approach. The internal control work plan is created based on risk-based evaluations by the Internal Control Department, requests from the Board of Directors and management, findings on internal control from audit activities conducted by the Audit Department, and corporate risk maps. The annual internal control work plan is submitted to the CEO and the Board of Directors for their information and approval.

During periodical meetings between the Internal Control Department and the management, internal control activities planned and realized within the year are evaluated, findings are disclosed, action plans based on the findings and follow-up results are shared and plans for the upcoming period are reviewed.

Zorlu Group Internal Control team is also supported and encouraged by Zorlu Group to build upon their skills and expertise through further training, and to obtain membership in relevant professional associations and international professional certifications (such as CIA, CPA, CISA, CFE, CICA and CRMA).

OPINION OF THE BOARD OF DIRECTORS REGARDING THE COMPANY'S INTERNAL CONTROL SYSTEM AND INTERNAL AUDIT ACTIVITIES

None.



STATEMENT OF COMPLIANCE WITH CORPORATE GOVERNANCE PRINCIPLES

Corporate governance practices were initiated at Zorlu Enerji Elektrik Üretim AŞ (“Zorlu Enerji” or “Company”) in 2005 in accordance with the Corporate Governance Principles. Within the scope of these efforts, in the first stage, a series of amendments were made to the Company’s Articles of Association in order to provide an equitable, accountable, responsible and transparent structure to shareholders. The corporate governance practices were continued with the establishment of corporate governance mechanisms within the Company. While the Board of Directors was vested with greater objectivity with the inclusion of independent members, committees were set up under the Board with the aim of further enhancing the effectiveness of corporate governance.

Zorlu Enerji carries out all its activities in compliance with the applicable legislation and the Capital Markets Board’s “Corporate Governance Principles”. The Company fully complies with all the compulsory principles in the Corporate Governance Principles appended to the CMB’s Communiqué

on Corporate Governance (II-17.1), and has also adopted the majority of the principles that are not mandatory. No conflict of interest has been noted between the stakeholders in relation to the principles that have not yet been fully complied with.

Being aware of the positive contributions that adoption of the Corporate Governance Principles brings to the Company, Zorlu Enerji Elektrik Üretim AŞ continues its efforts to further improve its compliance with the Corporate Governance Principles and to comply with the non-mandatory principles that are not yet implemented.

For the reporting period which ended on 31 December 2022, the compliance with the Corporate Governance Principles which are appended to the Communiqué on Corporate Governance and the explanations with regard to the principles that have not yet been complied with are included in the Corporate Governance Compliance Report, the Corporate

Statement of Compliance with Corporate Governance Principles

COMPANY COMPLIANCE STATUS						
	YES	PARTIAL	NO	EXEMPTED	NOT APPLICABLE	EXPLANATION
1.1. FACILITATING THE EXERCISE OF SHAREHOLDER RIGHTS						
1.1.2 - Up-to-date information and disclosures which may affect the exercise of shareholder rights are available to investors at the corporate website.	✓					
1.2. RIGHT TO OBTAIN AND REVIEW INFORMATION						
1.2.1 - Management did not enter into any transaction that would complicate the conduct of special audit.	✓					
1.3. GENERAL ASSEMBLY						
1.3.2 - The company ensures the clarity of the General Assembly agenda, and that an item on the agenda does not cover multiple topics.	✓					
1.3.7 - Insiders with privileged information have informed the board of directors about transactions conducted on their behalf within the scope of the company's activities in order for these transactions to be presented at the General Shareholders' Meeting.					✓	There was no such transaction in 2022.
1.3.8 - Members of the board of directors who are concerned with specific agenda items, auditors, and other related persons, as well as the officers who are responsible for the preparation of the financial statements were present at the General Shareholders' Meeting.	✓					
1.3.10 - The agenda of the General Shareholders' Meeting included a separate item detailing the amounts and beneficiaries of all donations and contributions.		✓				A separate item on donations and grants was included in the agenda of the Annual General Meeting in order to inform the shareholders. In the relevant accounting period, general information is provided about the total amount of donations and grants made within the upper limit determined in the previous year's general assembly. In addition, in response to the detailed information requests of the shareholders, general information is given at the General Assembly about the beneficiaries when necessary. The implementation is planned to continue in this vein in the following AGMs.
1.3.11 - The General Shareholders' Meeting was held open to the public, including the stakeholders, without having the right to speak.	✓					
1.4. VOTING RIGHTS						
1.4.1 - There is no restriction preventing shareholders from exercising their shareholder rights.	✓					
1.4.2 - The company does not have shares that carry privileged voting rights.	✓					
1.4.3 - The company withholds from exercising its voting rights at the General Shareholders' Meeting of any company with which it has cross-ownership, in case such cross-ownership provides management control.					✓	The Company has no cross-shareholding relationship which brings a controlling relationship.



COMPANY COMPLIANCE STATUS						
	YES	PARTIAL	NO	EXEMPTED	NOT APPLICABLE	EXPLANATION
1.5. MINORITY RIGHTS						
1.5.1 - The company pays maximum diligence to the exercise of minority rights.	✓					
1.5.2 - The Articles of Association extend the use of minority rights to those who own less than one twentieth of the outstanding shares, and expand the scope of the minority rights.			✓			The scope of minority rights has not been expanded in the Articles of Association and the provisions of the relevant legislation apply. No amendment to the Articles of Association is planned in this regard.
1.6. DIVIDEND RIGHT						
1.6.1 - The dividend policy approved by the General Shareholders' Meeting is posted on the company website.	✓					
1.6.2 - The dividend distribution policy comprises the minimum information to ensure that the shareholders can have an opinion on the procedure and principles of dividend distributions in the future.	✓					
1.6.3 - The reasons for retaining earnings, and their allocations, are stated in the relevant agenda item.	✓					
1.6.4 - The board reviewed whether the dividend policy balances the benefits of the shareholders and those of the company.	✓					
1.7. TRANSFER OF SHARES						
1.7.1 - There are no restrictions preventing shares from being transferred.		✓				As the Company operates in a regulated market, the acquisition of shares representing 5% or more of the share capital, directly or indirectly, by a real or a legal person and the transfer of shares that result in a change of control in ownership or other transactions that result in such a change are always subject to the approval of the Energy Market Regulatory Authority (EMRA) in line with the legislation and the Company's Articles of Association. However, EMRA's approval is not sought for changes in the shareholding structure arising from the transactions in publicly held shares.
2.1. CORPORATE WEBSITE						
2.1.1. - The company website includes all elements listed in Corporate Governance Principle 2.1.1.	✓					
2.1.2 - The shareholding structure (names, privileges, number and ratio of shares, and beneficial owners of more than 5% of the issued share capital) is updated on the website at least every 6 months.				✓		Within the framework of the Article 12 of the CMB's Communiqué on Material Events Disclosure, the changes in the Company's shareholding structure resulting from the transactions in the stock exchange are followed and updated by the Central Securities Depository (MKK). The Company's website provides a link to the shareholding structure disclosed at the Public Disclosure Platform (KAP).
2.1.4 - The company website is prepared in other selected foreign languages, in a way to present exactly the same information with the Turkish content.		✓				Except for the interim activity reports, all information that may affect the investment decisions of foreign investors is available in English on the Company's Investor Relations website. Interim activity reports are planned to be published in English within the scope of time and cost management.
2.2. ANNUAL REPORT						
2.2.1 - The board of directors ensures that the annual report represents a true and complete view of the company's activities.	✓					
2.2.2 - The annual report includes all elements listed in Corporate Governance Principle 2.2.2.	✓					

COMPANY COMPLIANCE STATUS						
	YES	PARTIAL	NO	EXEMPTED	NOT APPLICABLE	EXPLANATION
3.1. CORPORATION'S POLICY ON STAKEHOLDERS						
3.1.1 - The rights of the stakeholders are protected pursuant to the relevant regulations, contracts and within the framework of bona fides principles.	✓					
3.1.3 - Policies or procedures addressing stakeholders' rights are published on the company's website.	✓					
3.1.4 - A whistleblowing programme is in place for reporting legal and ethical issues.	✓					
3.1.5 - The company addresses conflicts of interest among stakeholders in a balanced manner.	✓					
3.2. SUPPORTING THE PARTICIPATION OF THE STAKEHOLDERS IN THE CORPORATION'S MANAGEMENT						
3.2.1 - The Articles of Association, or the internal regulations (terms of reference/manuals), regulate the participation of employees in management.	✓					The participation of employees in management is governed by internal regulations. In addition, employee commitment and satisfaction are measured by an external company every two years.
3.2.2 - Surveys/other research techniques, consultation, interviews, observation method etc. were conducted to obtain opinions from stakeholders on decisions that significantly affect them.	✓					
3.3. HUMAN RESOURCES POLICY						
3.3.1 - The company has adopted an employment policy ensuring equal opportunities, and a succession plan for all key managerial positions.	✓					The succession plan prepared by Zorlu Holding for key managerial positions (Deputy General Manager and above) of Zorlu Enerji was reviewed by the Company in 2022. The Company has a Human Resources Policy which embraces diversity, equal opportunity, inclusion and engagement as the basis of innovation and development and offers a working environment in line with these principles. Management Academy Program, which was initiated in 2021 in collaboration with Boğaziçi University for the Company's middle managers continued in 2022. The Program will proceed with the participation of new managers in 2023. Talent Management, Critical Role and Backup studies were carried out with an expert consultancy firm in 2022.
3.3.2 - Recruitment criteria are documented.	✓					
3.3.3 - The company has a policy on human resources development, and organizes trainings for employees.	✓					





COMPANY COMPLIANCE STATUS						EXPLANATION
	YES	PARTIAL	NO	EXEMPTED	NOT APPLICABLE	
3.3.4 - Meetings have been organized to inform employees on the financial status of the company, remuneration, career planning, education and health	✓					
3.3.5 - Employees, or their representatives, were notified of decisions impacting them. The opinion of the related trade unions was also taken.					✓	Employees are informed by their managers of any decisions that may affect them. There is no labor union at Zorlu Enerji.
3.3.6 - Job descriptions and performance criteria have been prepared for all employees, announced to them and taken into account to determine employee remuneration.	✓					
3.3.7 - Measures (procedures, trainings, raising awareness, goals, monitoring, complaint mechanisms) have been taken to prevent discrimination, and to protect employees against any physical, mental, and emotional mistreatment.	✓					
3.3.8 - The company ensures freedom of association and supports the right for collective bargaining.					✓	There is no collective bargaining agreement at Zorlu Enerji.
3.3.9 - A safe working environment for employees is maintained.	✓					
3.4. RELATIONS WITH CUSTOMERS AND SUPPLIERS						
3.4.1 - The company measured its customer satisfaction and operated to ensure full customer satisfaction	✓					
3.4.2 - Customers are notified of any delays in handling their requests.	✓					
3.4.3 - The company complied with the quality standards with respect to its products and services.	✓					
3.4.4 - The company has in place adequate controls to protect the confidentiality of sensitive information and business secrets of its customers and suppliers.	✓					
3.5. ETHICAL RULES AND SOCIAL RESPONSIBILITY						
3.5.1 - The board of the corporation has adopted a code of ethics, disclosed on the corporate website.	✓					
3.5.2 - The company has been mindful of its social responsibility and has adopted measures to prevent corruption and bribery.	✓					

COMPANY COMPLIANCE STATUS						EXPLANATION
	YES	PARTIAL	NO	EXEMPTED	NOT APPLICABLE	
4.1. ROLE OF THE BOARD OF DIRECTORS						
4.1.1 - The board of directors has ensured strategy and risks do not threaten the long-term interests of the company, and that effective risk management is in place.	✓					
4.1.2 - The agenda and minutes of board meetings indicate that the board of directors discussed and approved strategy, ensured resources were adequately allocated, and monitored company and management performance.	✓					
4.2. ACTIVITIES OF THE BOARD OF DIRECTORS						
4.2.1 - The board of directors documented its meetings and reported its activities to the shareholders.	✓					
4.2.2 - Duties and authorities of the members of the board of directors are disclosed in the annual report.	✓					
4.2.3 - The board has ensured the company has an internal control framework adequate for its activities, size and complexity.	✓					
4.2.4 - Information on the functioning and effectiveness of the internal control system is provided in the annual report.	✓					
4.2.5 - The roles of the Chairman and Chief Executive Officer are separated and defined.		✓				The Chairman of the Board of Directors and the Chief Executive Officer (general manager) are separate individuals.
4.2.7 - The board of directors ensures that the Investor Relations department and the corporate governance committee work effectively. The board works closely with them when communicating and settling disputes with shareholders.	✓					
4.2.8 - The company has subscribed to a Directors and Officers liability insurance covering more than 25% of the capital.				✓		The Company's controlling shareholder Zorlu Holding AŞ has acquired Directors & Officers Liability Insurance to cover the losses that may be suffered due to the misconduct of Board members during their term of office. The Policy covers all Zorlu Group companies including Zorlu Enerji. However, the annual insurance limit does not exceed 25% of the Company's share capital.
4.3. STRUCTURE OF THE BOARD OF DIRECTORS						
4.3.9 - The board of directors has approved the policy on its own composition, setting a minimal target of 25% for female directors. The board annually evaluates its composition and nominates directors so as to be compliant with the policy.				✓		There is no policy or target regarding the election of female directors to the Board. As of 2022, two female members, one of whom is an independent, were serving on the Board of Directors. The ratio of female members in the Board is 22%.
4.3.10 - At least one member of the audit committee has 5 years of experience in audit/ accounting and finance.	✓					
4.4. BOARD MEETING PROCEDURES						
4.4.1 - Each board member attended the majority of the board meetings in person.		✓				In 2022, Board meetings were held simultaneously in person and online and physical attendance was optional. Evaluations regarding the organization of board meetings electronically are still in progress.



COMPANY COMPLIANCE STATUS						EXPLANATION
	YES	PARTIAL	NO	EXEMPTED	NOT APPLICABLE	
4.4.2 - The board has formally approved a minimum time by which information and documents relevant to the agenda items should be supplied to all board members.	✓					
4.4.3 - The opinions of board members that could not attend the meeting, but did submit their opinion in written format, were presented to other members.					✓	Although there was the option to do so, there was no Board member who could not attend the Board meetings and submitted his/her opinions in writing to the Board of Directors during the reporting period.
4.4.4 - Each member of the board has one vote.	✓					
4.4.5 - The board has a charter/written internal rules defining the meeting procedures of the board.	✓					
4.4.6 - Board minutes document that all items on the agenda are discussed, and board resolutions include director's dissenting opinions if any.	✓					
4.4.7 - There are limits to external commitments of board members. Shareholders are informed of board members' external commitments at the General Shareholders' Meeting.		✓				Due to the significant contribution of the work experience and sectoral know-how of board members to the Board of Directors, they are not restricted from assuming other duties outside the Company, and no restriction is planned in this regard. The external commitments of the board members are presented in the annual report and in the AGM information document and presented to shareholders at the AGM.
4.5. BOARD COMMITTEES						
4.5.5 - Board members serve in only one of the Board's committees.			✓			Two independent members of the Board serve on more than one committee. Due to the number of the independent Board members, no change is planned regarding the current situation.
4.5.6 - Committees have invited persons to the meetings as deemed necessary to obtain their views.	✓					
4.5.7 - If external consultancy services are used, the independence of the provider is stated in the annual report.				✓		The committees did not obtain any external consultancy services in 2022.
4.5.8 - Minutes of all committee meetings are kept and reported to board members.	✓					
4.6. FINANCIAL RIGHTS						
4.6.1 - The board of directors has conducted a board performance evaluation to review whether it has discharged all its responsibilities effectively.			✓			No work is planned regarding the performance assessment of the Board of Directors.
4.6.4 - The company did not extend any loans to its board directors or executives, nor extended their lending period or enhanced the amount of those loans, or improve conditions thereon, and did not extend loans under a personal credit title by third parties or provided guarantees such as surety in favour of them.	✓					
4.6.5 - The individual remuneration of board members and executives is disclosed in the annual report.			✓			In line with the general practice, remuneration of the Board members and senior executives is disclosed collectively in the annual report. Considering the legislation on the protection of personal data, the Company will continue to monitor the general practice with respect to disclosure on an individual basis.

Corporate Governance Information Form

1. SHAREHOLDERS

1.1. FACILITATING THE EXERCISE OF SHAREHOLDERS RIGHTS	
The number of investor meetings (conference, seminar/ etc.) organized by the company during the year	During the year, a total of 37 meetings were held with investors via video conference, by phone or face to face.
1.2. RIGHT TO OBTAIN AND EXAMINE INFORMATION	
The number of special audit request(s)	There was no request for the appointment of a special auditor in the reporting period.
The number of special audit requests that were accepted at the General Shareholders' Meeting	None.
1.3. GENEL KURUL	
Link to the PDP announcement that demonstrates the information requested by Principle 1.3.1. (a-d)	https://www.kap.org.tr/tr/Bildirim/1016089
Whether the company provides materials for the General Shareholders' Meeting in English and Turkish at the same time	Yes, they are presented.
The links to the PDP announcements associated with the transactions that are not approved by the majority of independent directors or by unanimous votes of present board members in the context of Principle 1.3.9	There was no such transaction in 2022.
The links to the PDP announcements associated with related party transactions in the context of Article 9 of the Communiqué on Corporate Governance (II-17.1)	There was no transaction carried out within the scope of Article 9 in 2022.
The links to the PDP announcements associated with common and continuous transactions in the context of Article 10 of the Communiqué on Corporate Governance (II-17.1)	https://www.kap.org.tr/tr/Bildirim/1077485
The name of the section on the corporate website that demonstrates the donation policy of the company	Investor Relations / Corporate Governance / Policies / Donation and Charity Policy
The relevant link to the PDP with minute of the General Shareholders' Meeting where the donation policy has been approved	https://www.kap.org.tr/tr/Bildirim/206950
The number of the provisions of the articles of association that discuss the participation of stakeholders to the General Shareholders' Meeting	None.
Identified stakeholder groups that participated in the General Shareholders' Meeting, if any	Although there is no restriction regarding the participation of stakeholders in the general shareholders' meeting, there was no participation thereby other than the shareholders.
1.4. VOTING RIGHTS	
Whether the shares of the company have differential voting rights	No
In case that there are voting privileges, indicate the owner and percentage of the voting majority of shares.	None.
The percentage of ownership of the largest shareholder	54.27%



1.5. MINORITY RIGHTS	
Whether the scope of minority rights enlarged (in terms of content or the ratio) in the articles of the association	No
If yes, specify the relevant provision of the articles of association.	None.
1.6. DIVIDEND RIGHT	
The name of the section on the corporate website that describes the dividend distribution policy	Investor Relations / Corporate Governance / Policies / Dividend Distribution Policy
Minutes of the relevant agenda item in case the board of directors proposed to the general assembly not to distribute dividends, the reason for such proposal and information as to use of the dividend	In the fiscal year 2021, Zorlu Enerji Elektrik Üretim AŞ recorded TL 159,434 thousand of net loss in its consolidated financial statements prepared in compliance with the Turkish Accounting Standards/Turkish Financial Reporting Standards as per the Capital Market Law and related Communiqués and TL 68,203 thousands of net profit in its statutory financial statements prepared in accordance with provisions of the Turkish Commercial Code and Tax Procedure Law. Considering the net loss in the Company's CMB financials and previous years' losses in the Company's statutory financial statements it was submitted to the information of shareholders at the Annual General Meeting for 2021 that no profit distribution could be made.
PDP link to the related general shareholder meeting minutes in case the board of directors proposed to the general assembly not to distribute dividends	https://www.kap.org.tr/tr/Bildirim/1025176

GENERAL ASSEMBLY MEETINGS

General Meeting Date	The number of information requests received by the company regarding the clarification of the agenda of the General	Shareholder participation rate to the General Shareholders' Meeting	Percentage of shares directly present at the GSM	Percentage of shares represented by proxy	Specify the name of the page of the corporate website that contains the General Shareholders' Meeting minutes, and indicates for each resolution the voting levels for or against	Specify the name of the page of the corporate website that contains all questions asked in the general assembly meeting and all responses to them	The number of the relevant item or paragraph of General Shareholders' Meeting minutes in relation to related party transactions	The number of declarations by insiders received by the board of directors	The link to the related PDP general shareholder meeting notification
28.04.2022	None.	80,2385%	0,0019%	%80,2366	Investor Relations / Corporate Governance / General Assembly Meetings of Shareholders	Investor Relations / Corporate Governance / General Assembly Meetings of Shareholders	None.	None.	https://www.kap.org.tr/tr/

2. SCLOSURE AND TRANSPARENCY

2.1. CORPORATE WEBSITE	
Specify the name of the sections of the website providing the information requested by the Principle 2.1.1.	The information requested in the corporate governance principle numbered 2.1.1. is available in the Investor Relations section of the Company's website under the headings of "About Us, Corporate Governance, Financial Reports & Annual Reports, Information on Stock & Debt Instruments, Material Event Disclosures and Frequently Asked Questions".
If applicable, specify the name of the sections of the website providing the list of shareholders (ultimate beneficiaries) who directly or indirectly own more than 5% of the shares.	None.
List of languages for which the website is available	Turkish & English
2.2. ANNUAL REPORT	
THE PAGE NUMBERS AND/OR NAME OF THE SECTIONS IN THE ANNUAL REPORT THAT DEMONSTRATE THE INFORMATION REQUESTED BY PRINCIPLE 2.2.2.	
a) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on the duties of the members of the board of directors and executives conducted out of the company and declarations on independence of board members	It is presented in the Board of Directors and Corporate Governance sections of the annual report.
b) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on committees formed within the board structure	It is presented in the Corporate Governance section of the annual report.
c) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on the number of board meetings in a year and the attendance of the members to these meetings	It is presented in the Additional Disclosures Required by the Legislation section of the annual report.
ç) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on amendments in the legislation which may significantly affect the activities of the corporation	It is presented in the Additional Disclosures Required by the Legislation section of the annual report.
d) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on significant lawsuits filed against the corporation and the possible results thereof	It is presented in the Additional Disclosures Required by the Legislation section of the annual report.
e) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on the conflicts of interest of the corporation among the institutions that it purchases services on matters such as investment consulting and rating and the measures taken by the corporation in order to avoid from these conflicts of interest	It is presented in the Additional Disclosures Required by the Legislation section of the annual report.
f) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on the cross ownership subsidiaries that the direct contribution to the capital exceeds 5%	It is presented in Additional Disclosures Required by the Legislation section of the annual report.
g) The page numbers and/or name of the sections in the Annual Report that demonstrate the information on social rights and professional training of the employees and activities of corporate social responsibility in respect of the corporate activities that arises social and environmental results	It is presented in the Human Capital, Social Capital and Zorlu Enerji Value Creation Model Sections of the annual report.



3. STAKEHOLDERS

3.1. CORPORATION'S POLICY ON STAKEHOLDERS	
The name of the section on the corporate website that demonstrates the employee remedy or severance policy	Investor Relations / Corporate Governance / Policies / Employee Compensation Policy
The number of definitive convictions the company was subject to in relation to breach of employee rights	1
The position of the person responsible for the alert mechanism (i.e. whistleblowing mechanism)	Zorlu Holding AŞ Director of Internal Audit & Ethics on behalf of Zorlu Holding A.Ş.'s Ethics Committee (Senem Dal - senem.dal@zorlu.com)
The contact detail of the company alert mechanism	Code of Ethics Hotlines: etik@zorlu.com 0 (212) 456 23 23/0 (850) 226 23 23
3.2. SUPPORTING THE PARTICIPATION OF THE STAKEHOLDERS IN THE CORPORATION'S MANAGEMENT	
Name of the section on the corporate website that demonstrates the internal regulation addressing the participation of employees on management bodies	Practices regarding the engagement of employees in management bodies are available in the Career / Human Resources Applications section of the website.
Corporate bodies where employees are actually represented	Sustainability Board, Social Performance Team, Occupational Health & Safety Board and Employee Representative Practice
3.3. HUMAN RESOURCES POLICY	
The role of the board on developing and ensuring that the company has a succession plan for the key management positions	In 2022, Talent Management, Critical Roles and Succession Plan studies were initiated with the independent consultancy firm Mercer for all white-collar employees. These studies will be completed at the beginning of 2023 and a succession plan for key managers will be developed.
The name of the section on the corporate website that demonstrates the human resource policy covering equal opportunities and hiring principles. Also provide a summary of relevant parts of the human resource policy.	Human Resources Policy and practices, including equal opportunities and personnel recruitment criteria, are available in the Career / Human Resources Policy and Human Resources Applications sections of the website.
Whether the company provides an employee stock ownership programme	There is no employee stock ownership programme.
The name of the section on the corporate website that demonstrates the human resource policy covering discrimination and mistreatments and the measures to prevent them. Also provide a summary of relevant parts of the human resource policy.	Human resources practices aimed at preventing discrimination and ill-treatment are available in the Career / Human Resources Applications section of the website.
The number of definitive convictions the company is subject to in relation to health and safety measures	None
3.5. ETHICAL RULES AND SOCIAL RESPONSIBILITY	
The name of the section on the corporate website that demonstrates the code of ethics	Investor Relations / Corporate Governance / Code of Ethics
The name of the section on the company website that demonstrates the corporate social responsibility report. If such a report does not exist, provide the information about any measures taken on environmental, social and corporate governance issues.	Information on environmental, social and corporate governance issues is provided in the Sustainability Reports which are available in the Sustainability / Sustainability Management section of the Company's corporate website.
Any measures combating any kind of corruption including embezzlement and bribery	Available in Zorlu Holding's Ethical Principles in the Investor Relations / Corporate Governance / Code of Ethics Section of the Company's corporate website.

4. BOARD OF DIRECTORS-I

4.2. ACTIVITY OF THE BOARD OF DIRECTORS	
Date of the last board evaluation conducted	-
Whether the board evaluation was externally facilitated	No
Whether all board members released from their duties at the GSM	Yes
Name(s) of the board member(s) with specific delegated duties and authorities, and descriptions of such duties	Chairman: Zeki Zorlu Vice Chairman: Bekir Ağırdir Board Members: Ahmet Nazif Zorlu, Olgun Zorlu, Selen Zorlu Melik, Bekir Cem Köksal, Cem Mengi, Ayşegül İldeniz, Mehmet Emre Zorlu Pursuant to the Board of Directors' resolution No. 2021/22 and dated April 27, 2021, Zeki Zorlu, Ahmet Nazif Zorlu, Olgun Zorlu, Selen Zorlu Melik and Mehmet Emre Zorlu are authorized to represent and bind the Company in every matter and in the broadest sense with their individual signatures placed under the company title and/or company stamp.
Number of reports presented by internal auditors to the audit committee or any relevant committee to the board	1
Specify the name of the section or page number of the annual report that provides the summary of the review of the effectiveness of internal controls	It is presented in the Corporate Governance section of the annual report.
Name of the Chairman	Zeki Zorlu
Name of the CEO	İ. Sinan Ak
If the CEO and Chair functions are combined: provide the link to the relevant PDP announcement providing the rationale for such combined roles	They are different individuals.
Link to the PDP notification stating that any damage that may be caused by the members of the board of directors during the discharge of their duties is insured for an amount exceeding 25% of the company's capital	https://www.kap.org.tr/tr/Bildirim/1039464 There is Directors & Officers Liability Insurance for the damages which Board members may cause to the Company during their term of office but the insurance limit does not exceed 25% of the Company's share capital.
The name of the section on the corporate website that demonstrates current diversity policy targeting women directors	There is no such policy.
The number and ratio of female directors within the Board of Directors	Number: 2 Ratio: 22%



5. COMPOSITION OF BOARD OF DIRECTORS

NAME, SURNAME OF BOARD MEMBER	WHETHER EXECUTIVE DIRECTOR OR NOT	WHETHER INDEPENDENT DIRECTOR OR NOT	THE FIRST ELECTION DATE TO BOARD	LINK TO PDP WHETHER THE NOTIFICATION THAT INDEPENDENT	WHETHER THE INDEPENDENT MEMBER HAS BEEN EVALUATED BY THE NOMINATION COMMITTEE	WHETHER SHE/HE IS THE DIRECTOR WHO CEASED TO SATISFY THE INDEPENDENCE OR NOT	WHETHER THE DIRECTOR HAS AT LEAST 5 YEARS OF EXPERIENCE ON AUDIT, ACCOUNTING AND/ OR FINANCE OR NOT
Zeki Zorlu	Non- executive	Not independent director	16.06.1993				
Bekir Ağırdir	Non- executive	Not independent director	08.05.2018	https://www.kap.org.tr/tr/Bildirim/923292	Considered	No	Yes
Ahmet Nazif Zorlu	Non- executive	Not independent director	17.05.2017				
Selen Zorlu Melik	Executive	Independent director	10.05.2001				
Mehmet Emre Zorlu	Non- executive	Not independent director	17.05.2017				
Olgun Zorlu	Non- executive	Not independent director	16.06.1993				
Ayşegül İldeniz	Non- executive	Not independent director	08.05.2018	https://www.kap.org.tr/tr/Bildirim/923292	Considered	No	
Cem Mengi	Non- executive	Not independent director	27.04.2021	https://www.kap.org.tr/tr/Bildirim/923292	Considered	No	Yes
Bekir Cem Köksal	Executive	Independent director	04.06.2012				

4. BOARD OF DIRECTORS-II

4.4. MEETING PROCEDURES OF THE BOARD OF DIRECTORS	
Number of physical board meetings in the reporting period (meetings in person)	The Board of Directors convened in-person and online simultaneously in 2022 where physical attendance was optional. A total of 11 hybrid meetings were held during the year.
Director average attendance rate at board meetings	75.8%
Whether the board uses an electronic portal to support its work or not	No
Number of minimum days ahead of the board meeting to provide information to directors, as per the board charter	The relevant information and documents are submitted to the members of the Board of Directors for review with sufficient time before the meeting.
The name of the section on the corporate website that demonstrates information about the board charter	It is specified in Article 7 of the Articles of Association which is available in the Investor Relations / About Us section of the website.
Number of maximum external commitments for board members as per the policy covering the number of external duties held by directors	None.
4.5. BOARD COMMITTEES	
Page numbers or section names of the annual report where information about the board committees is presented	It is presented in the Corporate Governance section of the annual report.
Link(s) to the PDP announcement(s) with the board committee charters	https://www.kap.org.tr/tr/Bildirim/220219 https://www.kap.org.tr/tr/Bildirim/261183 https://www.kap.org.tr/tr/Bildirim/350849 https://www.kap.org.tr/tr/Bildirim/350850 https://www.kap.org.tr/tr/Bildirim/350851

COMMITTEES OF THE BOARD OF DIRECTORS – I

NAMES OF TH BOARD COMMITTEES	NAME OF COMMITTEES DEFINED AS “OTHER” IN THE FIRST COLUMN	NAME-SURNAME OF COMMITTEE MEMBERS	WHETHER COMMITTEE CHAIR OR NOT	WHETHER BOARD MEMBER OR NOT
Audit Committee	-	Cem Mengi	Yes	Board member
Audit Committee	-	Bekir Ağırdir	No	Board member
Corporate Governance Committee	-	Bekir Ağırdir	Yes	Board member
Corporate Governance Committee	-	Selen Zorlu Melik	No	Board member
Corporate Governance Committee	-	Başak Dalga	No	Not board member
Committee of Early Detection of Risk	-	Cem Mengi	Yes	Board member
Committee of Early Detection of Risk	-	Olgun Zorlu	No	Board member



4. BOARD OF DIRECTORS-III

4.5. BOARD COMMITTEES-II	
Specify where the activities of the audit committee are presented in your annual report or website (Page number or section name in the annual report/website)	It is presented in the Corporate Governance section of the annual report.
Specify where the activities of the corporate governance committee are presented in your annual report or website (Page number or section name in the annual report/website)	It is presented in the Corporate Governance section of the annual report.
Specify where the activities of the nomination committee are presented in your annual report or website (Page number or section name in the annual report/website)	It is presented in the Corporate Governance section of the annual report.
Specify where the activities of the early detection of risk committee are presented in your annual report or website (Page number or section name in the annual report/website)	It is presented in the Corporate Governance section of the annual report.
Specify where the activities of the remuneration committee are presented in your annual report or website (Page number or section name in the annual report/website)	It is presented in the Corporate Governance section of the annual report.
4.6. FINANCIAL RIGHTS	
Specify where the operational and financial targets and their achievement are presented in your annual report (Page number or section name in the annual report)	The information is provided in the CEO's Message, The Energy Sector in Turkey, Operations of Zorlu Enerji in 2022 and Financial Capital sections of the annual report.
Specify the section of website where remuneration policy for executive and non-executive directors are presented.	Investor Relations / Corporate Governance / Policies / Remuneration Policy
Specify where the individual remuneration for board members and senior executives are presented in your annual report (Page number or section name in the annual report)	It is presented in the Additional Disclosures Required by the Legislation section of the annual report.

COMPOSITION OF BOARD COMMITTEES-II

NAMES OF THE BOARD COMMITTEES	NAME OF COMMITTEES DEFINED AS "OTHER" IN THE FIRST COLUMN	THE PERCENTAGE OF NON-EXECUTIVE DIRECTORS	THE PERCENTAGE OF INDEPENDENT DIRECTORS IN THE COMMITTEE	THE NUMBER OF MEETINGS HELD IN PERSON	THE NUMBER OF REPORTS ON ITS ACTIVITIES SUBMITTED TO THE BOARD
Audit Committee	-	100%	100%	6	5
Corporate Governance Committee	-	67%	33%	5	2

The Duties And Authorities Of The Board Of Directors

The Board of Directors manages and represents the Company. In addition to this main task, the Board of Directors is also responsible to the Company's stakeholders (customers, employees, suppliers and other stakeholders).

The following are the non-transferable and inalienable duties and powers of the Board of Directors:

- Managing the company at a high level and including the issue of instructions,
- Determining the management organization of the company,
- Establishing the necessary order for financial planning to the extent required by accounting, financial audit and management of the company,
- Appointment and dismissal of managers and persons serving the same purpose and who hold the authority to sign,
- Higher supervision of whether the persons responsible for management act in accordance with the laws, articles of association, internal guidelines and written instructions of the Board of Directors,
- Keeping the books of shares, the Board of Directors' resolutions and minutes of the general shareholders' meetings, preparation of the annual report and corporate governance report and submission to the General Assembly, organization of the General Shareholders' Meetings and execution of the General Assembly decisions,
- Taking the measures stipulated in the Article 376 of the Turkish Commercial Code in case of loss of capital or insolvency.

In this context, the responsibilities of the Board of Directors are as follows:

- To act cautiously in line with duty of care and supervision,
- To determine the company's short- and long-term goals,
- To examine the strategies which will be implemented to achieve the company's goals, to contribute to their development and to ensure their implementation,
- To examine the strategic and financial performance of the company and to take measures for improvement,
- To select the general manager, evaluate him/her in accordance with certain performance criteria and to determine his/her remuneration,

- To ensure the administrative and financial audit of the company,
- To ensure that the Board of Directors has the structure and function required to ensure the effective and efficient operation of the sub-committees of the Board of Directors and senior management, and to determine their performance criteria,
- To determine the communication and relationship approach taken by the company in communicating with the stakeholders and external authorities,
- To determine and implement business ethics rules for the company and its employees,
- To ensure that the company's internal and external activities and actions comply with the relevant legislation.

The Board of Directors is authorized to take decisions on all kinds of work and transactions as required to perform the company's business activities, except those to be taken by the General Assembly in accordance with the law and the Articles of Association.

BOARD COMMITTEES

- In line with the Capital Markets Board's Corporate Governance Principles, a Corporate Governance Committee, an Early Detection of Risk Committee and an Audit Committee were established to work under the Board of Directors to ensure that the duties and responsibilities of the Board of Directors be carried out effectively at Zorlu Enerji. Owing to the nature of the Board structure, the Company has not set up a separate "Remuneration Committee" or a "Nomination Committee", the duties of which are performed by the Corporate Governance Committee.
- As per the Corporate Governance Principle No. 4.5.3, all members of the Audit Committee and the chairpersons of other committees are elected from among the independent members of the Board. Also in line with the principles, the CEO does not take part in the Committees.
- The independent board members, Mr. Bekir Ağırdir and Mr. Cem Mengi serve on more than one committee due to the number of the members of the Board of Directors and the committee formation requirements in accordance with the CMB's Corporate Governance Principles.



- Committees convene at intervals stipulated by the legislation and the related Committee's working principles or upon a request from a member. The committees submit their reports containing information about their work and meeting results to the Board of Directors.
- Any and all resources and support required for the committees to fulfill their duties effectively are provided by the Board of Directors. The committees can invite anyone they deem necessary to their meetings and take their opinions.
- Duties, working principles and the members of the Committees are determined by the Board of Directors and are publicly disclosed on the Public Disclosure Platform and the Company website.

AUDIT COMMITTEE

- The Audit Committee was set up for the effective oversight of the Company's financial and operational activities pursuant to the Article 3 of the CMB's Communiqué Serial X, No. 19. The Committee is responsible for overseeing the functioning and effectiveness of the Company's accounting system, the disclosure of financial information to the public, independent auditing and the company's internal control and internal audit system.
- Audit Committee resorts to independent expert opinions on matters that it deems necessary regarding its activities. Costs of consultancy services required by the Audit Committee are borne by the Company.
- Pursuant to the CMB's Communiqué on Corporate Governance No. II-17.1, the "Working Principles of the Audit Committee" were revised and approved at the Board of Directors' meeting dated 7 April 2014. The revised working principles were made available to the shareholders through the Public Disclosure Platform and the Company's website.
- The Audit Committee is structured in accordance with the Capital Markets Board's Corporate Governance Principles and comprises of at least two members.
- The Chairman of the Committee was elected from among the independent members of the Board and certain criteria were taken into account in the election process. Care is taken to ensure that the Chairperson of the Committee previously held a similar role, has the knowledge to analyze financial statements, is well-versed in accounting standards, and is highly qualified.

- Both members of the Audit Committee were elected from among the independent Directors. The Chairman of the Committee is Mr. Cem Mengi while the other member is Mr. Bekir Ağırdir.

The structure of the Committee and membership information are as follows as per the decision taken in the Company's Board meeting on 28 April 2022:

Committee Members	Duty	Status
Cem Mengi	Chairman of the Committee	Independent Board Member
Bekir Ağırdir	Chairman of the Committee	Independent Board Membe

- It is essential that the Audit Committee convene at least 4 times a year including at least once every three months. The Committee convened 6 times in 2022.
- The Committee carries out its activities in line with the working principles set out in detail and in writing.

The activities carried out by the Audit Committee in 2022 are as follows:

- Oversight of the Company's financial and operational activities,
- Supervision and approval of the compliance of the annual and interim financial statements to be disclosed to the public with the accounting principles followed by the Company as well as their accuracy and veracity,
- Selection of the independent audit firm, preparation of the independent audit contract and initiation of the independent audit process,
- Monitoring the effectiveness and performance of the independent audit activity,
- Overseeing the functioning and effectiveness of the internal control and internal audit system,
- Reviewing the reports regarding the internal control and internal audit studies conducted during the reporting period.

CORPORATE GOVERNANCE COMMITTEE

- The Corporate Governance Committee was established in line with the Capital Markets Board's Communiqué on Corporate Governance to monitor the Company's compliance with the CMB's Corporate Governance Principles, to make improvements in this regard and to offer suggestions to the Board of Directors.
- Pursuant to the CMB's Communiqué on Corporate Governance No. II-17.1, the "Working Principles of the Corporate Governance Committee" were revised and

approved at the Board of Directors' meeting dated 7 April 2014. The revised working principles were made available to the shareholders through the Public Disclosure Platform and the Company's website.

- The Corporate Governance Committee is composed of at least three members, including two non-executive Board Members and the Investor Relations Manager. The chairperson of the Committee is Mr. Bekir Ağırdir elected from among the independent members.

The structure of the Committee and membership information are as follows as per the decision taken in the Company's Board meeting on 28 April 2022:

Committee Members	Duty	Status
Bekir Ağırdir	Chairman of the Committee	Independent Board Member
Selen Zorlu Melik	Member of the Committee	Non-Executive Board Member
Başak Dalga	Member of the Committee	Investor Relations Manager

The activities carried out by the Committee in 2022 in line with its detailed and written working principles are as follows:

- Making proposals to the Board of Directors to improve corporate governance practices within the scope of compliance with the Capital Markets Board's Communiqué on Corporate Governance no. II-17.1 and engaging in and overseeing activities required for compliance with the legislation within the Company,
- Overseeing the activities of the Investor Relations Department,
- Within the scope of the duties of the Remuneration Committee, submitting its proposal to the Board of Directors regarding the remuneration of the members of the Company's Board of Directors and executives with administrative responsibility for 2022, taking into account the degree of achievement of the criteria used in remuneration.

EARLY DETECTION OF RISK COMMITTEE

- The Early Detection of Risk Committee was established in line with the Turkish Commercial Code, the Company's Articles of Association and the Communiqué on Corporate Governance of the Capital Markets Board, with the aim of early detection of risks that may endanger the existence, development and continuity of the Company, implementation of necessary measures regarding the risks identified, and the management of risk. The Committee strives to detect threats that may have negative consequences on the continuity and development of the

- Corporate Governance Committee also fulfills the duties of the Nomination Committee and the Remuneration Committee.
- In principle, the Committee convenes at least twice a year in order to ensure the effective performance of its duties. Corporate Governance Committee convened 5 times in 2022.

company and manage the risks effectively by developing action plans against these threats.

- Pursuant to the CMB's Communiqué on Corporate Governance No. II-17.1, the "Working Principles of the Early Detection of Risk Committee" were revised and approved at the Board of Directors' meeting dated 7 April 2014. The revised working principles were made available to the shareholders through the Public Disclosure Platform and the Company's website.
- The Early Detection of Risk Committee consists of at least two members of the Board of Directors. If the committee consists of two members, both of them, if there are more than two members, the majority of the members are composed of non-executive Board members. Chairperson of the Committee is Mr. Cem Mengi elected from among the independent members. The other member of the Committee is the Board Member Mr. Olgun Zorlu.
- Early Detection of Risk Committee submits a report to the Board of Directors every two months.



The structure of the Committee and membership information are as follows as per the decision taken in the Company's Board meeting on 28 April 2022:

Committee Members	Duty	Status
Cem Mengi	Chairman of the Committee	Independent Board Member
Olgun Zorlu	Member of the Committee	Non-executive Board Member

- The Early Detection of Risk Committee convenes at least 3 times a year, but as often as necessary for the effectiveness of its activities and as explained in its working principles. The Early Detection of Risk Committee convened 6 times in 2022 and submitted 6 risk reports to the Board of Directors.

The activities carried out by the Committee in 2022 in line with its detailed and written working principles are as follows:

- High-level risk assessment was performed, and an inventory of risks that are critical to the Company in strategic, financial and operational areas was drawn up.
- Risks are classified according to the following criteria in the risk map where they are

By Level of Potential Impact	By Level of Likelihood:
---------------------------------	----------------------------

• Negligible	Rare
• Minor	Low
• Moderate	Likely
• Serious	High
• Critical	Almost Certain

- Sector and company-based risks contained in the risk reports were grouped under 9 main risk headings (External Environment, Operational, Authorization, Information Technology and Technology, Honesty/ Integrity, Financial, Process/Operational, Reporting and Strategic) according to COSO (The Committee of Sponsoring Organizations of the Treadway Commission) risk taxonomy.
- As a result of these assessments, it was observed that risks were generally concentrated under the main headings of External Environment, Operational, Financial and Strategic Risks.
- As a result of the risk inventory and Corporate Risk Management Department's research, risk reports were prepared and submitted to the Committee in order to detect the risks that may endanger the existence, development

and continuity of the Company, to implement necessary measures regarding the risks identified, and to manage the risk. Said reports are as follows:

- Results of Zorlu Energy Group's Risk Assessment Survey 2021
- Russia - Ukraine Crisis and the Sanctions Imposed
- Post-Pandemic Future of the World and the Economy
- Risks Threatening the Global Economy in the Framework of the Global Risks Report
- Energy Crisis in Europe and its Impact on the Turkish Economy
- The Global Economic Outlook and Expectations for the Turkish Economy in 2023

Board of Directors' Evaluation of the Working Principles and Effectiveness of the Board Committees

- The Board Committees were established to support the Board of Directors in fulfilling its duties and responsibilities more effectively. In line with the Corporate Governance Principles of the Capital Markets Board, at its meeting on 28 April 2022, the Board of Directors resolved to:
 - ✕ Elect Mr. Bekir Ağır, Independent Member of the Board, as the Chairman of the Corporate Governance Committee and Ms. Selen Zorlu Melik, Board Member, and Ms. Başak Dalga, Investor Relations Manager, as Committee members,
 - ✕ Elect Mr. Cem Mengi, Independent Member of the Board, as the Chairman of the Audit Committee and Mr. Bekir Ağır, Independent Member of the Board, as Committee Member,
- Elect Mr. Cem Mengi, Independent Member of the Board, as the Chairman of the Early Detection of Risk Committee and Mr. Olgun Zorlu, Board Member, as Committee Member.

Due to the structure of the Board, the Company did not establish a separate "Remuneration Committee" and a "Nomination Committee". The duties of these committees are fulfilled by the Corporate Governance Committee.

The Working Principles of the Board Committees were revised in accordance with the CMB's Communiqué on Corporate Governance No. II-17.1 and approved at the Board meeting held on 7 April 2014. The revised working principles were made available to the shareholders through the Public Disclosure Platform and the Company's website www.zorluenerji.com.tr.

In 2022, the Board Committees performed their duties and responsibilities as required in the Corporate Governance Principles and their own Working Principles and operated effectively.

In 2022, in order to enable the committees to fulfill their duties effectively, the committees convened as specified below as per their annual meeting schedules specified in their Working Principles:

- The Corporate Governance Committee convened four times,
- The Corporate Governance Committee convened once to fulfill the duties of the Remuneration Committee,
- The Audit Committee convened six times,
- The Early Detection of Risk Committee convened six times.

The Committees submitted the reports containing information about their work and the results of their meetings held during the year to the Board of Directors:

- The "Corporate Governance Committee", which was established in line with the Capital Markets Board's Communiqué on Corporate Governance in order to monitor the Company's compliance with the Corporate Governance Principles, carry out studies for improvement, and make proposals to the Board of Directors, monitored the Company's compliance with Corporate Governance Principles, made recommendations to the management to improve compliance with the non-mandatory principles and oversaw the activities of the Investor Relations Department.
- Fulfilling the duties of the Remuneration Committee, the Corporate Governance Committee submitted to the Board of Directors its proposal for the remuneration of the members of the Board of Directors and executives with administrative responsibility for 2022, taking into account the degree of achievement of the criteria used in remuneration within the scope of the duties of this committee.
- The "Audit Committee", which was established for the supervision of the Company's accounting system, the independent audit, public disclosure of financial information, and functioning and effectiveness of the Company's internal control and internal audit system, presented its opinions and suggestions in the areas of its responsibility to the Board of Directors.
- The "Early Detection of Risk Committee", which was established for the early detection of risks which may jeopardize the Company's existence, development and continuity, implementation of necessary measures against these risks and management of risk, carried out a high-level risk assessment, drew up an inventory of critical risks for the Company in strategic, financial and operational areas and prepared and submitted to the Board six Risk Reports as a result of its risk inventories and the Corporate Risk Management Department's research during the year within the scope of its duties set forth in its Working Principles.

**Statement of Independence****05.04.2021**

I hereby declare that, I am a candidate to serve as an “independent member” on the Board of Directors of Zorlu Enerji Elektrik Üretim AŞ in accordance with the legislation, the Articles of Association and the criteria specified in the Capital Markets Board's “Communiqué on Corporate Governance” no. II-17.1 and in that regard;

In addition to not having served as a member of the Board of Directors at Zorlu Enerji Elektrik Üretim AŞ (and at the subsidiaries and associates of Zorlu Enerji Elektrik Üretim AŞ) for more than six years in the last ten years and as an executive member of the Board of Directors in the afore-mentioned companies within the last five years, I declare that:

- Within the last five years, no employment relationship has been established between me, my spouse and my relatives by blood or marriage up to second degree and the Company, the affiliated companies which the Company controls the management of or has material influence over, shareholders who control the management of or have material influence over the Company and legal entities which these shareholders control the management of, in an executive position with important duties and responsibilities, nor have I/we individually or jointly held more than 5% of the capital or voting rights or privileged shares in or established a material business relationship with the same,
- Within the last five years, I have not been a shareholder (5% and more), or held an executive position with important duties and responsibilities, or served as a Board member in any company from/to which the Company purchases or sells a significant amount of products or services based on the agreements made during the periods these products or services were sold or purchased including particularly those companies which provide auditing (including tax audit, legal audit and internal audit), rating and consultancy services to the Company,
- I have the professional training, knowledge and experience necessary to duly carry out the duties which I shall assume due to my position as an independent Board member,
- I will not work as a full-time employee at any public institution or organization after being elected as a Board member with the exception of working as a faculty member at a university as prescribed by the legislation I am subject to,
- I am deemed to be a resident in Turkey according to the Income Tax Law dated 31 December 1960 and numbered 193,
- I have strong ethical standards, professional reputation and experience which will allow me to contribute positively to the activities of the Company, to protect my neutrality in case of conflicts of interest between the Company and the shareholders and to decide independently by taking into consideration the rights of the stakeholders,
- I will be able to dedicate a sufficient amount of time to the affairs of the Company to follow the functioning of the Company's activities and to fully meet the requirements of the duties I shall assume,
- I have not served as a Board member at the Company's Board of Directors for more than 6 years in the last ten years,
- I am not serving as an independent board member at more than three companies whose management is controlled by the Company or the shareholders controlling the Company and at more than five companies which listed on the stock exchange,
- I am not registered and declared on behalf of the legal entity which is elected as a member of the Board of Directors.

Ayşegül İldeniz**Statement of Independence****05.04.2021**

I hereby declare that, I am a candidate to serve as an “independent member” on the Board of Directors of Zorlu Enerji Elektrik Üretim AŞ in accordance with the legislation, the Articles of Association and the criteria specified in the Capital Markets Board's “Communiqué on Corporate Governance” no. II-17.1 and in that regard;

In addition to not having served as a member of the Board of Directors at Zorlu Enerji Elektrik Üretim AŞ (and at the subsidiaries and associates of Zorlu Enerji Elektrik Üretim AŞ) for more than six years in the last ten years and as an executive member of the Board of Directors in the afore-mentioned companies within the last five years, I declare that:

- Within the last five years, no employment relationship has been established between me, my spouse and my relatives by blood or marriage up to second degree and the Company, the affiliated companies which the Company controls the management of or has material influence over, shareholders who control the management of or have material influence over the Company and legal entities which these shareholders control the management of, in an executive position with important duties and responsibilities, nor have I/we individually or jointly held more than 5% of the capital or voting rights or privileged shares in or established a material business relationship with the same,
- Within the last five years, I have not been a shareholder (5% and more), or held an executive position with important duties and responsibilities, or served as a Board member in any company from/to which the Company purchases or sells a significant amount of products or services based on the agreements made during the periods these products or services were sold or purchased including particularly those companies which provide auditing (including tax audit, legal audit and internal audit), rating and consultancy services to the Company,
- I have the professional training, knowledge and experience necessary to duly carry out the duties which I shall assume due to my position as an independent Board member,
- I will not work as a full-time employee at any public institution or organization after being elected as a Board member with the exception of working as a faculty member at a university as prescribed by the legislation I am subject to,
- I am deemed to be a resident in Turkey according to the Income Tax Law dated 31 December 1960 and numbered 193,
- I have strong ethical standards, professional reputation and experience which will allow me to contribute positively to the activities of the Company, to protect my neutrality in case of conflicts of interest between the Company and the shareholders and to decide independently by taking into consideration the rights of the stakeholders,
- I will be able to dedicate a sufficient amount of time to the affairs of the Company to follow the functioning of the Company's activities and to fully meet the requirements of the duties I shall assume,
- I have not served as a Board member at the Company's Board of Directors for more than 6 years in the last ten years,
- I am not serving as an independent board member at more than three companies whose management is controlled by the Company or the shareholders controlling the Company and at more than five companies which listed on the stock exchange,
- I am not registered and declared on behalf of the legal entity which is elected as a member of the Board of Directors.

Bekir Ağırdir



Statement of Independence

05.04.2021

I hereby declare that, I am a candidate to serve as an “independent member” on the Board of Directors of Zorlu Enerji Elektrik Üretim AŞ in accordance with the legislation, the Articles of Association and the criteria specified in the Capital Markets Board’s “Communiqué on Corporate Governance” no. II-17.1 and in that regard;

In addition to not having served as a member of the Board of Directors at Zorlu Enerji Elektrik Üretim AŞ (and at the subsidiaries and associates of Zorlu Enerji Elektrik Üretim AŞ) for more than six years in the last ten years and as an executive member of the Board of Directors in the afore-mentioned companies within the last five years, I declare that:

- Within the last five years, no employment relationship has been established between me, my spouse and my relatives by blood or marriage up to second degree and the Company, the affiliated companies which the Company controls the management of or has material influence over, shareholders who control the management of or have material influence over the Company and legal entities which these shareholders control the management of, in an executive position with important duties and responsibilities, nor have I/we individually or jointly held more than 5% of the capital or voting rights or privileged shares in or established a material business relationship with the same,
- Within the last five years, I have not been a shareholder (5% and more), or held an executive position with important duties and responsibilities, or served as a Board member in any company from/to which the Company purchases or sells a significant amount of products or services based on the agreements made during the periods these products or services were sold or purchased including particularly those companies which provide auditing (including tax audit, legal audit and internal audit), rating and consultancy services to the Company,
- I have the professional training, knowledge and experience necessary to duly carry out the duties which I shall assume due to my position as an independent Board member,
- I will not work as a full-time employee at any public institution or organization after being elected as a Board member with the exception of working as a faculty member at a university as prescribed by the legislation I am subject to,
- I am deemed to be a resident in Turkey according to the Income Tax Law dated 31 December 1960 and numbered 193,
- I have strong ethical standards, professional reputation and experience which will allow me to contribute positively to the activities of the Company, to protect my neutrality in case of conflicts of interest between the Company and the shareholders and to decide independently by taking into consideration the rights of the stakeholders,
- I will be able to dedicate a sufficient amount of time to the affairs of the Company to follow the functioning of the Company’s activities and to fully meet the requirements of the duties I shall assume,
- I have not served as a Board member at the Company’s Board of Directors for more than 6 years in the last ten years,
- I am not serving as an independent board member at more than three companies whose management is controlled by the Company or the shareholders controlling the Company and at more than five companies which listed on the stock exchange,
- I am not registered and declared on behalf of the legal entity which is elected as a member of the Board of Directors.

Cem Mengi

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF CONSOLIDATED FINANCIAL STATEMENTS

AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 TOGETHER WITH INDEPENDENT AUDITORS’ REPORT (ORIGINALLY ISSUED IN TURKISH)



CONVENIENCE TRANSLATION OF THE INDEPENDENT AUDITOR’S REPORT ORIGINALLY PREPARED AND ISSUED IN TURKISH TO ENGLISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

SERMAYE PİYASASI KURULU’NUN II-14.1 SAYILI SERMAYE PİYASASINDA FİNANSAL RAPORLAMAYA İLİŞKİN ESASLAR TEBLİĞİ’NİN 9. MADDESİ GEREĞİNCE HAZIRLANAN SORUMLULUK BEYANI

FAALİYET RAPORUNUN KABULÜNE İLİŞKİN YÖNETİM KURULU’NUN

KARAR TARİHİ: 13.03.2023

KARAR SAYISI: 2023/18

Şirketimizce hazırlanan ve KPMG Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş. tarafından bağımsız denetime tabi tutulan 2022 yılına ait, Türk Ticaret Kanunu ve Sermaye Piyasası Kurulu’nun (SPK) II-14.1 sayılı “Sermaye Piyasasında Finansal Raporlamaya İlişkin Esaslar Tebliği”ne (“Tebliğ”) uyumlu olarak hazırlanan faaliyet raporunun, SPK düzenlemeleri doğrultusunda;

· Tarafımızca incelendiğini,

· Şirketimizdeki görev ve sorumluluk alanımızda sahip olduğumuz bilgiler çerçevesinde, önemli konularda gerçeğe aykırı bir açıklama veya açıklamanın yapıldığı tarih itibarıyla yanıltıcı olması sonucunu doğurabilecek herhangi bir eksiklik içermediğini,

- Şirketimizdeki görev ve sorumluluk alanımızda sahip olduğumuz bilgiler çerçevesinde, Tebliğ uyarınca hazırlanmış Faaliyet Raporu’nun işin gelişimi ve performansını ve konsolidasyon kapsamındakiyle birlikte, işletmenin finansal durumunu, karşı karşıya olunan önemli risk ve belirsizliklerle birlikte, dürüstçe yansıttığını beyan ederiz.

Saygılarımızla,

Denetim Komitesi Başkanı
Cem Mengi

Denetim Komitesi Üyesi
Bekir Ağırır

Finansal Raporlamadan Sorumlu Yönetici
Elif Yener

CONVENIENCE TRANSLATION OF THE INDEPENDENT AUDITOR’S REPORT ORIGINALLY PREPARED AND ISSUED IN TURKISH TO ENGLISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)



KPMG Bağımsız Denetim ve
Serbest Muhasebeci Mali Müşavirlik A.Ş.
İş Kuleleri Kule 3 Kat: 2-9
Levent 34330 İstanbul
Tel +90 212 316 6000
Fax +90 212 316 6060
www.kpmg.com.tr

Zorlu Enerji Elektrik Üretim Anonim Şirketi Genel Kurulu’na

Görüş

Zorlu Enerji Elektrik Üretim Anonim Şirketi’nin (“Şirket”) ve bağlı ortaklıklarının (birlikte “Grup” olarak anılacaktır) hesap dönemine ait tam set konsolide finansal tablolarını denetlemiş olduğumuzdan, bu hesap dönemine ilişkin yıllık faaliyet raporunu da denetlemiş bulunuyoruz.

Görüşümüze göre, yönetim kurulunun yıllık faaliyet raporu içinde yer alan konsolide finansal bilgiler ile Yönetim Kurulunun Grup’un durumu hakkında denetlenen finansal tablolarda yer alan bilgileri kullanarak yaptığı irdelemeler, tüm önemli yönleriyle, denetlenen tam set konsolide finansal tablolarla ve bağımsız denetim sırasında elde ettiğimiz bilgilerle tutarlıdır ve gerçeği yansıtmaktadır.

Görüşün Dayanağı

Yaptığımız bağımsız denetim, Sermaye Piyasası Kurulu (“SPK”) tarafından yayımlanan bağımsız denetim standartlarına ve Kamu Gözetimi, Muhasebe ve Denetim Standartları Kurumu (“KGK”) tarafından yayımlanan Türkiye Denetim Standartlarının bir parçası olan Bağımsız Denetim Standartlarına (“BDS”lere) uygun olarak yürütülmüştür. Bu standartlar kapsamındaki sorumluluklarımız, raporumuzun Bağımsız Denetçinin Yıllık Faaliyet Raporunun Bağımsız Denetimine İlişkin Sorumlulukları bölümünde ayrıntılı bir şekilde açıklanmıştır. KGK tarafından yayımlanan Bağımsız Denetçiler için Etik Kurallar (Bağımsızlık Standartları Dâhil) (“Etik Kurallar”) ve bağımsız denetimle ilgili mevzuatta yer alan etik hükümlere uygun olarak Grup’tan bağımsız olduğumuzu beyan ederiz. Etik Kurallar ve mevzuat kapsamındaki etiğe ilişkin diğer sorumluluklar da tarafımızca yerine getirilmiştir. Bağımsız denetim sırasında elde ettiğimiz bağımsız denetim kanıtlarının, görüşümüzün oluşturulması için yeterli ve uygun bir dayanak oluşturduğuna inanıyoruz.

Tam Set Konsolide Finansal Tablolara İlişkin Denetçi Görüşümüz

Grup’un 1/1/2022-31/12/2022 hesap dönemine ilişkin tam set konsolide finansal tabloları hakkında 8 Mart 2023 tarihli denetçi raporumuzda olumlu görüş bildirmiş bulunuyoruz.

**CONVENIENCE TRANSLATION OF THE INDEPENDENT AUDITOR’S REPORT ORIGINALLY PREPARED
AND ISSUED IN TURKISH TO ENGLISH**

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

**Yönetim Kurulunun Yıllık Faaliyet Raporuna İlişkin Sorumluluğu**

Grup yönetimi, 6102 sayılı Türk Ticaret Kanununun (“TTK”) 514 ve 516 ncı maddelerine ve Sermaye Piyasası Kurulu’nun II-14.1 No’lu “Sermaye Piyasasında Finansal Raporlamaya İlişkin Esaslar Tebliği” (“Tebliğ”) hükümlerine göre yıllık faaliyet raporuyla ilgili olarak aşağıdakilerden sorumludur:

- a) Yıllık faaliyet raporunu bilanço gününü izleyen ilk üç ay içinde hazırlar ve genel kurula sunar.
- b) Yıllık faaliyet raporunu; Grup’un o yıla ait faaliyetlerinin akışı ile her yönüyle konsolide finansal durumunu doğru, eksiksiz, dolambaçsız, gerçeğe uygun ve dürüst bir şekilde yansıtabilecek şekilde hazırlar. Bu raporda finansal durum, konsolide finansal tablolara göre değerlendirilir. Raporda ayrıca, Grup’un gelişmesine ve karşılaşması muhtemel risklere de açıkça işaret olunur. Bu konulara ilişkin yönetim kurulunun değerlendirmesi de raporda yer alır.
- c) Faaliyet raporu ayrıca aşağıdaki hususları da içerir:
 - Faaliyet yılının sona ermesinden sonra Grup’ta meydana gelen ve özel önem taşıyan olaylar,
 - Grup’un araştırma ve geliştirme çalışmaları,
 - Yönetim kurulu üyeleri ile üst düzey yöneticilere ödenen ücret, prim, ikramiye gibi mali menfaatler, ödenekler, yolculuk, konaklama ve temsil giderleri, aynı ve nakdi imkânlar, sigortalar ve benzeri teminatlar.

Yönetim kurulu, faaliyet raporunu hazırlarken Ticaret Bakanlığının ve ilgili kurumların yaptığı ikincil mevzuat düzenlemelerini de dikkate alır.

Bağımsız Denetçinin Yıllık Faaliyet Raporunun Bağımsız Denetimine İlişkin Sorumluluğu

Amacımız, TTK hükümleri ve Tebliğ çerçevesinde yıllık faaliyet raporu içinde yer alan konsolide finansal bilgiler ile Yönetim Kurulunun Grup’un durumu hakkında denetlenen finansal tablolarda yer alan bilgileri kullanarak yaptığı irdelemelerin, Grup’un denetlenen konsolide finansal tablolarıyla ve bağımsız denetim sırasında elde ettiğimiz bilgilerle tutarlı olup olmadığı ve gerçeği yansıtip yansıtmadığı hakkında görüş vermek ve bu görüşümüzü içeren bir rapor düzenlemektir.

Yaptığımız bağımsız denetim, SPK tarafından yayımlanan bağımsız denetim standartlarına ve BDS’lere uygun olarak yürütülmüştür. Bu standartlar, etik hükümlere uygunluk sağlanması ile bağımsız denetimin, faaliyet raporunda yer alan konsolide finansal bilgiler ve Yönetim Kurulunun Grup’un durumu hakkında denetlenen finansal tablolarda yer alan bilgileri kullanarak yaptığı irdelemelerin konsolide finansal tablolarla ve denetim sırasında elde edilen bilgilerle tutarlı olup olmadığına ve gerçeği yansıtip yansıtmadığına dair makul güvence elde etmek üzere planlanarak yürütülmesini gerektirir.

KPMG Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik Anonim Şirketi



Şirin Soysal, SMMM
Sorumlu Denetçi
13 Mart 2023
İstanbul, Türkiye

**CONVENIENCE TRANSLATION OF THE INDEPENDENT AUDITOR’S REPORT ORIGINALLY PREPARED
AND ISSUED IN TURKISH TO ENGLISH**

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

**SERMAYE PİYASASI KURULU’NUN II-14.1 SAYILI SERMAYE PİYASASINDA FİNANSAL RAPORLAMAYA İLİŞKİN
ESASLAR TEBLİĞİ’NİN 9. MADDESİ GEREĞİNCE HAZIRLANAN SORUMLULUK BEYANI**

Şirketimizce, Sermaye Piyasası Kurulu’nun II - 14.1 sayılı “Sermaye Piyasasında Finansal Raporlamaya İlişkin Esaslar Tebliği” hükümleri uyarınca Türkiye Muhasebe Standartları/Türkiye Finansal Raporlama Standartları ve SPK tarafından belirlenen formatlarla uyumlu olarak hazırlanan ve KPMG Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş. tarafından bağımsız denetime tabi tutulan 01.01.2022-31.12.2022 hesap dönemine ait konsolide finansal tabloların SPK düzenlemeleri doğrultusunda;

- a) Tarafımızca incelendiğini,
- b) Şirketteki görev ve sorumluluk alanında sahip olduğumuz bilgiler çerçevesinde, önemli konularda gerçeğe aykırı bir açıklama veya açıklamanın yapıldığı tarih itibarıyla yanıltıcı olması sonucunu doğurabilecek herhangi bir eksiklik içermediğini,
- c) Şirketteki görev ve sorumluluk alanında sahip olduğumuz bilgiler çerçevesinde, Tebliğ uyarınca hazırlanmış finansal tabloların konsolidasyon kapsamındakilerle birlikte, işletmenin aktifleri, pasifleri, finansal durumu ve kar ve zararı ile ilgili gerçeği dürüst bir biçimde yansıttığını

bilgilerinize sunar, yapılan açıklamadan dolayı sorumlu olduğumuzu beyan ederiz.

Saygılarımızla,

Denetim Komitesi Başkanı
Cem Mengi

Denetim Komitesi Üyesi
Bekir Ağırır

Finansal Raporlamadan Sorumlu Yönetici
Elif Yener



CONVENIENCE TRANSLATION OF THE INDEPENDENT AUDITOR’S REPORT ORIGINALLY PREPARED AND ISSUED IN TURKISH TO ENGLISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

To the Shareholders of Zorlu Enerji Elektrik Üretim Anonim Şirketi

A) Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of Zorlu Enerji Elektrik Üretim Anonim Şirketi’nin (“the Company”) and its subsidiaries (together will be referred to as “the Group”), which comprise the consolidated statement of financial position as at 31 December 2022, the consolidated statements of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2022, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Turkish Financial Reporting Standards (“TFRS”).

Basis for Opinion

We conducted our audit in accordance with standards on auditing issued by Capital Markets Board of Turkey (“CMB”) and Standards on Auditing which is a component of the Turkish Auditing Standards published by the Public Oversight Accounting and Auditing Standards Authority (“POA”) (“Standards on Auditing issued by POA”). Our responsibilities under those standards are further described in the Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We declare that we are independent of the Group in accordance with the Code of Ethics for Auditors issued by POA (including Independence Standards) (“POA’s Code of Ethics”) and the ethical requirements in the regulations issued by POA that are relevant to audit of consolidated financial statements, and we have fulfilled our other ethical responsibilities in accordance with the POA’s Code of Ethics and regulations. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

CONVENIENCE TRANSLATION OF THE INDEPENDENT AUDITOR’S REPORT ORIGINALLY PREPARED AND ISSUED IN TURKISH TO ENGLISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

Recoverability of deferred tax asset for unused tax losses:

Refer to Note 2.4, 2.7 and Note 23 to the consolidated financial statements for summary of significant accounting policies and significant accounting estimates and assumptions for recoverability of deferred tax asset for unused tax losses

The key audit matter

As of 31 December 2022, the deferred tax asset included in the consolidated financial statements of the Group and calculated over unused tax losses amounted to TL 1.838.695 thousand.

The recoverability of recognized deferred tax assets is dependent on the Group’s ability to generate future taxable profits sufficient to utilize deductible temporary differences and tax losses (before the five-year term expires). Therefore, the recognition and recoverability of deferred tax assets require significant judgment.

Estimating the amount and timing of the realization of future taxable profits and temporary differences involves inherent uncertainty, and this matter has been identified as one of the key audit matters.

How the matter was addressed in our audit

We have performed the following audit procedures to be responsive to this area:

- Assessing and challenging the assumptions and judgments exercised by management in respect of the forecasts of future taxable profits by analyzing the assumptions adopted by management;
- Considering the historical accuracy of management’s estimates of future taxable profits by comparing the actual taxable profits for the current year with management’s estimates in the forecasts made in the previous year;
- In addition, within the scope of the above-mentioned issues, the appropriateness and adequacy of the explanations in the financial statements about the deferred asset calculated over the previous years’ losses in terms of TFRSs;
- Assessing whether the Group’s disclosures in the consolidated financial statements of the application of judgment in estimating recognized and unrecognized deferred tax asset balances appropriately reflect the Group’s deferred tax position with reference to the requirements of the TFRSs.

Hedge accounting

Refer to Note 2.4, 2.7 and Note 19 to the consolidated financial statements for summary of significant accounting policies and significant accounting estimates and assumptions for the hedge accounting.

The key audit matter

As of 31 December 2021, the Group used its investment loans and its Eurobond amounting to USD 643.932 thousand as a hedging instruments to hedge against the exchange rate risk resulting from the highly probable sales income earned in the scope of Renewable Energy Sources Support Mechanism (“YEKDEM”), and implemented cash flow hedge accounting for highly-probable YEKDEM sales as a result of efficiency tests carried out within this scope.

The criteria for the application of the hedge accounting include defining, documenting and regularly testing the effectiveness of the hedge accounting transactions. Due the fact that hedge accounting has complicated structure and requires complex calculations, we considered this to be one of the key audit matters.

How the matter was addressed in our audit

We have performed the following audit procedures to be responsive to this area:

- Documentation and appropriateness of hedging relationships of cash flow hedge transactions have been identified.
- The objective of the hedge accounting and its compliance with TAS 39 “Financial Instruments” are considered. Management’s assessment of effectiveness, measuring ineffectiveness and appropriateness of accounting records were tested.
- Considering the purposes of hedge accounting and compliance with TAS 39 “Financial instruments” standard, the management reviews the effectiveness of the hedging effectiveness test, in case of ineffectiveness, and tests how it is recognized for selected hedging transactions,
- Involving specialists to assist in evaluating the appropriateness of hedging models, and
- Assessing the adequacy and appropriateness of disclosures in the consolidated financial statements, regarding the hedge accounting.



CONVENIENCE TRANSLATION OF THE INDEPENDENT AUDITOR’S REPORT ORIGINALLY PREPARED AND ISSUED IN TURKISH TO ENGLISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

Revaluation of property, plant and equipment

Refer to Note 2.4, 2.7 and Note 15 to the consolidated financial statements for summary of significant accounting policies and significant accounting estimates and assumptions for the accounting for revaluation of property, plant and equipment.

The key audit matter	How the matter was addressed in our audit
The Group revalued its power plants in line with revaluation model in IAS 16 “Property, plant and equipment”. In this regard, as a result of the revaluations carried out as of 31 December 2021, a revaluation increases in property, plant and equipment amounting to TL 16.116.112 thousand was recognized in the consolidated financial statements. Within the scope of the Group’s revaluation model, the values of the property, plant and equipment were determined by independent valuation institutions. “Revaluation of property, plant and equipment” was considered to be a key audit matter because the carrying values of these assets are material to the consolidated financial statements as of 31 December 2021 and also because of the significant estimates and judgments required in determining the assumptions to be used to estimate the recoverable amount.	We have performed the following audit procedures to be responsive to this area: - Assessing the competence and independence of independent valuation experts who carry out revaluations of property, plant and equipment - Assessing the competence and independence of independent valuation experts who carry out revaluations of property, plant and equipment, - Assessing the appropriateness of significant estimates and inputs used in valuation modeling with the help of valuation specialists, including comparing them with current precedents and past values in the market, - Assessing the appropriateness and adequacy of disclosures in the consolidated financial statements related to revaluation of property, plant and equipment in accordance with TFRS.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with TFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group’s financial reporting process.

Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements

Responsibilities of auditors in an audit are as follows:

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with standards on auditing issued by the CMB and Standards on Auditing issued by POA will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

CONVENIENCE TRANSLATION OF THE INDEPENDENT AUDITOR’S REPORT ORIGINALLY PREPARED AND ISSUED IN TURKISH TO ENGLISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

As part of an audit in accordance with the standards on auditing issued by the CMB and Standards on Auditing issued by POA, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group’s internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management’s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor’s report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor’s report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor’s report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.



CONVENIENCE TRANSLATION OF THE INDEPENDENT AUDITOR’S REPORT ORIGINALLY PREPARED AND ISSUED IN TURKISH TO ENGLISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

Other Legal and Regulatory Requirements

- 1) Pursuant to the fourth paragraph of Article 398 of Turkish Commercial Code (“TCC”) numbered 6102; the Independent Auditor’s Report on System and Committee of Early Identification of Risks is presented to the Board of Directors of the Company on 8 March 2023.
- 2) Pursuant to the fourth paragraph of Article 402 of the TCC; no significant matter has come to our attention that causes us to believe that for the period between 1 January 2022 and 31 December 2022, the Company’s bookkeeping activities and consolidated financial statements are not in compliance with TCC and provisions of the Company’s articles of association in relation to financial reporting.
- 3) Pursuant to the fourth paragraph of Article 402 of the TCC; the Board of Directors provided us the necessary explanations and required documents in connection with the audit.

KPMG Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik Anonim Şirketi



Şirin Soysal, SMMM
Partner 8 March 2023 İstanbul, Turke

CONTENTS

PAGE

CONSOLIDATED STATEMENT OF FINANCIAL POSITION	258-260
CONSOLIDATED STATEMENT OF PROFIT OR LOSS	261
CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME.....	262
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY	263
CONSOLIDATED STATEMENT OF CASH FLOWS	264-265
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS	266-359
NOTE 1 ORGANIZATION AND NATURE OF OPERATIONS.....	266-270
NOTE 2 BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS.....	271-302
NOTE 3 SEGMENT REPORTING	303-304
NOTE 4 CASH AND CASH EQUIVALENTS	304-305
NOTE 5 FINANCIAL ASSETS RELATED TO SERVICE CONCESSION AGREEMENTS	305-306
NOTE 6 FINANCIAL LIABILITIES	307-308
NOTE 7 TRADE RECEIVABLES AND PAYABLES	309-310
NOTE 8 OTHER RECEIVABLES AND PAYABLES	310
NOTE 9 INVENTORIES	311
NOTE 10 OTHER ASSETS AND LIABILITIES	311-312
NOTE 11 PREPAID EXPENSES	312
NOTE 12 FINANCIAL INVESTMENTS	313
NOTE 13 EQUITY ACCOUNTED INVESTEEES	313-314
NOTE 14 RIGHT OF USE ASSETS	315
NOTE 15 TANGIBLE ASSETS	316-318
NOTE 16 INTANGIBLE ASSETS	319-320
NOTE 17 CONTRACT ASSETS.....	321
NOTE 18 PROVISIONS, CONTINGENT ASSETS AND LIABILITIES.....	321-326
NOTE 19 DERIVATIVE FINANCIAL INSTRUMENTS	327-329
NOTE 20 PROVISIONS FOR EMPLOYEE BENEFITS.....	329-330
NOTE 21 DEFERRED INCOME	330
NOTE 22 EQUITY	331-332
NOTE 23 TAXES	333-336
NOTE 24 REVENUE.....	336
NOTE 25 COST OF SALES	337
NOTE 26 GENERAL ADMINISTRATIVE EXPENSES AND MARKETING EXPENSES	337-338
NOTE 27 OTHER OPERATING INCOME AND EXPENSES.....	338
NOTE 28 INCOME FROM INVESTMENT ACTIVITIES	339
NOTE 29 FINANCIAL INCOME AND EXPENSES	339
NOTE 30 RELATED PARTY TRANSACTIONS	340-344
NOTE 31 EARNINGS/(LOSSES) PER SHARE	345
NOTE 32 NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS	345-356
NOTE 33 FEES REGARDING SERVICES RECEIVED FROM INDEPENDENT AUDITOR/INDEPENDENT AUDITING COMPANY.....	356
NOTE 34 SUBSEQUENT EVENTS.....	357-359

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES**
CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022

Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

ASSETS	Notes	Audited 31 December 2022	Audited 31 December 2021
Current assets:			
Cash and cash equivalents	4	2.305.560	1.171.070
Financial investments	12	658.342	298.976
Trade receivables		7.041.880	2.846.527
- Trade receivables from related parties	7,30	1.076.819	182.302
- Trade receivables from third parties	7	5.965.061	2.664.225
Other receivables		1.478.472	944.050
- Other receivables from related parties	8,30	1.241.213	911.429
- Other receivables from third parties	8	237.259	32.621
Receivables from service concession agreements	5	1.041.484	694.125
Derivative financial assets	19	-	57.115
Inventories	9	510.310	239.030
Prepaid expenses		70.950	46.319
-Prepaid expenses to third parties	11	70.950	46.319
Current tax assets	23	21.307	9.532
Other current assets		433.252	164.562
- Other current assets from third parties	10	433.252	164.562
Total current assets		13.561.557	6.471.306
Non-current assets:			
Financial investments		246	246
- Other financial investments	12	246	246
Trade receivables		91.621	51.481
- Trade receivables from third parties	7	91.621	51.481
Other receivables		7.446.857	3.227.990
- Other receivables from related parties	8,30	7.287.208	3.074.954
- Other receivables from third parties	8	159.649	153.036
Contract assets		8.531	19.377
- Other contract assets	17	8.531	19.377
Receivables from service concession agreements	5	6.766.842	3.331.766
Equity accounted investees	13	1.614.022	1.181.148
Tangible assets	15	34.644.864	18.787.818
Right of use assets	14	263.484	162.309
Intangible assets	16	1.444.595	1.501.186
Derivative financial assets	19	459.185	-
Prepaid expenses		8.370	8.975
- Prepaid expenses to third parties	11	8.370	8.975
Deferred tax assets	23	1.101.734	671.747
Other non-current assets		15.777	11.069
- Other non-current assets to third parties	10	15.777	11.069
Total non-current assets		53.866.128	28.955.112
TOTAL ASSETS		67.427.685	35.426.418

The accompanying notes form an integral part of these consolidated financial statement

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022

Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

LIABILITIES	Notes	Audited 31 December 2022	Audited 31 December 2021
Current liabilities:			
Short-term borrowings		2.720.679	1.270.673
Short-term borrowings from related parties		-	35.551
- Other short-term borrowings	6,30	-	35.551
Short-term borrowings from third parties		2.720.679	1.235.122
- Bank borrowings	6	2.157.412	905.107
- Issued debt instruments	6	563.267	164.037
- Other short-term borrowings	6	-	165.978
Short-term portion of long-term borrowings		8.986.822	4.334.885
Short-term portion of long-term borrowings from third parties		8.986.822	4.334.885
- Bank borrowings	6	7.585.455	3.277.643
- Issued debt instruments	6	1.291.899	1.006.354
- Lease liabilities	6	109.468	50.888
Trade payables		5.994.384	2.189.914
- Trade payables to related parties	7,30	290.139	80.775
- Trade payables to third parties	7	5.704.245	2.109.139
Payables related to employee benefits		22.026	18.272
Other payables		3.607.928	1.235.798
- Other payables to related parties	8,30	1.214.723	7.769
- Other payables to third parties	8	2.393.205	1.228.029
Derivative financial liabilities	19	17.905	109.531
Deferred income		923.557	144.220
- Deferred income from third parties	21	923.557	144.220
Current tax liabilities	23	134.280	5.758
Short-term provisions		21.511	15.540
- Other short-term provisions	18	21.511	15.540
Other current liabilities		225.467	177.170
- Other current liabilities to third parties	10	225.467	177.170
Total current liabilities		22.654.559	9.501.761
Long-term liabilities:			
Long-term borrowings		22.708.925	18.174.197
Long-term borrowings from third parties		22.708.925	18.174.197
- Bank borrowings	6	17.393.418	14.337.735
- Lease liabilities	6	277.265	155.841
- Issued debt instruments	6	5.038.242	3.680.621
Other payables		7.916	6.365
- Other payables to related parties	30	7.916	6.365
Derivative financial liabilities	19	-	162.574
Long-term provisions		175.209	68.296
- Long-term provisions for employee benefits	18,20	175.209	68.296
Deferred tax liabilities	23	4.272.438	1.331.332
Total non-current liabilities		27.164.488	19.742.764
TOTAL LIABILITIES		49.819.047	29.244.525

The accompanying notes form an integral part of these consolidated financial statements.

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES**
CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022

Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

	Notes	Audited 31 December 2022	Audited 31 December 2021
EQUITY			
Equity attributable to owners of the Company		17.700.261	6.310.459
Paid-in capital	22	2.500.000	2.500.000
Adjustments to share capital	22	102.575	102.575
Share premium	22	1.448	1.448
Other comprehensive income not to be reclassified in profit or loss		22.959.860	10.976.242
- Gains/ (losses) on revaluation and remeasurement		22.959.860	10.976.242
Increases on revaluation of property, plant and equipment	15	23.039.988	10.994.165
Actuarial gains/ (losses)		(80.128)	(17.923)
Other comprehensive income to be reclassified in profit or loss		(7.743.708)	(6.176.094)
- Currency translation adjustment		1.680.772	1.374.130
- Losses on hedging transactions			
Losses on cash flow hedges	19	(9.424.480)	(7.550.224)
Restricted reserves appropriated from profits		7.931	7.931
- Legal reserves	22	7.931	7.931
Accumulated losses		(239.208)	(1.015.196)
Current year profit/ (loss)	31	111.363	(86.447)
Non-controlling interests	22	(91.623)	(128.566)
Total equity		17.608.638	6.181.893
Total liabilities and equity		67.427.685	35.426.418

The accompanying notes form an integral part of these consolidated financial statements.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2022

Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

	Notes	Audited 1 January- 31 December 2022	Audited 1 January- 31 December 2021
PROFIT/ (LOSS)			
Revenue	24	30.067.398	11.634.808
Cost of sales (-)	25	(26.171.178)	(9.771.696)
Gross profit/ (loss) from commercial operations		3.896.220	1.863.112
GROSS PROFIT		3.896.220	1.863.112
General administrative expenses (-)	26	(689.170)	(365.287)
Marketing expenses (-)	26	(77.351)	(34.654)
Other income from operating activities	27	3.899.287	1.836.121
Other expenses from operating activities (-)	27	(1.637.358)	(578.029)
Profit from operating activities		5.391.628	2.721.263
Income from investment activities	28	3.870	2.098
Share of gain/ (loss) on equity accounted investees	13	93.177	29.491
PROFIT BEFORE FINANCE INCOME/ (EXPENSE)		5.488.675	2.752.852
Finance income	29	4.284.422	2.516.698
Finance expense (-)	29	(9.652.712)	(5.464.622)
PROFIT (LOSS) FROM CONTINUING OPERATIONS, BEFORE TAX		120.385	(195.072)
Tax (expense)/ income from continuing operations		(80.386)	35.638
- Current year tax expense	23	(284.699)	(93.751)
- Deferred tax (expense)/ income	23	204.313	129.389
PROFIT/ (LOSS) FROM CONTINUING OPERATIONS		39.999	(159.434)
PROFIT/ (LOSS) FOR THE YEAR		39.999	(159.434)
Profit/ (loss) attributable to:			
Non-controlling interests		(71.364)	(72.987)
Equity holders of the Parent	31	111.363	(86.447)
Income/ (loss) per share (TL)			
- Income/ (loss) per share from continuing operations	31	0,04	(0,04)

The accompanying notes form an integral part of these consolidated financial statements.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR EMDED 31 DECEMBER 2022
Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

	Notes	Audited 1 January - 31 December 2022	Audited 1 January - 31 December 2021
OTHER COMPREHENSIVE INCOME (LOSS)			
CURRENT PERIOD NET PROFIT/ (LOSS)		39.999	(159.434)
Other comprehensive income not to be reclassified to profit or loss			
-Gains on revaluation of property, plant and equipment	15	16.116.112	7.805.116
-Actuarial losses	20	(77.756)	(7.399)
Taxes relating to components of other comprehensive income not to be reclassified to profit or loss			
- Taxes relating to gains on revaluation of property, plant and equipment		(3.199.547)	(1.460.231)
- Taxes relating to actuarial losses		15.551	1.480
Other comprehensive income to be reclassified to profit or loss			
- Exchange differences on translation of foreign operations,net of tax		306.642	783.761
Gains/ (losses) on exchange differences on translation of foreign operations,net of tax		306.642	783.761
- Other comprehensive loss relating to cash flow hedges		(2.342.820)	(4.589.377)
Taxes relating to components of other comprehensive income to be reclassified to profit or loss			
-Taxes relating to cash flow hedges		468.564	917.875
OTHER COMPREHENSIVE INCOME		11.286.746	3.451.225
TOTAL COMPREHENSIVE INCOME		11.326.745	3.291.791
Total comprehensive income/ (expense) attributable to			
Non-controlling interests		(71.364)	(72.987)
Equity holders of the Parent		11.398.109	3.364.778

The accompanying notes form an integral part of these consolidated financial statements.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2022
Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

					Items not to be reclassified to profit or loss				Items to be reclassified to profit or loss					
	Paid-in Capital	Adjustment to Share Capital	Share Premium	Revaluation of Property, Plant and Equipment	Actuarial Gains/ (Losses)	Currency Translation Adjustment	Hedge Reserves	Legal Reserves	Accumulated Losses	Net Profit or Loss	Equity Holders of the Parent	Non- Controlling Interest	Equity	
Previous year 1 January-31 December 2021	Opening balances													
	2.000.000	102.575	916	4.900.479	(11.534)	590.369	(3.858.376)	7.931	(1.361.062)	73.851	2.445.149	(147.929)	2.297.220	
Share capital increase	500.000	-	532	-	-	-	-	-	-	-	500.532	-	500.532	
Transactions with non-controlling shareholders	-	-	-	-	-	-	-	-	-	-	-	-	92.350	
Transfers	-	-	-	(251.199)	(470)	-	(20.346)	-	345.866	(73.851)	-	-	-	
Total comprehensive income	-	-	-	6.344.885	(5.919)	783.761	(3.671.502)	-	-	(86.447)	3.364.778	(72.987)	3.291.791	
- Profit/ (loss) of the year	-	-	-	-	-	-	-	-	-	(86.447)	(86.447)	(72.987)	(159.434)	
- Other comprehensive income	-	-	-	6.344.885	(5.919)	783.761	(3.671.502)	-	-	-	3.451.225	-	3.451.225	
Ending balances	2.500.000	102.575	1.448	10.994.165	(17.923)	1.374.130	(7.550.224)	7.931	(1.015.196)	(86.447)	6.310.459	(128.566)	6.181.893	
Current year 1 January - 31 December 2022														
Opening balances	2.500.000	102.575	1.448	10.994.165	(17.923)	1.374.130	(7.550.224)	7.931	(1.015.196)	(86.447)	6.310.459	(128.566)	6.181.893	
Transactions with non-controlling shareholders	-	-	-	-	-	-	-	-	-	-	-	100.000	100.000	
Transfers	-	-	-	(870.742)	-	-	-	-	775.988	86.447	(8.307)	8.307	-	
Total comprehensive income	-	-	-	12.916.565	(62.205)	306.642	(1.874.256)	-	-	111.363	11.398.109	(71.364)	11.326.745	
- Profit/ (loss) of the year	-	-	-	-	-	-	-	-	-	111.363	111.363	(71.364)	39.999	
- Other comprehensive income	-	-	-	12.916.565	(62.205)	306.642	(1.874.256)	-	-	-	11.286.746	-	11.286.746	
Ending balances	2.500.000	102.575	1.448	23.039.988	(80.128)	1.680.772	(9.424.480)	7.931	(239.208)	111.363	17.700.261	(91.623)	17.608.638	

The accompanying notes form an integral part of these consolidated financial statements.

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES**
CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2022

Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

	Notes	Audited 1 January- 31 December 2022	Audited 1 January- 31 December 2021
CASH FLOWS FROM OPERATING ACTIVITIES		2.657.450	2.001.211
Profit/ (loss)		39.999	(159.434)
- Profit/ (loss) from continuing operations		39.999	(159.434)
Adjustments for profit/ (loss) for the period		4.744.290	2.968.941
Adjustments for depreciation and amortisation expense	14,15,16	1.482.003	690.598
Adjustments for provisions		20.957	14.861
- Adjustments for provisions relating to employee benefits	20	14.986	13.138
- Adjustments for (reversal of) other provisions		5.971	1.723
Adjustments for interest (income)/ expenses		2.776.277	1.679.446
- Adjustments for interest income	27,29	(893.671)	(349.141)
- Adjustments for interest expense	27,29	3.669.948	2.028.587
Adjustments for unrealized foreign exchange losses		3.426.857	1.769.459
Adjustments for fair value losses/ (gains)		(482.071)	(43.555)
- Adjustments for fair value losses/ (gains) on derivative financial instruments	19,29	(482.071)	(43.555)
Adjustments for undistributed profits of investments accounted for using equity method		(93.177)	(29.491)
- Adjustments for undistributed profits of associates	3,13	(93.177)	(29.491)
Adjustments for tax (income)/ expenses	23	80.386	(35.638)
Adjustments for gains/ (losses) on disposal of non-current assets		(3.870)	(2.098)
- Adjustments for gains/ (losses) on disposal of tangible assets	28	(3.870)	(2.098)
Other adjustments to reconcile profit/ (loss)	4	(2.463.072)	(1.074.641)
Changes in working capital		(1.938.046)	(651.346)
Adjustments for decrease/ (increase) in trade receivables		(4.054.798)	(1.319.463)
- Increase in trade receivables from related parties		(852.129)	(104.272)
- Increase in trade receivables from third parties		(3.202.669)	(1.215.191)
Adjustments for decrease/ (increase) in other receivables related with operations		(1.631.181)	152.118
- Decrease/ (increase) in other related party receivables relating with operations		(1.495.090)	117.118
- Decrease/ (increase) in other third party receivables relating with operations		(136.091)	35.000
Decrease/ (increase) in receivable from service concession agreements		(282.159)	169.122
Adjustments for decrease/ (increase) in inventories		(271.280)	(96.733)
Adjustments for increase/ (decrease) in trade payables		3.535.958	220.506
- Increase/ (decrease) in trade payables to related parties		195.034	26.386
- Increase/ (decrease) in trade payables to third parties		3.340.924	194.120
Adjustments for increase/ (decrease) in other payables		204.296	106.151
- Increase/ (decrease) in other payables to third parties		204.296	106.151
Other adjustments for other increase/ (decrease) in working capital		(229.065)	4.019
- Increase in other assets relating with operations		(281.116)	(48.351)
- Increase in other liabilities relating with operations		52.051	52.370
Adjustments for decrease/ (increase) in contract assets		10.846	60.262
- Decrease in other contract assets		10.846	60.262
Increase in deferred income		779.337	52.672

The accompanying notes form an integral part of these consolidated financial statements.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2022

Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

	Notes	Audited 1 January- 31 December 2022	Audited 1 January- 31 December 2021
Cash flows from operations		2.846.243	2.158.161
Payments relating with provisions for employee benefits	20	(4.533)	(2.973)
Taxes paid		(184.260)	(153.977)
CASH FLOWS FROM INVESTING ACTIVITIES		(527.233)	(269.582)
Proceeds from sale of property, plant, equipment and intangible assets		9.427	4.795
- Proceeds from sale of property, plant and equipment		9.427	4.795
Purchase of property, plant, equipment and intangible assets		(522.009)	(340.157)
- Purchase of property, plant and equipment		(508.352)	(327.213)
- Purchase of intangible assets		(13.657)	(12.944)
Cash outflows related to purchases for obtaining control of subsidiaries		(14.651)	-
Dividends received		-	65.780
CASH FLOWS FROM FINANCING ACTIVITIES		(953.720)	(1.162.564)
Proceeds from issuing shares or other equity instruments		-	194.096
- Proceeds from capital increase		-	194.096
Proceeds from capital advances	30	1.187.036	-
Proceeds from borrowings		7.045.923	5.548.136
- Proceeds from borrowings	6	5.195.160	1.729.274
- Proceeds from issuance of debt instruments	6	1.850.763	3.818.862
Repayments of borrowings		(5.813.068)	(5.000.287)
- Borrowing repayments	6	(4.363.328)	(4.118.492)
- Payments of issued debt instruments	6	(1.449.740)	(881.795)
Increase in other payables to related parties		21.469	-
Increase/ (decrease) in other payables to related parties		-	(72.468)
Payments of lease liabilities	6	(70.208)	(40.027)
Interest paid		(2.932.342)	(1.795.838)
Interest received		360.735	183.984
Other cash outflows	4	(753.265)	(180.160)
NET INCREASE IN CASH AND CASH EQUIVALENTS BEFORE THE EFFECT OF EXCHANGE RATE CHANGES		1.176.497	569.065
Effect of exchange rate changes on cash and cash equivalents		(44.495)	(117.330)
Net increase in cash and cash equivalents		1.132.002	451.735
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR		1.161.644	709.909
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	4	2.293.646	1.161.644

The accompanying notes form an integral part of these consolidated financial statements.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 1- ORGANIZATION AND NATURE OF OPERATIONS

Zorlu Enerji Elektrik Üretim AŞ (“Zorlu Enerji” or “The Company”) and its subsidiaries (collectively referred to as “the Group”) are engaged in electricity, steam production and selling, distribution and retailing of electricity, trading electricity, supply and distribution of gas, selling and distribution of solar panel and selling, installation and operation of electric charging stations. Zorlu Enerji was established by Zorlu Holding AŞ (“Zorlu Holding”) and Korteks Mensucat Sanayi ve Ticaret AŞ (“Korteks”) in 1993. Ultimate controlling party of the Group is Zorlu Family. The Company is registered in Turkey and its registered address is as follows: Bursa Organize Sanayi Bölgesi, Pembe Cadde, No:13 Bursa, Türkiye. Zorlu Enerji is registered to the Capital Markets Board (“CMB”), and its shares are publicly traded in Borsa İstanbul AŞ (“BİST”) since 2000. As at 31 December 2022, 35,96% of its shares are open for trading (31 December 2021: 34,97%) (Note 22).

Directly held affiliates of the Company are presented below:

Directly Held Affiliates	Share Percentage (%)	Nature of Operations	Country
Zorlu Osmangazi Enerji Sanayi ve Ticaret AŞ (“ Zorlu Osmangazi ”)	100%	Distribution and retail sale of electricity	Turkey
Zorlu Yenilenebilir Enerji AŞ (“ Zorlu Yenilenebilir ”)	100%	Electricity production and other	Turkey
Zorlu Solar Enerji Tedarik ve Ticaret AŞ (“ Zorlu Solar ”) (*)	100%	Electricity production and other	Turkey
Nemrut Jeotermal Elektrik Üretimi AŞ (“ Nemrut Jeotermal ”)	100%	Electricity production and other	Turkey
Electrip Araç Kiralama Ticaret AŞ (“ Electrip ”) (**)	100%	Leasing and rental of self drive light motor vehicles and cars and other	Turkey
Zorlu Elektrik Enerjisi İthalat İhracat ve Toptan Ticaret AŞ (“ Zorlu Elektrik ”)	100%	Procurement of gas, liquid or electricity or wholesale trade of production meters and other	Turkey
Zorlu Enerji Dağıtım AŞ (“ Zorlu Enerji Dağıtım ”)	100%	Distribution of gaseous fuels via network pipeline, distribution of electrical energy and other	Turkey
Zorlu Wind Pakistan (Private) Limited (“ Zorlu Wind Pakistan ”)	99,70%	Electricity production and other	Pakistan
Zorlu Enerji Pakistan Limited (“ Zorlu Enerji Pakistan ”)	99,99%	Electricity production and other	Pakistan
Zorlu Enerji İsrail Limited (“ Zorlu Enerji İsrail ”)	100%	Electricity production and other	Israel
Zador Israel Limited (“ Zador ”)	100%	Electricity production and other	Israel
ZJ Strong Energy for Renewable Energy Limited Co. (“ ZJ Strong ”)	75%	Electricity production and other	Palestine
Electrip Global B.V. (“ Electrip Global ”) (***)	100%	Maintenance, repair, installation, sale of charging stations and other	Netherlands
Rarik Turkison Enerji AŞ (“ Rarik Turkison ”)	100%	Engineering and consultancy activities for energy projects and other	Turkey
Alkan Jeotermal Enerji Elektrik Üretimi AŞ (“ Alkan Jeotermal ”)	100%	Electricity production and other	Turkey
Zorlu Enerji Asia Holding Limited-in liquidation (“ Zorlu Enerji Asia ”)	100%	Energy projects and investment services	Dubai

(*) The company’s new trade name was registered as “ZES Solar Enerji Tedarik ve Ticaret AŞ” on 16 January 2023.

(**) The company’s new trade name was registered on 9 February 2023 as “Eway Car Rental Ticaret AŞ”.

(***) On 13 January 2023, shares representing half of the capital of Electrip Global B.V., a 100% subsidiary of the Company, plus one share, were sold to Electrip Global Limited for USD 50.000.000. Shares representing half of the capital of Electrip Global B.V. remaining under the ownership of the Company, minus one share (minority shares), were transferred to Electrip Global Limited by being put as capital in kind in return for the Company’s capital commitment in the capital increase of Electrip Global Limited on the same date. With this share transfer, the management control of Electrip Global B.V. was transferred to Wren House Infrastructure LP through Electrip Global Limited.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 1- ORGANIZATION AND NATURE OF OPERATIONS (Continued)

The indirectly held affiliates of the Company are as follows:

Indirectly held affiliates	Shareholding Direct Affiliate and its Share Ratio	Nature of Operations	Country
Osmangazi Elektrik Perakende Satış AŞ (“ OEPSAŞ ”)	100% Zorlu Osmangazi	Electricity trading for users and other	Turkey
Osmangazi Elektrik Dağıtım AŞ (“ OEDAŞ ”)	100% Zorlu Osmangazi	Electricity distribution and other	Turkey
Zorlu Doğal Elektrik Üretimi AŞ (“ Zorlu Doğal ”)	100% Zorlu Yenilenebilir	Electricity production and other	Turkey
Zorlu Jeotermal Enerji Elektrik Üretimi AŞ (“ Zorlu Jeotermal ”)	100% Zorlu Yenilenebilir	Electricity production and other	Turkey
Rotor Elektrik Üretim AŞ (“ Rotor ”)	100% Zorlu Yenilenebilir	Electricity production and other	Turkey
Trakya Bölgesi Doğal Gaz Dağıtım AŞ (“ Trakya ”)	90% Zorlu Enerji Dağıtım	Distribution of gaseous fuels via network pipeline and other	Turkey
Gazdaş Gaziantep Doğal Gaz Dağıtım AŞ (“ Gazdaş ”)	90% Zorlu Enerji Dağıtım	Distribution of gaseous fuels via network pipeline and other	Turkey
Zorlu Doğal Gaz Tedarik Ticaret AŞ (“ Zorlu Doğal Gaz Tedarik ”)	100% Zorlu Enerji Dağıtım	Wholesale of gaseous fuels and related products and other	Turkey
Zorlu Renewable Pakistan (Private) Limited (“ Zorlu Renewable Pakistan ”)	99,70% Zorlu Wind Pakistan	Electricity production and other	Pakistan
Zorlu Sun Power (Private) Limited (“ Zorlu Sun Power Pakistan ”)	99,70% Zorlu Wind Pakistan	Electricity production and other	Pakistan
Zorlu Industrial Pakistan (Private) Limited (“ Zorlu Industrial Pakistan ”)	99,99% Zorlu Wind Pakistan	Engineering and consultancy activities for energy projects and other	Pakistan
Zorlu O&M Pakistan Limited (“ Zorlu O&M Pakistan ”)	99,99% Zorlu Wind Pakistan	Operation and maintenance activities for energy projects and other	Pakistan
Zorlu Solar Pakistan Limited (“ Zorlu Solar Pakistan ”)	99,70% Zorlu Enerji Asia	Maintenance, repair, installation, sale of charging stations and other	Pakistan
ZES Dijital Ticaret AŞ (“ ZES Dijital ”) (*)	100% Electrip Global	Procurement of gas, liquid or electricity or wholesale trade of production meters. Installation services of electrical equipment and other	Turkey
Electrip Energy Solutions and Mobility Services Sasu	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	France
Electrip Bucharest SRL	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Romania

(*) All of the shares representing the capital of ZES Digital Ticaret AŞ in the Company’s portfolio have been transferred to Electrip Global B.V., the Company’s 100% subsidiary, as stated in the material event disclosure dated 9 December 2022



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 1- ORGANIZATION AND NATURE OF OPERATIONS (Continued)

Indirectly held affiliates (Continued)	Shareholding Direct Affiliate and its Share Ratio	Nature of Operations	Country
Electrip Albania SHPK	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Albania
Electrip USA Inc.	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	United States of America
ZES Germany GmbH	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Germany
Electrip Doel Skopje	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Macedonia
Electrip Italy S.r.l.	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Italy
Electrip Bulgaria EOOD	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Bulgaria
Electrip Hellas Single Member P.C.	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Greece
Electrip Mobility Service D.O.O.	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Croatia
Electrip Poland Spółka Z.O.O.	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Poland
Electrip Montenegro DOO	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Montenegro
ZES Israel Ltd	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Israel
Electrip Mobility Service L.T.D.	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	England
ZES Solutions, D.O.O	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Slovenia
Electrip Netherlands B.V.	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Netherlands
Electrip PTG, Unipessoal LDA	100% Electrip Global	Maintenance, repair, installation, sale of charging stations and other	Portugal

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 1- ORGANIZATION AND NATURE OF OPERATIONS (Continued)

Associates

Direct associates of the Company are presented below:

Direct associates	Share Percentage (%)	Nature of Operations	Country
Ezotech Electric Limited (“Ezotech”)	42,15 %	Electricity production and other	Israel
Solad Energy Limited (“Solad”)	42,15%	Electricity production and other	Israel
Adnit Real Estate Limited (“Adnit”)	42,15%	Solar power plant construction	Israel
Dorad Energy Limited (“Dorad”)	25%	Electrical energy production	Israel

Indirect affiliates of the Company are presented below:

Indirect Associates	Shareholding Direct Affiliate and its Share Ratio	Nature of Operations	Country
Ashdod Energy Limited (“Ashdod”)	100% Ezotech	Electricity production and other	Israel
Ramat Negev Energy Limited (“Ramat”)	100% Ezotech	Electricity production and other	Israel

As at 31 December 2022, the number of average personnel employed is 2.645 (31 December 2021: 2.373).

The power plants of the Group located in Turkey and abroad are presented below together with their existing installed capacities:
Installed capacity in Turkey:

Power Plant	Company	Location	Type	Electricity Production Capacity (MW)	Steam Production Capacity (Ton/Hour)
Geothermal				305,00	-
Kızıldere 1	Zorlu Doğal	Denizli	Geothermal	15,00	-
Kızıldere 2	Zorlu Doğal	Denizli	Geothermal	80,00	-
Kızıldere 3	Zorlu Doğal	Denizli-Aydın	Geothermal	165,00	-
Alaşehir 1 (*)	Zorlu Jeotermal	Manisa	Geothermal	45,00	-
Wind				135,00	-
Gökçedağ	Rotor	Osmaniye	Wind	135,00	-

(*) The 3,588 MWp solar power plant integrated to the existing Alaşehir 1 Geothermal Power Plant started commercial operations as of 22 December 2022 and the second 0,1663 MWp unit (Rooftop solar PV system) as of 20 January 2023.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 1- ORGANIZATION AND NATURE OF OPERATIONS (Continued)

Installed capacity in Turkey (Continued)

Power Plant	Company	Location	Type	Production Capacity (MW)	Steam Production Capacity (Ton/Hour)
Hydroelectric				118,94	-
Tercan	Zorlu Doğal	Erzincan	Hydroelectric	15,00	
Kuzgun	Zorlu Doğal	Erzurum	Hydroelectric	20,90	-
Ataköy	Zorlu Doğal	Tokat	Hydroelectric	5,50	-
Mercan	Zorlu Doğal	Tunceli	Hydroelectric	20,40	-
Çıldır	Zorlu Doğal	Kars	Hydroelectric	15,40	-
İkizdere	Zorlu Doğal	Rize	Hydroelectric	24,94	-
Beyköy	Zorlu Doğal	Eskişehir	Hydroelectric	16,80	-
Natural Gas				83,83	98,00
Lüleburgaz	Zorlu Enerji	Lüleburgaz, Kırklareli	Cogeneration Natural Gas	49,53	98,00
Bursa	Zorlu Enerji	Bursa Organized Industrial Zone	Combined-Cycle Natural Gas	34,30	-
TOTAL				642,77	98,00

Installed capacity abroad:

Power Plant	Location	Type	Electricity Production Capacity (MW))	Steam Production Capacity (Ton/Hour)
Wind			56,40	-
Jhimpir	Pakistan	Wind	56,40	-
Solar (*)			1,50	-
Deadsea	Solar (*)	Solar (2 MW)	1,50	-
Natural Gas (*)			290,48	46,37
Dorad	Israel	Combined-Cycle Natural Gas (840 MW)	210,00	-
Ashdod	Israel	Cogeneration Natural Gas (64.54 MW, 40 ton/hour)	27,20	16,86
Ramat Negev	Israel	Cogeneration Natural Gas (126.4 MW, 70 ton/hour)	53,28	29,51
TOTAL			348,38	46,37

(*) Stake of Zorlu Enerji in Israel and Palestine companies has been taken into consideration in the calculation of total production capacity.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS

2.1 Basis of Presentation

The consolidated financial statements have been prepared in accordance with the provisions of the “Communiqué on Principles of Financial Reporting in the Capital Markets”, published in the Official Gazette dated 13 June 2013 and numbered 28676, by the CMB, based on the Turkish Financial Reporting Standards (“TFRS”), which were put into effect by the Public Oversight Accounting and Auditing Standard Authority (“POA”), along with their annexes and comments, due to the said Communiqué’s Article No.5.

Consolidated financial statements have been presented in accordance with the formats specified in the “Announcement on TFRS Taxonomy” published by POA on 15 April 2019 and the “Financial Statement Examples and User Guide” published by the CMB.

Approval of consolidated financial statements:

The consolidated financial statements were approved by the Company’s Board of Directors on 8 March 2023.

Adjustment of financial statements during periods of high inflation

In the announcement made by the Public Oversight Authority on 20 January 2022, it was stated that businesses applying TFRS do not need to make any adjustments within the scope of TAS 29 Financial Reporting in Hyperinflationary Economies in their financial statements for the year ended 31 December 2022. While preparing the financial statements as of 31 December 2022, no inflation adjustment has been made as there has been no new announcement made by POA regarding TAS 29.

2.2. Basis of consolidation

The consolidated financial statements include the accounts of the Parent company, Zorlu Enerji and its subsidiaries and associates on the basis set out in sections below. The financial statements of the companies included in the scope of consolidation have been prepared at the date of the consolidated financial statements and have been prepared in accordance with TFRS by applying uniform accounting policies and presentations. The results of operations of subsidiaries are included or excluded from their effective dates of acquisition or disposal, respectively.

a) Affiliates

Zorlu Enerji controls an affiliate when it is exposed, or has rights, to variable returns from its involvement with the affiliate and has the ability to affect those returns through its power over the affiliate. Zorlu Enerji has power over an affiliate when it has existing rights that give it the current ability to direct the relevant activities that significantly affect the affiliate’s returns. Power arises from rights and the existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Zorlu Enerji controls another entity.

Affiliates including the structured entities are the companies controlled by the Group. The Group’s control is provided by the ability to affect the variable returns through its power over the affiliates. Affiliates are consolidated from the date on which the control is transferred to the Group and are no longer consolidated from the date that control ceases.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.2 Basis of consolidation (Continued)

On the statement of financial position and statement of profit or loss the affiliates are consolidated on a line-by-line basis and the carrying value of the investments held by Zorlu Enerji and its affiliates are eliminated against the related equity. Intercompany transactions and balances between Zorlu Enerji and its affiliates are eliminated within the scope of consolidation accounting.

Loss of control

If the Group loses control of an affiliate, it recognizes any investment retained in the former affiliate at its fair value when control is lost and any difference between the fair value and net book value of investment is accounted for as a gain or loss. That fair value shall be regarded as the fair value on initial recognition of a financial asset, when appropriate, the cost on initial recognition of an investment in an associate or joint venture. Additionally, assets and liabilities that were previously recognized as other comprehensive income attributable to that affiliate are accounted for as if those were disposed of by the Group. This may result in a fact that these amounts previously recognized as other comprehensive income may be classified to profit or loss.

Non-controlling interests

The minority shares in the net assets and operating results of affiliates are separately classified in the consolidated statement of financial position and consolidated statements of profit or loss as “non- controlling interests”.

The Group applies a policy of treating transactions with non-controlling interests as transactions with owners of the Parent. Regarding the purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the affiliate is deducted from equity. Gains or losses on disposals to non-controlling interests are also accounted for in equity.

For disposals to non-controlling interests, differences between any proceeds received and the relevant share of non-controlling interests are also recorded in equity.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.2 Basis of consolidation (Continued)

The table below sets out all affiliates and demonstrates the proportion of ownership interest as at 31 December 2022 and 31 December 2021. Financial statements of affiliates are consolidated using the full consolidation method.

Directly held affiliates	Direct ownership interest by Zorlu Enerji (%)	
	31 December 2022	31 December 2021
Zorlu Osmangazi	100	100
Zorlu Yenilenebilir	100	100
Zorlu Solar	100	100
Nemrut Jeotermal	100	75
Electrip	100	100
Zorlu Elektrik	100	100
Zorlu Enerji Dağıtım	100	100
Zorlu Wind Pakistan	99,70	99,70
Zorlu Enerji Pakistan	99,99	99,99
Zorlu Enerji İsrail	100	100
Zador	100	-
ZJ Strong	75	75
Electrip Global	100	100
Rarik Turkison	100	-
Alkan Jeotermal	100	-
Zorlu Enerji Asia	100	100
ZES Dijital	-	100

b) Equity accounted investees

Investments in associates are accounted for based on their acquisition cost on the date of initial recording and the equity method in the following periods. These are entities in which the Group generally has between 20% and 50% of the voting rights or over which the Group has significant influence, but not control. Unrealized profits arising from transactions between the Group and its associates are eliminated to the extent of the Group’s interest in the associate, and unrealized losses are also eliminated if the transaction does not indicate that the transferred asset is impaired. According to the equity method, the net profit/(losses) after tax of the associates after the acquisition are reflected in the net profit/(loss) of the Group to the extent of the Group’s share in the associate.

The equity method is abandoned if the carrying value of the investment in the associate is zero or the significant effect of the Group has ended, as long as the Group does not incur an obligation or commitment in relation to the associate. After the Group’s share in the associate has decreased to zero, additional provision and recognition of the liability has been incurred if the Group is exposed to legal or constructive obligations or has made payments on behalf of the associate.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.2 Basis of consolidation (Continued)

The table below sets out direct associates and the effective shareholding rates as at 31 December 2022 and 31 December 2021:

Direct Associates	31 December 2022 (%)	31 December 2021 (%)
Dorad	25	25
Ezotech	42,15	42,15
Solad	42,15	42,15
Adnit	42,15	42,15

2.3 Amendments in International Financial Reporting Standards

a) Standards issued but not yet effective and not early adopted:

A number of new standards, interpretations of and amendments to existing standards are not effective at reporting date and earlier application is permitted; however the Group has not early adopted are as follows.

- Classification of Liabilities as Current or Non-current (Amendments to TAS 1),
- Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction – Amendments to TAS 12 Income Taxes,
- Definition of Accounting Estimates (Amendments to TAS 8),
- Disclosure of Accounting Policies (Amendments to TAS 1),
- Lease Liability in a Sale and Leaseback – Amendments to TFRS 16 Leases,

The Group does not expect that application of these amendments will have a significant impact on its consolidated financial statements.

b) Amendments effective from 1 January 2022:

Changes that have become effective and have been adopted for annual periods beginning on or after 1 January 2022:

- Annual Improvements to TFRS Standards 2018–2020 -Amendment to TFRS 1 First-time Adoption of Turkish Financial Reporting Standards, TFRS 9 Financial Instruments, TAS 41 Agriculture
- Reference to the Conceptual Framework – Amendments to TFRS 3 Business Combinations
- Property, Plant and Equipment – Proceeds before Intended Use: Amendments to TAS 16 Property, Plant and Equipment
- Onerous Contracts – Cost of Fulfilling a Contract: Amendments to TAS 37 Provisions, Contingent Liabilities and Contingent Assets

These newly adopted amendments to standards have not been a significant impact on the consolidated financial statements of the Group.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies

a) Related parties

If one of the below listed criteria exists the party is regarded as related with the Group:

- Directly, or indirectly through one or more intermediaries, the party:
 - Controls, is controlled by, or is under common control with, the Group (this includes parents, subsidiaries and fellow subsidiaries);
 - has an interest in the Group that gives it significant influence over the Group; or
 - has joint control over the Group;
- The party is an associate of the Group;
- The party is a joint venture in which the Group is a venture;
- The party is a member of the key management personnel of the Group or its Parent;
- The party is a close member of the family of any individual referred to in (a) or (d);
- The party is an entity that is controlled, jointly controlled or significantly influenced by, or for which significant voting power in such entity resides with, directly or indirectly, any individual referred to in (d) or (e);
- The party has a post-employment benefit plans for the employees of the Group, or of an entity that is a related party of the Group.

A number of transactions are entered into with related parties in the normal course of business (Note 30).

b) Functional and presentation currency

Items included in the financial statements of each of the Group’s entities are measured using the currency of the primary economic environment in which the entity operates (‘the functional currency’). The consolidated financial statements are presented in TL.

The financial statements of the subsidiaries operating in foreign countries have been prepared in accordance with the TFRS published by POA reflecting the necessary adjustments and classifications in order to make the correct presentation. The assets and liabilities of the related foreign subsidiaries are translated into Turkish Lira using the exchange rate on the balance sheet date, and the income and expenses are converted into Turkish Lira using the average exchange rate. Currency differences resulting from the use of closing and average exchange rates are accounted for under the foreign currency translation differences in equity.

c) Property, plant and equipment

The Group revalued its power plants in accordance with TAS 16 Tangible Fixed Assets standard and presented its tangible fixed assets with their fair values in its consolidated financial statements.

“Peer Comparison Method” and “Cost Approach” methods have been used to determine the fair values of natural gas power plants belonging to Zorlu Energy and Kızıldere 1 geothermal power plant owned by Zorlu Doğal. As for the calculation of the fair value of the facilities other than the abovementioned ones, Income Capitalization Approach-Discounted Cash Flow Analysis (“DCF”) has been used.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

c) Property, plant and equipment (Continued)

In the accompanying financial statements, the value increase amounts determined in the power plants where the DCF method is applied, have been presented by proportional distribution in addition to the plant, machinery and devices; to the lands, underground and surface improvements and buildings, which are considered as an integral element of the power plants. Motor vehicles and fixtures are reflected in the consolidated financial statements at their acquisition costs, consistent with previous years, after deducting accumulated depreciation and permanent impairment, if any.

Increases in tangible assets as a result of revaluation are recorded to the revaluation fund account in the equity line of the balance sheet after deferred tax effect is netted off. The difference between the depreciation and amortization calculated over the carrying values of the revalued assets (depreciation charged to the profit or loss statement) and the depreciation and amortization calculated over the acquisition cost of these assets is transferred from the revaluation fund to the accumulated profit/loss after the deferred tax effect is netted each year. The same applies to property, plant and equipment disposals.

Lands are not depreciated because their economic life is considered to be indefinite. Depreciation is calculated using the straight-line depreciation method over the values of tangible fixed assets based on their useful lives.

In the consolidated financial statements, Kızıldere 1, 2 and 3 geothermal power plants and hydroelectric power plants owned by Zorlu Doğal, Alaşehir 1 geothermal power plant and solar power plant owned by Zorlu Geothermal, Gökçedağ wind farm owned by Rotor and Jhimpir owned by Zorlu Pakistan and the wind farm and natural gas power plants belonging to Zorlu Energy were revalued on 31 December 2022 and were taken into account with their new values in the consolidated financial statements. The valuation studies of the power plants in Turkey were carried out by Aden Gayrimenkul Değerleme ve Danışmanlık AŞ, an institution accredited to the CMB. The fair value of the wind power plant owned by Zorlu Pakistan established in Pakistan on the other hand, was determined by the company A A Baig & Co. Chartered Accountants . The assumptions used in the valuation reports are presented in Note 2.7.

The remaining useful lives of the plants whose fair values are calculated by adopting the DCF approach are as follows:

	Remaining useful life (Years)
Kızıldere geothermal power plants and hydroelectric power plants	16
Alaşehir 1 geothermal and solar power plant	18
Jhimpir wind farm	11
Gökçedağ wind farm	13

In the valuation of Zorlu Enerji's facilities, whose fair values are determined by Cost Approach and Peer Comparison Method, the estimated useful lives are taken into account as follows:

	Useful life (Years)
Buildings	30-45
Land improvements	10-20
Plant and machinery	6-48

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

c) Property, plant and equipment (Continued)

Maintenance and repair expenses of tangible assets are normally recorded in expense accounts. However, if there is an expansion or significant improvement in assets, these expenses can be capitalized and depreciated over the remaining economic life of the associated fixed asset. The profit or loss resulting from the disposal of tangible fixed assets is determined by comparing the adjusted amounts with the collected amounts and is then reflected to the related income and expense accounts in the current period. If the carrying amount of an asset is higher than the estimated recoverable value of the asset, the carrying amount is immediately reduced to its recoverable amount.

d) Intangible assets

Intangible assets are carried at their acquisition cost less accumulated depreciation and permanent impairment losses,if any. Intangible assets include licenses, rights (computer softwares, customer relationships, service concession agreements, contract costs and other),goodwill and licenses (commercial enterprise licenses).

Intangible assets with definite useful life are recognised at the cost of acquisition and depreciated using the straight-line method. Intangible assets with definite useful life are reviewed for the purpose of determining whether there is an indication of impairment or not, and if the carrying amount of the intangible asset exceeds its recoverable amount, the carrying amount of the intangible asset is reduced to its recoverable amount. An impairment loss is recognized for the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the asset's net selling price or its value in use. An impairment provision is reflected in the profit or loss statement within the same period.

Other Rights

Other rights consist of development costs and computer software and are recorded at acquisition cost. Other rights are amortized using the straight-line method over their estimated useful lives and are carried over the acquisition cost less accumulated amortization. The estimated useful life of other rights is approximately 10 years (Note 16).

Contract Assets

In accordance with the concession agreement, the Group shows its investments for the first 8 years which cannot be billed to its subscribers until the formation of the regulated asset base, under intangible assets. The remaining useful life of contract costs is approximately 14 years (Note 16).

Service concession agreements

Service concession agreements owned as a result of business combinations are recognised at their fair values at the acquisition date. The duration of the arrangement was determined as 20 years for OEDAŞ (remaining useful life is about 14 years). The service concession agreement is amortised within this period specified (Note 16).

Customer relationships

Customer relationships acquired as a result of business combinations are recognised at their fair value at the acquisition date. The duration of OEPSAŞ's customer relationships is determined as 20 years. (remaining useful life is about 14 years). Customer relationships are amortised within this period specified. (Note 16).



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

d) Intangible assets (Continued)

Business combinations and goodwill

A business combination is the bringing together of separate legal entities or businesses into one reporting entity. Business combinations are recognised using the acquisition method in accordance with TFRS 3.

Cost of the acquisition incurred as a result of the acquisition of an enterprise is allocated to identifiable assets, obligations and contingent obligations of the enterprise on the date of acquisition. The difference between the cost of the acquisition and the fair value of identifiable assets, obligations and contingent obligations of the entity on the date of acquisition is recognised in the consolidated financial statement as goodwill. The assets, intangible assets and contingent obligations that are not covered by the financial statements of the acquired entity but can be separated from the goodwill are recognised in the consolidated statement of financial position at their fair values. The goodwill previously recognised in the financial statements of the acquiree is not considered to be an identifiable asset.

If the acquirer’s share in the fair value of the acquired identifiable assets, liabilities and contingent liabilities exceeds the business combination cost, the difference is associated with the consolidated income statement.

The recorded value of the goodwill is reviewed annually and, when deemed necessary, adjusted taking into account its permanent depreciation. The carrying amount of the goodwill is reviewed for impairment at year-ends in accordance with TFRS 3.

In the impairment test, goodwill is allocated to each cash-generating unit of the Group that will benefit from the synergies of the merger. Impairment testing is applied every year or in shorter periods when there is an indication of impairment in order to check whether there is an impairment on the goodwill. (Note 2.7).

In cases when the cash-generating unit’s recoverable amount is less than its carrying amount, the impairment is first used to reduce the carrying amount of the goodwill allocated to the cash-generating unit and then, within a ratio, to reduce the carrying amount of other assets. The impairment provision for goodwill cannot be reversed in subsequent periods.

e) Receivables from service concession agreements

IFRIC 12, “Service concession agreements” regulates the recognition of the arrangements for service concessions provided by public operators to private industry. The service concession agreements concerning electricity and gas distribution services are recognised within the framework of IFRIC 12 by the Group.

As per the conditions of agreements based on the arrangements within the scope of IFRIC 12, the Group operates as a service provider with the title “operator”. An operator builds and renovates the infrastructure used to provide a public service, operates the infrastructure during the determined period and maintains the infrastructure. The Group distributes electricity and gas within the scope of the service concession agreement transferred from public to private sector.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

e) Receivables from service concession agreements (Continued)

The Group recognises investment expenditures related to distribution, under financial assets to the extent that it has unconditional rights arising from the contract concerning invoicing to subscribers in line with the instructions from the guarantor. The right to collect in return for distribution services is carried out by invoicing subscribers. The distribution element of the said invoices is regulated by distribution tariffs determined by EMRA. The difference between the annual collections from distribution and the revenue cap predetermined by EMRA is corrected by EMRA by revising the future tariff.

The Group constructs or renews the infrastructure used for the delivery of a public service within the framework of its natural gas distribution activities and operates and maintains this infrastructure during the specified period. The Group also collects a certain subscription fee from each subscriber in order to provide resources for infrastructure investments to be made in the region where the subscriber is located and to deliver natural gas to subscribers. The subscriber connection fee amounts determined by EMRA are collected only once and non-refundable at the time of signing the connection agreement. In this context, investments made during the period are calculated on a net basis by deducting the connection revenues obtained in the relevant tariff year from the regulated network investment expenditures made within the scope of distribution activities for each tariff year, according to the Regulation on Tariff Calculation Procedures and Principles for Natural Gas Distribution Companies with decision number 7139.

In scope of IFRIC 12, all investments of the Group related to electricity and gas distribution operation are recognised as “Receivables from service concession agreements” (Note 5). Service concession agreements related to OEDAŞ disclosed under intangible assets are included in the consolidated financial statements in 2017 as a result of the business combination accounting applied according to TFRS 3.

The electricity distribution activities of OEDAŞ are carried out within the framework of the service concession agreement regulated by the Transfer of Operating Rights (“TOR”) agreement signed with Türkiye Elektrik Dağıtım AŞ (“TEDAŞ”) on 24 July 2006. Until the expiration date of the distribution license of the Company on 1 September 2036 or its cancellation for any reason before its expiration, the Company has the right to operate the electricity distribution system, the existing or to be established distribution facilities in the distribution region and the operation of distribution facilities, rehabilitation and strengthening of these facilities and constructions. It has control of immovable and immovable assets, which are of very high importance for the Company. Any renewal of the distribution license will not result in the extension of the contract with the same terms. The Company may apply to TEDAŞ and request the renewal of the contract at least one year before the expiry of the contract period. TEDAŞ may decide to renew the contract six months before the expiration of the contract, after considering this request taking into account the new conditions within the framework of the current legislation.

The distribution system operating income requirement and related parameters for the third implementation period, which will be valid for OEDAŞ between 2016-2020, were determined by EMRA with the Board decision dated 30 December 2015 and numbered 6039-1 (last revision: numbered 9067- 1 and dated 26 December 2019) whereas the distribution system operating income requirement and related parameters for the fourth implementation period, which will be valid between 2021-2025, were approved by EMRA with the Board decision dated 24 December 2020 and numbered 9911-1.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

e) Receivables from service concession agreements (Continued)

Trakya’s natural gas distribution activity started with the receipt of a license on 25 January 2006 after the tender held by EMRA on 23 June 2005. The license of Trakya will expire on 25 January 2036. The parameters regarding the investment and operating income requirement for the retail sales tariffs for the third tariff implementation period, which will be valid for Trakya between 2022 and 2026, were published by EMRA with the Board Decision dated 8 September 2022 and numbered 11194. Gazdaş’s natural gas distribution activity started with the receipt of a license on 24 February 2006 after the tender held by EMRA on 28 July 2005. Gazdaş’s license will expire on 24 February 2036. The parameters regarding the investment and operating income requirement for the third tariff implementation period retail sales tariffs for Gazdaş, which will be valid between 2022-2026, are determined by EMRA. It was published with the Board Decision dated 1 September 2022 and numbered 11169.

In the natural gas distribution sector, the ownership of the distribution network belongs to the distribution company. The distribution company may request the renewal of the natural gas distribution license in force, at the earliest one year or at the latest nine months before the expiration date of the license via a petition to EMRA. If the license period is not extended by EMRA, EMRA opens a tender for the relevant city in accordance with the procedures and principles specified in the Distribution and Customer Services Regulation and licenses the legal entity that has submitted the most appropriate offer.

Receivables from service concession agreements are measured at amortized cost in accordance with IFRS 9, since they are composed of cash flows that only include principal and interest.

Receivables from service concession agreements for electricity and natural gas distribution activities are depreciated over 10 and 22 years as per the concession arrangements, respectively (Note 5).

The Group has applied the financial asset model in accordance with TFRS Interpretation 12 “Service Concession Agreements”, taking into account the terms of its service concession agreement with the government and has accounted for financial assets related to concession agreements amounting to TL 7.808.326 in its statement of financial position as of 31 December 2022 (31 December 2021: TL 4.025.891). On the other hand, the profit or loss and other comprehensive income statement for the period ended 31 December 2022 include an interest income weighted average cost of capital (“WACC”) correction from the service concession agreements amounting to TL 754.093 (31 December 2021: TL 442.745) and indexation differences amounting to TL 2.876.994 (31 December 2021: TL 1.176.826) (Note 27).

In accordance with the concession agreement, the Group shows its investments for the first 8 years which cannot be billed to its subscribers until the formation of the regulated asset base, under intangible assets (31 December 2022: contract cost, net TL 47.899, 31 December 2021: contract cost, net TL 51.321) and amortises them for the duration of the remaining license period (Note 16). The relevant amortization expense is accounted under cost of sales and is TL 3.422 as of 31 December 2022 and 31 December 2021 (Note 16).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

f) Revenue

The Group recognizes revenue in its consolidated financial statements when it completely or partially fulfills its performance obligation by transferring a promised good or service to its customer. An asset is transferred when control of an asset is completely or partially taken possession of by the customer. The Group reflects revenue in the consolidated financial statements in line with the following 5 basic principles:

- Identification of customer contracts,
- Identification of performance obligations,
- Determination of transaction price in the contract,
- Allocation of price to performance obligations,
- Recognition of revenue when the performance obligations are fulfilled.

The Group recognizes revenue from its customers only when all of the following criteria are met:

- The parties to the contract have approved the contract (in writing, orally or in accordance with other customary business practices) and are committed to perform their respective obligations,
- The Group can identify each party’s rights regarding the goods or services to be transferred,
- The Group can identify the payment terms for the goods or services to be transferred,
- The contract has commercial substance,
- It is probable that the Group will be able to collect in exchange for the goods or services that will be transferred to the customer. In evaluating whether the collectability of an amount of consideration is probable, an entity shall only consider the customer’s ability and intention to pay that amount when it is due.

At the beginning of an agreement the Group evaluates the services committed to the client in the agreement and defines each commitment to transfer services as a separate performance obligation. In addition, at the beginning of the agreement the Group identifies whether they will meet each obligation over time. The Group considers agreement provisions and commercial customs in order to determine the transaction price. The transaction price is the price which the Group expects to earn in return for services it committed to provide to a customer, excluding amounts (e.g. some sales taxes) collected on behalf of third parties.

The Group allocates a transaction price to each performance obligation (or different good or service) in an amount that shows how much the customer expects to have a right to in return for the transfer of goods or services committed to the client. In this allocation, the Group allocates the transaction price to each performance obligation specified in the agreement over a relative sales price, in this allocation, the Group determines the individual selling price of different goods or services that form the basis of each performance obligation at the beginning of the agreement and the transaction price is proportional to these individual sales prices.

The Group does not adjust the promised amount of consideration for the effects of a significant financing component since the Group expects, at contract inception, that the period between when the entity transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less. If the financing component is significant in revenue, future collections are discounted by the interest rate in financing component. The difference is recognised as income from operating activities in current period.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

f) Revenue (Continued)

The Group’s performance obligations consist of distribution of electricity and gas and electricity sales. The customer simultaneously consumes the benefits of performance provided by the Group. Electricity and gas distribution services are recognized as soon as services are rendered whereas electricity sales are recognized upon the delivery of electricity. The Group recognises revenue when the entity satisfies a performance obligation by transferring a promised good or service to the customer. Due to the Group’s operations, TFRS 15 did not have a material impact on the Group’s financial position and performance.

Electricity production and wholesale revenue

It is the income generated by the electricity produced and sold by the Group through its power plants. Electricity service is accounted for as a single act since it is a service that the customer receives and consumes simultaneously by its nature and is offered in series.

Electricity sales revenue is recognised in case of electricity delivery and on accrual basis and at the invoiced amount.

Panel sales revenue

It refers to the revenue obtained at home and abroad by generating electricity from solar energy and selling, purchasing, exporting and installing solar photovoltaic panels on rooftops. The said amount is invoiced simultaneously with the delivery of the goods and recorded as revenue.

Retail sales revenue

In the Electricity Market Law, retail sales services are defined as services provided to consumers other than electrical energy and/or capacity sales by companies holding retail sales licenses. In the Electricity Market License Regulation, the scope of retail sales service is defined as other services provided to consumers, such as invoicing and collection, apart from electrical energy and/or capacity sales. The retail sales service fee included in the invoices issued by the Company consists of invoicing, customer services, investment expenses and other expenses related to retail sales service. Retail sales service fee is applied to all consumers who purchase energy from the Company.

Revenue related to electricity distribution

• **Distribution system utilization income**

Fees for the use of the distribution system are calculated by taking into account the distribution revenue ceiling and demand forecasts.

Distribution revenue ceiling consists of system operating and lost energy revenue ceilings. Distribution system utilization revenues are determined based on the costs required for the Group’s distribution companies to carry out their distribution activities. In this context, in determining the revenues related to the use of the distribution system, the investment expenditures required within the scope of the execution of the distribution activity and all costs and services within the scope of the distribution activity are taken into account such as WACC on investment expenditures, system operating costs, technical and non-technical loss costs, cutting-connecting service costs, meter reading costs, reactive energy costs and the amounts paid under the transmission tariff.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

f) Revenue (Continued)

Revenue related to electricity distribution activities (Continued)

In determining the costs for the use of the distribution system; detection and change of the target rates for technical and non-technical losses and including the cost to be incurred in the tariffs and to consumers, the provisions of EMRA’s Communiqué on the Regulation of Distribution Tariffs and the procedures and principles issued by EMRA for determining the target loss rates of electricity distribution companies are taken into account.

The costs of technical and non-technical losses are included in the distribution tariffs and are reflected to consumers, provided that they do not exceed the target loss rates determined by EMRA regarding the technical and non-technical losses that will be taken as a basis while determining the tariff of the Group.

Revenues to be collected by electricity distribution companies for system operating activities in a tariff year are limited by system operating revenue ceilings approved by EMRA for each electricity distribution company. For each tariff year, the difference between the system operating income ceiling, which is the basis for year-end correction, calculated by EMRA according to the realizations of each electricity distribution company, and the system operating income realized at the end of the year, is adjusted with tariffs by EMRA two years later.

Following the final determination of the amount by EMRA, the difference between the year-end adjusted system operating income ceiling calculated by EMRA and the system operating income realized at the end of the year is recognized in the financial statements as a trade receivable or deferred income on an accrual basis.

The main income difference for the lost energy correction component is calculated by subtracting the lost energy part of the support amount and the lost energy part of the income accrued to the users regarding the use of the distribution system from the total lost energy cost in line with the target loss rate. Lost energy correction component is corrected with tariffs by EMRA two years later for each tariff year, as in the income difference correction component. The income difference based on the lost energy correction component is recognized as trade receivables or deferred income on an accrual basis in the financial statements.

Price equalization mechanism is established to ensure that consumers are partially or completely protected from cost differences between distribution regions. With this mechanism, support amounts are calculated by taking the difference between the distribution revenue ceiling approved by EMRA for each distribution company and the revenue amounts expected to be obtained in national unit prices, considering the seasonal electric traction proportionality of the annual demand forecast. The transfer of the calculated support amounts between the related parties is made through Elektrik Üretim AŞ (“EÜAŞ”).

Therefore, distribution revenues of electricity distribution companies are regulated according to the revenue cap methodology.

• **Electricity sales revenue**

At the same time, the Group, as the party responsible for the balance, has revenues from the electrical energy sold to the Market Operator EPIAŞ in accordance with the “Electricity Market Balancing and Settlement Regulation”. These revenues are accounted for as electricity sales revenues at the same time the electricity sale is performed.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

f) Revenue (Continued)

• Weighted average cost of capital (“WACC”) correction

EMRA takes into account the annual consumer price index (“CPI”) while arranging the price of investment expenditures made by distribution companies in accordance with the Transfer of Operating Rights. Therefore, receivables from service concession agreements accounted for as financial assets in accordance with TFRS Interpretation 9 are updated according to CPI as of each reporting date. The index difference regarding receivables from service concession agreements is accounted for in other operating income in the accompanying financial statements.

• Interest income from distribution activities

In accordance with TOR, interest income related to WACC adjustment for investment expenditures made by the Group is accounted for in accordance with TFRS 9. Interest income on financial assets related to concession agreements are recognised using the effective interest method. Interest income related to the WACC adjustment is recorded in other operating income in the accompanying financial statements.

• Income from investment and construction activities

OEDAŞ makes capacity increase, expansion, improvement, modernization and network operating system investments necessary for the execution of distribution activities within the framework of the demand forecasts and investment plans approved by EMRA and also invests in assets - other than distribution assets - with a useful life of more than one year such as land, fixtures, buildings, drones etc. which are required for the execution of the distribution activities.

Within the scope of TFRS Interpretation 12 “Service Concession Agreements”, a service concession agreement is defined as the transfer of transactions provided by the government or other public sector enterprises - such as road construction, energy distribution, hospital or school construction - to private enterprises. The Company’s electricity distribution service operations are covered by service concession agreements.

The aforementioned right arising from electricity distribution is accounted for by being reflected in the total billing made to the subscribers based on the tariffs for distribution and retail sales service set out by EMRA.

Investment expenditures and income from construction activities are recognized as a single performance obligation as soon as the related investments are settled.

The Group recognizes the income calculated according to the financial asset model as “Income from investment and construction activities” in the statement of profit or loss and other comprehensive income, and the financial asset as “Financial assets related to concession agreements” in the statement of financial position (Note 24 and Note 5).

The Group accounts for the revenue collected and costs incurred as a result of its investment expenditures in accordance with TFRS 15 “Revenue from Contracts with Customers”.

• General lighting income

Within the scope of the Electricity Market Law No. 6446 and other secondary legislation, electricity distribution companies are obliged to supply energy to the general lighting consumer group. By the electricity sales made to the general lighting consumer group, the purchase and sale of electricity take place at the same time, due to the fact that electricity is not a low cost- and highly storable stock in the current situation, thus sales and costs occur at the time of use.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

f) Revenue (Continued)

Revenue related to gas distribution activities

• Income from investment and construction expenditures

Gazdaş and Trakya make investments in power line, facility and various construction activities in the natural gas distribution system to fulfil demand estimates determined by EMRA. Revenue and costs related to the investment expenditures are recognised within the framework of TFRS 15.

• Natural gas sales income and system operating income

Gazdaş and Trakya, determine the amount of natural gas sales for the invoicing of subscribers based on the index value read by the customer counter. Counters are read periodically once a month and index values are recorded. Natural gas sales revenue is recognized on an accrual basis based on weighted average retail price determined by EMRA on the sales quantity calculated according to two index differences between the last reading date and the previous reading date and calculated on the basis of reading periods. The retail price consists of the unit purchase price and the system usage price. According to the Natural Gas Market Distribution and Customer Services Regulation, Gazdaş and Trakya may not charge any fee to consumers other than the retail price approved by EMRA and other service fees determined by EMRA. Gazdaş and Trakya reflect the sale of natural gas to subscribers to their consolidated financial statements in accordance with EMRA regulations. In this context, Gazdaş and Trakya invoice the natural gas they purchase to subscribers without adding a profit margin. Gazdaş and Trakya record the revenue as gross, since they are mainly responsible for fulfilling the commitment that subscribers are provided with natural gas.

• Natural gas transmission income

Wholesale companies, from whom individual consumers purchase natural gas, contact with distribution companies to sign transmission service agreements and delivery service agreements for their customers. The distribution companies provide natural gas transmission service to the wholesale companies in scope of the transmission service agreement and delivery service agreement. As it is the case with its customers, the distribution company processes the amount of natural gas consumption for invoicing to the system records by reading the customer counter periodically every month. The sale of natural gas transportation service is accrued over the calculated natural gas consumption amount and the system usage fee notified to the distribution company by EMRA. The transmission service invoice is reflected to the wholesale companies by the distribution companies.

• Interest income related to WACC adjustment

The interest income portion of the revenue related to the service concession agreements for distribution is recognised as per Service Concession Agreements (IFRIC 12). Interest income earned from receivables from concession agreements is recognised using the effective interest method.

• Indexation difference on receivables from concession arrangements

The Group accounts for the income calculated using the effective interest method on the financial asset as “Indexation difference related to receivables from service concession agreements” within other operating income. The indexation difference regarding receivables from service concession agreements is included in other operating income item in the accompanying financial statement.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

g) Deferred revenue

The retail company must earn a net profit margin of 2,38% on sales to its tariff customers. The retail net profit margin consists of the adjustment component recorded to equate the net profit margin to 2,38%. The excess portion of the period is classified under deferred income in the financial statements.

In accordance with the “Communiqué on the Regulation of the Distribution Tariff” published by EMRA, electricity distribution companies have income requirements determined to cover the costs in the form of investment and operating expenses to carry out the distribution activities, excluding the costs incurred within the scope of energy supply activities for lost energy and general lighting purposes. In this framework, the difference between the value of the system operating income ceiling for a tariff year calculated based on the December CPI of the relevant tariff year and the value of the system operating income realized in the relevant tariff year calculated based on the December CPI of the relevant tariff year is determined as the system operating income difference. Difference is taken into account by EMRA in determining the system operating revenue cap for the next tariff year, as a component of system operating revenue difference adjustment and is included in the system operating revenue cap calculation. The excess portion of the period is classified under deferred income in the financial statements.

h) Deposits received

Accounting policy for deposits received from retail electricity distribution segment:

In accordance with the decision of EMRA about “The Rules and Regulation related to the Update of Guarantee Payments in Electricity Market”, OEPSAŞ is obliged to pay the deposit amounts to customers which have terminated their subscription, updated in accordance with the methods identified by EMRA. Deposits received are included in the financial statements by being updated according to the CPI. In addition, according to the Transfer of Operating Rights agreement signed between TEDAŞ and OEPSAŞ, the Group must keep track of deposits received from the subscribers and refunded, and to pay the net balance back to TEDAŞ until the end of the license period.

Differences resulting from the valuation of the amounts received for deposits are accounted for under other operating expenses in the consolidated statement of profit or loss (Note 27).

Accounting policy for deposits received from gas distribution segment:

In order to guarantee the receivables arising from the sale of gas, the Group collects deposits from the subscribers using the mechanical meter for a one-time period or receives a letter of guarantee. The deposits paid by a subscriber whose subscription is ending is paid to the subscriber or their authorised representative within fifteen days following a request on the condition that all debts are paid, and the deposit received in cash is updated within the framework of the relevant legislation.

Differences resulting from the valuation of the amounts received for deposits are accounted for under other operating expenses in the consolidated statement of profit or loss (Note 27).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

i) Borrowing costs

Bank loans are recorded at their fair values with reduced transaction costs on the date they are received. In the following periods, they are valued at their discounted values using the effective interest rate method, and the difference between the remaining amount after deducting the transaction costs and the discounted cost value is reflected in the consolidated profit or loss statement as financing cost during the loan period.

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which (at least a period of one year) are assets that necessarily take a substantial period of time to prepare for their intended use or sale, are added to the cost of those assets, until such time as the assets are mostly ready for their intended use or sale.

All other borrowing costs are recorded in the consolidated statement of profit or loss in which they are incurred.

j) Provisions, contingent liabilities, contingent assets

Provisions are recognized when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made.

Liabilities arising from past events that cannot be confirmed by the realization of one or more uncertain future events, the existence of which is not fully under the control of the enterprise, are not included in the financial statements and are treated as contingent liabilities (Note 18).

Contingent assets usually arise from unplanned or other unexpected events that give rise to the possibility of an inflow of economic benefits to the entity. Contingent assets are disclosed where an inflow of economic benefit is probable. Contingent assets are assessed continually to ensure that developments are appropriately reflected in the consolidated financial statements. If it has become virtually certain that an inflow of economic benefits will arise, the asset and the related income are recognized in the consolidated financial statements of the period in which the change occurs.

k) Employment termination benefits

Provisions for employee termination benefits:

As per the existing labor law in Turkey, the Group is obliged to pay certain amounts to its employees who have completed one year of employment and left due to reasons such as retirement, military service or death. Provision for employment termination benefits represents the present value of the estimated future probable obligation of the Group in case of the retirement of employees on a 30-day basis. Provision for employment termination benefits is calculated as if all employees are subject to such payment and reflected in the consolidated financial statements on accrual basis. The provision has been calculated based on the severance pay ceiling announced by the Government.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

l) Earnings/(losses) per share

Earnings per share are calculated by dividing net profit by the weighted average number of shares that have been outstanding during the related year concerned. In case of capital increase from internal resources during the period, the newly found value is considered to be valid as of the beginning of the period while calculating the weighted average of the shares.

Companies can increase their share capital by making a pro-rata distribution of shares (“bonus shares”) to existing shareholders from retained earnings and allowable reserves. Therefore, the weighted average number of shares used in the calculation of earnings per share is obtained by applying the issue of bonus shares retrospectively (Note 31).

m) Current Period Tax Expense and Deferred Tax Assets and Liabilities

Tax liability on the current period profit or loss includes current period tax and deferred tax. Current year tax liability consists of the tax liability calculated based on the taxable portion of the profit for the period with the tax rates valid as of the reporting date and according to the tax legislation in force and includes adjustments related to previous years’ tax liabilities.

Deferred tax is provided, for temporary differences arising between the tax bases of assets and liabilities and their carrying values for financial reporting purposes. Tax bases of assets and liabilities comprise of the amounts that will impact taxable income in future periods based on the tax legislation. Currently enacted tax rates, which are expected to be effective during the periods when the deferred tax assets will be utilized or deferred tax liabilities will be settled, are used to determine deferred tax.

Deferred tax is calculated over the temporary differences between the book values of assets and liabilities in the financial statements and the values used in the tax base. Deferred tax is not recognized for temporary differences occurring in the following cases:

- Temporary differences in the initial recognition of assets or liabilities resulting from a transaction that is not a business combination and does not affect either accounting profit or taxable profit or loss;
- Temporary differences related to investments in subsidiaries, associates and jointly controlled entities that are not likely to reverse in the foreseeable future and for which the Group has control over the reversal time;
- Taxable temporary differences during the initial recognition of goodwill.

Deferred tax assets and liabilities are recognized to the extent that they will impact taxes to be paid in the periods that temporary differences will disappear. Deferred tax liabilities are recognized for all taxable temporary differences, where deferred tax assets resulting from deductible temporary differences are recognized to the extent that it is probable that future taxable profit will be available against which the deductible temporary difference can be utilized. Carrying value of deferred tax assets are decreased to the extent necessary, if future taxable profits are not expected to be available to utilize deferred tax assets partially or fully.

Deferred tax assets and deferred tax liabilities related to taxes levied by the same taxation authority are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities (Note 23).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

n) Inventories

Inventories are valued at the lower of cost and net realizable value. It is determined by the inventory costs method and includes the cost of purchasing inventories, production or conversion costs, and other costs incurred in bringing the inventories to their current state and location (Note 9).

o) Share premium

Share premium represents differences resulting from the sale of the Group’s affiliates’ or associates’ shares at a price exceeding the face value of those shares or differences between the face value and the fair value of shares issued for acquired companies (Note 22).

p) Financial instruments

(i) Recognition and initial measurement

The Group recognizes its trade receivables and borrowing instruments at the time of their origination. All other financial assets and financial liabilities are initially recognised when the Group becomes a party to the contractual provisions of the instrument. The Group accounts for all of its other financial assets and financial liabilities if and only if it becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus or minus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

(ii) Classification and subsequent measurement

On initial recognition, a financial asset is classified as; measured at amortised cost; FVOCI – investments in debt instruments, equity investments; or FVTPL.

The Group cannot reclassify its financial assets subsequent to their initial recognition unless it changes its business model for managing financial assets. In this case, all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

p) Financial assets (Continued)

All financial assets not classified as measured at amortised cost or FVOCI as described above are measured at FVTPL. These also include all derivative assets. On initial recognition, the Group may irrevocably designate a financial asset that meets the requirements to be measured at amortised cost or at FVOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Financial assets – Business model assessment

The Group makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:

- The stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether management’s strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liability or expected cash outflows for realizing cash flows through the sale of the assets;
- Purpose of the business model; it may be to manage daily liquidity needs, maintain a certain interest yield, or match the maturity of financial assets with the maturity of the debts funding those assets;
- How the performance of the portfolio is reported to the Group’s management;
- The risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed;
- How managers of the business are compensated – e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected; and
- The frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

p) Financial assets (Continued)

Financial assets held for trading or managed on a fair value basis and whose performance is evaluated on this basis are classified as measured at fair value through profit or loss.

Financial assets – Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, ‘principal’ is defined as the fair value of the financial asset on initial recognition. ‘Interest’ is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Group considers:

- Contingent events that would change the amount or timing of cash flows (triggering event in other words)
- Terms that may adjust the contractual coupon rate, including variable-rate features;
- Prepayment and extension features; and
- Terms that limit the Group’s claim to cash flows from specified assets (e.g. non-recourse features)
- A prepayment feature is solely consistent with the payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable compensation for early termination of the contract.
- Additionally, for a financial asset acquired at a discount or premium to its contractual per amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

p) Financial Instruments (Continued)

Financial assets – Gains or losses from subsequent measurement

Financial assets and liabilities at fair value through profit or loss	These assets are measured at their fair value in subsequent measurements. Net gains and losses related to them, including any interest or dividend income, are recognized in profit or loss. The Group’s financial assets at fair value through profit or loss include derivative instruments that are not subject to hedge accounting. For derivatives defined as hedging instruments, See Section (v) below.
Financial assets and liabilities carried at amortized cost	These assets are subsequently measured at amortized cost using the effective interest method. Amortized costs are reduced by the amount of impairment losses, if any. Interest income, foreign currency gains and losses and impairments are recognized in profit or loss. Gains or losses resulting from their derecognition are recognized in profit or loss. Financial assets which are accounted for by the Group based on their amortized costs are “cash and cash equivalents”, “trade receivables”, “other receivables” and “receivables from service concession agreements”.
Debt instruments measured at fair value through other comprehensive income	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method are recognized foreign currency gains and losses and impairments in profit or loss. Other gains and losses are recognized in other comprehensive income. When financial assets are derecognized, total gains or losses previously recognized in other comprehensive income are reclassified to profit or loss.

Financial liabilities - Classification, subsequent measurement and gains and losses

Financial liabilities are classified as measured at amortized cost and at fair value through profit or loss.

A financial liability is classified as at fair value through profit or loss if it meets the definition of held for trading. A financial liability is classified as a financial liability held for trading if it is a derivative or designated as such at initial recording. Financial liabilities at fair value through profit or loss are measured at their fair value and net gains and losses including interest expenses are recognized in profit or loss. Other financial liabilities are measured at effective interest rates and amortized cost values of future principal and interest cash flows, less any impairment upon initial recognition. Interest expenses and foreign exchange differences are recognized in profit or loss. Gains or losses on derecognition of these liabilities are recognized in profit or loss. For derivatives defined as hedging instruments, see Section (v) below.

(iii) Derecognition

Financial assets

The Group derecognizes the financial asset if it does not continue to have control over the financial asset when the contractual rights to the cash flows related to the financial assets expire or when it transfers substantially all the risks and rewards of ownership of that financial asset.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

p) Financial Instruments (Continued)

Financial liabilities

The Group derecognizes a financial liability and if and only if the debt related to the liability is removed or cancelled. In addition, if there is a material change in the terms or cash flows of an existing financial liability, the Group removes that financial liability from its statement of financial position. This requires the recognition of a new financial liability at fair value in accordance with the amended terms.

On derecognition of a financial liability, the difference between the carrying amount and the amount paid for the liability (including any non-cash assets transferred or any liabilities assumed) is recognized as profit or loss.

(iv) Offsetting of financial assets and liabilities

Financial assets and liabilities are offset and the net amount reported in the statement of financial position only when there is a legally enforceable right to set off the recognized amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously.

(v) Derivative financial instruments and hedge accounting

The Group uses derivative financial instruments as a hedging instrument against the highly probable foreign exchange risk, to which it is exposed due to the sales revenues based on USD made within the scope of YEKDEM, and applies cash flow hedge accounting as a result of the effectiveness tests conducted in this context. In addition, it can apply cash flow hedge accounting through interest rate swaps in order to hedge its variable-rate loans from changes in interest rates. The Group uses derivative transactions effectively in line with its risk management strategy and objectives. Since it is possible to postpone TFRS 9 in the application of hedge accounting and continue to apply TAS 39 accordingly, the Group continued to apply TAS 39 standard for hedge accounting.

At the date of the derivative contract, the Group determines an asset or liability or the transactions that can be associated with a particular risk and are likely to occur or the transactions that provide hedging against changes that may affect profit/loss, as cash flow hedges.

The Group presents its gains and losses on the hedging transaction qualified as effective, under “gains/(losses) on hedging transactions” in equity. The ineffective portion on the other hand is defined in the profit or loss statement. In the event that the hedged commitment or possible future transaction becomes an asset or liability, the gains or losses related to these transactions, which are recognized as equity items, are taken from these items and included in the acquisition cost or book value of the said asset or liability. Otherwise, the amounts recognized under equity items are transferred to the income statement in the period in which the hedged possible future transaction affects the income statement and reflected as profit or loss.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

(v) Derivative financial instruments and hedge accounting (Continued)

Efficiency tests are performed at the beginning of the hedge accounting, with the balance sheet method in each reporting period, prospectively. According to this method, hedge accounting is continued if the efficiency is between 80%-125%.

In the cases that the hedging instrument is sold, expires or fails to meet hedge accounting requirements even though it is for hedging purposes or one of the situations occur where the promised or probable future transaction was not expected to take place, the committed or probable future transaction continues to be classified separately in equity until the transaction is realized. When the promised or probable future transaction is realized, it is recorded in the income statement or if it is expected not to be realized the accumulated gains or losses related to the transaction are reflected in the consolidated financial statements as profit or loss (Note 19).

r) Impairment of Assets

(i) Non-derivative financial assets

Financial instruments and contract assets

The Group recognizes a loss allowance for expected credit losses (“ECL”) for:

- Financial assets measured at amortized cost;

The Group measures the loss allowance at an amount equal to life-time ECLs, excluding items measured as 12-month expected credit losses as noted below:

- Debt instruments determined to have low credit risk at the reporting date, and
- Other debt instruments and bank balances for which the credit risk (i.e., the risk of default over the expected life of the financial instrument) has not increased significantly since initial recognition.

The Group has chosen life-time ECLs in calculating the impairment of trade receivables and contract assets.

The Group considers reasonable and supportable information available without undue cost or effort regarding the estimation of expected credit losses including the effects of expected early payments in determining whether the credit risk of a financial asset has increased significantly since initial recognition and in estimating its ECLs. This information includes quantitative and qualitative information and analysis based on the Group’s past experience of credit losses and forward-looking information.

Life-time ECLs are expected credit losses resulting from possible default events over the expected life of the financial instrument. The 12-month ECLs are the portion that represents the expected credit losses arising from possible default events on the financial instrument within the following 12 months after the reporting date.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

r) Impairment of Assets (Continued)

(i) Non-derivative financial assets (Continued)

The maximum period for which ECLs will be measured is the maximum contractual period for which the Group is exposed to credit risk.

Measurement of ECLs

The ECLs are a weighted estimate based on the probabilities of credit losses over the expected life of the financial instrument. In other words, they are credit losses measured at the present value of all cash deficits (for example, the difference between the contractual cash flows to the entity and the cash flows the entity expects to receive).

Since the amount and timing of payments are taken into account for the calculation of expected credit losses, a credit loss is incurred even if the entity expects to receive full payment after the contractual maturity.

ECLs are discounted at the effective interest rate of the financial asset.

Credit impaired financial assets

At the end of each reporting period, the Group assesses whether its financial assets measured at amortized cost and debt assets measured at fair value through other comprehensive income are impaired. A financial asset is credit impaired when one or more events occur that adversely affect the estimated future cash flows of a financial asset.

Evidence that a financial asset is credit impaired includes the following observable data:

- The borrower or issuer is in significant financial difficulty;
- A breach of contract, such as a default of debtor or an average of 90 days past the due date of the financial instrument;
- Restructuring of a loan or advance, subject to conditions that the Group cannot take into account otherwise;
- The debtor is likely to go bankrupt or have financial restructuring; or
- The disappearance of an active market for a security due to financial difficulties.

Presentation of impairment

Loss provisions for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

s) Leases

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group uses the definition of a lease in IFRS 16.

As a lessee

At the actual commencement date of the lease or at the date of the change in the contract containing the lease component, the Group allocates to each lease component based on the relative stand-alone price of the lease component and the total price of the non-lease components.

The Group has not separated the non-lease components from the lease components, but preferred accounting for each lease component and its associated non-lease components as a single lease component instead.

The Group recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the cost of the right-of-use asset reflects that the Group will exercise a purchase option. In that case the right-of-use-asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment.

In addition, the value of the right-of-use asset is periodically reduced by deducting any impairment losses and adjusted for remeasurement of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date. Lease payments are discounted using the interest rate implicit in the lease in case it can easily be determined. If that rate cannot be specified readily, the Group's incremental borrowing rate is utilized as the discount rate. Generally, the Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.4 Summary of significant accounting policies (Continued)

s) Leases (Continued)

- penalties to be incurred when the Group is reasonably certain in exercising call option or demonstrates that it will exercise an option to terminate the lease.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, if the Group changes its assessment of whether it will exercise a purchase, extension or termination option or if there is a revised in-substance fixed lease payment. In case of re-measurement of the lease liability, it is reflected to the financial statements as an adjustment to the right-of-use asset based on the newly found debt amount. However, if the carrying amount of the right-of-use asset is reduced to zero and there is a further reduction in the measurement of the lease liability, the remaining remeasurement amount is recognized in profit or loss.

t) Segment reporting

The Group management has determined the reportable segments of the Group as electricity distribution, natural gas distribution, retail and wholesale electricity sales, production and trade and other according to activity groups. The Group management may change the structure of segment reporting, if they reach the conclusion that it might affect financial statement users' decisions and/or it will be useful during the review of financial statements. (Note 3).

2.5 Going concern assumption

The gross profit and EBITDA of the Group are TL 3.896.220 and TL 8.178.122 respectively as at 31 December 2022. The Group has TL 111.363 of net profit for the equity holders of the Parent as at and for the year ended 31 December 2022. The Group's current liabilities exceed its current assets by TL 9.093.002.

According to the material event disclosure made on 13 January 2023; as a result of negotiations between the Company, its controlling shareholder Zorlu Holding AŞ and Wren House Infrastructure LP (a subsidiary of Kuwait Investment Authority ("KIA")) regarding the sale of the majority shares of Electrip Global B.V. (whose previous trade name was ZES N.V.), a company incorporated in the Netherlands which the Company fully owns and the minority shares of the Company as well as the amendment of the loan agreement signed between the Company and KIA on March 15, 2018, the repayment term of the loan debt of the Company was extended, the credit risk in foreign currency was reduced, and thus the Company's balance sheet and financial situation were strengthened.

Furthermore, according to the material event disclosure dated 31 January 2023; in order to provide additional working capital, reduce financial debt via principal and interest payments, repay debt to existing vendors and meet the capital need required by the business operations in accordance with the Company's medium and long term plans, it has been decided that the paid-in capital of the Company will be increased from TL 2.500.000.000 (two billion five hundred million Turkish lira) to TL 5.000.000.000 (five billion Turkish lira), which is within the registered capital ceiling of TL 6.000.000.000 (six billion Turkish lira), via a 2.500.000.000 (two billion five hundred million Turkish lira) rights issue (by 100%) pursuant to authorisation set forth in Article 6 of the Company's Articles of Association.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.5 Going concern assumption (Continued)

The Company also covers some of its short-term financial borrowings with long-term financial debt instruments. The Company will maintain the balance between its current assets and short-term liabilities, thanks to the aforementioned reduction of its financial debts mentioned in the material event disclosure dated 13 January 2023, and the funds it will provide from the capital increase in the statement dated 31 January 2023.

The fact that the major portion of the Group's electricity sales is at pre-determined prices in USD within the scope of Renewable Energy Sources Mechanism ("YEKDEM") has a positive effect on the gross profit. In addition, foreign exchange losses arising from foreign currency loans of companies selling within the scope of YEKDEM are largely eliminated through foreign currency indexed sales revenues.

Zorlu Holding, the main shareholder of the Company, stated in its letter dated 22 February 2023 that it intends to provide the necessary support for the continuity of the Group's operations.

The Group has prepared its consolidated financial statements on a going concern basis in a foreseeable future and does not expect any risk in this respect.

2.6 Comparatives and restatement of prior year financial statements

The consolidated financial statements of the Group for the current period is prepared in comparison with the prior year in order to be able to determine the financial position and performance trends. For the purposes of effective comparison, comparative consolidated financial statements are reclassified when deemed necessary, and descriptions on significant differences are disclosed.

The following classifications has been taken into account in the consolidated statement of financial position and profit or loss statement as of 31 December 2021:

- "Effect of Previous year Business Combinations under Common Control" amounting to TL 391.175 in the consolidated statement of financial position has been reclassified to "Retained Earnings".
- Tax expenses excluding current period tax amounting to TL 3.059 in marketing expenses account in consolidated profit or loss statement are reclassified to general administrative expenses.
- Foreign exchange losses arising from commercial transactions amounting to TL 17.128 in the financial expenses account in the consolidated statement of profit or loss are reclassified to other operating expenses.

2.7 Critical accounting estimates, assumptions and judgements

The preparation of the consolidated financial statements requires the disclosure of the amounts of assets and liabilities reported as of the reporting date, the disclosure of contingent assets and liabilities, and the use of estimates and assumptions that may affect the amounts of income and expenses reported during the accounting period. These estimates and assumptions are based on the Group management's understanding of current events and transactions. Although based on the best information available, actual results may differ from assumptions.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.7 Critical accounting estimates, assumptions and judgements (Continued)

The estimates and assumptions that are significant in terms of the carrying values of the Group's assets and liabilities and operating results are given below:

a) *Deferred tax asset on cumulative tax losses*

While deferred tax liability is recognized for all taxable temporary differences, deferred tax assets consisting of deductible temporary differences are recognized on the condition that it is highly probable that these differences will be benefited by generating taxable profit in the future. As of 31 December 2022, the Group has allocated deferred tax assets for unused prior year financial losses amounting to TL 9.184.938 (31 December 2021: TL 7.623.980). Deferred tax asset has not been calculated for unused tax losses amounting to TL 1.748.494 (31 December 2021: TL 669.077) (Note 23).

b) *Cash flow hedge transactions*

As explained in Note 19, the Group uses bond and investment loans amounting USD 643.932 thousand (31 December 2021: USD 891.100 thousand) and as a hedging instrument against the highly probable USD spot exchange rate risk the Group is exposed to due to YEKDEM sales income, and applies cash flow hedge accounting as a result of the effectiveness tests performed. The estimations in budgets for YEKDEM sales income used for effectiveness test include estimations such as sales quantities and production capacity.

c) *Determination of fair value*

Commencing from the presentation of the consolidated financial statements as of 31 December 2013, the cost method, one of the application methods in TAS 16, has been excluded from application and the revaluation method has been chosen instead in order to present the electricity generation facilities of the Group at their fair values.

On 31 December 2022, A A Baig & Co. and Aden Gayrimenkul Değerleme ve Danışmanlık AŞ, a CMB accredited company, have been granted the necessary authorisation to determine the fair values of the power plants owned by Zorlu Energy Pakistan and the facilities established in Turkey, respectively. The cost method was used in the valuation of the natural gas power plants owned by Zorlu Energy and the Kızıldere 1 geothermal power plant owned by Zorlu Doğal, while the income discount method was used in the valuation of the other power plants.

Regarding the assumptions used in the valuation of power plants other than the power plant owned by Zorlu Enerji Pakistan; the USD weighted average cost of capital ratio taken into account is 11%. As for the valuation of Zorlu Enerji Pakistan's power plant, the USD weighted average cost of capital ratio used is 11,74%.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.7 Critical accounting estimates, assumptions and judgements (Continued)

The parameters applied and the valuation methods used in the aforementioned valuation studies are summarized below:

Valued companies	Valuated power plant type	Valuation period	Valuation company	Valuation method	Valuation assumptions		
					Weighted capital cost rate	Electricity Sales Price (cent/kWh) (*)	Electricity Sales Volume (kWh/year)
Zorlu Doğal	Kızıldere 2 Geothermal Energy Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10,5-16 cent	400.367.040
Zorlu Doğal	Kızıldere 3 Geothermal Energy Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10,5-16 cent	996.603.300
Zorlu Doğal	Tokat/Ataköy Hydroelectric Energy Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10-16 cent	7.634.585
Zorlu Doğal	Eskişehir/Beyköy Hydroelectric Energy Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10-16 cent	42.038.539
Zorlu Doğal	Kars/Çıldır Hydroelectric Energy Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10-16 cent	15.904.236
Zorlu Doğal	Rize/İkizdere Hydroelectric Energy Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10-16 cent	111.902.588
Zorlu Doğal	Erzurum/Kuzgun Hydroelectric Energy Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10-16 cent	22.542.218
Zorlu Doğal	Tunceli/Mercan Hydroelectric Energy Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10-16 cent	70.409.376
Zorlu Doğal	Erzincan/Tercan Hydroelectric Energy Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10-16 cent	36.240.120
Rotor	Gökçedağ Wind Energy Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10-16 cent	337.809.690
Zorlu Jeotermal	Alaşehir 1 Geothermal Energy Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10,5-16 cent	252.386.550
Zorlu Jeotermal	Alaşehir 1 Solar Power Plant	31.12.2022	Aden Gayrimenkul	DCF	11	10,5-16 cent	5.560.270-
Zorlu Enerji Pakistan	Jhimpir Wind Energy Power Plant	31.12.2022	A A Baig & Co. Chartered Accountants	DCF	11,74	6,8 - 13,4 cent	6.178.078 159.010.000

(*) Represents the minimum and maximum prices used in DCF calculation.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.7 Critical accounting estimates, assumptions and judgements (Continued)

In the event that the prospective electricity prices, sales volume and weighted capital cost ratio used in the models increase or decrease by 10%, the effects on tangible fixed assets recognized in the consolidated financial statements, assuming all other variables are constant, are presented below:

31 December 2022	In case of a 10% increase	In case of a 10% decrease
Electricity prices	142.536	(142.685)
Sales volume	142.363	(142.371)
Weighted capital cost ratio	(42.075)	48.207

d) Uninvoiced sales

The costs of active energy and retail sale services provided to the customer but not invoiced are recognized at estimated amounts. Unbilled electricity costs of active energy and retail sale services are reflected in the consolidated financial statements by multiplying the relevant period's tariff prices by the difference between the date of the customer's most recent meter reading and the last day of the relevant period.

e) Provisions

The Group management is reflecting the best estimation to the consolidated financial statements based on the best available data and results might differ when fulfilling the liabilities. As at 31 December 2022, the Group is the object of several lawsuits. Depending on the reviews of legal counsels, the Group is evaluating the probable results of these lawsuits and setting aside necessary provisions in consolidated financial statements. The Group also insures the loss of profits or damages incurred during the period regarding the cash-generating facilities with the insurances it has taken out at its facilities.

Additionally, insurance income accruals are recorded against current damage and profit losses.

f) Detection of goodwill impairment

In accordance with the aforementioned accounting policy in Note 2.4, the Group reviews the goodwill for impairment once a year or more frequently if conditions indicate impairment. Recoverable values of cash-generating units are determined based on the value in use or fair value calculations. As a result of the impairment tests performed on the basis of cash-generating units, the details of which are given below, no impairment has been detected in the goodwill amounts as of 31 December 2022.

OEDAŞ:

OEDAŞ operations were considered to be part of separate cash-generating units, and the recoverable amount of the said units were determined based on fair value calculations. Fair value calculations include cash flow projections to be realized during the life of the license valid until 1 September 2036 and the projections determined in TL are based on long-term plans prepared by the Group management. In the fair value calculations, the cost of capital ratio for OEDAŞ is variable over the years and is between 19% and 27%, while the annual inflation rate is kept variable between 70% for 2022, 32% for 2023 and between 8% and 20% for the following years. The Group has also considered the cost efficiency in the fair value calculations and has taken into account the cost efficiency as an annual average of 15% over fixed- and variable costs.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2.7 Critical accounting estimates, assumptions and judgements (Continued)

If the inflation rate, cost of capital ratio and expense efficiency ratio used in the calculation of discounted cash flows are higher or lower by 1% the effects on the equity value reached, assuming all other variables are constant, are presented below:

31 December 2022	In case of a 1% increase	In case of a 1% decrease
Inflation rate	413.981	(390.128)
Capital cost ratio	(128.006)	130.762
Expense efficiency	52.425	(52.425)

As a result of the sensitivity analysis, there is no impairment in the amount of goodwill.

OEPSAŞ:

The activities of OEPSAŞ have been evaluated as separate cash-generating units and the recoverable values of these cash-generating units have been determined according to the fair value calculations. Fair value calculations include cash flow projections to be realized throughout the life of the license and the projections determined in TL are based on long-term plans prepared by the Group management. In the cash flow projections used in the fair value calculations, the eligible consumer profit margin ratio started at 2% in 2022 and continued at a constant rate. The capital cost ratio for OEPSAŞ is variable over the years and has been taken into account in the range of 19%-27%.

If the eligible consumer profit margin ratio and cost of capital ratio used in the calculation of discounted cash flows are higher or lower by 1% the effects on the equity value reached, assuming all other variables are constant, are presented below:

31 December 2022	In case of a 1% increase	In case of a 1% decrease
Eligible consumer profit margin	377.561	(487.253)
Capital cost ratio	(19.928)	20.388

As a result of the sensitivity analysis, there is no impairment in the amount of goodwill.

2.8 Seasonality of operations

Business volume shows seasonal changes according to the structure of the industry in which the Group operates. In the gas distribution segment, business volume is higher in the first and fourth quarters corresponding to winter months and for the wind and hydroelectric power plants, which are under production and trading segment, business volumes are higher in second and third quarters and in the fourth quarter of the year, respectively. Seasonality does not have a significant impact on the volume of business in the remaining segments of the Group.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 3 - SEGMENT REPORTING

Management of the Group has determined the reportable parts of the Group as distribution of electricity and distribution of gas, retail and wholesale of electricity, production/trading and other according to the activity groups. Management of the Group considers earnings before interest, taxes, depreciation and amortisation ("EBITDA") as the most appropriate method for comparability with other companies within the same industry. The segment information in industrial basis is presented below:

1 January – 31 December 2022	Electricity distribution	Gas distribution	Retail and wholesale	Production/trading and other	Consolidation adjustments	Consolidation total
Revenue	3.608.852	9.869.927	13.742.330	10.666.679	(7.820.390)	30.067.398
Cost of sales	(3.567.212)	(9.943.883)	(13.059.260)	(7.349.074)	7.748.251	(26.171.178)
Gross profit	41.640	(73.956)	683.070	3.317.605	(72.139)	3.896.220
Operating expenses	(219.164)	(92.150)	(225.096)	(302.250)	72.139	(766.521)
Amortisation and depreciation expenses (*)	26.067	11.614	1.717	1.377.938	-	1.417.336
Interest income from distribution activities (**)	576.587	177.506	-	-	-	754.093
Indexation difference on receivables from service concession agreements (**)	2.228.933	648.061	-	-	-	2.876.994
EBITDA	2.654.063	671.075	459.691	4.393.293	-	8.178.122

1 January – 31 December 2021	Electricity distribution	Gas distribution	Retail and wholesale	Production/trading and other	Consolidation adjustments	Consolidation total
Revenue	1.493.648	2.611.267	6.560.882	3.445.534	(2.476.523)	11.634.808
Cost of sales	(1.304.598)	(2.646.488)	(6.320.146)	(1.954.746)	2.454.282	(9.771.696)
Gross profit	189.050	(35.221)	240.736	1.490.788	(22.241)	1.863.112
Operating expenses	(119.547)	(54.076)	(118.257)	(130.387)	22.326	(399.941)
Amortisation and depreciation expenses (*)	25.872	6.593	1.770	591.696	-	625.931
Interest income from distribution activities (**)	291.357	151.388	-	-	-	442.745
Indexation difference on receivables from service concession agreements (**)	898.734	278.092	-	-	-	1.176.826
EBITDA	1.285.466	346.776	124.249	1.952.097	85	3.708.673

1 January – 31 December 2022	Electricity distribution	Gas distribution	Retail and wholesale	Production/trading and other	Consolidation adjustments	Consolidation total
Segment assets	8.415.780	5.660.538	4.397.604	64.754.197	(17.414.456)	65.813.663
Equity accounted investees	-	-	-	1.614.022	-	1.614.022
Segment liabilities	5.057.410	5.851.984	3.999.010	41.712.597	(6.801.954)	49.819.047

1 January – 31 December 2021	Electricity distribution	Gas distribution	Retail and wholesale	Production/trading and other	Consolidation adjustments	Consolidation total
Segment assets	4.044.728	2.142.491	1.805.915	36.066.284	(9.814.148)	34.245.270
Equity accounted investees	-	-	-	1.181.148	-	1.181.148
Segment liabilities	2.475.458	3.330.693	1.333.922	25.121.707	(3.017.255)	29.244.525

(*) An amortisation and depreciation expense amounting to TL 1.417.336 (31 December 2021: TL 625.931) has been included in cost of sales, general administrative expenses and marketing expenses, whereas a redemption of TL 64.667 (31 December 2021: TL 64.667) has been recorded under other operating expenses.

(**) Interest income from distribution activities and indexation differences on receivables from service concession agreements related to OEDAŞ, Gazdaş and Trakya amount to TL 754.093 (31 December 2021: TL 442.745 and TL 2.876.994 (31 December 2021: TL 1.176.826) respectively, which are included in the other operating income and considered in EBITDA calculation.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 3 - SEGMENT REPORTING (Continued)

Reconciliation between EBITDA and income before tax from continued operations is as follows:

	1 January - 31 December 2022	1 January - 31 December 2021
EBITDA (*)	8.178.122	3.708.673
Amortisation and depreciation expenses	(1.482.003)	(690.598)
Financial income/(expenses), net	(5.368.290)	(2.947.924)
Other operating income/(expenses), net	(1.304.491)	(296.812)
Share of gain/ (loss) on equity accounted investees	93.177	29.491
Income from investment activities	3.870	2.098
Income/(loss) before tax from continued operations	120.385	(195.072)

(*) The Group's Dorad investments have been accounted using equity method and EBITDA related to these investments amounting TL 687.840 (31 December 2021: TL 341.376) was not taken into consideration in the Group's total EBITDA for the year ended 31 December 2022 (Note 13).

NOTE 4 - CASH AND CASH EQUIVALENTS

	31 December 2022	31 December 2021
Cash	300	133
Banks		
- Time deposits	841.498	619.270
- Demand deposits	1.463.762	551.667
	2.305.560	1.171.070

The maturities of time deposits are less than 3 months and the average effective annual interest rates for time deposits are as follows:

	31 December 2022 (%)	31 December 2021 (%)
USD	0,03	0,30
PKR	14,51	5,65
TL	12,78	14,40
EURO	-	0,01

Cash and cash equivalents include the following for the purpose of the consolidated statements of cash flows as at 31 December 2022 and 31 December 2021:

	31 December 2022	31 December 2021
Cash and cash equivalents	2.305.560	1.171.070
Less: Restricted cash (*)	(11.914)	(9.426)
	2.293.646	1.161.644

(*) As of 31 December 2022, total restricted cash balance of the Group is TL 670.256 together with the restricted cash amounting to TL 658.342 recorded under short-term financial investments. Restricted deposits generally consist of the amounts held as deposits related to the payments of the loans obtained by the companies.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 4 - CASH AND CASH EQUIVALENTS (Continued)

The details of “Other adjustments related to profit/(loss) reconciliation” in the cash flow statement are as follows:

	1 January - 31 December 2022	1 January - 31 December 2021
Amortisation of loan commissions	76.324	81.110
Indexation differences of receivables from service concession agreements (Notes 5, 27)	(2.876.994)	(1.176.826)
Adjustments made pursuant to EMRA tariff change	20.798	-
Indexation differences of deposits received (Notes 8, 27)	960.880	155.466
Profit from investment and construction expenditures (Notes 24, 25)	(644.080)	(134.391)
	(2.463.072)	(1.074.641)

The details of “Other cash inflows/outflows from financing activities” in the cash flow statement are as follows:

	1 January - 31 December 2022	1 January - 31 December 2021
Commissions paid related to borrowings	(391.411)	(148.741)
Change in restricted deposits	(361.854)	(31.419)
	(753.265)	(180.160)

NOTE 5 – FINANCIAL ASSETS RELATED TO SERVICE CONCESSION AGREEMENTS

	31 December 2022	31 December 2021
Short-term financial assets	1.041.484	694.125
Long-term financial assets	6.766.842	3.331.766
	7.808.326	4.025.891

Financial assets from service concession agreements consist of amounts of the investments not yet recovered by the tariff.

As at 31 December 2022, TL 6.070.532 of the financial assets from service concession agreements is related to OEDAŞ (31 December 2021: TL 3.059.373) and TL 1.737.794 is related to Gazdaş and Trakya (31 December 2021: TL 966.518).

The maturity analysis of financial assets from service concession agreements are shown below:

	31 December 2022	31 December 2021
Up to 1 year	1.041.484	694.125
Between 1 to 2 years	1.041.484	694.125
More than 2 years	5.725.358	2.637.641
	7.808.326	4.025.891



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 5 – FINANCIAL ASSETS RELATED TO SERVICE CONCESSION AGREEMENTS (Continued)

The movements of financial assets from service concession agreements for electricity and gas distribution companies are as follows:

	1 January - 31 December 2022	1 January - 31 December 2021
Opening balance	4.025.891	2.883.796
Adjustments made pursuant to EMRA tariff change (*)	(20.798)	-
Adjusted opening balance	4.005.093	2.883.796
Gross investments	2.100.806	604.625
Subscriber connection fees (**)	(133.082)	(61.813)
Net investment	1.967.724	542.812
Collections (-)	(1.041.485)	(577.543)
Indexation differences (***)	2.876.994	1.176.826
Closing balance	7.808.326	4.025.891

(*) For Trakya and Gazdaş, the parameters related to investment and operating income requirement for the third tariff implementation period retail sales tariffs that will be valid between 2022 and 2026 were determined by EMRA (Energy Market Regulatory Authority) with the Board Decision dated 8 September 2022, and numbered 11194 and the Board Decision dated 1 September 2022 and numbered 11169, respectively. The difference between the end-of-period asset base of 31 December 2021 in the published Board resolution and the asset base at the beginning of the period reported in the financial statements dated 31 December 2022, has been reflected in 2022 figures as adjustments made in accordance with the EMRA tariff change.

(**) The Company collects a certain subscription fee from each subscriber in order to provide resources for infrastructure investments to be made in the region where the subscriber is located and to deliver natural gas to subscribers within the framework of natural gas distribution activities. The subscriber connection fee amounts determined by EMRA are collected at the time of signing the connection agreement for once only and is non-refundable. In this context, subscriber connection investments and collections made during the period are shown as gross.

(***) EMRA takes into account the annual CPI while regulating the price of investment expenditures made by distribution companies. Therefore, receivables from service concession agreements recorded as financial assets in accordance with TFRS Interpretation 12 are updated according to CPI as of each reporting date.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 6 - FINANCIAL LIABILITIES

The detail of financial liabilities of the Group as at 31 December 2022 and 31 December 2021 is as follows:

	31 December 2022	31 December 2021
Short-term bank borrowings	2.157.412	905.107
Issued bonds	563.267	164.037
Other issued securities	-	165.978
Short-term other payables to related parties (Note 30)	-	35.551
Total short-term financial liabilities	2.720.679	1.270.673
Short-term portion of long-term bank borrowings	7.585.455	3.277.643
Issued bonds	1.291.899	1.006.354
Lease liabilities	109.468	50.888
Total short-term portion of long-term financial liabilities	8.986.822	4.334.885
Long-term bank borrowings	17.393.418	14.337.735
Issued bonds	5.038.242	3.680.621
Lease liabilities	277.265	155.841
Total long-term financial liabilities	22.708.925	18.174.197
Total financial liabilities	34.416.426	23.779.755

The detail of short-term financial liabilities of the Group as at 31 December 2022 and 31 December 2021 is as follows:

	Original currency		Weighted average effective interest rate per annum (%)		TL equivalent	
	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021
USD	85.706	24.922	12,47	8,23	1.602.559	323.425
TL	1.118.120	947.248	32,37	28,99	1.118.120	947.248
					2.720.679	1.270.673

The detail of short-term portion of long-term financial liabilities of the Group as at 31 December 2022 and 31 December 2021 is as follows:

	Original currency		Weighted average effective interest rate per annum (%)		TL equivalent	
	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021
USD	341.706	225.269	10,93	8,04	6.389.320	2.923.428
EURO	13.511	14.400	8,64	7,48	269.340	211.425
TL	2.312.204	1.182.545	17,36	18,47	2.312.204	1.182.545
PKR	168.304	221.904	10,66	10,55	13.803	16.037
NIS	405	347	5,50	5,50	2.155	1.450
					8.986.822	4.334.885



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 6 - FINANCIAL LIABILITIES (Continued)

The detail of long-term financial liabilities of the Group as at 31 December 2022 and 31 December 2021 is as follows:

	Original currency		Weighted average effective interest rate per annum (%)		TL equivalent	
	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021
USD	1.038.091	1.223.327	10,58	8,70	19.410.532	15.875.724
EURO	19.055	19.001	7,99	7,79	379.860	278.978
TL	2.890.031	1.987.866	21,93	21,92	2.890.031	1.987.866
PKR	19.715	125.137	-	9,39	1.617	9.044
NIS	5.053	5.401	5,50	5,50	26.885	22.585
					22.708.925	18.174.197

Letters of guarantees given, pledges and mortgages related to financial liabilities are explained in Note 18.

The movements of financial liabilities as of 31 December 2022 and 2021 are as follows:

	2022	2021
As at 1 January	23.779.755	14.543.183
Cash inflows from bank borrowings	5.195.160	1.729.274
Cash inflows from issued debt instruments	1.850.763	3.818.862
Cash outflows due to the repayment of bank borrowings	(4.363.328)	(4.118.492)
Cash outflows from debt repayments of issued debt instruments	(1.449.740)	(881.795)
Unrealized foreign exchange gains/losses	9.008.449	8.339.976
Interest accruals	589.674	266.773
Cash outflows from debt repayments of lease agreements	(70.208)	(40.027)
Payables related to lease liabilities	142.583	159.069
Interest accruals related to lease liabilities	48.405	30.563
Other reclassifications	(315.087)	(67.631)
As at 31 December	34.416.426	23.779.755

The Group is obliged to comply with various commitments within the context of the existing loan agreements. Financial ratios of the Group are consistent with the provisions of these agreements.

The carrying value of variable-rate financial liabilities are considered to approximate to their respective carrying values. As of 31 December 2022, the carrying value and the fair value of the fixed-rate financial liabilities is TL 14.787.711 (31 December 2021: TL 9.137.158) and TL 13.396.330, respectively (31 December 2021: TL 8.647.707).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 7 - TRADE RECEIVABLES AND PAYABLES

a) Short-term trade receivables:

	31 December 2022	31 December 2021
Trade receivables from related parties (Note 30)	1.076.819	182.302
	1.076.819	182.302
Trade receivables from third parties	6.078.409	2.778.562
Notes receivables and postdated cheques	45.672	5.710
Less: Allowance for doubtful receivables	(159.020)	(120.047)
	5.965.061	2.664.225

Movement for provisions set aside for doubtful receivables is as follows:

	2022	2021
Opening Balance-1 January	120.047	112.970
Reversal of provisions	(167)	-
Provisions related to the current period	64.392	27.889
Provisions no longer required	(25.252)	(20.812)
Closing Balance-31 December	159.020	120.047

As of 31 December 2022, trade receivables amounting to TL 159.020 (31 December 2021: TL 120.047) have passed the due date and thus impaired. As of 31 December 2022 and 2021 the aging schedules are as follows:

	31 December 2022	31 December 2021
More than 12 months	159.020	120.047
	159.020	120.047

Past experiences of the Group at collecting its receivables is considered in providing new doubtful receivable provisions. The Group considers that there is no additional trade receivable risk other than the risks already made subject to provision for possible collection losses.

As of 31 December 2022, the Group's receivables which are past due but not yet impaired amount to TL 1.025.636 (31 December 2021: TL 587.053) of which TL 569.533 is under guarantee with collaterals (31 December 2021: TL 396.500).

b) Long-term trade receivables:

The detail of long-term trade receivables of the Group as at 31 December 2022 and 31 December 2021 is as follows:

	31 December 2022	31 December 2021
Income accruals for uncontrollable expenses (*)	91.621	51.481
	91.621	51.481

(*) Uncontrollable operating expenses which are one of the Group's system operating income ceiling elements approved by EMRA, belong to OEDAŞ and OEPSAŞ. The Group accounts for the adjustments for these uncontrollable operating expenses on accrual basis in the year they occur.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 7 - TRADE RECEIVABLES AND PAYABLES (Continued)

c) Trade payables:

	31 December 2022	31 December 2021
Short-term trade payables to third parties	5.704.245	2.109.139
Short-term trade payables to related parties (Note 30)	290.139	80.775
	5.994.384	2.189.914

As of 31 December 2022 and 2021, the average maturity of trade payables is less than 3 months. Trade payables are not discounted.

NOTE 8 – OTHER RECEIVABLES AND PAYABLES

a) Short-term other receivables:

	31 December 2022	31 December 2021
Other receivables from related parties (Note 30)	1.241.213	911.429
Other receivables from third parties	237.259	32.621
	1.478.472	944.050

b) Long-term other receivables:

	31 December 2022	31 December 2021
Other receivables from related parties (Note 30)	7.287.208	3.074.954
Other receivables from third parties	159.649	153.036
	7.446.857	3.227.990

c) Short-term other payables:

	31 December 2022	31 December 2021
Deposits received	2.387.752	1.223.273
Other payables to related parties (Note 30)	1.214.723	7.769
Other payables to third parties	5.453	4.756
	3.607.928	1.235.798

Movement for deposits received is as follows:

	31 December 2022	31 December 2021
As at 1 January	1.223.273	966.258
Additions and payments, net	203.599	101.549
Indexation differences of deposits received (Note 27)	960.880	155.466
As at 31 December	2.387.752	1.223.273

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 9 - INVENTORIES

	31 December 2022	31 December 2021
Trade goods and other (*)	332.396	38.871
Direct materials and merchandise	177.914	200.159
	510.310	239.030

(*) TL 312.417 of the commercial goods amounting to TL 332.396 is related to the panel stocks (31 December 2021: TL 32.219).

NOTE 10 - OTHER ASSETS AND LIABILITIES

a) Other current assets:

	31 December 2022	31 December 2021
Investment inventories (*)	167.513	19.366
Deferred VAT	165.745	38.577
Insurance income accruals	85.458	76.068
Income accruals (**)	8.052	23.829
Other	6.484	6.722
	433.252	164.562

(*) As of 31 December 2022 and 31 December 2021, the investment inventories consist of the materials that have not yet been used in investments of the Group.

(**) Within the scope of TEDAŞ's audits regarding OEDAŞ before 2017, a total of TL 23.829 administrative fine was imposed regarding the invoices issued to general lighting customers and they were fully paid as of 31 December 2022. Regarding the said administrative fine, OEDAŞ filed a lawsuit against TEDAŞ and for the amount of TL 7.153 in line with the decision of the Council of State in favor of OEDAŞ in the file No. 2017/1967 of the Ankara 1st Administrative Court. On 17 June 2021, the Court of Appeal decided to cancel the administrative act, in full compliance with the decision of reversal.

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES**
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 10 - OTHER ASSETS AND LIABILITIES (Continued)**b) Other non-current assets:**

	31 December 2022	31 December 2021
Income accruals (*)	15.777	-
Accruals of income difference adjustment (**)	-	11.069
	15.777	11.069

(*) Within the scope of TEDAŞ's audits regarding OEDAŞ before 2017, a total of TL 23.829 administrative fine was imposed regarding the invoices issued to general lighting customers and they were fully paid as of 31 December 2022. As for the portion amounting to TL 15.777, as a result of the trial made by the Court of First Instance in the file numbered 2021-622 of the Ankara 4th Administrative Court, it was decided to cancel the administrative action that was the subject of the lawsuit on 10 November 2021.

Since these lawsuits were concluded in favor of the Company, upon the evaluation that it is possible to collect the said administrative fines from TEDAŞ, income accrual, including the expenses, has been accounted for the administrative fine paid in the accompanying financial statements.

(**) According to the revenue requirement ceiling determined within the framework of EMRA regulations, the revenue requirement components of the distribution companies are formed with a predetermined ceiling. Since the Company's revenues and expenses are under the required ceiling amount, the related shortage portion will be considered as an adjustment to the tariffs set by EMRA in the following second year from their origination.

c) Other short-term liabilities:

	31 December 2022	31 December 2021
VAT payable	116.974	100.126
Taxes and funds payable	107.846	76.573
Other	647	471
	225.467	177.170

NOTE 11 – PREPAID EXPENSES**a) Short-term prepaid expenses:**

	31 December 2022	31 December 2021
Prepaid expenses	58.565	19.942
Order advances given	12.385	26.377
	70.950	46.319

b) Long-term prepaid expenses:

	31 December 2022	31 December 2021
Order advances given	8.370	7.565
Prepaid expenses	-	1.410
	8.370	8.975

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 12 – FINANCIAL INVESTMENTS**Short-term financial investments**

	31 December 2022	31 December 2021
Financial investments (*)	658.342	298.976
	658.342	298.976

(*) The Group's total restricted deposits are TL 670.256 (31 December 2021: TL 308.402). TL 11.914 (31 December 2021: TL 9.426) of the restricted deposits are recorded under the cash and cash equivalents and TL 658.342 (31 December 2021: TL 298.976) under short-term financial investments. The restricted deposits in financial investments are related to the bank borrowings obtained by OEDAŞ from the European Bank for Reconstruction and Development ("EBRD"), the International Finance Corporation ("IFC"), Nederlandse Financierings Maatschappij Voor Ontwikkelingslanden N.V. ("FMO"), Asian Infrastructure Investment Bank ("AIIB") and Denizbank AŞ. together amounting to TL 3.358 million, by Trakya from Yapı ve Kredi Bankası AŞ and Akbank TAŞ amounting to USD 34 million and by ZJ Ztrong from Bank Palestine amounting to NIS 6 million. As at 31 December 2022, the weighted average interest rate for TL denominated time deposits of TL 584.866 (31 December 2021: TL 264.187) is 14,29%.

Long-term financial investments

	31 December 2022	31 December 2021
Long-term securities (*)	246	246
	246	246

(*) Zorlu Enerji participated with 246.291 shares (Share amount: TL 246) and in a ratio of 0,4% in the ownership of Enerji Piyasaları İşletme Anonim Şirketi which was established with a capital of TL 61.573.

NOTE 13 - EQUITY ACCOUNTED INVESTEEES

Movement of equity accounted investees for the period is presented below:

	2022	2021
As at 1 January	1.181.148	681.368
Share of profit/(loss) of equity accounted investees	93.177	29.491
Dividend payment	-	(65.780)
Change on equity accounted investees (*)	339.697	536.069
As at 31 December	1.614.022	1.181.148

(*) As at 31 December 2022 change on equity accounted investees amounting to TL 339.697 is related to the currency translation difference (31 December 2021: TL 536.069).

Summary information regarding the financial statements of the Group's equity accounted investees, Dorad, Ezotech, Solad and Adnit is as follows:

31 December 2022	Dorad	Ezotech	Solad	Adnit	Total
Current assets	2.249.967	856.564	128	10.199	3.116.858
Non-current assets	20.557.596	5.591.976	-	1.683	26.151.255
Current liabilities	(2.788.365)	(1.009.848)	(70.239)	(3.850)	(3.872.302)
Non-current liabilities	(13.535.293)	(5.840.352)	(186.166)	(8.148)	(19.569.959)
Currency translation difference	(27.817)	-	-	-	(27.817)
Net assets/(liabilities)	6.456.088	(401.660)	(256.277)	(116)	5.798.035
Group's share on net assets/(liabilities)(%)	25%	42,15%	42,15%	42,15%	
Book value in the statement of financial position	1.614.022	-	-	-	1.614.022



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 13 - EQUITY ACCOUNTED INVESTEEES (Continued)

31 December 2021	Dorad	Ezotech	Solad	Adnit	Total
Current assets	2.053.185	673.199	100	8.016	2.734.500
Non-current assets	16.541.739	4.394.904	-	1.323	20.937.966
Current liabilities	(2.672.399)	(793.670)	(55.203)	(3.026)	(3.524.298)
Non-current liabilities	(11.141.412)	(4.590.111)	(146.314)	(6.403)	(15.884.240)
Currency translation difference	(56.521)	-	-	-	(56.521)
Net assets/(liabilities)	4.724.592	(315.678)	(201.417)	(90)	4.207.407
Group's share on net assets/(liabilities) (%)	25%	42,15%	42,15%	42,15%	
Book value in the statement of financial position	1.181.148	-	-	-	1.181.148
31 December 2022	Dorad	Ezotech	Solad	Adnit	Total
Revenue	11.729.968	-	-	-	11.729.968
Cost of sales	(10.043.314)	-	-	-	(10.043.314)
Operating expense	(119.148)	-	-	-	(119.148)
Financial income/ (expense), net	(1.084.193)	-	-	-	(1.084.193)
Tax expense	(110.606)	-	-	-	(110.606)
Net profit for the period	372.707	-	-	-	372.707
Group's share profit for the period	93.177	-	-	-	93.177
Amortisation and depreciation expenses	(1.183.854)	-	-	-	(1.183.854)
EBITDA	2.751.360	-	-	-	2.751.360
Group's share of EBITDA	687.840	-	-	-	687.840
31 December 2021	Dorad	Ezotech	Solad	Adnit	Total
Revenue	5.948.019	-	-	-	5.948.019
Cost of sales	(5.151.369)	-	-	-	(5.151.369)
Operating expense	(69.270)	-	-	-	(69.270)
Financial income/ (expense), net	(605.907)	-	-	-	(605.907)
Other income	32.803	-	-	-	32.803
Tax expense	(36.311)	-	-	-	(36.311)
Net profit for the period	117.965	-	-	-	117.965
Group's share profit for the period	29.491	-	-	-	29.491
Amortisation and depreciation expenses	(638.125)	-	-	-	(638.125)
EBITDA	1.365.505	-	-	-	1.365.505
Group's share of EBITDA	341.376	-	-	-	341.376

In the table presented above, current year figures for Dorad have been obtained from its financial statements as of 31 December 2022 whereas financial statements as of 31 December 2021 have been taken into consideration for Solad, Adnit and Ezotech.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 14 - RIGHT OF USE ASSETS

As of 31 December 2022 and 31 December 2021, the details of right-of-use assets accounted in the consolidated financial statement by asset categories are as follows:

	31 December 2022	31 December 2021
Land (*)	216.731	103.295
Motor vehicles	31.043	47.551
Buildings	12.131	10.777
Plant, machinery and equipment	3.579	686
Total right-of-use assets	263.484	162.309

(*) A portion amounting to TL 184.654 is related to the lease agreement with a 30 year validity period on Zorlu Doğal's Sarayköy geothermal field. The remaining TL 32.077 is related to the lease agreement with a 25 year validity period on Rotor - Gökçedağ Wind Energy Power Plant. Both agreements are within the scope of TFRS 16.

The movements for the right-of-use assets are as follows:

	1 January 2022	Additions	31 December 2022
Cost			
Land	109.626	124.773	234.399
Buildings	17.851	6.385	24.236
Plant, machinery and equipment	3.515	4.690	8.205
Motor vehicles	99.511	6.735	106.246
	230.503	142.583	373.086
Accumulated depreciation			
Lands	6.331	11.337	17.668
Buildings	7.074	5.031	12.105
Plant, machinery and equipment	2.829	1.797	4.626
Motor vehicles	51.960	23.243	75.203
	68.194	41.408	109.602
Net book value	162.309		263.484

	1 January 2021	Additions	31 December 2021
Cost			
Land	27.882	81.744	109.626
Buildings	8.077	9.774	17.851
Plant, machinery and equipment	2.471	1.044	3.515
Motor vehicles	33.004	66.507	99.511
	71.434	159.069	230.503
Accumulated depreciation			
Land	1.640	4.691	6.331
Buildings	2.700	4.374	7.074
Plant, machinery and equipment	305	2.524	2.829
Motor vehicles	30.786	21.174	51.960
	35.431	32.763	68.194
Net book value	36.003		162.309

TL 39.465 (2021:TL 31.303) of the total depreciation expense for the year ended 31 December 2022 is included in cost of sales and whereas TL 1.943 of it (2021:TL 1.460) is included in general administrative expenses.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 15 – TANGIBLE ASSETS

	Land	Land improvements	Buildings	Plant, machinery and equipment	Motor vehicles	Furniture and fixtures	Construction work in progress (*)	Leasehold improvements	Total
Cost									
1 January 2022	350.906	518.363	154.684	19.913.009	26.754	53.038	871.448	20.491	21.908.693
Additions (*)	-	-	-	141.941	16.996	26.843	729.489	11.767	927.036
Transfers (**)	-	21.247	1.533	148.303	5.965	-	(171.544)	-	5.504
Disposals	-	-	-	-	(7.080)	(41)	-	-	(7.121)
Currency translation difference	-	-	-	199.455	-	279	17.647	-	217.381
Revaluation increase	286.536	557.070	232.619	15.039.887	-	-	-	-	16.116.112
31 December 2022	637.442	1.096.680	388.836	35.442.595	42.635	80.119	1.447.040	32.258	39.167.605
Accumulated depreciation									
1 January 2022	-	77.975	14.119	2.963.587	12.683	43.862	-	8.649	3.120.875
Additions (*)	-	32.303	6.923	1.305.269	6.430	7.366	-	2.971	1.361.262
Transfers (**)	-	-	-	-	30	-	-	-	30
Disposals	-	-	-	-	(1.523)	(41)	-	-	(1.564)
Currency translation difference	-	-	-	41.859	-	279	-	-	42.138
Revaluation increase	-	-	-	-	-	-	-	-	-
31 December 2022	-	110.278	21.042	4.310.715	17.620	51.466	-	11.620	4.522.741
Net book value	637.442	986.402	367.794	31.131.880	25.015	28.653	1.447.040	20.638	34.644.864

(*) The total investment made in the one year period is TL 2.411.611 excluding capitalized financial expenses amounting to TL 418.684. TL 310.805 of this amount are recorded under tangible assets and TL 2.100.806 of it is included in financial assets related to concession agreements (Note 5). Additions for construction work in progress in 2022 are related to; rehabilitation work of Kızildere 2 and 3 projects amounting to TL 102.591, Alaşehir 1 improvement and hybrid solar power plant projects amounting to TL 92.201, to Rotor improvement projects amounting to TL 24.589, ZES Digital's charging station investment amounting to TL 71.948 and other projects of the Group amounting to TL 19.476.

(**) The total amount of investments transferred is TL 171.544. TL 100.408 of this amount is related to Kızildere 2 and 3 projects and has been transferred to plant and machinery; TL 1.507 is related to Zorlu Enerji investments of which TL 1.533 has been transferred to buildings and TL 37 to rights; TL 45.684 is related to Alaşehir 1 improvement and hybrid solar power plant investments of which TL 21.247 has been transferred to land improvements and TL 24.437 to plant, machinery and equipment; TL 23.458 is related to Rotor improvement projects plant machinery and devices; TL 424 is related to other investments. Motor vehicles with a net book value of TL 47 have been transferred from the rights account to the motor vehicles account.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 15 – TANGIBLE ASSETS (Continued)

	Land	Land improvements	Buildings	Plant, machinery and equipment	Motor vehicles	Furniture and fixtures	Construction work in progress (*)	Leasehold improvements	Total
Cost									
1 January 2021	179.221	309.817	79.402	11.803.453	16.602	47.080	525.479	15.522	12.976.576
Additions (*)	2.952	350	-	28.749	13.689	5.883	566.666	158	618.447
Transfers (**)	(2.883)	-	26.143	228.889	-	41	(268.166)	4.811	(11.165)
Disposals	-	-	-	-	(3.537)	(191)	(735)	-	(4.463)
Currency translation difference	-	-	-	475.753	-	225	48.204	-	524.182
Revaluation increase	171.616	208.196	49.139	7.376.165	-	-	-	-	7.805.116
31 December 2021	350.906	518.363	154.684	19.913.009	26.754	53.038	871.448	20.491	21.908.693
Accumulated depreciation									
1 January 2021	-	64.498	11.781	2.233.731	11.516	39.291	-	4.968	2.365.785
Additions (*)	-	13.477	2.338	556.814	2.882	4.299	-	3.681	583.491
Transfers (**)	-	-	-	-	-	-	-	-	-
Disposals	-	-	-	-	(1.715)	(51)	-	-	(1.766)
Currency translation difference	-	-	-	173.042	-	323	-	-	173.365
Revaluation increase	-	-	-	-	-	-	-	-	-
31 December 2021	-	77.975	14.119	2.963.587	12.683	43.862	-	-	3.120.875
Net book value	350.906	440.388	140.565	16.949.422	14.071	9.176	871.448	11.842	18.787.818

(*) The total investment made in the one year period is TL 880.057 excluding capitalized financial expenses amounting to TL 291.234. TL 275.432 of this amount are recorded under tangible assets and TL 604.625 of it is included in financial assets related to concession agreements (Note 5). Additions for construction work in progress in 2021 are related to; rehabilitation work of Kızildere 2 and 3 projects amounting to TL 188.845, Alaşehir 1 hybrid and Alaşehir 2 projects amounts to TL 34.919, ZES Digital's charging station amounts to TL 21.859 and other projects of the Group amounts to TL 29.809.

(**) The total amount of investments transferred is TL 268.166. TL 198.979 of this amount is related to Kızildere 2 and 3 projects and has been transferred to plant and machinery; TL 34.391 is related to Zorlu Enerji investments of which TL 23.260 has been transferred to buildings and TL 11.131 to inventories; TL 16.608 is related to Alaşehir 1 investments of which TL 16.587 has been transferred to plant and equipment and TL 22 to rights; TL 13.397 is related to charging stations of which TL 8.545 has been transferred to plant and equipment, TL 41 to furniture and fixtures and TL 4.811 to leasehold improvements, TL 4.790 is related to Rotor improvement projects plant machinery and devices; TL 4.778 has been transferred to plant and equipment, TL 12 to rights. Lands with a net book value of TL 2.883 have been transferred from the lands account.to the building account.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 15 – TANGIBLE ASSETS (Continued)

As of 31 December 2022, the net book value of tangible assets acquired by the Group through finance lease is TL 139.382 (31 December 2021: TL 71.139).

The Group has chosen the revaluation method among application methods mentioned under IAS 16 with respect to measurement and disclosure of the Group’s power plants at fair value commencing from 31 December 2013. As at 31 December 2022, the Group has revalued its power plants and the revaluation fund has been accounted in the consolidated statement of financial position. The valuation studies related to the domestic power plants at the mentioned date have been performed by Aden Gayrimenkul Değerleme ve Danışmanlık AŞ and the valuation study related to the plant established in Pakistan has been performed by A A Baig & Co. Chartered Accountants.

As at 31 December 2022 and 31 December 2021, the movements for revaluation fund are as follows:

1 January 2021	4.900.479
Revaluation surplus	6.344.885
Transfers	(251.199)
31 December 2021	10.994.165
1 January 2022	10.994.165
Revaluation surplus	12.916.565
Transfers	(870.742)
31 December 2022	23.039.988

Collateral, pledges and mortgages on property, plant and equipment are presented in Note 18.

Breakdown of the current period depreciation and amortisation expenses under cost of sales, operating expenses and other operating expenses have been presented in Notes 25, 26 and 27.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 16 – INTANGIBLE ASSETS

	<i>Rights</i>	<i>Customer relationships</i>	<i>Service concession agreements</i>	<i>Contract cost</i>	<i>Other rights</i>	<i>Goodwill</i>	<i>Licenses</i>	<i>Total</i>
Cost								
1 January 2022	1.472.331	348.812	918.126	90.472	114.921	402.237	16.489	1.891.057
Additions	27.318	-	-	-	27.318	-	838	28.156
Transfers	(5.504)	-	-	-	(5.504)	-	-	(5.504)
Currency translation difference	119	-	-	-	119	-	-	119
31 December 2022	1.494.264	348.812	918.126	90.472	136.854	402.237	17.327	1.913.828
Accumulated amortisation								
1 January 2022	383.037	87.459	230.206	39.151	26.221	-	6.834	389.871
Additions	78.174	17.804	46.863	3.422	10.085	-	1.159	79.333
Transfers	(30)	-	-	-	(30)	-	-	(30)
Currency translation difference	59	-	-	-	59	-	-	59
31 December 2022	461.240	105.263	277.069	42.573	36.335	-	7.993	469.233
Net book value	1.033.024	243.549	641.057	47.899	100.519	402.237	9.334	1.444.595



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 16 – INTANGIBLE ASSETS (Continued)

	<i>Rights</i>	<i>Customer relationships</i>	<i>Service concession agreements</i>	<i>Contract cost</i>	<i>Other rights</i>	<i>Goodwill</i>	<i>Licenses</i>	<i>Total</i>
Cost								
1 January 2021	1.409.880	348.812	918.126	90.472	52.470	402.237	12.424	1.824.541
Additions	64.479	-	-	-	64.479	-	4.065	68.544
Transfers	(2.231)	-	-	-	(2.231)	-	-	(2.231)
Currency translation difference	203	-	-	-	203	-	-	203
31 December 2021	1.472.331	348.812	918.126	90.472	114.921	402.237	16.489	1.891.057
Accumulated amortisation								
1 January 2021	312.009	69.655	183.343	35.729	23.282	-	5.645	317.654
Additions	73.155	17.804	46.863	3.422	5.066	-	1.189	74.344
Transfers	(2.265)	-	-	-	(2.265)	-	-	(2.265)
Currency translation difference	138	-	-	-	138	-	-	138
31 December 2021	383.037	87.459	230.206	39.151	26.221	-	6.834	389.871
Net book value	1.089.294	261.353	687.920	51.321	88.700	402.237	9.655	1.501.186

Amortisation and depreciation amounts are included in cost of sales, general administrative expenses, marketing expenses and other operating expenses; details have been presented in Notes 25, 26 and 27.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 17 - CONTRACT ASSETS

	31 December 2022	31 December 2021
Other contract assets (*)	8.531	19.377
	8.531	19.377

(*) Contract assets consist of ongoing investment expenditures as of 31 December 2022 and 2021. The aforementioned investment expenditures have not yet been notified to EMRA by the Group and include amounts that cannot be recognized as financial assets related to concession agreements. They are recognized as financial assets associated to service concession agreements upon their notification to EMRA by the Company.

NOTE 18 – PROVISIONS, CONTINGENT ASSETS AND LIABILITIES

18.1 Short-term provisions

	31 December 2022	31 December 2021
Short-term provisions	21.511	15.540
	21.511	15.540

Portion of TL 21.511 of short-term provisions (31 December 2021: TL 15.540) consists of provisions for legal disputes and the movement table is presented below:

	2022	2021
As of 1 January	15.540	13.373
Provisions for legal disputes / (reversals and payments,net)	5.971	2.167
As of 31 December	21.511	15.540

18.2 Long-term provisions

	31 December 2022	31 December 2021
Long-term provisions for employment benefits	175.209	68.296
	175.209	68.296

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES**
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 18 – PROVISIONS, CONTINGENT ASSETS AND LIABILITIES (Continued)**17.3 Guarantees received**

	Original currency	31 December 2022		31 December 2021	
		Original amount	TL equivalent	Original amount	TL equivalent
Letters of guarantee received	TL	1.917.134	1.917.134	561.285	561.285
Letters of guarantee received	USD	8.688	162.451	4.511	58.542
Letters of guarantee received	EURO	446	8.891	252	3.700
Cheques received	TL	19.806	19.806	16.091	16.091
Cheques received	USD	8.114	151.718	133	1.726
Cheques received	EURO	181	3.608	241	3.538
		2.263.608		644.882	

Guarantees received consist of letters of guarantee and cheques and notes received from customers in relation to the Group’s operations.

17.4 Guarantees, pledges and mortgages given by the Group

The Group’s guarantees, pledges and mortgages (“GPM”) as at 31 December 2022 and 31 December 2021 are summarized as follows:

		31 December 2022		31 December 2021	
	Original Currency	Original amount	TL equivalent	Original amount	TL equivalent
GPM's given by the Group					
A. Total amount of GPM's given for the Company's own legal entity	USD	128.805	2.408.435	128.805	1.671.567
	TL	5.997.818	5.997.818	4.666.273	4.666.273
	PKR	4,796.483	393.408	4,796.483	346.642
B. Total amount of GPM given for the affiliates and associates in the full scope of consolidation	TL	3.273.914	3.273.914	2.070.205	2.070.205
	USD	7.950	148.651	7.954	103.223
	NIS	625	3.325	-	-
C. Total amount of GPM's given to other third parties for the purpose of carrying out their ordinary commercial activities	USD	18.569	347.209	20.060	260.329
	EURO	-	-	481	7.062
		9.243	49.179	7.298	30.518
	NIS	-	-	-	-
D. Total amount of other GPM's given					
		12.621.939		9.155.819	

Letters of guarantee given generally consist of letters given to government agencies for the electricity and gas transmission and distribution (mainly to “EMRA” and government agencies providing electricity and gas transmission and distribution) and natural gas suppliers for the procurement of natural gas and banks for borrowings obtained.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 18 – PROVISIONS, CONTINGENT ASSETS AND LIABILITIES (Continued)**18.4 Guarantees, pledges and mortgages given by the Group (Continued)**

The ratio of other guarantees, pledges and mortgages given by the Group to the total equity of the Group is 0% as at 31 December 2022 (31 December 2021: 0%).

Details concerning the guarantees, pledges and mortgages that the Company and its subsidiaries gave have given within the scope of project finance loans and on behalf of their legal entities are presented below:

Zorlu Doğal

On 27 October 2015, a loan agreement amounting to USD 815 million (USD 785 million in cash and USD 30 million guarantee limit) and having a 14 year term was signed between Zorlu Doğal, Akbank TAŞ, Türkiye Garanti Bankası AŞ, Türkiye İş Bankası AŞ and Türkiye Sınai Kalkınma Bankası AŞ for the refinancing of Zorlu Doğal’s debts and to finance the investment in the 1st unit of Kızıldere 3 Geothermal Energy Plant established in Denizli with a power of 99,5 MW. Furthermore, Zorlu Doğal entered into a loan agreement amounting to USD 190 million with the European Bank for Reconstruction and Development (“EBRD”), Akbank TAŞ, Türkiye İş Bankası AŞ and Türkiye Sınai Kalkınma Bankası AŞ on 6 April 2017 for the purpose of financing the second unit of the Kızıldere 3 Geothermal Energy Plant with a power of 65,5 MW In addition to the said loan contracts, contracts for an account pledge, a share pledge and the transfer of receivables and stakeholder receivables transfers have been signed. Within the scope of the related agreement, the transfer amount cap for EPİAŞ’s receivable is TL 9.500.000. EPİAŞ’s receivable transfer amount is not included in the collateral, pledges and mortgages given by the Group disclosure since it represents the cap. Zorlu Holding AŞ and Zorlu Enerji are the guarantors for the loan amounting to USD 975 million obtained by Zorlu Doğal. The outstanding loan amount after payments is USD 637 million, including all reporting adjustments.

Zorlu Jeotermal

Zorlu Jeotermal’s project finance loan was paid early on 13 July 2021 with the proceeds of the issued bonds. Transfer of EPİAŞ receivables, transfer of receivables, account pledge, share pledge and successor pledge contracts signed within the scope of project financing were terminated on 16 July 2021 whereas mortgage and commercial enterprise transfer agreements were cancelled on 29 July 2021.

Zorlu Jeotermal is a guarantor for Zorlu Yenilenebilir’s issuance of a foreign bond (Eurobond) with a coupon rate of 9% and amounting to USD 300 million. An account pledge and a share pledge agreement were signed on 30 July 2021 and assignment of EPİAŞ receivables and trade receivables agreements were entered into on 6 August 2021 by Zorlu Jeotermal for providing collateral for the Eurobond issuance. Within the scope of the related agreement, the transfer amount cap for EPİAŞ’s receivable is TL 6.000.000. The transfer amount of EPİAŞ’s receivable is not included in the collateral, pledges and mortgages given by the Group disclosure since it represents the cap.

Rotor

Rotor’s project finance loan was paid early on 15 June 2021 with the proceeds of the issued bonds. Mortgage, transfer of commercial enterprise, account pledge, share pledge, transfer of receivables pledge of insurance receivables and guarantee agreements signed within the scope of project financing were terminated on 14 July 2021 accordingly.

Rotor is a guarantor for Zorlu Yenilenebilir’s issuance of a foreign bond (Eurobond) with a coupon rate of 9% and amounting to USD 300 million. An account pledge and a share pledge agreement were signed on 30 July 2021 and assignment of EPİAŞ receivables and trade receivables agreements were entered into on 6 August 2021 by Rotor for providing collateral for the Eurobond issuance.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 18 – PROVISIONS, CONTINGENT ASSETS AND LIABILITIES (Continued)

18.4 Guarantees, pledges and mortgages given by the Group (Continued) Rotor (Continued)

Within the scope of the related agreement, the transfer amount cap for EPIAŞ’s receivable is TL 6.000.000. The transfer amount of EPIAŞ’s receivable is not included in the collateral, pledges and mortgages given by the Group disclosure since it represents the cap.

Zorlu Yenilenebilir

Zorlu Yenilenebilir has issued a secured priority Eurobond amounting to USD 300 million with a maturity of 1 June 2026 and a coupon rate of 9%, to be sold abroad. An account pledge and a share pledge on 30 July 2021, a foreign account pledge on 31 July 2021, and a transfer of trade receivables agreement on 6 August 2021 were signed as collaterals within the scope of the bond. The outstanding bond amount after payments and with all adjustments related to reporting is USD 297 million.

Zorlu Enerji Pakistan Ltd

As at 26 October 2011, Zorlu Enerji Pakistan signed a long term loan agreement with International Finance Corporation (“IFC”), the Asian Development Bank (“ADB”), Eco Trade and Development Bank (“ECO”) and Habib Bank Limited (“HBL”) amounting to USD 111 million in total with a maturity of up to 12 years for financing of its wind energy power plant with a capacity of 56,4 MW established in Jhimpir, the Sindh region of Pakistan. In addition to the said loan agreement, account pledge, share pledge, transfer of insurance receivables, title deed pledge, assignment of project rights and mortgage establishment agreements on fixed assets have been signed. A mortgage amounting to USD 118.625 thousand and PKR 1.875 million has been established on the fixed assets of Zorlu Enerji Pakistan. Zorlu Holding is a guarantor for Zorlu Enerji Pakistan’s aforementioned loan agreement. The outstanding loan balance after payments and with all adjustments related to reporting is amounting to USD 5.4 million and PKR 168.3 million.

Zorlu Enerji

As per the sale of the Lüleburgaz steam generator of Zorlu Enerji, a sell and leaseback financial leasing agreement was signed between Şeker Finansal Kiralama AŞ and Zorlu Enerji on 24 August 2017. Zorlu Holding is a guarantor for the finance lease liabilities of Zorlu Enerji resulted from sell and leaseback agreement signed for the sale of steam generator. The receivables of Zorlu Enerji arising from the steam agreement with Zorluteks Tekstil Tic.ve San.AŞ were transferred to Şeker Finansal Kiralama AŞ in the scope of financial leasing transactions.

Zorlu Enerji has become a guarantor to provide the limit of Bank Mizrahi for Adnit, a 42,15% associate of Zorlu Enerji.

Gazdaş

On 29 June 2015, a loan agreement with a term of 12 years for the amount of USD 102 million was signed with Akbank TAŞ and Yapı ve Kredi Bankası AŞ for use in the expansion investments to be made by Gazdaş in the scope of natural gas distribution license expansion in the Gaziantep region. In this agreement, Zorlu Holding is a guarantor, and Trakya and Gazdaş are guarantors for each other. In addition to the loan agreement, an account pledge agreement, transfer of consecutive receivables and a share collateral agreement, a license transfer contract and an account pledge agreement worth TL 529.650 thousand were signed. The outstanding balance after payments and with all adjustments related to reporting is amounting to USD 35 million.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 18 – PROVISIONS, CONTINGENT ASSETS AND LIABILITIES (Continued)

17.4 Guarantees, pledges and mortgages given by the Group (Continued)

Trakya

On 29 June 2015, a loan agreement with a term of 12 years for the amount of USD 114 million was signed with Akbank TAŞ and Yapı ve Kredi Bankası AŞ for use in the expansion investments to be made by Trakya in the scope of natural gas distribution license expansion in the Trakya region. In this agreement, Zorlu Holding is a guarantor, and Trakya and Gazdaş are guarantors for each other. In addition to the loan agreement, an account pledge agreement, transfer of consecutive receivables and a share collateral agreement, a license transfer contract and an account pledge agreement worth TL 431.000 thousand were signed. The outstanding balance after payments and with all adjustments related to reporting is amounting to USD 35 million.

OEDAŞ

For the cash loan agreement between OEDAŞ, the European Bank for Reconstruction and Development (“EBRD”), the International Finance Corporation (“IFC”), Nederlandse Financierings Maatschappij Voor Ontwikkelingslanden N.V. (“FMO”), Asian Infrastructure Investment Bank (“AIIB”) and Denizbank AŞ, project financing agreements have been signed. In addition to the said loan agreement, agreements for receivable transfer, account pledge, successor pledge and share collateral amounting to TL 147.743 thousand were signed. Zorlu Enerji, Zorlu Holding and Zorlu Osmangazi were co-signers as the guarantors for OEDAŞ’s loan in the amount of TL 4.065 million, which was provided from EBRD, IFC, FMO, AIIB and Denizbank AŞ. Share pledge agreements amounting to TL 52.126 thousand and TL 1.150.050 thousand were signed for OEPSAŞ and Zorlu Osmangazi, respectively as well. The outstanding balance after payments and with all adjustments related to reporting is TL 3.358 million.

ZJ Strong

ZJ Strong and Bank of Palestine signed a 13-year loan agreement with a nine-month grace period on 28 August 2019 for the financing of the 2 MW capacity solar power plant project amounting to NIS 5 million and together with an additional contract of NIS 1 million signed on 4 June 2020 it will provide resources up to 6 million NIS in total. In addition to the aforementioned loan agreement, an account pledge agreement has been signed.

Zorlu Enerji, together with JDECO (Jerusalem District Electricity Company), which is a 25% shareholder of ZJ Strong, has vouched for this loan provided by ZJ Strong as a guarantor. The outstanding balance after payments and with all adjustments related to reporting is amounting to NIS 5.5 million.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 18 – PROVISIONS, CONTINGENT ASSETS AND LIABILITIES (Continued)

17.5 Electricity purchase and sale commitments

Zorlu Elektrik Toptan

Zorlu Elektrik Toptan has an electricity purchase commitment of 22.320 MWh related to 2023. As for the electricity energy purchase agreements with energy companies in 2022, the purchase commitment of 452.745 MWh has been completely fulfilled. Within the scope of risk sharing agreements made with energy companies in connection with electricity purchase and sale operations, no transactions were carried out in 2022 and the Company has not committed to carry out any transactions in 2023.

Zorlu Enerji

As for the electricity energy purchase agreements with energy companies in 2022, the purchase commitment of 159.360 MWh has been completely fulfilled. Within the scope of risk sharing agreements made with energy companies in connection with electricity purchase and sale operations, no transactions were carried out in 2022 and the Company has not committed to carry out any transactions in 2023.

OEDAŞ

The Company has no electricity sales commitment for 2022. Within the scope of electricity sales agreements the Company has committed to buy 760.404 MWh energy for 2022 and has bought 759.915 MWh of the committed amount.

OEPSAŞ

The Company has a electricity purchase commitment of 148.680 MWh for 2023. Within the scope of the electricity buying agreements made with energy companies, the Company has committed to buy 572.166 MWh energy for 2022 and fulfilled its commitment as at 31 December 2022.

17.6 Gas purchase and sales commitments

Trakya

Trakya has committed to purchase 846,9 million sm³ gas according to its contract with BOTAŞ for the year 2022. Related consumption was realized as 726,1 million sm³.

Gazdaş

Gazdaş has committed to purchase 466,9 million sm³ gas according to its contract with BOTAŞ for the year 2022. Related consumption was realized as 508,74 million sm³.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 19 - DERIVATIVE FINANCIAL INSTRUMENTS

Derivative financial instruments

	31 December 2022					
	Contract amount (USD)	Total contract amount (TL)	Fair value asset	Fair value liability	Carried at fair value through profit or loss	Carried at fair value under hedge reserves
Interest rate swap transactions	491.125	9.183.203	459.185	-	557.091	-
Forward agreements	5.127	95.866	-	(17.905)	(75.020)	-
	496.252	9.279.069	459.185	(17.905)	482.071	-

	31 December 2021					
	Contract amount (USD)	Total contract amount (TL)	Fair value asset	Fair value liability	Carried at fair value through profit or loss	Carried at fair value under hedge reserves
Cross currency swap agreements held for hedging purpose	-	-	-	-	587	-
Forward agreements	14.541	188.706	57.115	-	78.145	-
Interest rate swap agreements held for hedging purpose	738.000	9.577.395	-	(272.105)	(35.177)	(139.359)
	752.541	9.766.101	57.115	(272.105)	43.555	(139.359)



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 19 - DERIVATIVE FINANCIAL INSTRUMENTS (Continued)

Derivative financial instruments are initially recognized in the consolidated statement of financial position at cost and are subsequently remeasured at their fair value. The derivative instruments of the Group consist of interest rate swaps and cross currency swaps.

On the date a derivative contract is entered into, the Group designates certain derivatives as either a hedge of the fair value of a recognized asset or liability ("fair value hedge") or a hedge of a forecasted transaction or a company commitment ("cash flow hedge"). Interest rate swap transactions provide effective economic hedges under the Group's risk management position and qualify for hedge accounting under specific rules and are therefore treated as derivatives held for hedging. Changes in the fair value of derivatives designated as cash flow hedges and qualified as effective, are recognized in "Other comprehensive income/(expenses) to be reclassified to profit or loss" under "hedge reserves" whereas the ineffective portion is recognized in the consolidated statement of profit or loss. Amounts recognized under equity are transferred to the consolidated statement of profit or loss in the period in which the the hedged company commitment or forecasted transaction affects the consolidated statement of profit or loss.

Derivative instruments not covered by cash flow hedge accounting

Interest rate swap transactions

Interest rate swap transactions have been made in order to eliminate the interest risk arising from Zorlu Doğal's variable rate project finance loan. Interest rate swap transactions have been performed between the relevant banks and Zorlu Doğal with predetermined amounts and interest payment periods. As of 31 December 2022, approximately 73% of the project finance loan utilized by Zorlu Doğal is subject to interest rate swap transactions. Zorlu Doğal has stabilized its variable- rate loan at an average interest rate of 2,39% within the scope of agreements concluded with banks, thus eliminating possible risks to occur from interest rate changes. As of 31 December 2021, there are no interest rate swap transactions that are not covered by cash flow hedge accounting.

Forward agreements

As of 31 December 2022, the Group has a sales commitment of TL 115.961 (31 December 2021: TL 146.278) in exchange for a purchase commitment of USD 5.127 thousand (31 December 2021: USD 14.541 thousand) pursuant to the contract dated 8 June 2022 with the maturity date of 14 April 2023.

Interest rate swap transactions subject to cash flow hedges

As of 31 December 2021, approximately 53% of the project finance loans used by Zorlu Doğal are subject to interest rate swap transactions and within the scope of agreements concluded with banks, Zorlu Doğal has stabilized its variable-rate loan at an average interest rate of 3,02%. The aforementioned interest rate swap transactions are evaluated within the scope of cash flow hedge accounting.

Non-derivative financial instruments

31 Aralık 2022		31 Aralık 2021	
Original amount (USD)	Carried at fair value through other comprehensive income (TL) (*)	Original amount (USD)	Carried at fair value through other comprehensive income (TL) (*)
643.932	(9.424.480)	891.100	(7.410.865)
643.932	(9.424.480)	891.100	(7.410.865)

(*) The Group uses bond and investment loans amounting to USD 643.932 thousand (31 December 2021: USD 891.100 thousand) and as a hedging instrument against the highly probable USD exchange rate risk to which the Group is exposed due to YEKDEM sales income and applies cash flow hedge accounting as a result of the effectiveness tests performed.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 19 - DERIVATIVE FINANCIAL INSTRUMENTS (Continued)

The movements of derivative financial instruments are as follows:

	2022	2021
As at 1 January	(214.990)	(323.559)
Carried at fair value through profit or loss		
- Income from derivative instruments (Note 29)	482.071	43.555
Carried at fair value through other comprehensive income		
- Gains relating to cash flow hedges	174.199	65.014
As at 31 December	441.280	(214.990)

The movements of non -derivative financial instruments are as follows:

	2022	2021
As at 1 January	(7.410.865)	(3.667.006)
Carried at fair value through other comprehensive income		
- Losses relating to cash flow hedges	(2.013.615)	(3.723.513)
Transfers	-	(20.346)
As at 31 December	(9.424.480)	(7.410.865)

NOTE 20 - PROVISIONS FOR EMPLOYEE BENEFITS

Long - term provisions related to employee benefits

	31 December 2022	31 December 2021
Provision for employee termination benefits	175.209	68.296
	175.209	68.296

Movement of provision for employee termination benefits is as follows:

	2022	2021
As at 1 January	68.296	44.000
Service cost	14.986	13.138
Interest cost	18.704	6.732
Termination benefits paid	(4.533)	(2.973)
Actuarial loss	77.756	7.399
As at 31 December	175.209	68.296

Provisions for employment termination benefits are allocated in accordance with the disclosures given below:

Under the Turkish Labour Law, companies are required to pay termination benefits to each employee who has completed one year of service and whose employment is terminated without due cause, is called up for military service, dies or who retires after completing 25 years of service (20 years for women) and achieves the retirement age (58 for women and 60 for men). Since the legislation was changed on 23 May 2002, there are certain transitional provisions relating to the length of service prior to retirement. The amount payable consists of one month's salary limited to a maximum of TL 15.371 for each year of service as of 31 December 2022 (31 December 2021: TL 8.285).

Severance pay liability is legally not dependent on any funding and there is no funding requirement. The provision is calculated by estimating the present value of the future probable obligation of the Group arising from the retirement of employees.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 20 - PROVISIONS FOR EMPLOYEE BENEFITS (Continued)

TFRS published by POA require actuarial valuation methods to be developed to estimate the Group's provisions for employee termination benefits. Accordingly, following actuarial assumptions have been used in the calculation of the total liability:

	2022	2021
Discount rate (%)	1,8	4,1
Default salary increase/inflation rate	10,0	15,5
Probability of retirement (weighted average %)	95,1	95,5

The principal assumption is that the maximum liability for each year of service will increase parallel with inflation. Thus, the discount rate applied represents the expected real rate after adjusting for the anticipated effects of future inflation. The amount payable consists of one month's salary limited to a maximum of TL 19.983 for each period of service as of 1 January 2023 (1 January 2022: TL 10.849).

NOTE 21 - DEFERRED INCOME

Short-term deferred income from third parties

	31 December 2022	31 December 2021
Deferred income related to net profit margin of retail sales (OMEGA 4) (*)	760.532	-
Deferred income related to income difference adjustment component (**)	142.774	123.091
Natural gas sales income for the next months	10.111	6.333
Deferred income related to uncontrollable operating expenses	7.045	10.846
Other	3.095	3.950
	923.557	144.220

(*) The retail sales company must earn a net profit margin of 2,38% from sales to its tariff customers. The net profit margin of retail sales consists of the adjustment component recorded to equate the net profit margin to 2,38%.

(**) The income difference adjustment component includes the correction for the difference between the value of the system operating income ceiling for a tariff year calculated according to the December CPI of the relevant tariff year and the value of the system operating income realized in the relevant tariff year, calculated according to the December CPI of the relevant tariff year. The adjustment for the said difference is considered by EMRA as the system operating income ceiling which constitutes the basis for adjustment in the second year following its occurrence and is used in the calculation of the income ceiling for the relevant year.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 22 – EQUITY

a) Share capital

	31 December 2022	31 December 2021
Limit on registered share capital (*)	6.000.000	6.000.000
Issued capital (*)	2.500.000	2.500.000

The Company's shareholders and shareholding structure as at 31 December 2022 and 31 December 2021 are as follows:

	Share (%)	31 December 2022	Share (%)	31 December 2021
Zorlu Holding	46,09	1.152.143	47,08	1.177.018
Publicly held (*)	35,96	899.170	34,97	874.295
Korteks	17,55	438.687	17,55	438.687
Other	0,40	10.000	0,40	10.000

Nominal capital	100	2.500.000	100	2.500.000
------------------------	------------	------------------	------------	------------------

(*) TL 204.486 and the portion equivalent to 8,18% of the total capital represent the shares that belong to Zorlu Holding.

Based on the material event disclosure dated 13 January 2023 and within the framework of the "ZOREN Share Purchase Agreement" signed between Zorlu Holding and Wren House Infrastructure LP ("WH") on 26 September 2022, the transfer of 30.860.606.611 Group B shares representing approximately 12,34% of the Company's capital to WH, the controlling shareholder, has been completed in accordance with the terms and conditions set forth in the material event disclosure dated 27 September 2022.

As of 31 December 2022 and 31 December 2021, the Group's capital inflation adjustment differences amount to TL 102.575, representing the adjustment difference arising from the adjustment of the Group's paid-in capital amount according to inflation and not offset with previous years' losses.

b) Premiums related to shares

The premiums related to the shares in the consolidated financial statements consist of the difference between the issuance price and the nominal value, as a result of the issuance of the shares which were issued within the capital increases after the initial establishment of the Group at a price above their nominal value. As of 31 December 2022, the premiums related to the shares in the consolidated financial statements of the Group are TL 1.448 (31 December 2021: TL 1.448).

c) Restricted reserves and retained earnings

	31 December 2022	31 December 2021
Legal reserves	7.931	7.931

The legal reserves consist of primary and secondary reserves, appropriated in accordance with the Turkish Commercial Code ("TCC"). The TCC stipulates that the primary legal reserve is appropriated out of statutory profits at the rate of 5% per annum, until the total reserve reaches 20% of the Company's paid-in share capital. The secondary legal reserve is appropriated at the rate of 10% per annum of all cash distributions in excess of 5% of the paid-in share capital. Under the TCC, the legal reserves can only be used to offset losses and are not available for any other usage unless they exceed 50% of paid-in share capital.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 22 – EQUITY (Continued)

Retained earnings and current period profit in the legal financial statements are ready to be distributed, provided that the abovementioned legal reserve allocation requirements are fulfilled and the legal regulations of the Capital Markets Board regarding profit distribution are complied with.

Publicly traded companies are entitled to distribute dividends in accordance with CMB’s Dividend Communiqué numbered II-19.1 which entered into force on 1 February 2014.

Companies distribute their profits within the framework of the profit distribution policies to be determined by their general assembly and in accordance with the provisions of the relevant legislation. Within the scope of the said communiqué, a minimum distribution rate has not been set. Companies make their dividend payments according to their articles of association or dividend policies. In addition, dividends can be paid in installments of equal or varying amounts and dividend advances can be distributed in cash over the profit included in the financial statements.

Unless the reserves required to be set aside according to the TCC and the profit share determined for the shareholders in the articles of association or the profit distribution policy are allocated; it cannot be decided to allocate other reserves, transfer profits to the next year, as well as distribute dividends to shareholders, members of the board of directors, employees and non-shareholders.

d) Non-controlling interests

The parts of the net assets of the subsidiaries that correspond to the shares outside the direct and/or indirect control of the Parent (31 December 2022: TL 91.623, 31 December 2021: TL 128.566) are classified under the “non-controlling interests” item in the consolidated statement of financial position of the Group.

The movements of non-controlling interests in the years ended 31 December 2022 and 2021 are as follows:

	2022	2021
As at 1 January	(128.566)	(147.929)
The portion of the period (loss)/profit attributed to non-controlling interests	(71.364)	(72.987)
Transactions with non-controlling shareholders	100.000	92.350
Transfers	8.307	-
As at 31 December	(91.623)	(128.566)

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 23 - TAXES

	31 December 2022	31 December 2021
Current tax expense	284.699	93.751
Less: Prepaid taxes	(171.726)	(97.525)
Current income tax (assets)/liabilities, net	112.973	(3.774)

Corporation tax

The Company and its subsidiaries located in Turkey are subject to the tax legislation and practices in force in Turkey. Corporate tax is declared until the evening of the twenty-fifth day of the fourth month following the end of the relevant accounting period and is paid in one single installment until the end of the relevant month.

In Turkey, the corporate tax rate applied to the legal tax base to be found by adding the expenses that are not accepted as deductible in accordance with the tax laws to the commercial income of the corporations and by deducting the exemptions in the tax laws was applied as 20% after January 1, 2021.

However, with Article 11 of “the Law on the Amendment of Some Laws and the Law on Collection Procedure of Public Receivables” which has been published on the Official Gazette numbered 31462 and dated 22 April 2021 and and the Provisional Article 13 which has been added to the Law No. 5520 Corporate Tax, the corporate tax rate has been arranged to be applied as 23% for corporate earnings for the 2022 taxation period. Therefore, the Company and its subsidiaries located in Turkey used the 23% tax rate in the calculation of the period tax for 2022.

Within the change specified, the tax rate used in the deferred tax calculation as of 31 December 2022 is 20%. (31 December 2021: 23% and 20%, respectively, for the portions of temporary differences that will have tax effects in 2022 and beyond).

Corporation tax

As of 31 December 2022, the corporate tax rates for Turkey and subsidiaries outside Turkey are as follows:

Country	Tax rate
Turkey	23%
Pakistan (Earnings from electricity sales are exempt from corporate tax)	29%
Israel	23%
Netherlands (The first EURO 395,000 of the financial profit is taxed at 15%)	25,8%

Turkish tax legislation does not allow for the submission of tax returns over consolidated financial statements prepared by the parent company, which include its affiliates and affiliates, tax considerations reflected in these consolidated financial statements have calculated separately for each of the companies in the scope of the consolidation.

According to the Corporate Tax Law, financial losses stated on the tax return can be deducted from the tax base of current institutions, provided that they do not exceed 5 years. Declarations and related accounting records can be examined by tax offices within five years and tax accounts can be revised.

Dividend payments made to joint stock companies residing in Turkey other than the ones which are not responsible for or exempt from corporate-and income tax and to real persons whether residing in Turkey or not and to non-resident legal entities in Turkey are subject to 15% income tax.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 23 - TAXES (Continued)

Dividend payments made from joint stock companies residing in Turkey to joint stock companies residing in Turkey are not subject to income tax. In addition, in the case that profit is not distributed or added to the capital, income tax is not calculated.

Dividend earnings of corporations from their participation in the capital of another corporation subject to full obligation are exempt from corporation tax. Furthermore, 75% of the profits arising from the sale of the participation shares included in the assets of the institutions for at least two full years and the founding certificates of the real estates (immovables) that they own for the same period, the dividend shares and the preference rights, are exempt from corporate tax as of 31 December 2017. However, with the amendment made with the Law No. 7061, this rate has been reduced from 75% to 50% in terms of immovables and this rate is used as 50% in tax returns to be prepared as of 2018.

In order to be able to benefit from the exemption, the income must be kept in a passive fund account and not withdrawn from the business for 5 years. The sales price must be collected until the end of the second calendar year following the year of sale.

There is no practice in Turkey to reach an agreement with the tax administration regarding the taxes to be paid. Corporate tax returns are submitted within four months following the end of the accounting period. The tax inspection authorities may examine the tax returns and the accounting records underlying them during the five years following the accounting period and make a reassessment as a result of their findings.

Income tax withholding

There is a withholding tax liability on dividend distributions, and this withholding liability is declared in the period when the dividend is paid in cash or on account. Dividend payments are subject to a 15% withholding tax until 22 December 2021, except for non-resident companies that generate income through a workplace or their permanent representative in Turkey, and those made to companies residing in Turkey. However, in accordance with the Presidential Decision No. 4936, published in the Official Gazette dated 22 December 2021 and numbered 31697, the dividend withholding tax rate, which was 15% according to the Income Tax Law No. 193 and the Corporate Tax Law No. 5520, was reduced to 10%.

In the application of withholding tax rates for profit distributions to non-resident companies and real persons, the withholding tax rates in the relevant Double-Tax Agreements are also taken into account. The addition of retained earnings to the capital is not considered as profit distribution, and therefore not subject to withholding tax.

Transfer pricing regulations

In Turkey, transfer pricing regulations are specified in Article 13 of the Corporate Tax Law, titled "Disguised profit distribution through transfer pricing". Application details are regulated by the Communiqué dated 18 November 2007 on disguised profit distribution via transfer pricing.

If the taxpayer buys or sells goods or services with related parties at a worth or price they have determined in violation of the arm's length principle, the profit is deemed to have been distributed implicitly through transfer pricing in whole or in part. Disguised profit distribution through such transfer pricing is considered a non-deductible expense for corporate tax.

The reconciliation of current tax expense and tax income/(expense) calculated using the current tax rate on profit before tax in the consolidated profit or loss statements for the accounting periods ending on 31 December 2022 and 2021 is as follows:

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 23 - TAXES (Continued)

	1 January - 31 December 2022	1 January - 31 December 2021
Profit/(loss) before tax	120.385	(195.072)
Tax rate	%23	%25
Tax calculated on basis of tax rate	(27.689)	48.768
Deductions and exemptions	340.786	368.465
Additions	(233.958)	(286.110)
Financial losses for which no deferred tax is calculated	(220.733)	(190.968)
Effect of tax rate change (*)	61.167	95.833
Other	41	(350)
Total tax expense	(80.386)	35.638

(*) In the calculation of deferred tax assets and liabilities arising from temporary differences, the Group has used the tax rate of 20%, which will be effective after 31 December 2022. As a result, the effect of a change in the tax rate of TL 61.167 occurred in the reconciliation of the effective tax rate.

Deferred taxes

The Group calculates its deferred tax assets and liabilities by taking into account the effects of temporary differences that arise as a result of different evaluations of financial statements prepared in accordance with TFRS and Tax Procedure Law.

As of 31 December 2022, the tax rate used in the calculation of deferred tax assets and liabilities is 20% (31 December 2021: 23% and 20%).

	31 December 2022	31 December 2021
Deferred tax (liabilities)/assets, net	(3.170.704)	(659.585)
Deferred tax (liabilities)/assets, net	(3.170.704)	(659.585)

	Temporary differences		Deferred tax assets/(liabilities)	
	31 December 2022	31 December 2021	31 December 2022	31 December 2021
Tangible and intangible assets	19.206.054	7.711.431	(3.841.969)	(1.517.635)
Carry forward tax losses	(9.184.938)	(7.623.980)	1.838.695	1.563.790
Receivables from service concession agreements	7.808.326	4.025.891	(1.561.665)	(824.022)
Indexation of deposits received	(1.477.842)	(516.962)	295.579	118.901
OMEGA 4 income accrual	-	269.384	-	(61.958)
Credit commission and unaccrued finance expenses	(395.515)	553.285	92.114	(66.447)
Income related to investment incentives	(340.028)	(171.974)	68.006	42.994
Derivative instruments	441.280	(214.990)	(88.256)	49.448
Provision for employee termination benefits	(175.209)	(68.296)	33.029	13.660
Other (net)	33.971	(78.278)	(6.237)	21.684
Deferred tax assets/(liabilities), net			(3.170.704)	(659.585)



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 23 - TAXES (Continued)

The movements in deferred tax assets and liabilities for the years ended 31 December 2022 and 2021 are as follows:

	2022	2021
As at 1 January	(659.585)	(248.098)
Charged to statement of profit or loss	204.313	129.389
Charged to other comprehensive income	(2.715.432)	(540.876)
As at 31 December	(3.170.704)	(659.585)

As a result of the studies performed, a deferred tax asset amounting to TL 9.184.938 (31 December 2021: TL 7.623.980) has been set aside as of 31 December 2022 for the usable past year financial losses of the Group. Deferred tax assets have not been calculated for the remaining available tax losses of TL 1.748.494 (31 December 2021: TL 669.077). The financial losses and expiry years for which the Group did not calculate deferred tax assets according to the assessment made as of the reporting date are as follows:

Date of Validity	31 December 2022	31 December 2021
2022	-	302
2023	30.018	3.363
2024	2.218	3.263
2025	3.742	4.306
2026	752.809	657.843
2027	959.707	-
	1.748.494	669.077

NOTE 24 – REVENUE

	1 January - 31 December 2022	1 January - 31 December 2021
Natural gas sales revenue	9.212.731	2.406.939
Retail sales revenue	7.398.514	3.501.481
Electricity generation and wholesale revenue	7.038.612	3.888.686
Revenue from panel sales	2.346.822	134.872
Income from investment and construction activities	2.100.806	604.625
Revenue from electricity distribution activities	804.089	607.363
General lighting income	551.128	85.886
System usage income related to gas distribution activities	224.922	75.355
Other	389.774	329.601
	30.067.398	11.634.808

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 25- COST OF SALES

	1 January - 31 December 2022	1 January - 31 December 2021
Natural gas purchase cost	9.000.276	2.378.441
Retail electricity purchase cost	6.478.645	3.011.004
Electricity generation and wholesale purchase cost	3.185.353	1.897.796
Panel purchase cost	2.063.063	98.592
Expenses from investment and construction activities	1.456.726	470.234
Depreciation and amortisation expense	1.390.876	612.220
Energy purchase cost associated with electricity distribution	980.310	346.552
Maintenance and repair expenses	420.427	121.723
Employee and personnel expenses	386.305	196.154
Electricity generation and retail system utilization fee	339.192	260.350
Other	470.005	378.630
	26.171.178	9.771.696

NOTE 26– GENERAL ADMINISTRATIVE EXPENSES AND MARKETING EXPENSES

a) General administrative expenses:

	1 January - 31 December 2022	1 January - 31 December 2021
Employee and personnel expenses	251.275	136.860
Outsourcing expenses	160.132	84.506
Office expenses	53.332	13.895
Taxes paid	47.796	27.239
Rent expenses	26.863	20.933
Depreciation and amortisation expenses	26.403	13.335
Municipality fees	19.087	13.712
Repair and maintenance expenses	18.186	9.767
Advertising expenses	13.415	8.481
Travelling expenses	12.443	3.826
License expenses	7.364	2.690
Other	52.874	30.043
	689.170	365.287



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 26 – GENERAL ADMINISTRATIVE EXPENSES AND MARKETING EXPENSES (Continued)

b) Marketing expenses:

	1 January - 31 December 2022	1 January - 31 December 2021
Employee and personnel expenses	36.982	19.875
Rent expenses	10.376	1.981
Commission expenses	5.310	4.049
Advertising expenses	5.158	1.783
Outsourcing expenses	3.332	772
Communication expenses	2.962	2.149
Travelling expenses	2.728	331
Office expenses	2.424	1.077
Vehicle expenses	1.421	448
Depreciation and amortisation expenses	57	376
Other	6.601	1.813
	77.351	34.654

NOTE 27 - OTHER OPERATING INCOME AND EXPENSE

a) Other operating income:

	1 January - 31 December 2022	1 January - 31 December 2021
Indexation difference on receivables from service concession agreements	2.876.994	1.176.826
Interest income from distribution activities	754.093	442.745
Interest income from trading activities	113.118	64.075
Foreign exchange gain from trading activities	67.577	47.191
Other	87.505	105.284
	3.899.287	1.836.121

b) Other operating expenses:

	1 January - 31 December 2022	1 January - 31 December 2021
Indexation difference of deposits received (*)	1.070.082	188.828
Late interest from trading activities	157.841	41.864
Foreign exchange loss from trading activities	110.671	130.091
Nonoperating power plant expenses (**)	80.409	27.347
Depreciation of service concession agreements	46.863	46.863
Depreciation of customer relations	17.804	17.804
Cancellation of income accrual	-	7.069
Other	153.688	118.163
	1.637.358	578.029

(*) Contains the indexation effect of paid deposits amounting to TL 109.202 (31 December 2021: TL 33.362).

(**) Within the scope of the geothermal operation license leased from Denizli Metropolitan Municipality, the rents paid to Denizli Metropolitan Municipality in relation to the Tekkehamam geothermal power plant project and the expenses of Kizildere 1 geothermal power plant, which is not in operation as of the reporting date, are presented as nonoperating part costs.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 28 - INCOME FROM INVESTMENT ACTIVITIES

	1 January - 31 December 2022	1 January - 31 December 2021
Gains on disposal of tangible assets	3.870	2.098
	3.870	2.098

NOTE 29 - FINANCIAL INCOME AND EXPENSES

a) Financial income:

	1 January - 31 December 2022	1 January - 31 December 2021
Foreign exchange income	3.021.798	2.188.077
Interest income	780.553	285.066
Income on derivative instruments	482.071	43.555
	4.284.422	2.516.698

b) Financial expense:

	1 January - 31 December 2022	1 January - 31 December 2021
Foreign exchange loss (*)	6.050.582	3.350.766
Interest expense (*)	3.512.107	1.986.723
Bank commission and other financial expenses	90.023	127.133
	9.652.712	5.464.622

(*) For the period ended 31 December 2022, the total financial expense capitalized on tangible fixed assets is TL 418.684 (31 December 2021: TL 291.234). TL 48.405 (31 December 2021: TL 30.563) of interest expenses for the period ended 31 December 2022 are associated with the lease contracts within the scope of TFRS 16.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 30 - RELATED PARTY TRANSACTIONS

i) Related party balances:

a) Short-term trade receivables from related parties

	31 December 2022	31 December 2021
Korteks	466.384	29.781
Zorluteks Tekstil Ticaret ve Sanayi AŞ (“Zorluteks”)	367.705	17.912
Meta Nikel Kobalt Madencilik Sanayi AŞ (“Meta Nikel”)	188.914	62.970
Zorlu Tesis Yönetimi AŞ (“Zorlu Tesis Yönetimi”)	33.920	3.689
Vestel Beyaz Eşya Sanayi ve Ticaret AŞ (“Vestel Beyaz Eşya”)	11.903	-
Lentatek Uzay Havacılık ve Teknoloji AŞ	-	62.383
Other	7.993	5.567
	1.076.819	182.302

b) Short-term other receivables from related parties

	31 December 2022	31 December 2021
Zorlu Holding (*)	1.237.778	907.080
Other	3.435	4.349
	1.241.213	911.429

(*) TL 1.237.778 of the Group’s total receivables from Zorlu Holding amounting to TL 6.092.982 are short- term. All of the short-term receivables originate from intercompany loans, and the interest rates of the receivables amounting to TL 23.020, EURO 5.067 thousand equivalent to TL 101.003 and USD 59.565 thousand equivalent to TL 1.113.755 are 31% for TL, 9,1% for EURO and in the range of 6,8%-11,9% for USD.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 30 - RELATED PARTY TRANSACTIONS (Continued)

c) Long-term other receivables from related parties

	31 December 2022	31 December 2021
Zorlu Holding (*)	4.855.204	2.029.378
Zorlu O&M (**)	1.629.112	467.034
Ezotech (***)	571.560	449.193
Zorlu Doğal Gaz İthalat, İhracat ve Toptan Ticaret AŞ (“Zorlu Doğal Gaz İthalat”) (****)	169.862	86.685
Other	61.470	42.664
	7.287.208	3.074.954

(*) TL 4.855.204 of the Group’s total receivables out of TL 6.092.982 from Zorlu Holding is long-term. The interest rates for the parts of the Group’s long-term receivable amounting to TL 86.102 and USD 35.516 thousand together equivalent to TL 664.081 and EURO 18.496 thousand equivalent to TL 368.712 resulting from an intercompany loan are 30,5%, 7,5%-11,75% and 6,95%-7,75%, respectively. The remaining USD 199.821 thousand equivalent to TL 3.736.309 of the long-term receivables are of financial nature and interest rate is 7% which is valid for USD and determined by market conditions (31 December 2021: 7% for USD).

(**) USD 68.475 thousand equivalent to TL 1.280.359 of the Group’s long-term receivables from Zorlu O&M amounting to TL 1.629.112 are of financial nature and the interest rate is 7%, which is valid for USD and determined by market conditions. The remaining receivables amounting to USD 18.652 thousand equivalent to TL 348.753 originate from an intercompany loan and the interest rate is 11,75%.

(***) The Group’s financial receivables amounting to NIS 107.422 thousand equivalent to TL 571.560 have been provided within the scope of power plant projects in Israel.

(****) The interest rate of the Group’s long-term financial receivable from Zorlu Doğal Gaz İthalat, amounting to USD 9.084 thousand equivalent to TL 169.862, is 7%, which is valid for USD and determined by market conditions.

d) Short-term trade payables to related parties

	31 December 2022	31 December 2021
Vestel Elektronik Sanayi ve Ticaret AŞ (“Vestel Elektronik”)	214.662	-
Zorlu O&M	37.385	31.080
Zorlu Holding	14.768	4.561
Zorlu Yapı Yatırım AŞ	1	42.849
Other	23.323	2.285
	290.139	80.775

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES**
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 30 - RELATED PARTY TRANSACTIONS (Continued)**e) Short-term other payables to related parties**

	31 December 2022	31 December 2021
Zorlu Holding (*)	780.536	-
Korteks (*)	406.500	-
Zorlu O&M	27.687	7.769
	1.214.723	7.769

(*) The Group's payables of TL 780.536 to Zorlu Holding and TL 406.500 to Korteks are related to capital advances provided by Zorlu Holding and Korteks, based on Zorlu Enerji's material event disclosure dated 27 September 2022.

f) Short-term financial liabilities to related parties

	31 December 2022	31 December 2021
Zorlu Faktoring AŞ (Dipnot 6)	-	35.551
	-	35.551

g) Long-term financial liabilities to related parties

	31 December 2022	31 December 2021
Zorlu O&M	7.916	6.365
	7.916	6.365

All other transactions between the Company and its subsidiaries that are not mentioned in this footnote have been eliminated on consolidation. The details of the transactions between the Group and other related parties are explained below.

h) Sales transactions with related parties

	1 January - 31 December 2022	1 January - 31 December 2021
Korteks	822.398	234.535
Vestel Elektronik	641.640	69.075
Zorluteks	366.570	98.151
Vestel Beyaz Eşya	244.388	52.395
Zorlu Tesis Yönetimi	197.387	48.277
Meta Nikel Kobalt	148.035	32.163
Other	28.519	6.782
	2.448.937	541.378

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 30 - RELATED PARTY TRANSACTIONS (Continued)**i) Purchase transactions with related parties**

	1 January - 31 December 2022	1 January - 31 December 2021
Vestel Elektronik	100.301	-
Vestel Ticaret AŞ	66.586	581
Zorlu O&M	60.784	41.970
Other	7.913	1.193
	235.584	43.744

i) General administrative and marketing expenses related to related

	1 January - 31 December 2022	1 January - 31 December 2021
Zorlu Holding	37.339	7.265
Zorlu Gayrimenkul Geliştirme ve Yatırım AŞ	18.438	12.209
ABH Turizm Temsilcilik ve Ticaret AŞ	7.700	1.319
Vestel Elektronik	6.612	1
Zorlu Tesis Yönetimi	3.320	1.687
Other	6.746	2.791
	80.155	25.272

j) Operating income related to related parties

	1 January - 31 December 2022	1 January - 31 December 2021
Meta Nikel Kobalt	28.293	8.487
Korteks	24.113	1.518
Zorluteks	23.638	503
Vestel Elektronik	16.756	4.154
Other	2.154	3.704
	94.954	18.366

k) Operating expenses related to related parties

	1 January - 31 December 2022	1 January - 31 December 2021
Vestel Elektronik	43.067	1.461
Zorlu O&M	1.996	815
Other	4.054	15.705
	49.117	17.981

l) Interest income from related parties

	1 January - 31 December 2022	1 January - 31 December 2021
Zorlu Holding	522.196	148.874
Zorlu O&M	101.682	45.719
Zorlu Doğal Gaz İthalat	9.474	4.146
Other	94	1.607
	633.446	200.346

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES**
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 30 - RELATED PARTY TRANSACTIONS (Continued)**m) Interest expense from related parties**

	1 January - 31 December 2022	1 January - 31 December 2021
Zorlu O&M	-	183
Other	-	4.072
	-	4.255

n) Foreign exchange income from related parties

	1 January - 31 December 2022	1 January - 31 December 2021
Zorlu Holding	1.959.773	1.172.831
Zorlu O&M	387.738	341.121
Ezotech	122.351	203.350
Zorlu Doğal Gaz İthalat	43.616	36.723
Other	19.085	21.365
	2.532.563	1.775.390

o) Foreign exchange expenses from related parties

	1 January - 31 December 2022	1 January - 31 December 2021
Zorlu Holding	-	4.489
	-	4.489

Sales and purchases made to related parties generally include electricity- and product and service sales and purchases within the framework of the relevant main field of activity.

Interest income (expense) and exchange difference income (expense), are associated with both financing and commercial transactions.

Other operating income and expenses due from related parties are related to late interests of commercial receivables and payables and foreign exchange income and expenses.

ii) Key management compensations for the periods between 1 January - 31 December 2022 and 2021 are as follows:

Key management compensation consists of the payments made to Group shareholders and top management (General Manager and Assistant General Managers and Directors).

Members of the Board of Directors, General Manager, Assistant General Managers and Directors are considered as the Group's key management. Compensations provided to the Group's key management are presented below.

	1 January - 31 December 2022	1 January - 31 December 2021
Salaries and benefits	47.933	27.319

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 31 – EARNINGS/(LOSSES) PER SHARE

Income per share disclosed in the accompanying consolidated statement of income is obtained by dividing net income/(expense) by the weighted average number of shares in existence during the year concerned.

	1 January - 31 December 2022	1 January - 31 December 2021
Net profit/(loss) of the main shareholder	111.363	(86.447)
Weighted average number of ordinary shares issued	250.000.000	216.666.667
Gain/ (loss) per 100 shares (TL)	0,04	(0,04)

Nominal value of each registered share as of 31 December 2022 and 2021 is 1 Kr.

NOTE 32 - NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS**Financial risk factors**

The Group is subject to various financial risks including liquidity risk, market risk (foreign currency risk and interest rate risk), funding risk, capital risk and credit risk.

The Group's entire risk management program focuses on the unpredictability of financial markets and aims to minimize the potential negative effects on the Group's financial performance.

The Group also benefits from derivative financial instruments to hedge against various risks.

(a) Liquidity risk

The Group continuously monitors and manages the risks by conducting periodic analysis studies on the liquidity risks that it may be exposed to, such as not being able to provide sufficient cash and securities in the sense of business continuity, not finding sufficient funding in order to balance cash flow or weakening of its ability to close open positions.

The table below shows the cash outflows that the Group will be exposed to for its on-balance sheet financial liabilities according to their remaining maturities as of the balance sheet date. The amounts shown in the table are contractual undiscounted cash flows and the Group performs its liquidity management by taking into account the expected undiscounted cash flows.

As at 31 December 2022 and 2021, the analysis of the Group's financial liabilities according to their maturities is as follows:

Non-derivative financial liabilities ^{(1)/(2)}:**Total cash outflows**

2022	Book Value	in accordance with contract	Less than 3 months	3-12 months	1-5 years	Over 5 years
Financial liabilities	34.029.693	43.853.067	6.684.379	5.703.410	26.086.037	5.379.241
Lease liabilities	386.733	1.004.960	39.254	98.327	265.163	602.216
Trade payables	5.994.384	5.994.384	5.994.384	-	-	-
Other payables	3.615.844	3.615.844	3.607.928	-	7.916	-
	44.026.654	54.468.255	16.325.945	5.801.737	26.359.116	5.981.457

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES**
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 32 - NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS (Continued)**Financial risk factors (Continued)****(a) Liquidity risk (Continued)**

2021	Book Value	Total cash outflows in accordance with contract	Less than 3 months	3 - 12 months	1 - 5 years	Over 5 years
Financial liabilities	23.573.026	30.587.115	1.861.159	4.447.599	19.071.923	5.206.434
Lease liabilities	206.729	483.949	18.261	36.731	113.592	315.365
Trade payables	2.189.914	2.189.914	2.189.914	-	-	-
Other payables	1.242.163	1.242.163	1.235.798	-	6.365	-
	27.211.832	34.503.141	5.305.132	4.484.330	19.191.880	5.521.799

⁽¹⁾ Maturity analysis has been applied on financial instruments and this analysis does not include legal liabilities.⁽²⁾ Amounts above are undiscounted cash flows related to contracts. Since discounted amounts are at immaterial level, balances with a maturity less than 3 months are equivalent to their book value.**Derivative financial liabilities ⁽¹⁾⁽²⁾:**

2022 value	Book Value	Less than 3 months	3 - 12 months	1 - 5 years	Over 5 years
Derivative financial liabilities held for hedging	(17.905)	-	(17.905)	-	-
Derivative financial assets held for hedging	459.185	-	-	433.625	25.560

2021 value	Book Value	Less than 3 months	3 - 12 months	1 - 5 years	Over 5 years
Derivative financial liabilities held for hedging	(272.105)	(60.332)	(49.199)	(135.433)	(27.141)
Derivative financial assets held for hedging	57.115	-	57.115	-	-

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 32 - NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS (Continued)**(b) Market risk****Interest rate risk**

Interest rate risk arises from financial assets and liabilities. The Group funds its investments with various financing sources. The Group manages its financial liabilities by making an appropriate distribution between fixed- and variable-rate debts. Variable-rate liabilities can be converted into fixed-rate liabilities, taking into account market forecasts, the Group's maturity needs, and short- and long-term interest rate expectations, and to minimize interest rate changes.

	2022	2021
Fixed interest rate financial instruments		
Cash and cash equivalents	841.498	619.270
Financial investments	584.866	264.187
Other receivables	1.219.897	713.934
Financial liabilities	(14.787.711)	(9.137.158)
Variable interest rate financial instruments		
Other receivables	7.072.402	2.963.860
Receivables from service concession agreements (*)	7.808.326	4.025.891
Other payables to related parties	(35.603)	(14.134)
Financial liabilities (**)	(19.628.715)	(14.642.597)
Deposits received (*)	(2.387.752)	(1.223.273)

(*) Financial assets related to concession agreements are updated according to CPI. The assurance fees received are also updated according to the CPI, according to the methods determined by EMRA.

(**) Variable interest rate borrowings amounting to TL 8.591.394 whose interest rate is fixed are taken into account in the calculation of variable-rate financial borrowings.

If interest rates of borrowings with floating rates had been 100 basis points higher/lower with all other variables held constant, the loss before taxation of the Group would be TL 110.373 higher/lower (2021: TL 79.978 lower/ higher).

Foreign exchange risk

The sources used by the Group in financing its investments are predominantly foreign currency denominated. The Group is exposed to foreign exchange risk arising from the translation of the amounts denominated in USD and EURO. In order to eliminate these risks, protection policies are applied in order to use various derivative instruments. In addition, foreign exchange losses arising from borrowings of the companies which sell electricity in scope of YEKDEM have been mainly hedged by the foreign exchange gains arising from the sales indexed to USD (Note 19). Foreign currency denominated assets and liabilities held by the Group as at 31 December 2022 and 31 December 2021 are as follows:

	31 December 2022	31 December 2021
Assets	11.528.494	5.070.401
Liabilities	(29.279.770)	(20.222.978)
Net position of derivative instruments	95.866	188.706
Foreign currency position, (net)	(17.655.410)	(14.963.871)



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 32 - NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS (Continued)

(b) Market risk (Continued)

As of 31 December 2022 and 31 December 2021, the amounts and TL equivalents of the Group's foreign currency assets and liabilities are as follows:

31 December 2022					
		TL equivalent (Functional currency)			
		USD	EURO	NIS	
1-	Trade receivables	1.759.347	89.928	3.905	-
2a-	Monetary financial assets	2.475.412	124.771	6.740	1.512
2b-	Non-monetary financial assets	-	-	-	-
3-	Other	92.632	4.389	530	-
4-	Current assets (1+2+3)	4.327.391	219.088	11.175	1.512
5-	Trade receivables	-	-	-	-
6a-	Monetary financial assets	7.201.103	334.834	18.496	107.422
6b-	Non-monetary financial assets	-	-	-	-
7-	Other	-	-	-	-
8-	Non-current assets (5+6+7)	7.201.103	334.834	18.496	107.422
9-	Total assets (4+8)	11.528.494	553.922	29.671	108.934
10-	Trade payables	1.228.159	58.994	6.274	-
11-	Financial liabilities	8.261.219	427.412	13.511	-
12a-	Other monetary liabilities	-	-	-	-
12b-	Other non-monetary liabilities	-	-	-	-
13-	Current liabilities (10+11+12)	9.489.378	486.406	19.785	-
14-	Trade payables	-	-	-	-
15-	Financial liabilities	19.790.392	1.038.091	19.055	-
16a-	Other monetary liabilities	-	-	-	-
16b-	Other non-monetary liabilities	-	-	-	-
17-	Non-current liabilities (14+15+16)	19.790.392	1.038.091	19.055	-
18-	Total liabilities (13+17)	29.279.770	1.524.497	38.840	-
19-	Net assets/(liabilities) position of off- balances sheet derivative instruments (19a-19b)				
		95.866	5.127	-	-
19a-	Total amount of assets hedged	5.866	5.127	-	-
19b-	Total amount of liabilities hedged	-	-	-	-
20-	Net foreign currency of asset/(liability) position (9-18+19)	(17.655.410)	(965.448)	(9.169)	108.934
21-	Monetary items net foreign currency asset/(liability) position (1+2a+5+6a-10-11-12a-14-15-16a)	(17.843.908)	(974.964)	(9.699)	108.934
22-	Total fair value of financial instruments used for foreign currency hedging	(17.905)	(958)	-	-
23-	Export	636	34	-	-
24-	Import	1.037.849	55.505	-	-

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 32 - NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS (Continued)

(b) Market risk (Continued)

31 December 2021					
		TL equivalent (Functional currency)			
		USD	EURO	NIS	JPY
1-	Trade receivables	81.603	6.107	160	-
2a-	Monetary financial assets	1.749.098	126.771	6.891	658
2b-	Non-monetary financial assets	-	-	-	-
3-	Other	98.656	6.938	587	-
4-	Current assets (1+2+3)	1.929.357	139.816	7.638	658
5-	Trade receivables	-	-	-	-
6a-	Monetary financial assets	3.141.044	184.495	20.267	107.419
6b-	Non-monetary financial assets	-	-	-	-
7-	Other	-	-	-	-
8-	Non-current assets (5+6+7)	3.141.044	184.495	20.267	107.419
9-	Total assets (4+8)	5.070.401	324.311	27.905	108.077
10-	Trade payables	603.620	42.458	3.584	-
11-	Financial liabilities	3.458.278	250.191	14.400	-
12a-	Other monetary liabilities	13	1	-	-
12b-	Other non-monetary liabilities	-	-	-	-
13-	Current liabilities (10+11+12)	4.061.911	292.650	17.984	-
14-	Trade payables	-	-	-	-
15-	Financial liabilities	16.154.702	1.223.327	19.001	-
16a-	Other monetary liabilities	6.365	490	-	-
16b-	Other non-monetary liabilities	-	-	-	-
17-	Non-current liabilities (14+15+16)	16.161.067	1.223.817	19.001	-
18-	Total liabilities (13+17)	20.222.978	1.516.467	36.985	-
19-	Net assets/(liabilities) position of off- balances sheet derivative instruments (19a-19b)				
		188.706	14.541	-	-
19a-	Total amount of assets hedged	188.706	14.541	-	-
19b-	liabilities hedged	-	-	-	-
20-	Net foreign currency of asset/(liability) position (9-18+19)	(14.963.871)	(1.177.615)	(9.080)	108.077
21-	Monetary items net foreign currency asset/(liability) position (1+2a+5+6a-10-11-12a-14-15-16a)	(15.251.233)	(1.199.094)	(9.667)	108.077
22-	Total fair value of financial instruments used for foreign currency hedging	57.115	4.401	-	-
23-	Export	6.022	464	-	-
24-	Import	265.260	20.440	-	-



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 32 - NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS (Continued)

(b) Market risk (Continued)

As at 31 December 2022 and 31 December 2021, had the TL appreciated or depreciated by 10% against USD, EURO and NIS with all other variables held constant, the effect over current period consolidated net income/ (loss) and equity would be as follows:

	31 December 2022		31 December 2022	
	Profit or loss		Equity	
	Appreciation of foreign currency	Depreciation of foreign currency	Appreciation of foreign currency	Depreciation of foreign currency
In case of a 10% appreciation / depreciation USD against TL				
USD net asset/(liability)	(1.805.224)	1.805.224	(1.805.224)	1.805.224
Amount hedged for USD risk (-)	1.204.043	(1.204.043)	-	-
USD net effect	(601.181)	601.181	(1.805.224)	1.805.224
In case of a 10% appreciation / depreciation of EURO against TL:				
EURO net asset/(liability)	(18.278)	18.278	(18.278)	18.278
Amount hedged for EURO risk (-)	-	-	-	-
EURO net effect	(18.278)	18.278	(18.278)	18.278
In case of a 10% appreciation / depreciation of NIS against TL:				
NIS net asset/(liability)	57.961	(57.961)	57.961	(57.961)
Amount hedged for NIS risk (-)	-	-	-	-
NIS net effect	57.961	(57.961)	57.961	(57.961)
Total net effect	(561.498)	561.498	(1.765.541)	1.765.541

As at 31 December 2022, the Group uses bond and investment loans amounting to USD 643.932 thousand as a hedging instrument against the highly probable USD spot exchange rate risk to which the Group is exposed due to YEKDEM sales income and applies cash flow hedge accounting as a result of the effectiveness tests performed.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 32 - NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS (Continued)

(b) Market risk (Continued)

	31 December 2021		31 December 2021	
	Profit or loss		Equity	
	Appreciation of foreign currency	Depreciation of foreign currency	Appreciation of foreign currency	Depreciation of foreign currency
In case of a 10% appreciation / depreciation USD against TL:				
USD net asset/(liability)	(1.528.250)	1.528.250	(1.528.250)	1.528.250
Amount hedged for USD risk (-)	1.156.425	(1.156.425)	-	-
USD net effect	(371.825)	371.825	(1.528.250)	1.528.250
In case of a 10% appreciation / depreciation of EURO against TL:				
EURO net asset/(liability)	(13.332)	13.332	(13.332)	13.332
Amount hedged for EURO risk (-)	-	-	-	-
EURO net effect	(13.332)	13.332	(13.332)	13.332
In case of a 10% appreciation / depreciation of NIS against TL:				
NIS net asset/(liability)	45.195	(45.195)	45.195	(45.195)
Amount hedged for NIS risk (-)	-	-	-	-
NIS net effect	45.195	(45.195)	45.195	(45.195)
Total net effect	(339.962)	339.962	(1.496.387)	1.496.387

As at 31 December 2021, the Group uses bond and investment loans amounting to USD 891.100 thousand as a hedging instrument against the highly probable USD spot exchange rate risk to which the Group is exposed due to YEKDEM sales income and applies cash flow hedge accounting as a result of the effectiveness tests performed.

(c) Funding risk

The Group makes long-term investments as a matter of normal course of business. The financing needs of these investments are met with liquid assets and and risks such as not being able to find funds on favorable terms for the project financing loan, the fact that the maturity of current loans cannot be made according to the maturity of the assets and the lack of an optimum balance between assets and resources is being followed.

(d) Capital risk

The Group manages its capital to ensure that the Group will be able to continue as a going concern while maximizing the return to stakeholders through the optimization of the debt and equity balance.

The Group sets the amounts of capital in proportion to its overall financing structure i.e. equity and financial liabilities. The Group manages the capital structure and makes adjustments to it in the light of changes in economic conditions and the risk characteristics of the underlying assets. In order to maintain or adjust the capital structure the Group may adjust the amount of dividends paid the shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 32 - NATURE AND LEVEL OF RISKS RISING FROM FINANCIAL INSTRUMENTS (Continued)

d) Capital risk management (Continued)

As of 31 December 2022 and 2021, net debt to equity ratio is as follows:

	31 December 2022	31 December 2021
Financial liabilities (Note 6)	34.416.426	23.779.755
Other payables to related parties (Note 30) (*)	35.603	14.134
Less: Cash and cash equivalents (Note 4)	(2.305.560)	(1.171.070)
Less: Financial investments (Note 12)	(658.342)	(298.976)
Net debt	31.488.127	22.323.843
Total equity	17.608.638	6.181.893
Net debt to equity ratio	1,8	3,6

(*) As of 31 December 2022, financial liabilities in the form of capital advances amounting to TL 780.536 and TL 406.500, respectively, placed by Zorlu Holding and Korteks (Note 30) have not been taken into account in the calculation.

e) Credit risk

Credit risk consists of cash and cash equivalents, other receivables, customers exposed to credit risk including uncollected receivables and financial assets related to concession agreements.

The possession of financial instruments also carries the risk of not meeting the requirements of the other party. The Group management meets these risks by restricting the average risk for each negotiated counterparty and by obtaining collateral if necessary.

The Group closely monitors the credit risk by taking advantage of its past experience in order to eliminate possible risks in the collection of trade receivables. Certain credit control procedures, credit rating system and internal control policies are used for the management of credit risk.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

NOTE 32 - NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS (Continued)

e) Credit risk (Continued)

As of 31 December 2022, the credit risks that the Group is exposed to by types of financial instruments are as follows:

2022	Trade receivables		Service concession agreements		Other receivables		Cash at bank	
	Related parties	Other	Related parties	Other	Related parties	Other	Related parties	Other
Maximum credit risk exposed to as of balance sheet date (A+B+C+D)	1.076.819	6.056.682	-	7.808.326	8.528.421	396.908	-	2.305.260
- The part of maximum risk under guarantee with collaterals, etc	-	2.513.191	-	-	-	-	-	-
A. Net book value of financial assets that are neither past due nor impaired	1.076.819	5.031.046	-	7.808.326	8.528.421	396.908	-	2.305.260
B. Net book value of financial assets past due but not yet impaired	-	1.025.636	-	-	-	-	-	-
- Portion under guarantee with collaterals	-	569.533	-	-	-	-	-	-
C. Net book value of impaired assets	-	-	-	-	-	-	-	-
- Past due (gross carrying amount)	-	159.020	-	-	-	-	-	-
- Impairment (-)	-	(159.020)	-	-	-	-	-	-
- Portion under guarantee with collaterals	-	-	-	-	-	-	-	-



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 32 - NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS (Continued)

e) *Credit risk (Continued)*

As of 31 December 2021, the credit risks that the Group is exposed to by types of financial instruments are as follows:

2021	Trade receivables		Service concession agreements		Other receivables		Cash at bank	
	Related parties	Other	Related parties	Other	Related parties	Other	Related parties	Other
Maximum credit risk exposed to as of balance sheet date (A+B+C+D)	182.302	2.715.706	-	4.025.891	3.986.383	185.657	-	1.170.937
- The part of maximum risk under guarantee with collaterals, etc	-	1.060.279	-	-	-	-	-	-
A. Net book value of financial assets that are neither past due nor impaired	182.302	2.128.653	-	4.025.891	3.986.383	185.657	-	1.170.937
B. Net book value of financial assets past due but not yet impaired	-	587.053	-	-	-	-	-	-
- Portion under guarantee with collaterals	-	396.500	-	-	-	-	-	-
C. Net book value of impaired assets	-	-	-	-	-	-	-	-
- Past due (gross carrying amount)	-	120.047	-	-	-	-	-	-
- Impairment (-)	-	(120.047)	-	-	-	-	-	-
- Portion under guarantee with collaterals	-	-	-	-	-	-	-	-

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES

CONVENINCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 32 - NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS (Continued)

Fair value of financial instruments

Fair value is the amount at which a financial instrument could be exchanged in a current transaction between willing parties, other than in a forced sale or liquidation, and is best evidenced by a quoted market price, if one exists.

The fair values of financial instruments that are not traded in an active market have been determined by the Group using available market information and appropriate valuation methodologies. However, judgement is necessarily required to interpret market data to estimate fair value. Accordingly, the estimates presented herein may differ from the amounts the Group could realize in a current market exchange.

The following methods and assumptions were used to estimate the fair value of the financial instruments for which it is practicable to estimate fair value:

Monetary assets

The fair values of certain financial assets carried at cost, including cash and cash equivalents, are considered to approximate to their respective carrying values due to their short-term nature.

The carrying values of trade receivables along with the related provisions for uncollectibility are estimated to approximate to their fair values.

Monetary liabilities

Amortized costs of fixed-rate financial liabilities are estimated to be close to their book values.

Due to the expectation that the variable interest rate will change with market interest rates, it is assumed that the fair value of variable-rate financial liabilities is equivalent to the book value of the related liabilities.

Trade payables are assumed to be equivalent to their fair value due to their short-term nature.

Fair value estimation:

Disclosure of fair value measurements by level of the following fair value measurement hierarchy is as follows:

- Level 1: Quoted prices in active markets for identical assets or liabilities
- Level 2: Inputs other than quoted market prices included within Level 1 that are observable for the assets or liabilities.
- Level 3: Inputs for assets or liabilities that are not based on observable market data.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 32 - NATURE AND LEVEL OF RISKS ARISING FROM FINANCIAL INSTRUMENTS (Continued)

Fair value estimation (Continued)

The fair value of financial instruments that are not traded active markets is determined by using valuation techniques. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to estimate the fair value an instrument are observable, the instrument is included in Level 2.

The fair values of assets and liabilities as at 31 December 2022 and 31 December 2021 are as follows:

	31 December 2022	31 December 2021
Derivative financial instruments		
Level 1	-	-
Level 2	441.280	(214.990)
Level 3	-	-
	441.280	(214.990)

The fair value of power plants belonging to Zorlu Enerji have been determined by using “Peer Comparison” and “Cost Approach” methods (Level 2) whereas the fair values of all other power plants have been obtained by using the Income Capitalization Approach-Discounted Cash Flow Analysis method (Level 3).

	31 December 2022	31 December 2021
Tangible Fixed Assets		
Level 1	-	-
Level 2	882.613	439.985
Level 3	32.208.646	17.441.296
	33.091.259	17.881.281

NOTE 33 – FEES REGARDING SERVICES RECEIVED FROM INDEPENDENT AUDITOR/INDEPENDENT AUDITING COMPANY

The Company’s explanation regarding the fees for services rendered by independent audit firms, prepared according to POA’s Board Decision published in the Official Gazette on 30 March 2021 and whose preparation principles are based on the letter of POA dated 19 August 2021 is as follows:

	31 December 2022	31 December 2021
Independent audit fee for the reporting period	4.500	2.561
Special independent audit fee	1.300	516
Fees for other assurance services	100	140
	5.900	3.217

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES

CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 34 - SUBSEQUENT EVENTS

The developments that the Company deems important within the framework of the explanations on the Public Disclosure Platform after 31 December 2022 are presented below, and all developments should be read together with those announced on the Public Disclosure Platform.

Company establishments

Pursuant to the material event disclosure dated 12 January 2023; With the aim of expanding its activities including the sale, installation and operation of electric vehicle charging stations in Turkey to overseas markets through its subsidiaries, a new company with the title of “Electrip Czech Republic s.r.o.” was established in Czech Republic under 100% direct ownership of Electrip Global B.V., a wholly-owned subsidiary of the Company based in the Netherlands.

Amendment of loan agreement with share sales

Pursuant to the material event disclosure dated 13 January 2023; Material event disclosures were made on 23 September 2022 and 27 September 2022 about the negotiations and agreements entered into as a consequence of such negotiations regarding the sale between the Company, its controlling shareholder Zorlu Holding A.Ş. (“Zorlu Holding”) and Wren House Infrastructure LP (“WH”) (a subsidiary of Kuwait Investment Authority (“KIA”)) of the majority shares of Electrip Global B.V. (whose previous trade name was ZES N.V.), a company incorporated in the Netherlands which the Company fully owns, and minority shares of the Company and regarding the amendment of the loan agreement signed between the Company and KIA on 15 March 2018 (“Loan Agreement”).

Information about the closing transactions related to the agreements subject to the aforementioned material event disclosures and the important provisions stipulated in the agreements are explained below.

I- In relation to the sale of the majority shares in ZES

a- Within the scope of the provisions of “Electrip Limited Share Purchase Agreement” (previously named as ZES Share Purchase Agreement) executed between the Company and WH on 26 September 2022 and amended on 13 January 2023;

- All of the shares representing the capital of ZES Dijital Ticaret A.Ş. were transferred by the Company to Electrip Global B.V. (whose previous trade name was ZES N.V.) a 100% subsidiary of the Company as per the material event disclosure made on 9 December 2022.
- Incorporation of a “New Company” in Jersey as a 100% subsidiary of WH under the tradename of Electrip Global Limited (“Electrip Limited”) was completed on 9 December 2022.
- On 13 January 2023, shares representing half of the entire share capital plus one share of Electrip Global B.V., which was a 100% subsidiary of the Company, were sold and transferred to Electrip Limited, by the Company for a purchase price of USD 50.000.000 and such amount was utilized as per the material event disclosure dated 27 September 2022.
- On 13 January 2023, remaining shares representing half of the entire share capital minus one share of Electrip Global B.V. owned by the Company (minority shares) were transferred to Electrip Limited by way of contribution in kind to Electrip Limited’s capital increase which took place on the same date. With this share transfer, the management control of Electrip Global B.V. is acquired by WH via Electrip Limited.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 34 - SUBSEQUENT EVENTS (Continued)

Amendment of loan agreement with share sales (Continued)

- b- Pursuant to the provisions of Electrip Limited Shareholders Agreement (previously named as ZES Share Purchase Agreement) executed between the Company, Zorlu Holding and WH on 13 January 2023 simultaneously with the completion of the share transfers stipulated under the Electrip Limited Share Purchase Agreement;
- Parties agreed not to sell their shares in the capital of Electrip Limited for a period of 18 months from the closing date under the Electrip Limited Shareholders Agreement.
 - The Company committed that it will participate in the capital increase of Electrip Limited up to USD 6.000.000 which is planned to be realized within 9 months from 13 January 2023. This capital increase will not result in a change in the shareholder structure of Electrip Limited.

II- In relation to the sale of minority shares of the Company;

- a- Within the scope of the provisions of “ZOREN Share Purchase Agreement” executed between Zorlu Holding and WH on 26 September 2022, the transfer of 30.860.606.611 Group B shares, representing approximately 12,34% of the Company’s share capital, to WH by the Company’s controlling shareholder Zorlu Holding was completed under the terms and conditions referred in the material event disclosure dated 27 September 2022.
- b- Concurrently with the completion of the share transfer stipulated under the ZOREN Share Purchase Agreement, on 13 January 2023, “ZOREN Shareholders Agreement” was executed between Zorlu Holding, Korteks Mensucat Sanayi ve Ticaret A.Ş. and WH, under the same terms referred in the material event disclosure dated 27 September 2022. Within the scope of the provisions of the said agreement, this transfer has not resulted in any change in the management control of the Company.
- c- Zorlu Holding’s direct shareholding ratio in the Company has become 41,92% with the total share held by Zorlu Holding directly and indirectly amounting to 59,87%. WH’s shareholding ratio in the Company has become 12,34%.
- d- WH will undertake not to sell its shares in the Company’s capital to third parties for a period of 12 months from the signing date of the ZOREN Shareholders’ Agreement.

III- Amendment of the Loan Agreement

Simultaneously with the completion of the transactions referred above, on 13 January 2023, the amendment of the Loan Agreement executed between the Company and KIA on 26 September 2022 has become effective under the terms and conditions referred in the material event disclosure dated 27 September 2022.

With the amendment of the Loan Agreement, maturity of the repayment schedule of the loan is extended, foreign currency debt exposure of the Company is decreased, and thereby the balance sheet and financial position of the Company is strengthened.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIARIES
CONVENIENCE TRANSLATION OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT AND
FOR THE YEAR ENDED 31 DECEMBER 2022 ORIGINALLY ISSUED IN TURKISH

(Amounts expressed in thousands of Turkish Lira (“TL”) unless otherwise indicated.)

NOTE 34 - SUBSEQUENT EVENTS (Continued)

License applications

Pursuant to the material event disclosure dated 20 January 2022; Zorlu Jeotermal Enerji Elektrik Üretim AŞ, a wholly-owned indirect subsidiary of Zorlu Enerji, obtained the necessary approval from the Ministry of Energy for the second 0,1663 MWp unit (Rooftop solar PV system) of the solar power plant, which is integrated to the existing 48,7543 MWm/45MWe Alaşehir Geothermal Power Plant in Manisa, Alaşehir and the unit started commercial operations as of 20 January 2023.

Pursuant to the material event disclosure dated 23 January 2022; Zorlu Jeotermal Enerji Elektrik Üretimi AŞ, a wholly-owned indirect subsidiary of Zorlu Enerji, has applied to Energy Market Regulatory Authority (EMRA) for a 10 MWm/10 MWe pre-license for Alkan-2 Geothermal Power Plant Project, which is planned to be developed in Alaşehir, Manisa.

Capital increase

Pursuant to the material event disclosure dated 31 January 2022; In accordance with the Board of Directors’ decision dated 26.09.2022 and numbered 2022/40, which was announced to the public on 27 September 2022 and pursuant to authorisation set forth in Article 6 of the Company’s Articles of Association, Zorlu Enerji’s paid-in capital will be increased from TL 2.500.000.000 (two billion five hundred million Turkish lira) to TL 5.000.000.000 (five billion Turkish lira), which is within the registered capital ceiling of TL 6.000.000.000 (six billion Turkish lira), via a 2.500.000.000 (two billion five hundred million Turkish lira) rights issue (by 100%) in order to provide additional working capital, reduce financial debt via principal and interest payments.

Binding in the simplified manner

Pursuant to the material event disclosure dated 6 February 2023; At Zorlu Enerji’s Board of Directors meeting dated 6 February 2023, it has been decided that Rarik Turkison Enerji AŞ, a wholly-owned subsidiary of the Company, will be merged in a simplified manner under the Company, in accordance with the provisions of Article 155 of the Turkish Commercial Code, Articles 19 and 20 of the Corporate Tax Law and Article 13 of the Capital Markets Board’s (“CMB”) Communiqué on Merger and Demerger No. II-23.2. by being taken over to the Company in its entirety with all its assets and liabilities.

Statement on natural disaster

Due to the negativities caused by the earthquakes which struck Kahramanmaraş on February 6, 2023, affecting many of our provinces and shaking our whole country, a three-month statement of emergency has been declared in the provinces of Adana, Adıyaman, Diyarbakır, Gaziantep, Hatay, Kahramanmaraş, Kilis, Malatya, Osmaniye and Şanlıurfa in accordance with the Official Gazette dated February 8, 2023 and numbered 32098. Developments regarding the natural disaster in question are being closely monitored and fact finding studies are continuing.



ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022

Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

ANNEXES

Performance Indicators

Financial Performance Indicators

Summary Balance Sheet (Thousand TRY)

(Thousand TRY)	2018*	2019*	2020*	2021	2022
CURRENT ASSETS	3,538,069	4,268,896	4,047,594	6,471,306	13,561,557
FIXED ASSETS	13,715,762	14,417,983	17,354,975	28,955,112	53,866,128
TOTAL ASSETS	17,253,831	18,686,879	21,402,569	35,426,418	67,427,685
SHORT-TERM LIABILITIES	6,267,576	8,364,884	8,027,850	9,501,761	22,654,559
LONG-TERM LIABILITIES	8,586,386	8,653,736	11,077,499	19,742,764	27,164,488
SHAREHOLDERS' EQUITY	2,399,869	1,668,259	2,297,220	6,181,893	17,608,638
TOTAL EQUITY	17,253,831	18,686,879	21,402,569	35,426,418	67,427,685
GROSS FINANCIAL LIABILITY	11,284,624	12,781,029	14,543,183	23,779,755	34,416,426
NET FINANCIAL LIABILITY	10,684,800	11,938,209	13,556,291	22,309,709	31,452,524

Summary Income Statement (Thousand TL)*

(Thousand TRY)	2018	2019*	2020	2021*	2022
REVENUES	5,970,314	8,204,197	8,579,113	11,634,808	30,067,398
GROSS PROFIT	1,486,057	1,425,508	1,516,723	1,863,112	3,896,220
REAL OPERATING PROFIT / (LOSS)	1,249,854	1,440,843	1,699,294	2,721,263	5,391,628
SHARES FROM INVESTMENTS EVALUATED BY EQUITY METHOD	44,923	64,302	50,679	29,491	93,177
OPERATING PROFIT / (LOSS) BEFORE FINANCING EXPENSES	1,295,015	1,535,088	1,821,857	2,752,852	5,488,675
EBITDA**	1,853,991	2,053,858	2,419,756	3,708,673	8,178,122
NET FINANCING EXPENSES	-1,385,271	-1,575,626	-1,677,164	-2,947,924	-5,368,290
PROFIT / (LOSS) FOR THE PERIOD***	34,548	-118,645	73,851	-86,447	111,363
GROSS PROFIT MARGIN	24.9%	17.4%	17.7%	16.0%	13.0%
EBITDA MARGIN	31.1%	25.0%	28.2%	31.9%	27.2%

* Restated

**EBITDA calculation includes the interest income related to the revenue cap arising from the electricity and natural gas distribution activities and the fair value difference related to the service concession arrangements while excluding the depreciation expense reported under the operating expenses.

*** Net income/(loss) represents the income/(loss) attributable to the owners of the parent company.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022

Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

Activity and Generation Indicators

Zorlu Energy Generation Data

GENERATION	2020	2021	2022	ANNUAL CHANGE
Electricity (kWh)*	2,601,786,760	2,708,415,530	2,660,930,111	-1.8%
Steam (ton)	355,642	378,487	339,421	-10.3%

*Gross generation values are used.

Zorlu Energy Sales and Distribution Data

SALES/DISTRIBUTION	2020	2021	2022	ANNUAL CHANGE
Electricity (Generation) (kWh)	2,352,604,951	2,451,522,607	2,397,033,972	-
Electricity (Commercial) (kWh)	8,726,491,206	8,609,459,763	6,686,790,194	-
Steam (ton)	355,642	378,487	339,421	-
Usage and Cooling Water (m3)	44,528	35,728	30,432	-
Carbon Dioxide Gas (m3)	100,000	110,000	56,939	-
Net Distributed Electricity (kWh)	6,334,243,407	6,926,976,734	6,809,632,533	-
Natural Gas (Sales) (Sm3)	1,185,429,220	1,343,950,182	1,431,103,605	+
Natural Gas (Distribution, including Transfer) (Sm3)	1,927,494,297	2,237,646,906	2,086,617,550	-

OEDAŞ Line Length Comparison by Year

	Unit	2020	2021	2022	Annual Change
Energy Transmission Line	km	21,233	21,387	21,973	2.74%
Village Networks	km	12,181	12,270	12,364	0.77%
Urban Networks (Overhead Lines)	km	9,105	9,171	9,141	-0.33%
Urban Networks (Underground Lines)	km	8,268	8,555	9,728	13.72%
Total	km	50,787	51,383	53,207	3.55%

OEDAŞ Current Transformer Capacity

	ORGANIZATION		PRIVATE	
	LV	MV	LV	MV
AFYONKARAHİSAR	636.02	30.00	1,879.73	40.00
BİLECİK	196.52	4.00	769.25	117.85
ESKİŞEHİR	751.44	230.00	1,657.23	101.60
KÜTAHYA	456.25	50.00	695.28	48.91
UŞAK	385.31	10.00	483.53	0.00

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022****Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish**

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

OEDAŞ Energy Transmission Line

PROVINCE	ORGANIZATION				PRIVATE			
	LV		MV		LV		MV	
	Overhead	Underground	Overhead	Under-ground	Overhead	Under-ground	Overhead	Under-ground
AFYONKARAHİSAR	6,008.61	1,460.40	4,992.79	565.25	60.35	30.88	3,077.69	172.54
BİLECİK	1,217.56	740.02	1,514.81	239.91	52.19	2.63	645.14	98.24
ESKİŞEHİR	3,630.09	1,743.91	3,754.50	857.84	180.89	189.07	3,675.12	260.99
KÜTAHYA	4,096.79	1,167.37	3,548.56	365.78	60.70	11.50	830.13	128.07
UŞAK	3,184.16	1,132.39	2,271.92	490.46	81.12	21.70	594.94	49.52

Distribution of Net Generation in Türkiye, Palestine and Pakistan by Source

Source	Unit	2020	2021	2022	ANNUAL CHANGE
Geothermal	kWh	1,824,752,500	1,962,960,747	1,611,787,740	-
Wind	kWh	457,395,000	457,317,667	436,812,230	-
Hydropower	kWh	318,291,930	272,966,815	303,174,551	+
Solar	kWh	671,883	3,159,872	3,181,709.00	+
Natural Gas	kWh	675,447	12,010,428	243,160	-
TOTAL	kWh	2,601,786,760	2,708,415,529	2,355,199,390	-

Environmental Performance Indicators

Zorlu Energy Consumption Details

	UNIT	2020	2021	2022*
Direct Energy Consumption (Natural Gas, Diesel, Gas-oline, LPG, Coal)	GJ	1,095,860	2,721,435	4,391,438
Indirect Energy Consumption (Electricity, Heating, Cooling, Steam)	GJ	52,346	149,906	132,242
Energy Intensity (Total Energy Consumed/ Total Energy Generated)	(MWh/MWh) %	0.592	0.09	0.47

*Consumption of OEDAŞ is included; steam generation is excluded.

Zorlu Energy Water Usage Details

	Unit	2020	2021	2022
Use of surface waters	m3	67,916	22,666	875
Use of ground waters	m3	76,158,612	89,479,983	95,617,391
Use of mains water	m3	10,414	63,139	14,025
TOTAL	m3	76,236,942	89,565,788	95,632,291

*OEDAŞ data is not included.

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022****Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish**

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

Zorlu Energy Waste Data

	Unit	2020	2021	2022
Hazardous Waste	Ton	21,268.16	19,456.57	1,072
Non-Hazardous Waste	Ton	46,157.18	38,451.63	40,393.75

Zorlu Energy Waste Data by Company

Company	Unit	Hazardous Waste		Non-Hazardous Waste	
		2021	2022	2021	2022
Zorlu Energy	Ton	18,087,195	144.812	25,581,376	34,198,887
OEDAŞ	Ton	1,368,786	925.58	12,866.97	3,948.53
OEPSAŞ	Ton	0.015	0.021	0.342	0.514
GAZDAŞ	Ton	0.572	1.587	2.945	2.819

Zorlu Energy GHG Emissions

	Unit	2020	2021	2022	Change
Scope 1	tCO2e	1,209,770	1,093,383	1,063,477.93	-
Scope 2	tCO2e	213,410	240,699	232,456.77	-
Scope 3	tCO2e	4,008	466,473	212,703.06	-
TOTAL	tCO2e	1,427,188	1,800,555	1,508,637.76	-

Zorlu Energy Air Emissions

Parameter	Unit	2020	2021	2022	Change
NOx	ton/year	207.6	296.70	367.76	+
SO2	ton/year	578.1	1,075.25	1,335.42	+
Dust	ton/year	1.23	8.85	9.89	+
CO	ton/year	14.98	52.75	54.06	+
PM10	mg/nm3	-	0.77	-	N/A
H2S	Kg/h	-	24.9	41*	-

*Sum of average annual generation by GPPs measured via CEMS.

Social Performance Indicators

Employees by Gender

	2020	2021	2022
Female	382	401	450
Male	1,886	1,955	2,286
Total	2,268	2,356	2,736
Female Employees/All Employees	17%	17%	16%
Male Employees/All Employees	83%	83%	84%

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022****Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish**

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

Number of Employees with Disabilities

	2022
Female	9
Male	44

Number of Employees in Governance Bodies by Age Group and Gender

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
30-	0	0	0	0	0	0
30-50	4	8	4	7	3	4
50 +	0	9	0	9	1	8

Number of Blue Collar Employees by Age Group and Gender

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
30-	0	49	0	38	1	34
30-50	12	748	12	736	11	705
50 +	4	23	4	26	4	30

Number of White Collar Employees by Age Group and Gender

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
30-	94	196	83	207	109	414
30-50	265	816	285	879	316	1022
50 +	4	54	9	64	9	81

Number of Board Members

	2020	2021	2022
Female	2	2	2
Male	7	7	7

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022****Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish**

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

Total Number of Newly Hired Employees

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
<30 years old	35	60	9	58	49	284
30-50 years old	17	18	10	49	36	99
>50 years old	0	0	1	8	1	6

Total Number of Released Employees

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
<30 years old	7	32	4	22	12	34
30-50 years old	20	73	13	29	23	69
>50 years old	1	9	1	10	4	13

Rates of Returning to / Resigning from Work after Parental Leave by Gender

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Number of Employees Entitled to Paternal Leave	11	104	11	32	26	83
Number of Employees that Used Paternal Leave	11	104	11	32	26	83
Number of Employees the Returned back to Work after Paternal Leave	10	104	9	32	10	83
Total Number of Employees the Returned to Work after Paternal Leave and still Working 12 Months after Returning to Work	10	10 4	9	32	10	82
Rates of Employees Who Returned to Work and Who are Still Working after using Paternal Leave	%91	%100	%82	%100	%38	%99

Total Training Hours for Employees

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Blue Collar	1	4,28	0,68	9,40	0,44	5,80
White Collar	4,62	5,66	2,84	2,60	11,47	14,76
Senior Managers	0	11,75	8,33	8,61	3,49	17,29

Average Ethics-Related Training Hours of Employees

	2020		2021		2022	
	Famele	Male	Famele	Male	Famele	Male
Blue Collar	1	0,9	0	0,9	0	0,9
White Collar	1,3	1,1	1	0,8	1,1	0,9
Executives	0	0,9	1,2	0	0	0

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022****Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish**

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

Percentage of Employees Regularly Subjected to Performance and Career Development Assessment by Gender and Employee Category

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Blue Collar	100%	94%	100%	100%	100%	98%
White Collar	94%	95%	94%	94%	94%	95%
Executives	100%	94%	75%	94%	100%	100%

Number of Employees Participating in Employee Loyalty Survey

	2020	2021	2022
Female	330	330	-
Male	1,105	1,112	-

** The Employee Loyalty Survey is conducted biennially in Zorlu Energy. No study was conducted in 2022.

Salary and wage rates among men and women by certain locations of operation for each employee category (given in TRY)

Title	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
DG/DDG/Director	49,575	51,262	63,335	61,164	133,019	133,727
Group Mng/Mng	17,207	17,714	20,787	21,159	43,974	45,224
Up to Manager	5,943	5,442	7,302	6,801	15,216	12,948

Job Accident Rates of Total Workforce at Zorlu Energy by Gender

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Frequency of Total Reportable Incidents	0	1.62	1.59	3.01	0	2.23
Frequency Rate of Total Accident	0	1.62	1.59	3.01	0	2.23
Total Accident Weight Rate	0	0.01	0.05	0.05	0	39.57
Frequency Rate of Accidents with Lost Days	0	1.62	1.59	3.01	0	2.23
Occupational Disease Frequency Rate	0	0	0	0	0	0
Total Number of Accidents with Lost Days	0	3	1	6	0	8
Number of Total Accidents	0	3	1	6	0	8
Number of Total Lost Days	0	14	30	96	0	142
Work-Related Fatalities	0	0	0	0	0	0
Total Number of Occupational Diseases	0	0	0	0	0	0

**ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ AND ITS SUBSIDIATIES
CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022****Convenience Translation of Consolidated Financial Statements Originally Issued in Turkish**

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

Health and Safety Performance Metrics for All Contractors Controlled by Zorlu Energy by Gender

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Frequency of Total Reportable Incidents	0	10.18	0	2.78	0	2.05
Frequency Rate of Total Accident	0	10.18	0	2.78	0	2.05
Total Accident Weight Rate	0	0.02	0	0.02	0	3.76
Frequency Rate of Accidents with Lost Days	0	7.4	0	1.39	0	2.05
Occupational Disease Frequency Rate	0	0	0	0	0	0
Total Number of Accidents with Lost Days	0	8	0	2	0	3
Number of Total Accidents	0	11	0	4	0	3
Number of Total Lost Days	0	25	0	29	0	5.5
Work-Related Fatalities	0	0	0	0	0	0
Total Number of Occupational Diseases	0	0	0	0	0	0

OEDAŞ's Health and Safety Performance Metrics for Total Workforce by Gender

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Frequency of Total Reportable Incidents	0	1.62	1.59	3.01	0.00	6.65
Frequency Rate of Total Accident	0	1.62	1.59	3.01	0.00	6.65
Total Accident Weight Rate	0	0.01	0.05	0.05	0	0.01
Frequency Rate of Accidents with Lost Days	0	1.62	1.59	3.01	0	1.56
Occupational Disease Frequency Rate	0	0	0	0	0	0
Total Number of Accidents with Lost Days	0	3	1	6	0	4
Number of Total Accidents	0	3	1	6	0	17
Number of Total Lost Days	0	14	30	96	0	38
Work-Related Fatalities	0	0	0	0	0	0
Total Number of Occupational Diseases	0	0	0	0	0	0

Health and Safety Performance Metrics for All Contractors Controlled by ODEAŞ by Gender

	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Frequency of Total Reportable Incidents	0	10.18	0	2.78	22.28	32.44
Frequency Rate of Total Accident	0	10.18	0	2.78	22.28	32.44
Total Accident Weight Rate	0	0.02	0	0.02	0	0.39
Frequency Rate of Accidents with Lost Days	0	7.4	0	1.39	0	11.89
Occupational Disease Frequency Rate	0	0	0	0	0	0
Total Number of Accidents with Lost Days	0	8	0	2	0	22
Number of Total Accidents	0	11	0	4	1	60
Number of Total Lost Days	0	25	0	29	0	729
Work-Related Fatalities	0	0	0	0	0	0
Total Number of Occupational Diseases	0	0	0	0	0	0

Frequency of Total Reportable Incidents: (Number of Fatal Job Accidents + Number of Lost Time Job Accidents + Number of No Loss Time Job Accidents) * 10⁶ / (Total working time)Frequency Rate of Total Accident: Number of Lost Time Job Accidents + Number of No Loss Time Job Accidents * 10⁶ / (Total working time)Total Accident Weight Rate: Lost days due to lost time work accidents * 10⁶ / (Total working time)Frequency Rate of Accidents with Lost Days: Number of Lost Time Job Accidents * 10⁶ / (Total working time)Occupational Disease Frequency Rate: Number of Occupational Accidents * 10⁶ / (Total working time)

Total Annual Working Time: (312 x 7.5 x Total number of employees) - (Total lost days due to job accident x 7.5)

* Calculations for 2019 include OEPSAŞ, but exclude GAZDAŞ and OEDAŞ.

* Calculations for 2020 include OEPSAŞ, but exclude OEDAŞ.

* Calculations for 2021 and 2022 include OEPSAŞ, but exclude OEDAŞ.



GRI CONTENT INDEX



2023

GRI 1

Zorlu Energy reported in accordance with GRI Standards for the January–December 2022 period.

The GRI Services Team found that, within the scope of Content Index -Essentials Service, the GRI content index is clearly included in the report, and that references to the GRI 2-1 to 2-5 and GRI 3 -1 and 3-2 disclosures are included in the relevant parts of the report.

GRI Standards	Disclosures	Page No, Source and/or Direct Answers
GRI 1: BASIC 2021		
GRI 2: GENERAL DISCLOSURES 2021		
GRI 2: General Disclosures 2021	2-1 Organizational Details	2022 Performance Indicators p.37
	2-2 Entities included in the organization's sustainability reporting	About Report p. 1
	2-3 Reporting period, frequency and contact point	About Report p. 1
	2-4 Restatements of information	Prioritization Analysis p. 52
	2-5 External Assurance	Sustainability Management at Zorlu Energy p. 52
	2-6 Activities, value chain and other business relationships	Value Creation Model p. 51
	2-7 Employees	Companies and Fields of Activity p. 48
	2-8 Workers who are not employees	Human Capital p. 125
	2-9 Governance structure and composition	Human Capital p. 125
	2-10 Nomination and selection of the highest governance body	Duties and Responsibilities of the Board p. 210
	2-11 Chair of the highest governance body	Risks and Evaluation of the Board p. 188
	2-12 Role of the highest governance body in overseeing the management of impacts	Duties and Responsibilities of the Board p. 210
	2-13 Delegation of responsibility for managing impacts	Risks and Evaluation of the Board p. 188
	2-14 Role of the highest governance body in sustainability reporting	Risks and Evaluation of the Board p. 188
	2-15 Conflicts of interest	Sustainability Governance Structure p. 58
	2-16 Communication of critical concerns	Corporate Governance Principles Conformance Statement p. 196
	2-17 Collective knowledge of the highest governance body	Duties and Responsibilities of the Board p. 210
	2-18 Evaluation of the performance of the highest governance body	Duties and Responsibilities of the Board p. 210
	2-19 Remuneration policies	Board's Committees p. 210
	2-20 Process to determine remuneration	Employee Rights and Welfare p. 133
	2-21 Annual total compensation ratio	Sustainability Management at Zorlu Energy p. 52
	2-22 Statement on sustainable development strategy	Confidentiality restrictions: Not public information.
	2-23 Policy commitments	Sustainability Management at Zorlu Energy p. 52
	2-24 Embedding policy commitments	Corporate Management p. 188
	2-25 Processes to remediate negative impacts	Corporate Management p. 188
	2-26 Mechanisms for seeking advice and raising concerns	Sustainability Management at Zorlu Energy p. 52
	2-27 Compliance with laws and regulations	Risks and Evaluation of the Board p. 193
	2-28 Membership associations	Internal Audit Activities and Internal Control System p. 188
	2-29 Approach to stakeholder engagement	Subsidiaries p. 45
	2-30 Collective bargaining agreements	Internal Audit Activities and Internal Control System p. 193

GRI CONTENT INDEX

Material Issues		
GRI Standards	Disclosures	Page No, Source and/or Direct Answers
GRI 3: Material Issues 2021		
Material Issues		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
		Sustainability Management at Zorlu Energy p. 52
Strong Economic Performance		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p.52
	3-2 List of material topics	Financial Capital p. 74
	3-3 Management of material topics	Prioritization Analysis p. 52
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Prioritization Analysis p. 52
	201-2 Financial implications and other risks and opportunities due to climate change	Financial Capital p. 74
	201-3 Defined benefit plan obligations and other retirement plans	Financial Capital p. 74
Integration, Infrastructure and Service Quality		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Financial Capital p. 80
	3-2 List of material topics	2022 Performance Indicators p.37
	3-3 Management of material topics	Financial Capital p. 74
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and supported services	Financial Capital p. 74
	203-2 Significant indirect economic impacts	Integration, Infrastructure and Service Quality p. 124
		Value Creation Model p. 51



GRI CONTENT INDEX

Social Compliance in the Supply Chain		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52 Social Compliance in the Supply Chain p. 147
	3-2 List of material topics	Prioritization Analysis p. 52 Social Compliance in the Supply Chain p. 147
	3-3 Management of material topics	Prioritization Analysis p. 52 Social Compliance in the Supply Chain p. 147
Business Ethics and Compliance with Laws		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Corporate Management p. 188
	3-2 List of material topics	Corporate Management p. 188
	3-3 Management of material topics	Corporate Management p. 188
GRI 205: Anti-Corruption 2016	205-1 Operations assessed for risks related to corruption	Corporate Management p. 188
	205-2 Communication and training in anti-corruption policies and procedures	Corporate Management p. 188
	205-3 Confirmed incidents of corruption and actions taken	Corporate Management p. 188
Effective Management for Ethics and Integrity		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Corporate Management p. 188
	3-2 List of material topics	Corporate Management p. 188
	3-3 Management of material topics	Corporate Management p. 188
GRI 206: Anti-Competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	There have been no legal actions opened related to anti-competitive behavior, anti-trust or monopoly practices
Energy Efficiency		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p.52 Natural Capital p. 96 Manufactured Capital p. 80
	3-2 List of material topics	Prioritization Analysis p.52 Natural Capital p. 96 Manufactured Capital p. 80
	3-3 Management of material topics	Prioritization Analysis p.52 Natural Capital p. 96 Manufactured Capital p. 80
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Natural Capital p. 96 Performance Indicators p. 399
	302-2 Energy consumption outside the organization	Natural Capital p. 96 Performance Indicators p. 399
	302-3 Energy intensity	Natural Capital p. 96 Performance Indicators p. 399
	302-4 Reduction of energy consumption	Natural Capital p. 96 Performance Indicators p. 399
	302-5 Reductions in the energy requirements of products and services	Observations have been carried out under this indicator

GRI CONTENT INDEX

Transition to Low-Carbon Technologies		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p.52 Natural Capital p. 96 Manufactured Capital p. 80
	3-2 List of material topics	Prioritization Analysis p.52 Natural Capital p. 96 Manufactured Capital p. 80
	3-3 Management of material topics	Prioritization Analysis p.52 Natural Capital p. 96 Manufactured Capital p. 80
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Natural Capital p. 96 Performance Indicators p. 399
	305-2 Energy indirect (Scope 2) GHG emissions	Natural Capital p. 96 Performance Indicators p. 399
	305-3 Other indirect (Scope 3) GHG emissions	Natural Capital p. 96 Performance Indicators p. 399
	305-4 GHG emissions intensity	Natural Capital p. 96 2022 Performance Indicators p. 37
	305-5 Reduction of GHG emissions	Natural Capital p. 96 Message from Sector President p. 9 Sustainability Targets p. 61
Water Quality and Management		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p.52 Natural Capital p. 96
	3-2 List of material topics	Prioritization Analysis p.52 Natural Capital p. 96
	3-3 Management of material topics	Prioritization Analysis p.52 Natural Capital p. 96
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Natural Capital p. 96 Performance Indicators p. 399
	303-2 Management of water discharge-related impacts	Natural Capital p. 96 Performance Indicators p. 399
	303-3 Water withdrawal	Natural Capital p. 96 Performance Indicators p. 399
	303-4 Water discharge	Natural Capital p. 96 Performance Indicators p. 399
	303-5 Water consumption	Natural Capital p. 96 Performance Indicators p. 399
Biodiversity Loss and Deforestation		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p.52 Natural Capital p. 96 Manufactured Capital p. 80
	3-2 List of material topics	Prioritization Analysis p.52 Natural Capital p.96 Manufactured Capital p. 80
	3-3 Management of material topics	Prioritization Analysis p.52 Natural Capital p.96 Manufactured Capital p. 80



GRI CONTENT INDEX

GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased or managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Natural Capital p. 96 Loss of Biodiversity and Deforestation p. 103
	304-2 Significant impacts of activities, products, and services on biodiversity	Natural Capital p. 96 Loss of Biodiversity and Deforestation p. 103
	304-3 Habitats protected or restored	Natural Capital p. 96 Loss of Biodiversity and Deforestation p. 103
	304-4 IUCN (International Union for Conservation of Nature) Red List species and national conservation list species with habitats in areas affected by operations	Natural Capital p. 96 Loss of Biodiversity and Deforestation p. 103
Industrial Accident and Pollution Management		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52 Natural Capital p. 96
	3-2 List of material topics	Prioritization Analysis p. 52 Natural Capital p. 96
	3-3 Management of material topics	Prioritization Analysis p. 52 Natural Capital p. 96
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Accountable Waste Management p. 106 Performance Indicators p. 399
	306-2 Management of significant waste-related impacts	Accountable Waste Management p. 106 Performance Indicators p. 399
	306-3 Waste generated	Accountable Waste Management p. 106 Performance Indicators p. 399
	306-4 Waste diverted from disposal	Accountable Waste Management p. 106 Performance Indicators p. 399
	306-5 Waste directed to disposal	Accountable Waste Management p. 106 Performance Indicators p. 399
Employee Rights and Welfare		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52 Human Capital p. 125
	3-2 List of material topics	Prioritization Analysis p. 52 Human Capital p. 125
	3-3 Management of material topics	Prioritization Analysis p. 52 Human Capital p. 125
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Performance Indicators p. 399
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	There are no social rights or life insurance practices, nor does separate insurance exist for disability or invalidity
	401-3 Parental leave	Performance Indicators p. 399
Employee Opinions in Company's Decisions		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Health and Safety p. 126 Corporate Management p. 188 Prioritization Analysis p. 52
	3-2 List of material topics	Health and Safety p. 126 Corporate Management p. 188 Prioritization Analysis p. 52
	3-3 Management of material topics	Health and Safety p. 126 Corporate Management p. 188 Prioritization Analysis p. 52
GRI 402: Labor/ Management Relations 2016	402-1 Minimum notice periods for operational changes	Prioritization Analysis p. 52 Human Capital p. 125

GRI CONTENT INDEX

Health and Safety		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Health and Safety p. 126 Corporate Management p. 188 Prioritization Analysis p. 52
	3-2 List of material topics	Health and Safety p. 126 Corporate Management p. 188 Prioritization Analysis p. 52
	3-3 Management of material topics	Health and Safety p. 126 Corporate Management p. 188 Prioritization Analysis p. 52
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Health and Safety p. 126
	403-2 Hazard identification, risk assessment and incident investigation	Health and Safety p. 126
	403-3 Occupational health services	Health and Safety p. 126
	403-4 Worker participation, consultation and communication related to occupational health and safety	Health and Safety p. 126
	403-5 Worker training on occupational health and safety	Health and Safety p. 126
	403-6 Promotion of worker health	Health and Safety p. 126
	403-7 Prevention and mitigation of occupational health and safety impacts related directly to business relationships	Health and Safety p. 126
	403-8 Workers covered by an occupational health and safety management system	Health and Safety p. 126
	403-9 Work-related injuries	Performance Indicators p. 399
	403-10 Work-related ill health	Health and Safety p. 126
Inclusion, Equality, Diversity		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Inclusion, Equality, Diversity p. 131 Sustainability Management at Zorlu Energy p. 52 Prioritization Analysis p. 52
	3-2 List of material topics	Inclusion, Equality, Diversity p. 131 Sustainability Management at Zorlu Energy p. 52 Prioritization Analysis p. 52
	3-3 Management of material topics	Inclusion, Equality, Diversity p. 131 Sustainability Management at Zorlu Energy p. 52 Prioritization Analysis p. 52
GRI 405: Diversity and Equal Opportunities 2016	405-1 Diversity of governance bodies and employees	Inclusion, Equality, Diversity p. 131 Performance Indicators p. 399
	405-2 Ratio of basic salaries and remuneration of women to men	Employee Rights and Welfare p. 133
Human Rights		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Inclusion, Equality, Diversity p. 131 Corporate Management p. 188 Prioritization Analysis p. 52
	3-2 List of material topics	Inclusion, Equality, Diversity p. 131 Corporate Management p. 188 Prioritization Analysis p. 52
	3-3 Management of material topics	Inclusion, Equality, Diversity p. 131 Corporate Management p. 188 Prioritization Analysis p. 52
GRI 406: Non- discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Inclusion, Equality, Diversity p. 131



GRI CONTENT INDEX

Business Ethics and Compliance with Laws		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Accountability and Ethics p. 139 Prioritization Analysis p. 52
	3-2 List of material topics	Accountability and Ethics p. 139 Prioritization Analysis p. 52
	3-3 Management of material topics	Accountability and Ethics p. 139 Prioritization Analysis p. 52
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk of child labor	Accountability and Ethics p. 139 Social Compliance in the Supply Chain p. 147 Inclusion, Equality, Diversity p. 131
Business Ethics and Compliance with Laws		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Accountability and Ethics p. 139 Prioritization Analysis p. 52
	3-2 List of material topics	Accountability and Ethics p. 139 Prioritization Analysis p. 52
	3-3 Management of material topics	Accountability and Ethics p. 139 Prioritization Analysis p. 52
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk of forced or compulsory labor	Accountability and Ethics p. 139 Social Compliance in the Supply Chain p. 147 Inclusion, Equality, Diversity p. 131
Employee Training and Development		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52 Local Socio-Economic Impact p. 142 Employee Training and Development p. 134
	3-2 List of material topics	Prioritization Analysis p. 52 Local Socio-Economic Impact p. 142 Employee Training and Development p. 134
	3-3 Management of material topics	Prioritization Analysis p. 52 Local Socio-Economic Impact p. 142 Employee Training and Development p. 134
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Performance Indicators p. 399
	404-2 Programs for upgrading employee skills and transition assistance programs	Employee Training and Development p. 134
	404-3 Percentage of employees undergoing regular performance and career development reviews	Performance Indicators p. 399
Local Socio-Economic Impact		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52 Local Socio-Economic Impact p.142
	3-2 List of material topics	Prioritization Analysis p. 52 Local Socio-Economic Impact p.142
	3-3 Management of material topics	Prioritization Analysis p. 52 Local Socio-Economic Impact p.142
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments and development programs	Local Socio-Economic Impact p. 142
	413-2 Operations with significant actual and potential negative impacts on local communities	Local Socio-Economic Impact p. 142
Stakeholder Interaction and Social Dialogue		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52 Corporate Social Responsibility Projects p. 144
	3-2 List of material topics	Prioritization Analysis p. 52 Corporate Social Responsibility Projects p. 144
	3-3 Management of material topics	Prioritization Analysis p. 52 Corporate Social Responsibility Projects p. 144

GRI CONTENT INDEX

Customer Satisfaction and Loyalty		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52 Social Capital p. 142 Sustainability Management at Zorlu Energy p. 56
	3-2 List of material topics	Prioritization Analysis p. 56 Social Capital p. 147 Sustainability Management at Zorlu Energy p. 56
	3-3 Management of material topics	Prioritization Analysis p. 56 Social Capital p. 147 Sustainability Management at Zorlu Energy p. 52
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	OHS analyses of all operations are conducted continuously in accordance with legal requirements.
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	There has been no case of non-compliance with regulations or voluntary codes related to marketing communications, including advertising, promotion and sponsorship
Innovative Solutions		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52 Intellectual Capital p. 109
	3-2 List of material topics	Prioritization Analysis p. 52 Intellectual Capital p. 109
	3-3 Management of material topics	Prioritization Analysis p. 52 Intellectual Capital p. 109
Brand Reputation		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Corporate Governance and Behavior		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Fight Against Climate Change		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Accountable and Sustainable Financing		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Process Safety		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52



GRI CONTENT INDEX

Effective Risk and Crisis Management		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Cooperation for Climate Targets		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Digitalization		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Integrity and Accountability		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Environmentally and Socially Friendly Products or Services		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Integrity and Accountability		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Accountable Waste Management		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Physical Climate Risks		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Air Quality		

GRI CONTENT INDEX

GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Improvement of Products and Services		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Market Share		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Accountable Supply Chain		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Competition in the Market		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52
Effluent		
GRI 3: Material Issues 2021	3-1 Process to determine material topics	Prioritization Analysis p. 52
	3-2 List of material topics	Prioritization Analysis p. 52
	3-3 Management of material topics	Prioritization Analysis p. 52



REPORTING GUIDELINES

Energy Data	
Total Energy Consumption (GJ)	- Electricity, natural gas, diesel, gasoline, coal and LPG consumption were taken into account when calculating the total energy consumption. - Electricity consumption was obtained in kWh and then converted to GJ. This conversion was based on a conversion factor of 1 kWh=0.0036 GJ. - Annual consumptions at the power plants are calculated in m³ for natural gas, in tons for coal, in liters for diesel and gasoline, and in kg for LPG. The calculated values are then converted into GJ using the conversion factors provided by DEFRA. - The reporting content covers the Türkiye and Pakistan operations of Zorlu Energy
GHG Data	
Scope 1 (ton CO _{2e}) Scope 2 (ton CO _{2e}) Scope 3 (ton CO _{2e})	- GHG emissions refer to the carbon emissions from energy consumption and refrigerant gases during the reporting period. GHG emissions from operations of Zorlu Energy are calculated by SEEM in accordance with the Greenhouse Gas Protocol: A Revised Corporate Accounting and Reporting Standard. - GHG emissions are calculated for three categories: Scope 1 (Direct GHG Emissions), Scope 2 (Indirect GHG Emissions) and Scope 3 (Other Indirect GHG Emissions). - The emission factors used are taken from the “International Panel on Climate Change (IPCC), 2006 Guidelines for National Greenhouse Gas Inventories” and the “Department for Environment, Food & Rural Affairs (DEFRA) Greenhouse Gas Reporting: Conversion Factors”. - The Network Emission Factor is calculated in accordance with the data provided by the “International Energy Agency - CO2 Emissions from Fuel Combustion Highlights”. - Direct GHG emissions (Scope 1) and indirect energy GHG emissions (Scope 2) are based on the GHG Protocol – Location Based criteria. Other indirect GHG emissions (Scope 3) are reported according to the GHG Protocol. The emission factors used for the calculation of Scope 3 emissions are taken from the “Department for Environment, Food & Rural Affairs (DEFRA) Greenhouse Gas Reporting: Conversion Factors” - When calculating GHG emissions, the following sources of carbon emissions are taken into account: - Scope 1 emissions: -Natural gas and coal consumption for heating purposes -Company Vehicle Fuel Consumption (Diesel) -Refrigerant Gases (Leaks reported during installation and maintenance are taken into account. - Scope 2 emissions: -Electricity consumption - Scope 3 emissions: Domestic Business Flights - International Business Flights - The reported content covers the Türkiye operations of Zorlu Energy. The effects of working from home are not included in the calculations for resource consumption and emission during the reporting period.
Water and Waste Data	
Water Consumption (m ³) Total Hazardous Waste Amount (ton) Total Non-Hazardous Waste Amount (ton)	- Water consumption is evaluated in three different categories: surface water, groundwater and mains water. Water taken from municipalities or other suppliers such as İSKİ is considered mains water, and all of the water purchased and consumed as mains water is considered the total mains water. The meter readings of the supplier based on the consumption amount at each location are considered as the mains water consumption. The reporting content covers the Türkiye operations of Zorlu Energy. - The given waste quantities are itemized for Zorlu Energy, OEDAŞ, OEPSAŞ and GAZDAŞ. Plastic, metal and glass waste are considered non-hazardous recyclable waste. Disposed hazardous waste includes batteries, fluorescent lamps, vehicle batteries and toner cartridges. The reporting on waste covers the Alaçehir GPP, Kızıldere GPP, Trakya Gas, Gaziantep Gas, Lüleburgaz, Kuzgun, Çıldır, İkizdere, Tercan, Beyköy, Ataköy, Mercan, Gökçedağ and OEPSAŞ operations. Receipts from authorized recycling companies and MoTAT entries are taken into account when calculating the disposed waste amount.
Human Resources-Related Data	

REPORTING GUIDELINES

Total Number of Employees	This includes all employees working in the domestic operations of Zorlu Energy as of December 31, 2022. Interns, workers who are not employees, and employees assigned to domestic subsidiaries are not included in the total number of employees.
Distribution of Total Employees by Sex	This refers to the distribution of employees by sex.
Number of Female Employees	This represents the total number of female employees holding a managerial position or higher in Zorlu Energy as of December 31, 2022. (Managerial positions or higher include Manager, Group Manager, Director, Deputy Director General and Director General.)
Number of unionized employees	This is the rate of employees who are members of the Turkish Energy, Water and Gas Workers' Union within the total number of employees as of December 31, 2022.
Number of Employees Entitled to Paternal Leave	This is the number of female employees who took paid or unpaid paternal leave during the reporting period.
Number of Employees Who Returned to Work after taking Paternal Leave	This refers to the number of employees who returned to work after taking paternal leave (paid or unpaid) within the reporting period.
Total number of hours of training delivered to employees in 2022 related to Ethical Principles, including training in Human Rights and the anti-corruption policies and organizational procedures - Number of employees who received, and the total training hours provided for “Anti-Bribery and Corruption” training - Number of employees who received, and the total training hours provided for “Ethical Principles/Business Ethics” training - Number of employees who received, and the total training hours provided for “Human Rights” training - Number of employees who received, and the total training hours provided for “Sustainability” training	“Anti-Bribery and Corruption”, “Ethical Principles/Business Ethics”, “Human Rights” and “Sustainability” trainings provide education in these subjects; and the number of employees who received such training and the total hours of the said trainings are taken into account in the calculation of the indicator. Although Zorlu Energy does not deliver “Anti-Bribery and Anti-Corruption”, “Ethical Principles/Business Ethics” or “Human Rights” trainings, these subjects are included in training programs given at certain times. In this regard, the number of employees who received these trainings and the total hours were calculated taking into account the time dedicated to the relevant topics within the existing training programs. The training time was calculated exclusive of the duration of the trainings delivered for these subjects as part of the training programs organized by the Internal Audit Department.
OHS Data on an Employee Basis	
Accident frequency rate	This was calculated as ratio of accidents that occurred during the reporting year to the total working time. In this context, the following formula was used for the calculation: “Total Number of Accidents / Total number of man-hours worked x 1,000,000)”.
Lost days rate	This is calculated by dividing the number of lost days due to job accidents by the total working hours. The formula used for the calculation is as follows: “(Total number of days lost due to accidents / Total number of working days in a year”. The total number of lost days in the formula refers to the total number of days on which employees did not work due to any accident.



ENERGY UTILITY SECTOR ADDITIONAL DISCLOSURES

Aside from the disclosures within the scope of GRI Standards, Zorlu Energy reports in accordance with the additional disclosures in the Electric Utilities Module defined by GRI.

Electricity Generators Sector Additional Disclosures

GRI Standards	Disclosure
Energy Utility Sector Disclosures	
General Disclosures	
EU1 - Installed capacity, broken down by primary energy source and by regulatory regime	Performance Indicators p. 399 Installed Capacity and Investments of Zorlu Energy p. 45
EU2 - Net energy output, broken down by primary energy source and by regulatory regime	Performance Indicators p. 399 Installed Capacity and Investments of Zorlu Energy p. 45
EU3 - Number of residential, industrial, institutional and commercial customer accounts	Brand Reputation p. 138
EU4 - Length of above and underground transmission and distribution lines by regulatory regime	All transmission and distribution lines in Türkiye belong to TEİAŞ and TEDAŞ.
EU5 - Allocation of CO2 emission allowances or equivalent, broken down by carbon trading framework	Natural Capital p. 96
Economic Disclosures	
EU6 - Management approach to the assurance of short- and long-term electricity availability and reliability	Natural Capital p. 96 Manufactured Capital p. 80
EU10 - Planned capacity against projected electricity demand in the long term, broken down by energy source and regulatory regime	Natural Capital p. 96 Manufactured Capital p. 80
EU8 - Research and development activity and expenditures aimed at providing reliable electricity and promoting sustainable development	Intellectual Capital p. 109
EU11 - Average generation efficiency of thermal plants by energy source and by regulatory regime	Natural Capital p. 96 Manufactured Capital p. 80
EU12 - Transmission and distribution losses as a percentage of total energy	Natural Capital p. 96 Manufactured Capital p. 80
EU13 - Biodiversity of offset habitats compared to the biodiversity of the affected areas	Natural Capital p. 96 Loss of Biodiversity and Deforestation p. 103
Social Disclosures	
EU14 - Programs and processes ensuring the availability of a skilled workforce	Human Capital p. 125
EU16 - Policies and requirements related to the health and safety of employees and the employees of contractors and subcontractors	Human Capital p. 125
EU17 - Days worked by contractor and subcontractor employees involved in construction, operation & maintenance activities	Health and Safety p. 126
EU18 - Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	Health and Safety p. 126
EU19 - Stakeholder participation in decision-making processes related to energy planning and infrastructure development	Value Creation Model p. 51
EU20 - Approach to the management of the impacts of displacement	Stakeholder Interaction and Social Dialogue p. 144
EU22 - Number of people physically or economically displaced and compensation paid, broken down by project type	Stakeholder Interaction and Social Dialogue p. 144
EU25 - Number of injuries and fatalities to members of the public involving company assets, including legal judgments, settlements and pending legal cases related to disease	In the regions where the Company operates, there were no incidents resulting in injury or fatality of community members due to Company activities. There are no legal proceedings or reconciliation cases related to health and safety issues arising from the Company's activities.
EU23 - Programs, including those in partnership with the government, aimed at improving or maintaining access to electricity and customer support services	The Ministry and EMRA work together on the regulation on the hotlines of electricity distribution and retail companies. In this regard, technical studies are being carried out with TEDAŞ.
EU24 - Practices to address the barriers related to language, culture, low literacy and disability affecting the access to and safe use of electricity and customer support services; practices to identify and manage obstacles to electricity usage and access to customer support services	There are no practices addressing barriers related to language, culture, low literacy and disability affecting access to and safe use of electricity and customer support services

UNITED NATIONS GLOBAL COMPACT (UNGC) PROGRESS REPORTING

Topics	Principles	Disclosed in
Human Rights GRI 2-1; GRI 412-1; GRI 412-2; GRI 412-3; GRI 410-1; GRI 413-1; GRI 413-2	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights Principle 2: Make sure that they are not complicit in human rights abuses. Principle 3: Businesses should uphold freedom of association and the effective recognition of the right to collective bargaining.	Human Capital p. Human Capital p. Human Capital p.
Labor Standards GRI 2-8; GRI 2-7 GRI 2-30; GRI 202-1; GRI 202-2; GRI 401-1; GRI 401-3; GRI 402-1; GRI 404-1; GRI 404-3; GRI 405-1; GRI 405-2; GRI 406-1	Principle 4: Businesses should uphold the elimination of all forms of forced and compulsory labor. Principle 5: Businesses should uphold the effective abolition of child labor. Principle 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation.	Human Capital p. Human Capital p. Human Capital p.
Environment GRI 302-1; GRI 302-2; GRI 302-4; GRI 302-5; GRI 303-5; GRI 304-1; GRI 304-2; GRI 304-3; GRI 304-4; GRI 305-1; GRI 305-2; GRI 305-3; GRI 305-4; GRI 305-5; GRI 305-6; GRI 305-7; GRI 307-1	Principle 7: Businesses should support precautionary approaches to environmental challenges. Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility. Principle 9: Businesses should encourage the development and dissemination of environmentally friendly technologies.	Manufactured Capital p. Natural Capital p. Manufactured Capital p. Natural Capital p.
Anti-Corruption GRI 205-1; GRI 205-2; GRI 205-3	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	Corporate Management p.



WOMEN'S EMPOWERMENT PRINCIPLES (WEPS) PROGRESS REPORTING

Principles	GRI Disclosure	Page Reference
Principle 1: Establish high-level corporate leadership for gender equality	GRI 405-1, GRI 405-2	Human Capital p.
Principle 2: Treat all women and men fairly at work – respect and support human rights and nondiscrimination	GRI 202-1; GRI 401-1; GRI 401-3; GRI 405-1; GRI 405-2; GRI 406-1	Human Capital p.
Principle 3: Ensure the health, safety and well-being of all female and male workers	GRI 403-2; GRI 406-1	Human Capital p.
Principle 4: Promote education, training and professional development for women	GRI 404-1; GRI 404-3	Human Capital p.
Principle 5: Implement enterprise development, supply chain and marketing practices that empower women	GRI 204-1	Social Capital p.
Principle 6: Promote equality through community initiatives and advocacy	GRI 413-1	Human Capital p. Social Capital p.
Principle 7: Measure and publicly report on progress in the achievement of gender equality	GRI 3-1; GRI 3-2; GRI 3-3; GRI 405-1; GRI 405-2	Human Capital p. Social Capital p.

INVESTOR INFORMATION

GENERAL INFORMATION

Accounting Period of the Report January 1 – December 31, 2022
Trade Name: Zorlu Enerji Elektrik Üretim A.Ş.
Trade Registry No: Bursa Trade Registry Office, No: 33550
Headquarters: Organize Sanayi Bölgesi Pembe Cadde No: 13 16159 BURSA
Contact Address: Levent 199 Büyükdere Cad. No: 199 34394 Şişli - İSTANBUL
Tel: (212) 456 23 00
Fax: (212) 422 00 99
Authorized Share Capital: 6,000,000,000 TRY
Last Issued Capital: 2,500,000,000 TRY

INDEPENDENT AUDITOR

KPMG Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş.
Levent, İş Kuleleri, Kule 3, Kat:2-9, 34330 Beşiktaş - İSTANBUL
Tel: (212) 316 60 00
Fax: (212) 316 60 60

FINANCIAL INFORMATION AND COMPANY NEWS

The financial statements, audit reports, annual reports and material disclosures of Zorlu Enerji Elektrik Üretim A.Ş. are available on the Company's website: www.zorluenerji.com.tr Information can also be requested from the Investor Relations Department of Zorlu Enerji Elektrik Üretim A.Ş. via telephone or e-mail.

INVESTOR RELATIONS

Başak Dalga

Investor Relations Manager

Zorlu Enerji Elektrik Üretim A.Ş.

Levent 199 Büyükdere Cad. No: 199 34394 Şişli - İSTANBUL

Tel: (212) 456 34 56

E-mail: yatirimci@zoren.com.tr

Report Consultant

Deloitte Türkiye Sustainability Services

https://www2.deloitte.com/tr/tr/pages/risk/topics/surdurulebilirlik-hizmetleri.html?icid=top_surdurulebilirlik-hizmetleri