

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED FINANCIAL STATEMENTS

AS AT 31 DECEMBER 2019

TOGETHER WITH INDEPENDENT AUDITOR'S REPORT



INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Zorlu Enerji Elektrik Üretim A.Ş.

Our opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of Zorlu Enerji Elektrik Üretim A.Ş. (the "Company") and its subsidiaries (together the "Group") as at 31 December 2019, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRS").

What we have audited

The Group's consolidated financial statements comprise:

- the consolidated balance sheet as at 31 December 2019;
- the consolidated statement of profit or loss for the year then ended;
- the consolidated statement of other comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended and
- the notes to the consolidated financial statements, which include a summary of significant accounting policies.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing ("ISA"). 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 believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of matter- the impact of COVID-19

We draw attention to Note 29 to the consolidated financial statements, which describes the effects of COVID-19 outbreak on the Group. Our opinion is not modified in respect of this matter.

Independence

We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants ("IESBA Code"). We have fulfilled our other ethical responsibilities in accordance with the IESBA Code.

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. Key audit matters were addressed in the context of our independent 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.

When these key audit matters were compared with the previous year, the key audit matter specified for the acquisition accounting made in 2018 in accordance with the IFRS 3, "Business Combinations", was not mentioned as the key audit matter in our report, since no similar transaction occurred in 2019.

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Key Audit Matters	How the key audit matter was addressed in the audit
<p>Goodwill impairment testing</p> <p>Goodwill amounting TL622,750 thousand was recognized in the consolidated financial statements as at 31 December 2019 resulting from the acquisition of Osmangazi Elektrik Dağıtım A.Ş.'s ("OEDAŞ"), Osmangazi Elektrik Satış Perakende A.Ş.'s ("OEPSAŞ"), Trakya Bölgesi Doğal Gaz Dağıtım A.Ş.'s ("Trakya") and Gazdaş Gaziantep Doğal Gaz Dağıtım A.Ş.'s ("Gazdaş") shares.</p> <p>The accounting policies and estimates of the Group's related to the goodwill impairment tests were disclosed in Note 2.5 and Note 2.8 in the consolidated financial statements.</p> <p>In accordance with IAS 36 "Impairment of Assets", the Group is required to perform an impairment test annually for the goodwill that arose as part of the business combinations. OEDAŞ, OEPSAŞ, Gazdaş and Trakya entities were regarded as separate cash generating units and the related goodwill was associated with each activities by the Group management.</p> <p>We focused on this matter in our audit due to the following reasons:</p> <ul style="list-style-type: none"> Recognized goodwill is material to the Group's consolidated financial statements as at 31 December 2019, Use of critical management estimates, such as annual inflation rate, increase in number of subscribers, capital cost rate, efficiency in operating expenses and capital expenditures, in the future cash flows and investment projections in the goodwill impairment study, The estimates used in goodwill impairment study are likely to be affected by future industrial and macroeconomic changes, The use of our valuation experts was necessary for the audit of the goodwill impairment testing models due to the complexity of the parameters and the calculations of the model and to control the mathematical accuracy of goodwill impairment calculations. 	<p>We carried out the below audit procedures for the goodwill impairment testing:</p> <ul style="list-style-type: none"> The calculations in the goodwill impairment study were tested for mathematical accuracy. Capital cost rate, inflation rate and other significant macroeconomic estimations used in goodwill impairment test were evaluated together with our valuation experts considering the independent data sources and current market conditions. The realization of prospective cash flow and investment expenditures projections as well as the realization of expense and capital expenditures efficiency expectations and increase expectation in number of subscribers used in the goodwill impairment test were evaluated in meetings held with senior management. In addition, these projections were compared with the previous period performance and minimum investment amounts determined by EMRA for the period of 2017-2021. It has been checked whether the financial information of the base year on goodwill impairment tests is compatible with the audited financial information. The compliance of related disclosures on the "goodwill impairment testing" to IFRS were evaluated. The mathematical accuracy of the sensitivity analysis of the significant accounting estimates used in the goodwill impairment tests and the appropriateness of the tests were checked.

Key Audit Matters	How the key audit matter was addressed in the audit
<p>Cash flow hedge transactions</p> <p>As explained in Note 18, the Group uses its investment loans amounting to USD1,318,064 thousand and EUR16,714 thousand as hedging instruments against USD/TL spot exchange rate exposure resulting from highly probable future sales made within the scope of Renewable Energy Resources Support Mechanism ("YEKDEM") and applies cash flow hedge accounting as a result of the effectiveness tests.</p> <p>We focused on this matter in our audit due to the following reasons:</p> <ul style="list-style-type: none"> • Cash flow hedge transactions are material to the Group's consolidated financial statements as at 31 December 2019, • The calculations in the effectiveness testing of cash flow hedge transactions include key management judgements and estimates, such as capacity utilization rate and electricity generation quantity. • The effectiveness tests of cash flow hedge transactions contain complex elements and have a structure that requires expertise. 	<p>We carried out the below audit procedures for cash flow hedge transactions:</p> <ul style="list-style-type: none"> • Accounting process related to the cash flow hedge transactions has been understood through the meetings held with management. • The compliance of the hedge accounting documentation and effectiveness tests prepared by the Group to the IAS 39 - "Financial Instruments" standard has been evaluated with the support of our treasury transactions experts. • We evaluated whether the significant management assumptions such as electricity generation quantity expectations and capacity utilization rates, which are the basis of the prospective budget estimates used in the effectiveness tests, are reasonable; compared with previous period performances and independent data sources. • We confirmed the related USD and EUR investment loans, that are in hedge relation and used in effectiveness tests, with the financial institutions and recalculated the current year foreign exchange valuations in line with the loan agreements and tested them for mathematical accuracy with the support of our treasury transactions experts. • The compliance of related disclosures on the "cash flow hedge transactions" to IFRS was evaluated.

Key Audit Matters	How the key audit matter was addressed in the audit
Recoverability of deferred tax assets relating to deductible tax losses	
<p>As further disclosed in the accompanying consolidated financial statements, the Group recognized TL568,043 thousand of deferred tax assets over the deductible tax losses.</p> <p>The accounting policies and details of the Group's related to the deferred tax assets and liabilities are disclosed in Note 2.5 and Note 21 in the consolidated financial statements.</p> <p>We focused on this matter in our audit due to the following reasons:</p> <ul style="list-style-type: none"> • Deferred tax assets relating to deductible tax losses are material to the Group's consolidated financial statements as at 31 December 2019, • The recoverability of the deferred tax asset calculated on deductible tax losses depends on the ability to obtain sufficient taxable profit in the future, 	<p>We performed the following audit procedures in the assessment of the recoverability of deferred tax assets relating to deductible tax losses:</p> <ul style="list-style-type: none"> • Prospective cash flow projections were obtained from the Group management and the realization of the electricity price expectations, electricity generation quantity expectations, capacity utilization rates, profit margin to be provided during the year, exchange rate expectations used in the prospective cash flow projections were evaluated in meetings with senior management. At the same time, the consistency of aforementioned estimates with the estimates in previous years were evaluated in meetings with senior management. • Electricity generation quantity, capacity utilization rates and profit margin to be provided during the year used in the prospective cash flow projections were compared with the previous performance of the Group and the reason for the deviations, if any, was questioned. • In order to evaluate the profit margins in the services to be provided during the year, the future project plans were examined together with the relevant management units. • We compared the future electricity sales prices in the business plans with the prices determined in the Renewable Energy Resources Support Mechanism ("YEKDEM") which are approved by EMRA and cover ten year period after the power plants are operational.



Key Audit Matters	How the key audit matter was addressed in the audit
Recoverability of deferred tax assets relating to deductible tax losses	
<ul style="list-style-type: none"> Existence of the significant estimates and assumptions (such as electricity price expectations, the expectations for electricity generation, capacity utilization rates, exchange rates and profit margins as disclosed in Note 2.8) in the prospective cash flow projections which are used to assess the realization of the taxable profit. 	<ul style="list-style-type: none"> Meetings were made with the Group management regarding the electricity sales prices determined for the period after the end of YEKDEM mechanism and the evaluation approaches in the forecasting process were understood. The deductible tax losses and the years in which the deduction can be made are compared with the corporate tax declarations approved by the independent chartered accountants of the Group and the deferred tax asset calculated over the deductible tax losses was recalculated. The sensitivity analysis of the significant accounting estimates used in the assessment of the recoverability of the deferred tax asset calculated on deductible tax losses is correctly calculated and its presentation in the consolidated financial statements was checked. The compliance of related disclosures on the “recoverability of deferred tax assets relating to deductible tax losses” to IFRS were evaluated.

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 IFRS, 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

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 ISA 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.

As part of an audit in accordance with ISA, we exercise professional judgment and maintain professional scepticism 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.

PwC Bağımsız Denetim ve
Serbest Muhasebeci Mali Müşavirlik A.Ş.

A handwritten signature in blue ink, appearing to read 'Çağlar Sürücü', is positioned above the name and title.

Çağlar Sürücü, SMMM
Partner

İstanbul, 8 May 2020

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED FINANCIAL STATEMENT AT 31 DECEMBER 2019

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ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED BALANCE SHEET AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

	Notes	31 December 2019	31 December 2018
ASSETS			
Current assets:			
Cash and cash equivalents	4	832,715	598,576
Financial assets	12	10,008	-
Trade receivables			
- Other trade receivables	7	891,066	609,263
- Due from related parties	7, 27	12,877	23,185
Other receivables			
- Other receivables	8	58,737	33,269
- Due from related parties	8, 27	1,248,988	986,313
Derivative financial instruments	18	-	5,148
Receivables from service concession arrangements	5	258,074	158,453
Inventories	9	62,975	43,021
Other current assets	10	257,109	386,587
Total		3,632,549	2,843,815
Assets held for sale	11	625,282	604,317
Total current assets		4,257,831	3,448,132
Non-current assets:			
Other receivables			
- Other receivables	8	127	-
- Due from related parties	8, 27	1,164,669	1,184,359
Financial assets	12	246	246
Receivables from service concession arrangements	5	2,050,771	1,167,479
Associates	13	532,402	378,523
Property, plant and equipment	15	8,460,616	8,855,823
Intangible assets	16	2,812,381	2,955,771
Right of use assets	14	48,534	-
Deferred tax assets	21	375,127	312,084
Other non-current assets	10	117,862	69,065
Total non-current assets		15,562,735	14,923,350
Total assets		19,820,566	18,371,482

The accompanying notes form an integral part of these consolidated financial statements.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED BALANCE SHEET AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL") unless otherwise indicated.)

	Notes	31 December 2019	31 December 2018
LIABILITIES			
Current liabilities:			
Financial liabilities			
- Borrowings	6	4,738,103	3,362,648
Trade payables			
- Other trade payables	7	2,049,603	1,386,797
- Due to related parties	7, 27	72,942	127,224
Other payables			
- Other payables	8	822,921	709,738
- Due to related parties	8, 27	30,079	28,604
Derivative financial instruments	18	33,170	8,522
Taxes on income	21	31,006	2,897
Other provisions	17	11,141	16,198
Other current liabilities	10	188,409	158,902
Total		7,977,374	5,801,530
Liabilities related to the asset held for sale	11	404,963	406,682
Total current liabilities		8,382,337	6,208,212
Non-current liabilities:			
Financial liabilities	6	8,014,776	7,888,475
Derivative financial instruments	18	111,849	33,076
Other payables			
- Other payables	8	17,012	20,014
Deferred tax liabilities	21	662,013	761,300
Provisions for employment benefits	19	32,584	23,281
Other non-current liabilities	10	868	57,314
Total non-current liabilities		8,839,102	8,783,460
Total liabilities		17,221,439	14,991,672
EQUITY			
Share capital	20	2,110,948	2,110,948
Revaluation fund	15	3,211,890	3,415,981
Share premium		916	916
Hedge reserves		(2,635,595)	(1,984,100)
Actuarial losses		(10,574)	(6,627)
Currency translation adjustment		372,298	281,388
Accumulated losses		(427,608)	(434,657)
Equity attributable to equity holders of the parent		2,622,275	3,383,849
Non-controlling interests		(23,148)	(4,039)
Total equity		2,599,127	3,379,810
Total liabilities and equity		19,820,566	18,371,482

The accompanying notes form an integral part of these consolidated financial statements.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ**CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE PERIOD
1 JANUARY - 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

	Notes	1 January - 31 December 2019	1 January - 31 December 2018
Revenue	22	8,361,136	5,421,300
Cost of sales (-)	23	(6,800,007)	(3,995,421)
GROSS PROFIT		1,561,129	1,425,879
General administrative expenses (-)	23	(202,562)	(153,930)
Marketing and selling expenses (-)	23	(56,420)	(49,856)
Other operating income	24	352,516	236,156
Other operating expense (-)	24	(269,417)	(297,737)
OPERATING INCOME		1,385,246	1,160,512
Share of profit of associates	25	64,302	44,923
Financial income	26	654,428	1,094,127
Financial expenses (-)	26	(2,233,835)	(2,298,903)
(LOSS)/ PROFIT BEFORE TAXATION		(129,859)	659
Current income tax expense	21	(71,686)	(13,408)
Deferred tax (expense)/ income	21	(6,857)	88,353
NET (LOSS)/ PROFIT FOR THE YEAR		(208,402)	75,604
Income attributable to:			
Equity holders of the parent		(189,293)	95,492
Non-controlling interests		(19,109)	(19,888)
		(208,402)	75,604
(Loss)/ income per share (TL)	28	(0.095)	0.048

The accompanying notes form an integral part of these consolidated financial statements.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

	Notes	1 January - 31 December 2019	1 January - 31 December 2018
(Loss) / income for the year		(208,402)	75,604
Revaluation fund	2.7	(9,687)	3,642,457
Changes in actuarial gains on employee benefit obligations		(5,060)	(2,637)
Hedge reserves		(814,368)	(1,736,326)
Changes in currency translation adjustments		90,910	89,175
Deferred income tax related to other comprehensive income/ (loss)		165,924	(396,811)
Other comprehensive (loss)/ income		(572,281)	1,595,858
Total comprehensive (loss)/ income		(780,683)	1,671,462
Total comprehensive (loss)/ income attributable to:			
Equity holders of the parent		(761,574)	1,691,350
Non-controlling interests		(19,109)	(19,888)
Total comprehensive (loss)/ income		(780,683)	1,671,462

The accompanying notes form an integral part of these consolidated financial statements.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

	Attributable to equity holders of the parent							Non-controlling interests	Total equity
	Share capital	Share premium	Hedge reserves	Actuarial losses	Currency translation adjustment	Revaluation fund	Accumulated losses		
1 January 2018	2,110,948	916	(595,039)	(4,572)	192,213	648,807	(660,774)	(1,430)	1,691,069
Non-controlling interests on acquisition of subsidiary	-	-	-	-	-	-	-	17,279	17,279
Transfer	-	-	-	-	-	(130,625)	130,625	-	-
Total comprehensive income	-	-	(1,389,061)	(2,055)	89,175	2,897,799	95,492	(19,888)	1,671,462
31 December 2018	2,110,948	916	(1,984,100)	(6,627)	281,388	3,415,981	(434,657)	(4,039)	3,379,810
1 January 2019	2,110,948	916	(1,984,100)	(6,627)	281,388	3,415,981	(434,657)	(4,039)	3,379,810
Transfer	-	-	-	-	-	(196,342)	196,342	-	-
Total comprehensive loss	-	-	(651,495)	(3,947)	90,910	(7,749)	(189,293)	(19,109)	(780,683)
31 December 2019	2,110,948	916	(2,635,595)	(10,574)	372,298	3,211,890	(427,608)	(23,148)	2,599,127

The accompanying notes form an integral part of these consolidated financial statements.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

	Notes	1 January- 31 December 2019	1 January- 31 December 2018
Cash flows from operating activities:			
(Loss)/ income before taxation		(129,859)	659
Depreciation and amortisation	23, 24	583,158	489,932
Interest income	24, 26	(245,037)	(207,074)
Interest expense	24, 26	1,626,981	1,233,700
Unrealized foreign exchange losses and currency translation differences		60,990	208,922
Loss from financial derivative instruments	18, 26	33,651	18,392
Impairment on revaluation of fixed assets	15	-	2,000
Change in provision for employment termination benefits		8,783	13,115
Provisions		(5,057)	(27,204)
Loss from sale of tangible assets		(397)	(238)
Gain on associates	13	(64,302)	(44,923)
Indexation differences of receivables from service concession agreements	5	(156,939)	(181,011)
Indexation difference on deposits	8, 24	34,094	84,423
Amortization of commission expenses		38,311	30,311
Other adjustments related to non-cash items		(61,560)	(4,327)
Net cash generated from operating activities before changes in operating assets and liabilities		1,722,817	1,616,677
Changes in trade receivables		(261,959)	(219,189)
Changes in other receivables		189,467	(5,197)
Changes in other current and non-current assets		87,830	62,026
Changes in trade payables		564,869	216,372
Changes in other payables		76,041	127
Changes in other liabilities		(27,991)	12,251
Changes in inventories		(2,886)	(60,768)
Collections from service concession arrangements	5	245,543	110,946
Subscriber connection fee	5	47,011	46,287
Termination benefits paid	19	(3,165)	(3,514)
Taxes paid	21	(49,803)	(16,814)
Payment for other provisions		-	(5,258)
Net cash generated from operating activities		2,587,774	1,753,946
Cash flows from investing activities:			
Purchase of property plant and equipment and intangible assets		(151,285)	(656,639)
Investment on service concessions		(906,073)	(168,252)
Proceeds from sale of property, plant and equipment and intangible assets		7,028	3,547
Cash out flow from purchase of subsidiary	24	29,546	(77,385)
Change in assets held for sale		(6,261)	(31,138)
Net cash used in investing activities		(1,027,045)	(929,867)
Cash flows from financing activities:			
Proceeds from issued debt instruments	6	777,264	259,588
Proceeds from bank borrowings	6	1,690,158	2,777,007
Proceeds from other financial liabilities	6	-	6,785
Repayment of bank borrowings	6	(1,555,561)	(1,812,643)
Repayment of issued debt instruments	6	(586,712)	(475,350)
Changes in related parties balances		(23,933)	(208,861)
Interest received		38,273	38,187
Interest paid		(1,397,627)	(978,669)
Cash outflows related to payment of lease liabilities	6	(25,821)	-
Commission paid	6	(89,066)	(120,111)
Net cash used in financing activities		(1,173,025)	(514,067)
Net increase in cash and cash equivalents		387,704	310,012
Effect of foreign currency conversion differences on cash and cash equivalents		(143,557)	(45,618)
Change in restricted cash		(3,806)	719
Cash and cash equivalents at the beginning of the period	4	582,683	317,570
Cash and cash equivalents at the end of the period	4	823,024	582,683

The accompanying notes form an integral part of these consolidated financial statements.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 1 - ORGANISATION AND NATURE OF OPERATIONS

Zorlu Enerji Elektrik Üretim AŞ (“the Company” or “Zorlu Enerji”) and its subsidiaries (collectively referred to as (“the Group”), is engaged in electricity, steam production and selling, distribution and retailing of electricity, trading electricity, distribution of gas and distribution and selling of panel. The Company was established by Zorlu Holding AŞ (“Zorlu Holding”) and Korteks Mensucat Sanayi ve Ticaret AŞ (“Korteks”) in 1993. Ultimate controlling party of the Company is Zorlu Holding. The Company is registered in Turkey and its registered address is as follows: Bursa Organized Industrial Zone, Pembe Street, No: 13 Bursa/Turkey. The Company is registered to the Capital Markets Board (“CMB”), and its shares are publicly traded in Borsa Istanbul AŞ (“BIST”) since 2000. As at 31 December 2019, 32% of its shares are open for trading (31 December 2018: 32%).

The subsidiaries and associates of the Company are presented as below:

Subsidiaries	Nature of business	Country
Rotor Elektrik Üretim AŞ (“Rotor”)	Electricity production	Turkey
Zorlu Jeotermal Enerji Elektrik Üretimi AŞ (“Zorlu Jeotermal”)	Electricity production	Turkey
Zorlu Enerji Pakistan Ltd. (“Zorlu Enerji Pakistan”)	Electricity production	Pakistan
Zorlu Wind Pakistan (Private) Ltd. (“Zorlu Wind Pakistan”)	Electricity production	Pakistan
Zorlu Solar Pakistan (Private) Ltd. (“Zorlu Solar Pakistan”)	Electricity production	Pakistan
Zorlu Rüzgar Enerjisi Elektrik Üretimi AŞ (“Zorlu Rüzgar”)	Electricity production	Turkey
Zorlu Doğal Elektrik Üretimi AŞ (“Zorlu Doğal”)	Electricity production	Turkey
Nemrut Jeotermal Elektrik Üretimi AŞ (“Nemrut Jeotermal”)	Electricity production	Turkey
Zorlu Solar Enerji Tedarik ve Ticaret AŞ (“Zorlu Solar”)	Electricity production and solar panel trading	Turkey
Zorlu Elektrik Enerjisi İthalat İhracat ve Toptan Ticaret AŞ (“Zorlu ElektrikToptan”)	Electricity trading	Turkey
Zorlu Osmangazi Enerji Sanayi ve Ticaret AŞ (“Zorlu Osmangazi”) (*)	Electricity distribution and trading	Turkey
Zorlu Enerji İsrail Ltd. (“Zorlu Enerji İsrail”)	Electricity production	Israel
Zorlu Renewable Pakistan (Private) Ltd. (“Zorlu Renewable Pakistan”)	Electricity production	Pakistan
Zorlu Sun Power (Private) Ltd. (“Zorlu Sunpower Pakistan”)	Electricity production	Pakistan
Zorlu Enerji Dağıtım AŞ (“Zorlu Enerji Dağıtım”) (**)	Gas distribution	Turkey
Zorlu Enerji Asia Holding Ltd. (“Zorlu Asia”)	Energy investment	Dubai
ZES Dijital Ticaret AŞ (“ZES Dijital”) (****)	Electricity sale, renting of electric vehicle and other	Turkey
ZJ Strong Energy for Renewable Energy Ltd. Co. (“ZJ Strong”) (****)	Electricity production	Palestine
Zorlu Trade Elektrik Toptan Satış AŞ (“Zorlu Trade”) (****)	Electricity trading, whole sales	Turkey

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 1 - ORGANISATION AND NATURE OF OPERATIONS (Continued)

Associates	Nature of business	Country
Dorad Energy Ltd. (“Dorad”)	Electricity production	Israel
Ezotech Electric Ltd. (“Ezotech”) (***)	Electricity trading	Israel
Solad Energy Ltd. (“Solad”)	Electricity production	Israel
Adnit Real Estate Ltd. (“Adnit”) (*****)	Electricity production	Israel

(*) Zorlu Osmangazi has 100% shares of Osmangazi Elektrik Dağıtım AŞ (“OEDAŞ”) and Osmangazi Elektrik Satış Perakende AŞ (“OEPSAŞ”).

(**) Zorlu Enerji Dağıtım, which is 100% owned by Zorlu Enerji, has 90% of the shares of Trakya Bölgesi Doğal Gaz Dağıtım AŞ (“Trakya”) and Gazdaş Gaziantep Doğal Gaz Dağıtım AŞ (“Gazdaş”).

(***) Ezotech has 100% shares of Ashdod Energy Ltd. (“Ashdod”) and Ramat Negev Energy Ltd. (“Ramat Negev”).

(****) Zorlu Enerji joined the foundation of the company named “ZES Dijital Ticaret Anonim Şirketi”, established to operate electricity sale, electric vehicle leasing, electric vehicle charging station installation and energy management system development, with 100% share, and ZJ Strong Energy for Renewable Energy Ltd Co, established to build solar energy plants in various regions of Palestine in order to meet Palestine’s electricity need with solar energy and to operate in renewable energy and other energy areas, with 75% share.

(*****) Zorlu Enerji joined the Company named “Adnit Real Estate Ltd” with 42,15% share, owned by Edeltech Ltd a related party of Zorlu Enerji, which is won the tender for a 13 MW solar power plant organized by the Israel Electricity Authority.

As at 31 December 2019, the number of personnel employed was 2,254 (31 December 2018: 2,160).

The power plants of the Company 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				305.0	-
Kızıldere I	Zorlu Doğal	Denizli	Geothermal	15.0	-
Kızıldere II	Zorlu Doğal	Denizli	Geothermal	80.0	-
Kızıldere III	Zorlu Doğal	Denizli-Aydın	Geothermal	165.0	-
Alaşehir I	Zorlu Jeotermal	Manisa	Geothermal	45.0	-
Wind				215.3	-
Gökçeadağ (Rotor)	Rotor	Osmaniye	Wind	135.0	-
Sarıtepe (*)	Zorlu Rüzgar	Osmaniye	Wind	57.0	-
Demirciler (*)	Zorlu Rüzgar	Osmaniye	Wind	23.3	-
Hydroelectric				118.9	-
Tercan	Zorlu Doğal	Erzincan	Hydroelectric	15.0	-
Kuzgun	Zorlu Doğal	Erzurum	Hydroelectric	20.9	-
Ataköy	Zorlu Doğal	Tokat	Hydroelectric	5.5	-
Mercan	Zorlu Doğal	Tunceli	Hydroelectric	20.4	-
Çıldır	Zorlu Doğal	Kars	Hydroelectric	15.4	-
İkizdere	Zorlu Doğal	Rize	Hydroelectric	24.9	-
Beyköy	Zorlu Doğal	Eskişehir	Hydroelectric	16.8	-
Natural Gas				99.7	239.5
Lüleburgaz	Zorlu Enerji	Lüleburgaz, Kırklareli	Cogeneration Natural Gas	49.5	209.5
Bursa	Zorlu Enerji	Bursa Organized Industrial Zone	Combined-Cycle Natural Gas	34.3	-
Yalova	Zorlu Enerji	Altınova, Yalova	Cogeneration Natural Gas	15.9	30.0
TOTAL				738.9	239.5

(*) As per material event disclosure dated 5 February 2020, the sales transaction of all the shares of Zorlu Rüzgar Enerjisi Üretimi AŞ which is 100% subsidiary of the Zorlu Enerji, to İmbat Enerji AŞ, which is 100% subsidiary of Akfen Yenilenebilir Enerji AŞ, had been completed (Note 29).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 1 - ORGANISATION AND NATURE OF OPERATIONS (Continued)

Installed capacity in abroad:

Power Plant	Location	Type	Electricity Production Capacity (MW)	Steam Production Capacity (Ton/Hour)
Wind			56.4	-
Jhimpir	Pakistan	Wind	56.4	-
Natural Gas (*)			290.5	46.4
Dorad	Israel	Combined-Cycle Natural Gas (840 MW)	210.0	-
Ashdod	Israel	Cogeneration Natural Gas (64.54 MW, 40 ton/hour)	27.2	16.9
Ramat Negev	Israel	Cogeneration Natural Gas (126.4 MW, 70 ton/hour)	53.3	29.5
TOTAL			346.9	46.4

(*) Stake of Zorlu Enerji in Israel companies has been taken into consideration in the calculation of total production capacity.

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS

2.1 Financial reporting standards

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (“IFRS”). IFRS comprise accounting standards issued by the International Accounting Standards Board (“IASB”) and interpretations issued by the International Financial Reporting Interpretations Committee (“IFRIC”). The financial statements are based on the historical cost convention, with adjustments and reclassifications for the purpose of fair presentation in accordance with IFRS.

The Group is registered in Turkey, maintains its books of account and prepares its statutory financial statements in accordance with the Turkish Commercial Code (“TCC”), tax legislation and the Uniform Chart of Accounts issued by the Ministry of Finance.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group’s accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 2.5.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.2 Basis of consolidation

The Group maintain their books of accounts and prepare their statutory financial statements in accordance with the Turkish Commercial Code (“TCC”), tax legislation, the Uniform Chart of Accounts issued by the Ministry of Finance and principles. These consolidated financial statements have been prepared under historical cost conventions except for financial assets and financial liabilities which are carried at fair value and property plant and equipments accounted at fair value. The consolidated financial statements are based on the statutory records, which are maintained under historical cost conventions, with the required adjustments and reclassifications reflected for the purpose of fair presentation in accordance with IFRS.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Company’s accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 2.7.

The Group also prepares its consolidated financial statements in accordance with the Turkish Accounting Standards/Turkish Financial Reporting Standards (“TAS/TFRS”) issued by Public Oversight Accounting and Auditing Standards Authority (“POA”). These consolidated financial statements have been authorized for issue by the Board of Directors on 9 March 2020.

The consolidated financial statements includes the accounts of the parent company, Zorlu Enerji and its affiliates 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 IFRS by applying uniform accounting policies and presentation. The results of operations of affiliates are included or excluded from their effective dates of acquisition or disposal respectively.

Subsidiaries

Zorlu Enerji controls a subsidiary when it is exposed, or has rights, to variable returns from its involvement with the subsidiary and has the ability to affect those returns through its power over the subsidiary. Zorlu Enerji has power over a subsidiary when Zorlu Enerji has existing rights that give it the current ability to direct the relevant activities that significantly affect the subsidiary’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.

Subsidiaries 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 subsidiaries. Subsidiaries 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.

The balance sheets and statements of profit or loss the subsidiaries are consolidated on a line-by-line basis and the carrying value of the investment held by Zorlu Enerji and its subsidiaries are eliminated against the related equity. Intercompany transactions and balances between Zorlu Enerji and its subsidiaries are eliminated with the scope of consolidation accounting.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.2 Basis of consolidation (Continued)

Disposal of subsidiaries

If the Group loses control of a subsidiary, it recognizes any investment retained in the former subsidiary 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 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 subsidiary are accounted for as if those were disposed 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 subsidiaries are separately classified in the consolidated balance sheets and consolidated statements of 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 subsidiary 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 accounted for in equity.

The table below sets out all subsidiaries and demonstrates the proportion of ownership interest as at 31 December 2019 and 31 December 2018. Financial statements of subsidiaries are consolidated using the full consolidation method.

Subsidiaries	Direct ownership interest by the Company and its Subsidiaries (%)	
	31 December 2019	31 December 2018
Rotor	100.00	100.00
Zorlu Hidroelektrik (****)	-	100.00
Zorlu Jeotermal	100.00	100.00
Zorlu Enerji Pakistan	100.00	100.00
Zorlu Wind Pakistan	99.70	99.70
Zorlu Solar Pakistan	99.70	99.70
Zorlu Rüzgar (***)	100.00	100.00
Zorlu Doğal	100.00	100.00
Nemrut	75.00	75.00
Zorlu Solar	100.00	100.00
Zorlu Elektrik	100.00	100.00
Zorlu Osmangazi	100.00	100.00
Zorlu Enerji İsrail	100.00	100.00
Zorlu Renewable Pakistan	99.70	99.70
Zorlu Sun Power	99.70	99.70
Zorlu Enerji Dağıtım (**)	100.00	100.00
Zorlu Enerji Asia	100.00	100.00
ZES Dijital (*)	100.00	-
ZJ Strong Energy (*)	75.00	-
Zorlu Trade (*)	100.00	-

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.2 Basis of consolidation (Continued)

- (*) Zorlu Enerji joined the foundation of the company named "ZES Dijital Ticaret Anonim Şirketi", established to operate electricity sale, electric vehicle leasing, electric vehicle charging station installation and energy management system development, with 100% share, and ZJ Strong Energy for Renewable Energy Ltd Co, established to build solar energy plants in various regions of Palestine in order to meet Palestine's electricity need with solar energy and to operate in renewable energy and other energy areas, with 75% share.
- (**) The establishment registration procedures of Zorlu Enerji Dağıtım were completed on 20 April 2018, and Zorlu Enerji Dağıtım owns 90% of Gazdaş and Trakya shares. Non-controlling interests representing 10% of Trakya and Gazdaş are significant for the Group's consolidated financial statements, and summary financial information related to Trakya and Gazdaş is disclosed in Note 3 in the natural gas distribution segment.
- (***) As per the material event statement dated 30 October 2018, the start of the negotiations for the sale of the Rotor, Rüzgar, Gazdaş and Trakya was announced to the public. As of 31 December 2018, only Zorlu Rüzgar among the aforementioned companies, met the terms of the TFRS 5 "Non-current Assets Held for Sale and Discontinued Operations" standard, and the assets and liabilities related to this subsidiary were classified as "assets held for sale" and "liabilities related to the asset held for sale". As per material event disclosure dated 5 February 2020, the sales transaction of all the shares of Zorlu Rüzgar Enerjisi Üretimi AŞ which is 100% subsidiary of the Zorlu Enerji, to İmbat Enerji AŞ, which is 100% subsidiary of Akfen Yenilenebilir Enerji AŞ, had been completed.
- (****) As per the material event statement dated 6 December 2019, the registration of the facilitated merger of Zorlu Hidroelektrik with Zorlu Enerji is announced in Turkey Trade Register Gazette.

Investment in Associates

The Group's investments in associates are accounted under the equity method of accounting. Investments in associates are undertakings over which the Group generally has between 20% and 50% of the voting rights and the Group has significant influence and which are not subsidiaries or joint ventures of the Group. The investments in associates are carried in the consolidated balance sheet at cost plus post-acquisition changes in the Group's share of net assets of the associates, less any impairment in value. The consolidated statement of income/loss reflects the Group's share of the results of operations of the associates.

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 obligation or has made payments on behalf of the associate.

The table below sets out all associates and demonstrates the proportion of ownership interest as at 31 December 2019 and 31 December 2018:

Associates	Direct ownership interest by the Company and its associates (%)	
	31 December 2019	31 December 2018
Dorad	25.00	25.00
Ezotech	42.15	42.15
Solad	42.15	42.15
Adnit	42.15	-

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.3 Amendments in International Financial Reporting Standards

a) Standards, amendments and interpretations applicable as at 31 December 2019:

- IFRS 9, Financial instruments;
- IAS 28, Investments in associates and joint venture;
- IFRS 16, Leases;
- IFRIC 23, Uncertainty over income tax treatments;
- Annual improvements 2015-2017;
 - IFRS 3, Business combinations, - a company remeasures its previously held interest in a joint operation when it obtains control of the business;
 - IFRS 11, Joint arrangements, - a company does not remeasure its previously held interest in a joint operation when it obtains joint control of the business;
 - IAS 12, Income taxes - a company accounts for all income tax consequences of dividend payments in the same way;
 - IAS 23, Borrowing costs;
- Amendments to IAS 19, Employee benefits on plan amendment, curtailment or settlement;

The application of these amendments and interpretations do not have a material affect on the financial statement of the Group except IFRS 16, Leases. Effect of IFRS 16 are presented in Note 2.4 detailed.

b) Standards, amendments and interpretations that are issued but not effective as at 31 December 2019:

- Amendments to IAS 1 and IAS 8 on the definition of material;
- Amendments to IFRS 3 - definition of a business;
- Amendments to IFRS 9, IAS 39 and IFRS 7 - Interest rate benchmark reform;
- IFRS 17, Insurance contracts;

The Group will evaluate the effects of these amendments and will apply them starting from their effective dates.

2.4 Accounting Policies, Changes in Accounting Estimates and Errors

Material changes in accounting policies and accounting errors are applied on a retrospective basis as if a prior period error had never occurred or the policy had always been applied. The effect of change in accounting estimate shall be recognized prospectively by including it in the statements of comprehensive income within the period of the change, if the change affects that period only; or period of the change and future periods, if the change affects both.

IFRS 16 “Leases”:

The Group has applied accounting policy changes arising from the first time implementation of the IFRS 16 “Leases” effective from 1 January 2019, in accordance with the transitional provisions of the relevant standard.

The effects of this standard-led accounting policy change and the effects of the first time implementation of relevant standard are as follows:

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.4 Accounting Policies, Changes in Accounting Estimates and Errors (Continued)

Group - as a lessee

If a contract regulates the right to control the use of an asset that is defined in the contract for a certain period and for a specific price, this contract is considered as a lease in its nature or includes a lease transaction. At the beginning of a contract, the Group assesses whether the contract is a lease or include a lease transaction. The Group considers the following conditions when assessing whether or not a contract transfers the right to control the use of a defined asset for a specified period of time:

- a) The existence of a clearly or implicitly identifiable asset that constitutes the subject of the lease.
- b) The lessee has the right to obtain almost all of the economic benefits from the use of the defined asset that constitutes the subject of the lease.
- c) The lessee has the right to manage the use of the defined asset that constitutes the subject of the lease. According to circumstances listed below, the tenant is deemed to have the right to manage the defined asset constituting the subject of the lease;
 - i. The lessee has the right to operate the property for the duration of its use (or to direct others to operate the entity in its own way) and the lessor does not have the right to change these operating instructions or
 - ii. Designing the asset (or certain features of the asset) in advance in a manner of how and for what purpose the asset will be used during its occupancy by the lessee.

In the event of a contract fulfills these conditions, the Group reflects the existence of a right to use and a lease liability to the financial statements at the date of the lease's actual start.

The right-of-use asset

The right-of-use asset initially recognized by the cost method and includes the followings:

- a) The first measurement amount of the lease liability to be recognized as the right of use asset,
- b) Deduction of all leasing incentives related to the lease, from the first measurement amount of the lease liability recorded as a right of use asset,
- c) All direct costs, that are related to the lease, incurred by the Group to be added to the first measurement amount of the lease liability, which will be recognized as a right of use asset, and
- d) Estimated costs to be incurred by the Group shall be added to the initial measurement amount in relation to the dismantling and transporting of the defined asset constituting the subject of the lease, the restoration of the area in which it is placed, or the restoration of the defined asset as required by the terms and conditions of the lease.

In applying the cost method, the Group measures the right of use asset by:

- a) deducting the accumulated depreciation and accumulated impairment losses and
- b) measuring the cost of the lease in accordance with the re-measurement of the lease liability.

The Group applies depreciation provisions in IAS 16 “Property, Plant and Equipment” while depreciating the right of use asset. In order to determine whether the right of use asset has been impaired or not and to recognize any impairment losses the IAS 36 “Impairment of Assets” is implemented.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.4 Accounting Policies, Changes in Accounting Estimates and Errors (Continued)

As of 31 December 2019 and 1 January 2019, the details of the right of use assets accounted for in the condensed consolidated interim financial information are as follows:

	31 December 2019	1 January 2019
Lands	27,062	27,882
Buildings	7,188	4,637
Motor vehicles	14,284	29,055
Total right of use asset	48,534	61,574

As of 1 January 2019, lands amounting to TL27,062 thousand, which are accounted for under right of use assets, are related to lands rented for Gökçedağ powerplant of Rotor and its useful life is 34 years. Buildings amounting to TL7,188 thousand, which are accounted for under right of use assets, are related to office leases and their useful life changes between 1-10 years. Motor vehicles amounting to TL14,284 thousand are related to car rentals and their useful life changes between 2-4 years.

Lease liability

At the effective date of the lease, the Group measures its leasing liability at the present value of the lease payments not realized at that date. If the interest rate on the lease can be easily determined, this rate is used in discount; if the implied interest rate cannot be easily determined, the payments are discounted by using the alternative borrowing interest rate of the lessee.

Lease payments that are included in the measurement of the lease liability of the Group and the payments that are not occurred on the date when the lease is actually started consist of the following:

- Amount deducted from all types of rental incentive receivables from fixed payments,
- Lease payments based on an index or a rate, lease payments made using an index or a rate at the time the initial measurement was actually started.

The penalty for termination of the lease in cases the lessee shows a sign of it will use an option to terminate the lease.

After the effective date of the lease, the Group measures its lease liability as follows:

- Increasing the book value by reflecting interest on lease liability
- Reducing the book value by reflecting the lease payments made
- Re-measures the book value to reflect any re-evaluations and reconfigurations, if any. The Group reflects the remeasured amount of the lease obligation to the financial statements as adjustment in the use of right.

Extension and early termination options

A lease obligation is determined by considering the extension of the contracts and early termination options. Most of the extension and early termination options included in the contracts consist of options that are jointly applicable by the Group and the lessor. However, if such extension and early termination options are at the Group's discretion in accordance with the contract and the use of the options is reasonably certain, the lease term shall be determined by taking this issue into account. If there is a significant change in the conditions, the evaluation is reviewed by the Group.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.4 Accounting Policies, Changes in Accounting Estimates and Errors (Continued)

Variable lease payments

The Group's lease contracts also include variable lease payments which are not in the scope of IFRS 16. Variable lease payments are recognised in profit or loss in the related period.

Facilitative applications

Short-term lease agreements with a period of 12 months and less, have been assessed under the exemption granted by the IFRS 16 and payments for these contracts are recognized as an expense in the period in which they are incurred.

Transition to IFRS 16, "Leases"

IFRS 16 "Leases" replaces IAS 17, "Leasing Operations", as of 1 January 2019, and the Group retrospectively ("cumulative effect method") recognized the cumulative effect of applying the standard on its financial statements at once. Within the scope of the simplified transition application defined in the related standard, the comparative information of the financial statements and retained earnings have not been restated.

Under the first implementation of IFRS 16, before 1 January 2019, the lease commitments are accounted for as a lease obligation in accordance with IAS 17 in financial statements. This lease liability has been measured at the present value of the lease payments, which have not been realized as of the date of transition, discounted using the alternative borrowing interest rate at the date of initial application of the Group. The right to use of assets are accounted for an amount equal to the lease obligations (adjusted for the amount of prepaid or accrued lease payments) within the scope of simplified transition application in the related standard.

The reconciliation of operating lease commitments followed within the scope of IAS 17 prior to the first implementation date and the lease obligations accounted in consolidated financial statements as of 1 January 2019 are as follows:

	1 January 2019
Operating lease commitments under IAS 17	202,110
Total lease liabilities under IFRS 16 (Undiscounted)	202,110
Total lease liabilities under IFRS 16 (discounted with alternative borrowing rate)	61,574
- Short-term lease liabilities	26,491
- Long-term lease liabilities	35,083

In measuring lease liabilities, the Group has discounted its lease payments using the alternative borrowing rate and the discount rate applied for TL is between 18%-27% as of 1 January 2019. In measuring the alternative borrowing rate, the Group was considered the interest rate of similar borrowings.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 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:

- a) Directly, or indirectly through one or more intermediaries, the party:
 - i) controls, is controlled by, or is under common control with, the Group (this includes parents, subsidiaries and fellow subsidiaries);
 - ii) has an interest in the Group that gives it significant influence over the Group; or
 - iii) has joint control over the Group;
- b) The party is an associate of the Group;
- c) The party is a joint venture in which the Group is a venture;
- d) The party is member of the key management personnel of the Group or its parent;
- e) The party is a close member of the family of any individual referred to in (a) or (d);
- f) 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); or
- g) The party has a post-employment benefit plan for the benefit of employees of the Group, or of an entity that is a related party of the Group.

Related party transactions are transfer of resources or obligations between related parties, regardless of whether a price is charged. A number of transactions are entered into with related parties in the normal course of business (Note 27).

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, which is the functional currency of Group and the presentation currency of the Group.

Foreign consolidated subsidiaries are regarded as foreign entities since they are financially, economically and organizationally autonomous. Their reporting currencies are the respective local currencies. Financial statements of foreign consolidated affiliates are translated at year-end exchange rates with respect to the financial position and at exchange rates at the dates of the transactions with respect to the income statement. All resulting translation differences between the closing balances and opening balances due to the difference in inflation and devaluation are included in currency translation adjustment in equity.

c) Property, plant and equipment

The Group has chosen revaluation method among application methods mentioned under IAS 16 for its powerplants. The fair value of its powerplants is determined by using “income approach - discounted cash flow analysis” in the valuation reports. Motor vehicles and furniture and fixtures are carried at cost less accumulated depreciation and impairment losses if any.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

The fair value of powerplants belonging to Zorlu Enerji is determined by using "market approach and cost method" and fair values of all other power plants are determined by using "income approach - discounted cash flow analysis".

Increase in property, plant and equipments due to the revaluation is credited after netting of the deferred tax effect on revaluation fund account under shareholders' equity in the balance sheet. The difference between amortization (reflected in income statement) calculated by the carried amounts of revalued assets and amortization calculated by the acquisition costs of these assets is transferred to accumulated deficit from revaluation fund after netting of the deferred tax effect on a yearly basis. The same method is also applicable for tangible asset disposal.

Land is not depreciated as it is deemed to have an indefinite life. Depreciation is provided on restated costs of property, plant and equipment using the straight-line method based on the estimated useful lives of the assets.

Foreign currency values identified in the valuation of Kızıldere II and Kızıldere III projects (owned by Zorlu Doğal), Zorlu Jeotermal and Zorlu Pakistan power plant projects, which was carried out on 30 September 2018, were reflected in the consolidated financial statements considering the 31 December 2018 exchange rate. Due to the extension of the license period, the value of Rotor's wind power plant project has been taken into account in the consolidated financial statements as of 31 December 2018. In addition, Zorlu Doğal's Kızıldere I geothermal power plant and hydroelectric power plants and Zorlu Enerji's natural gas power plants were revalued on 31 December 2018 and taken into account in the consolidated financial statements with their new values. The revaluation of the power plants in Turkey was carried out by Avrupa Gayrimenkul Değerleme ve Danışmanlık AŞ, accredited by the CMB. The fair value of the Zorlu Pakistan wind power plant project, established in Pakistan, was determined by A A Baig & Co. Chartered Accountants.

Zorlu Rüzgar wind power plants were revalued on 30 September 2018, and as per the material event disclosure of Zorlu Enerji dated 30 October 2018, the assets and liabilities of Zorlu Rüzgar as of 31 December 2018 are presented as assets held for sale and liabilities related to the asset as held for sale. As a result of these classifications, the depreciation calculation of Zorlu Rüzgar's power plants was ceased as of 30 September 2018.

The assumptions used in the valuation reports are presented in Note 2.7.

The useful lives determined by the valuation of the Zorlu Doğal power plants as 20 years for Kızıldere I, II and III JES and hydroelectric power plants, Zorlu Jeotermal as 22 years, Zorlu Pakistan as 15 years and Rotor as 20 years. On the other hand, for the power plants of Zorlu Enerji, which their fair values are determined by market approach and cost method, the estimated useful lives are taken into consideration as follows:

	Useful live
Buildings	30-45
Land improvements	45-48
Plant and machinery	6-48

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

Expenses for the repair of property, plant and equipment are normally charged as expense. They are, however, capitalised if they result in an enlargement or substantial improvement of the respective assets.

Gains or losses on disposals of property, plant and equipment which are calculated as the difference between net carrying value and the collections made are included in the related income and expense accounts, as appropriate. Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down immediately to its recoverable amount.

d) Intangible assets

Intangible assets are carried at cost less accumulated depreciation and impairment losses. Intangible assets comprise licenses, computer softwares, service concession arrangements, customer relationships and goodwill.

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 asset net selling price or value in use. An impairment provision is reflected in the profit or loss statement within the same period.

Computer softwares

Computer softwares are recorded at acquisition cost and amortised on a straight-line basis over their estimated useful lives of 3 - 15 years. Where an indication of impairment exists, the carrying amount of any intangible assets is assessed and written down immediately to its recoverable amount.

Service concession arrangement

Service concession arrangements owned as a result of business combinations are recognised at their fair values at the acquisition date. The duration of the electricity distribution service concession arrangement and natural gas distribution service concession arrangement were determined to be 20 years for OEDAŞ and 22 years for Gazdaş and Trakya. The service concession arrangements is amortised during this time (Note 16).

Customer relationships

Customer relationships acquired as a result of business combinations related OEPSAŞ are recognised at their fair value at the acquisition date. The duration of customer relationships is determined to be 20 years for OEPSAŞ. Customer relationships are amortised by straight line method in accordance this time (Note 16).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (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 IFRS 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 condensed consolidated interim financial information as goodwill. In business combinations the assets, intangible assets and contingent obligations that are not covered by the financial statements of the acquired entity but that could be separated from the goodwill are recognised in the condensed consolidated interim balance sheet 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 Group's share of the net fair value of the identifiable assets, obligations and contingent obligations is more than the cost of the business combination the excess is accounted for in the consolidated statement of income in the related period.

Goodwill is tested for impairment annually and more frequently if impairment indicators are present. Carrying amount of goodwill and higher of fair value less costs of disposal and value in use compared. Impairment losses are recognized as an expense immediately in the consolidated statement of profit or loss and not reversible for subsequently periods (Note 2.8).

e) Receivable from service concession arrangements

IFRIC 12, "Service concession arrangements" regulate 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 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 arrangement transferred from public to private sector.

The Group recognises investment expenditure 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.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

In scope of the IFRIC 12, all investments of the Group related to electricity and gas distribution operation is recognised as “Receivables from service concession arrangements” (Note 5). Service concession agreements related OEDAŞ disclosed under intangible assets are included in the consolidated financial statements in 2017 as a result of the business combination accounting applied in the scope of IFRS 3.

Receivables from service concession arrangements 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 arrangements are depreciated over 22 years as per the concession arrangements concerning gas distribution activities (Note 5).

As per the concession arrangement for natural gas distribution companies, the Group accounts under intangible assets, investments of the first 8 years, carried out until the asset base developed, that it could not invoice to its customers (31 December 2019: contract cost, net TL58,165 thousand, 31 December 2018: contract cost, net TL61,587 thousand) and amortises for the duration of the remaining licence period (Note 16). The relevant amortization expense is accounted under cost of sales (as of 31 December 2019: depreciation expense is TL3,422 thousand and 31 December 2018: depreciation expense is TL1,712 thousand (Note 16)).

f) Revenue Recognition

The Group recognizes revenue in accordance with IFRS 15 “Revenue from contracts with customers” standard when the goods or services is transferred to the customer and when performance obligation is fulfilled based on the following main 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 assess the goods or services promised in a contract with a customer and identify as a performance obligation each promise to transfer to the customer.

For each performance obligation identified, the entity determine at contract inception whether it satisfies the performance obligation over time or satisfies the performance obligation at a point in time. If the Group transfers control of a good or service over time and therefore satisfies a performance obligation and recognises revenue over time. However, all of the Group's sales of goods and services include a single performance obligation.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

The Group recognises revenue when the entity satisfies a performance obligation by transferring a promised good or service to the customer. An asset is transferred when the customer obtains control of that asset or service.

The Group recognized 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,
- Group can identify each party's rights regarding the goods or services to be transferred,
- Group can identify the payment terms for the goods or services to be transferred;
- The contract has commercial substance,
- It is probable that Group will collect the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer. In evaluating whether collectability of an amount of consideration is probable, an entity shall consider only the customer's ability and intention to pay that amount of consideration when it is due.

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.

The Group's performance obligations consist of distribution of electricity and gas and electricity sales. The customer consumes the benefits of the Group simultaneously. Electricity sales are recognized as soon as electricity is delivered. Electricity and gas distribution services are recognized as soon as services are rendered. The Group recognise revenue when the entity satisfies a performance obligation by transferring a promised good or service to the customer. Due to the Group's operations, IFRS 15 does not have a significant impact on the financial position or performance of the Group.

Retail and wholesale electricity sales income

Electricity sales revenue is accounted in the case of realization of electricity delivery on an accrual basis, through the invoiced amount.

Electricity distribution

• **Distribution systems income**

Distribution revenue comprises distribution, meter reading, transmission, theft and loss. Electricity distribution and meter reading services are in the scope of the service concession agreement under EMRA regulations. As per Electricity Market Law, the Electricity Market Tariffs Regulation and other relevant regulations, the Group's distribution, transmission and meter reading services are subject to a revenue cap. Realized revenue includes operating expenses and investment needs related to distribution of electricity and meter reading services. Similarly, transmission revenue consists of the transmission costs allocated by Türkiye Elektrik İletim A.Ş. ("TEİAŞ"). This regulation guarantees the Group's revenue no matter the consumption level of the subscribers. Overcharges and undercharges by the Group are calculated at the end of each year and are adjusted through tariffs by EMRA two years later.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

Distribution system income difference of tariff year is the difference between the revenue cap related to distribution system income and realized tariff year distribution income and is recognised as accrual basis.

- **Interest income on financial assets**

The interest income portion of the revenue related to the service concession agreements for meter reading and retail sales is recognised as per Service Concession Agreements (IFRIC 12). Interest income earned from receivables from concession agreements is recognised using the effective interest method.

- **Income from investment expenditures**

OEDAŞ makes investments in power line, facility and various construction activities in the electricity distribution system to fulfil demand estimates determined by EMRA. Revenue and costs related to the investment expenditure are recognised within the framework of IFRS 15. Income from investment expenditures is recognised as a single performance obligation and at a point in time.

- **General Lighting Income**

When electricity is delivered, electricity sales to general lighting customers is recognised on an accrual basis.

Gas distribution

- **Income from investment expenditures**

Gazdaş and Trakya make investments in power line, facility and various construction activities in the gas distribution system to fulfil demand estimates determined by EMRA. Revenue and costs related to the investment expenditure are recognised within the framework of IFRS 15.

- **Natural gas sales 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.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

Gazdaş and Trakya reflects 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 account the revenue as gross, since they are mainly responsible for ensuring 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 on financial assets**

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.

Sales of electricity from production

It is the revenue generated from electricity produced by the Group through its power plants. Since electricity is a service provided as a series that the client gets and consumes simultaneously, it is recognised as one performance, over time and through output method.

g) Assets held for sale

Non-current assets (or disposal groups) are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. They are measured at the lower of their carrying amount and fair value less costs to sell, except for assets such as deferred tax assets, assets arising from employee benefits, financial assets and investment property that are carried at fair value and contractual rights under insurance contracts, which are specifically exempt from this requirement.

Non-current assets (including those that are part of a disposal group) are not depreciated or amortised while they are classified as held for sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale continue to be recognised.

Non-current assets classified as held for sale and the assets of a disposal group classified as held for sale are presented separately from the other assets in the balance sheet. The liabilities of a disposal group classified as held for sale are presented separately from other liabilities in the consolidated balance sheet.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)**2.5 Summary of significant accounting policies (Continued)****h) Deferred revenue**

Electricity sales revenue in the period is subject to the correction in accordance with income ceiling determined by EMRA and described by tariff chart in Regulatory Accounting Guidelines (“RAG”). The excess/deficit parts occurred in revenue are recorded to the tariff determined by EMRA as correction at the end of second year of occurrence and are offset from tariffs 2 years later. The excess part for the period is classified under short-term and long-term liabilities in the financial statements and deficit parts are classified under income accrual.

i) Deposits received*Accounting policy for deposit received from electricity distribution segment*

The Group receives deposits from the customers on behalf of the Turkish Electricity Distribution Corporation (“TEDAŞ”) during subscription and these deposits are determined by the tariffs and methods announced by EMRA and they are recognized over their fair value at the time when they are received from the customers. In accordance with the decision of EMRA about “The Rules and Regulation related to the Update of Guarantee Payments in Electricity Market”, the Group updates the deposits in accordance with the methods identified by EMRA and deposits are refunded to subscribers over their indexed values, where index is periodically updated by EMRA, upon termination of subscription of customers. Besides, in accordance with “the Transfer of Operating Right” (“TOR”) agreement signed with TEDAŞ, the Group has to follow the deposits received from the subscribers and the refunded deposits and to pay the net balance to TEDAŞ in the year of 2036 that is the end of the license period. The Group reflects the net of deposits received from and refunded to the subscribers in its consolidated financial statements (Note 24).

Accounting policy for deposit 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 refunded to the subscriber or their authorised representative within five 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.

The indexation of the deposits received is recognised under other operating expenses in the consolidated statement of income (Note 24).

j) Impairment of Non-Financial Assets

All assets are reviewed for impairment losses including property, plant and equipment and intangible assets whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. 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 an asset’s net selling price and value in use. Impairment losses are recognized in the consolidated statement of comprehensive income.

Impairment losses on assets can be reversed, to the extent of previously recorded impairment losses, in cases where increases in the recoverable value of the asset can be associated with events that occur subsequent to the period when the impairment loss was recorded.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

k) Borrowing Costs

Borrowings are recognized initially at fair value, net of transaction costs incurred. In subsequent periods, borrowings are stated at amortised cost using the effective yield method; any difference between proceeds (net of transaction costs) and the redemption value is recognized in the statement of income over the period of the borrowings.

The Group capitalizes borrowing costs as part of the cost of the qualifying asset in the period in which the asset is prepared for its intended use or sale. All other borrowing costs are charged to the statement of comprehensive income when they are incurred.

l) 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. Possible assets or obligations that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group are not included in the consolidated financial statements and are treated as contingent assets or liabilities (Note 17).

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 not recognized in the financial statements since this may result in the recognition of income that may never be realized.

A contingent asset is 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 financial statements of the period in which the change occurs.

m) Employment termination benefits

Provisions for employee termination benefits:

Under the Turkish Labour Law, the Group is required to pay termination benefits to each employee who has completed one year of service and whose employment is terminated without due cause, male employees who is called up for military service, female employees who request dismissal due to marriage within one year following the marriage, employees who are deceased, those within the scope of Article 4a of Law No. 5510 who fulfil retirement conditions apart from age (i.e. 15 years service and 3,600 premium days for those whose employment started before 8 September 1999) and employees who resign due to being entitled to a pension.

Under the Turkish Labour Law, according to IAS 19 “Employee termination benefits”, the provision has been calculated by estimating the present value of the future probable obligation of the Company arising from the retirement of the employees (Note 19).

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AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

n) Income/(loss) per share

Income per share are determined by dividing net gain by the weighted average number of shares that have been outstanding during the related year concerned. In Turkey, 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. For the purpose of loss per share computations, the weighted average number of shares outstanding during the year has been adjusted in respect of bonus shares issues without a corresponding change in resources, by giving them retroactive effect for the year in which they were issued and each earlier year (Note 28).

o) Current and deferred income tax

Taxes include current period income taxes and deferred income taxes. Current year tax liability consists tax liability on period income calculated based on currently enacted tax rates as of balance sheet date and according to tax legislation in force and includes adjustments related to previous years’ tax liabilities.

Deferred income tax is provided, using the liability method, 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 income tax assets will be utilized or deferred income tax liabilities will be settled, are used to determine deferred income tax.

Deferred income 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 income tax liabilities are recognized for all taxable temporary differences, where deferred income 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 income tax assets are decreased to the extent necessary, if future taxable profits are not expected to be available to utilize deferred income tax assets partially or fully.

Deferred income tax assets and deferred income tax liabilities related to income 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 21).

p) Reporting of cash flows

In the consolidated statement of cash flows, cash flows during the year are classified under operating, investing or financing activities.

The cash flows raised from operating activities indicate cash flows due to the Group’s operations.

The cash flows due to investing activities indicate the Group cash flows that are used for and obtained from investments (investments in property, plant and equipment and financial investments).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

The cash flows due to financing activities indicate the cash obtained from financial arrangements and used in their repayment.

Cash and cash equivalents comprise cash on hand and bank deposits and short-term, highly liquid investments that are readily convertible to known amounts of cash with maturities equal or less than 3 months and which are subject to an insignificant risk of changes in value (Note 4).

r) Subsequent events

Subsequent events consist of all events between balance sheet date and date of authorization for validity, even if they have been existed after public explanation of an announcement about profit or other financial information. In the case that events requiring an adjustment to the financial statements occur subsequent to the balance sheet date, the Group makes the necessary corrections on the financial statements (Note 29).

s) Share premium

Share premium represents differences resulting from the sale of the Group's subsidiaries' and 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 20).

t) Offsetting

Financial assets and liabilities are offset and the net amount reported in the financial position when there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

u) Financial assets and liabilities

Classification and measurement

The Group classifies the financial assets as three groups such as subsequently measured at amortised cost, fair value through profit or loss and fair value through other comprehensive income. The classification is made on the basis of the entity's business model for managing the financial assets/liabilities and contractual cash flow characteristics of the financial asset/liability. The Group classifies its financial assets and liabilities at the date which they are purchased.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

Financial assets	Classification in accordance with IFRS 9
Cash and cash equivalents	Amortized cost
Trade receivables	Amortized cost
Derivative financial instruments	Fair value through other comprehensive income
Derivative financial instruments	Fair value through profit or loss
Receivables from service concession arrangements	Amortized cost
Other receivables	Amortized cost

Financial liabilities	Classification in accordance with IFRS 9
Derivative financial instruments	Fair value through other comprehensive income
Derivative financial instruments	Fair value through profit or loss
Borrowings	Amortized cost
Trade payables	Amortized cost

Financial assets and liabilities carried at amortized cost

“Financial assets measured at amortised cost”, are the financial assets held within a business model whose objective is to hold financial assets in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount standing, not have an active market and non-derivatives financial assets. “Cash and cash equivalents”, “Trade receivables”, “Other receivables” and “Receivables from service concession arrangements” are classified as financial assets and “Trade payables” and “Borrowings” are measured at amortised cost using the effective interest method. Gains and losses recognised as a result of the fair value adjustments of financial assets and liabilities amortised at cost and non-derivative financial assets are included in the consolidated statement of profit or loss.

- **Cash and cash equivalents**

Cash and cash equivalents comprise cash in hand, bank deposits and highly liquid investments without a significant risk over the change in their value, whose maturity at the time of purchase is three months or less (Note 4). Cash and cash equivalents used in cash flow statement comprise cash and cash equivalents with short-term maturities of less than 3 months, excluding accrued interest income and blocked deposits.

- **Trade receivables**

Short-term trade receivables are measured at the invoice amount unless the effect of interest accrual is significant. In the circumstances that there is a situation which indicates that the Company will not be able to collect all amounts due, a provision for impairment is established for the trade receivables. The amount of such provision is the difference between the book value of the receivable and the collectible amount. The collectible amount is the current value of the expected cash flow, including the amounts to be collected from guarantees and collaterals, which is discounted based on the original effective interest rate of the initial receivable (Note 7).

**CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

When calculating the impairment of trade receivables, which are recognised based on the cost amortised in financial statements and do not include an important financing component (with maturities less than one year), Company has chosen the “simplified approach” in IFRS 9 standard. In accordance with the simplified approach, Company measures the loss allowances regarding its trade receivables at an amount equal to “lifetime expected credit losses” except incurred credit losses in which trade receivables are already impaired for a specific reason date. The Company uses a provision matrix in the calculation of expected credit losses. Provision rate is calculated based on the overdue days of trade receivables and the rates are revised each reporting period if necessary.

The Group collects certain parts of its receivables through factoring. From the receivables subject to factoring transactions, the amounts assumed by the factoring company in the risk of collection are deducted from the related receivable accounts. Due to the fact that the time between the sales dates and maturities of trade receivables subject to factoring transactions is insignificant, the business model of the related trade receivables has not been changed and has been accounted over the amortized cost.

- **Trade payables**

Trade payables are recognised initially at fair value and subsequently measured at amortised cost. Short-term trade payables are measured at invoice amount due to insignificance of interest accrual effect.

- **Borrowings**

Borrowings are recognized initially at fair value, net of transaction costs incurred. In subsequent periods, borrowings are stated at amortised cost using the effective yield method; any difference between proceeds (net of transaction costs) and the redemption value is recognized in the statement of income over the period of the borrowings. Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the balance sheet date. The long-term portion of the borrowing of the Group can be included in the short-term liabilities unless the necessary covenants, which cause the recall of the borrowing given by the related financial institute (event of default exercises), are not met about the borrowing taken on and before the balance sheet date. Borrowings are removed from the balance sheet when the obligation specified in the contract is discharged, cancelled or expired.

In the case of a financial liability modification, any costs or fees occurred regarding these liabilities is deducted from the carrying amount of the liability and amortised during the terms of the modified loan agreement.

Financial assets and liabilities at fair value through profit or loss

The financial assests of the Group which are carried at fair value include derivative instruments that are not subject to hedge accounting. Derivative financial instruments are initially recognised at the acquisition cost reflecting the fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Gains or losses arising from the valuation of these kinds of assets are recognized in the consolidated statement of profit or loss. Derivative instruments which are carried at fair value through profit or loss include cross currency swap transactions. Derivative instruments are recognized as asset when the fair value of the instrument is positive, as liability when the fair value of the instrument is negative.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)**2.5 Summary of significant accounting policies (Continued)*****Financial assets and liabilities at fair value through other comprehensive income***

The financial assets of the Group which are carried at fair value include derivative instruments that are subject to hedge accounting. Derivative financial instruments are initially recognised at the acquisition cost reflecting the fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Gains and losses arising from the valuation of these kinds of assets are accounted as other comprehensive income/expense in the consolidated statement of comprehensive income related to cash flow hedge. Derivative instruments which are accounted in other comprehensive income include interest rate swap transactions and cross currency swap transactions. Derivative instruments are recognized as asset when the fair value of the instrument is positive, as liability when the fair value of the instrument is negative (Note 18).

- **Cash flow hedge**

Hedges of exposures to variability in cash flows that are attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction and could affect profit and loss are designated as cash flow hedges by the Group.

Changes in the fair value of derivatives, designated as cash flow hedges and qualified as effective, are recognised in equity as “hedge reserves”. Where the forecasted transaction or firm commitment results in the recognition of an asset or of a liability, the gains and losses previously recognised under equity are transferred from equity and included in the initial measurement of the cost of the asset or liability. Otherwise, amounts recognised under equity are transferred to the consolidated statement of profit or loss in the period in which the hedged firm commitment or forecasted transaction affects the statement of income.

If the forecast transaction or firm commitment is no longer expected to occur, the cumulative gain or losses previously recognised in equity are transferred to the consolidated statement of income. If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover, or if its designation as a hedge is revoked, any cumulative gain or loss previously recognised in the consolidated statement of other comprehensive income remains in other comprehensive income until the forecast transaction or firm commitment affects profit or loss (Note 18).

v) Finance lease

Leases of property, plant and equipment where the Group substantially assumes all the risks and rewards of ownership are classified as finance leases. Finance leases are included in the property, plant and equipment at the inception of the lease at the lower of the fair value of the leased property or the present value of the minimum lease payments. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate. The property, plant and equipment acquired under finance leases are depreciated over the useful life of the asset. An impairment loss is recognised when a decrease in the carrying amount of the leased property is identified. Interest expenses and foreign exchange losses related to the finance lease liabilities are accounted in the consolidated statement of income. Lease payments are deducted from finance lease liabilities (Note 6).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.5 Summary of significant accounting policies (Continued)

y) Segment reporting

The Group management has determined the reportable segments of the Group as electricity distribution, natural gas distribution, retail and wholesale electricity sales, and production and trade according to activity groups. The Group management may change the structure of segment reporting, if they reach the conclusion that new structure may affect financial statement users’ decisions and/or it will be useful during the review of financial statements. As the assets of the Group are located mainly in Turkey, no geographic segmental information is considered necessary (Note 3).

2.6 Going concern assumption

The Group has prepared its consolidated financial statements on a going concern basis in a foreseeable future. The Group is at investment stage and some portion of its investments are financed through borrowings and some portion through capital injection. As at 31 December 2019, the gross profit and EBITDA of the Group are TL1,561,129 thousand and TL2,033,551 thousand, respectively. The Group has TL427,608 thousand of accumulated loss and TL189,293 thousand of net loss as at and for the year ending 31 December 2019. Besides, the Group’s current liabilities exceeds its current assets by TL4,124,506 thousand. As per the material event disclosure dated 30 January 2020 and 18 February 2020, the Group declared that it applied to the Capital Markets Board for a bond issuance that cannot exceed TL800 million and a lease certificate issuance that cannot exceed TL450 million, respectively (Based on the Group’s material event disclosure dated 5 March 2020, its application to the Capital Markets Board for a bond issuance of up to TL800 million was approved). As per the material event disclosure dated 5 February 2020, the Group sold all its shares in Zorlu Rüzgar, a 100% subsidiary of the Company. The Group focuses on public offerings and access to foreign financing sources in the short and medium term to decrease and pay the short-term borrowing costs and to provide funds for new investments. In addition, it aims to generate cash with its dividend income obtained from foreign projects in the short-term.

Since major portion of the Group’s electricity sales is at pre-determined prices in USD within the scope of Renewable Energy Sources Mechanism (“YEKDEM”), it affects the gross profit as positively. In addition, foreign exchange losses arising from borrowings of the Companies which sell electricity in scope of YEKDEM have been hedged by the foreign exchange gains arising from the sales indexed to USD mainly.

The Group’s ultimate parent company, Zorlu Holding AŞ has declared its intend to provide necessary support to the Group to continue on a going concern basis, in the support letter dated 13 January 2020.

2.7 Comparatives and restatement of prior year financial statements

The Group prepares comparative financial statements, to enable readers to determine financial position and performance trends. For the purposes of effective comparison, comparative financial statements can be reclassified when deemed necessary by the Group, where descriptions on significant differences are disclosed.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.7 Comparatives and restatement of prior year financial statements (Continued)

The Group has performed the following reclassifications:

- Cost of energy purchases within the scope of unlicensed electricity production amounts to TL657,788 thousand and other cost of sales element amounts to TL101,704 thousand which are shown in the consolidated statement of profit or loss for year ended 31 December 2018, are netted off with “revenue”. This reclassification has not any effect on accumulated losses and period income or loss.
- Investment inventories amounts to TL67,842 thousand which are shown in the other non-current assets in the consolidated balance sheet as of 31 December 2018, are reclassified to “property, plant and equipment”. This reclassification has not any effect on accumulated losses and period income or loss.
- Investment inventories amounts to TL33,605 thousand which are shown in the property, plant and equipment in the consolidated balance sheet as of 31 December 2018, are reclassified to “inventories”. This reclassification has not any effect on accumulated losses and period income or loss.
- Subscriber connection fee amounts to TL46,287 thousand and investment costs from service concession arrangements amounts to TL110,946 thousand shown as other cash flows from investment activities in the consolidated statement of cash flows as of 31 December 2018, are reclassified to net cash generated from operating activities. This reclassification has not any effect on accumulated losses and period income or loss.
- The foreign currency conversion differences on cash and cash equivalents amounting to TL45,618 thousand which are shown in the “unrealized foreign exchange losses and currency translation differences” in the cash flow statement dated 31 December 2018, is presented in the “effect of foreign currency conversion differences on cash and cash equivalents”. This reclassification has not any effect on accumulated losses and period income or loss.

2.8 Critical accounting estimates, assumptions and judgments

The preparation of consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions that affect reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates. These estimates are reviewed periodically, and as adjustments become necessary, they are reported in earnings in the periods in which they become known. The key assumption concerning the future and other key sources of estimation uncertainty at the balance sheet date and the significant judgments are set out below:

a) Deferred tax asset on cumulative tax losses

Deferred tax assets are accounted for only where it is likely that related temporary differences and accumulated losses will be recovered through expected future profits. When accounting for deferred tax assets it is necessary to make critical estimations and evaluations with regard to taxable profits in the future periods. According to the future projections, deferred tax assets are recognized on the carryforward tax losses amounts to TL2,754.617 thousand (31 December 2018: TL2,307,599 thousand). Deferred tax asset is not recognized carryforward tax losses for the remaining TL471.693 thousand (31 December 2018: TL130,747 thousand).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.8 Critical accounting estimates, assumptions and judgments (Continued)

The key estimations made by Zorlu Doğal, Rotor, Zorlu Jeotermal and Zorlu Rüzgar in the business plans are the future exchange rates, total electricity sales volumes and electricity prices. Should the exchange rates increased or decreased by 20% and if all other variables are held constant, deferred tax asset amount recognised in the consolidated financial statements would have been decreased by TL5,055 thousand or increased by TL10,703 thousand. Should the electricity sales volumes increased or decreased by 20% and if all other variables are held constant, deferred tax asset amount recognised in the consolidated financial statements would have been increased by TL7,490 thousand or decreased by TL47,180 thousand. Should the electricity sales price increased or decreased by 20% and if all other variables are held constant, deferred tax asset amount recognised in the consolidated financial statements would have been increased by TL514 thousand or decreased by TL556 thousand.

The key estimations made by the Group in the business plans are the future exchange rates, interest rates and profit margin. Should the exchange rates and profit margins decreased by 20% separately, and if all other variables are held constant, deferred tax asset amount recognised in the consolidated financial statements would have been decreased by TL63,939 thousand and TL18,292 thousand, respectively. Should the exchange rates and profit margins increased by 20% separately and if all other variables are held constant, deferred tax asset amount recognised in the consolidated financial statements would have been increased by TL63,116 thousand and TL10,596 thousand, respectively.

b) Cash flow hedge

As explained in Note 18, the Group uses investment loans amounting to USD1,318,064 thousand and EUR16,714 thousand as a hedging instrument against the USD spot exchange rate risk the Company is exposed to due to highly probable 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. Based on the sensitivity analysis performed by the Group regarding the sales quantity estimation, which is the basis of the efficiency test, the 5% increase in the estimates does not have any effect on the effectiveness tests of Zorlu Doğal, Zorlu Jeotermal and Rotor. The 5% decrease in sales amount estimation does not affect Zorlu Doğal and Zorlu Jeotermal's effectiveness tests, however 5% decrease in sales amount estimation affects Rotor's effectiveness tests.

c) Explanations for revaluation method and fair value measurement

Group has chosen 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. On 30 September 2018, A A Baig & Co. Chartered Accountants was given the authority to determine the market value of the power plant belonging to Zorlu Enerji Pakistan and on 30 September 2018 and 31 December 2018, Avrupa Gayrimenkul Değerleme ve Danışmanlık AŞ was given the authority to determine the same for power plants installed in Turkey. The cost method was used for the valuation of plants that belong to Zorlu Enerji, and the income method (income capitalisation-DCF) was used for the valuation of other plants.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.8 Critical accounting estimates, assumptions and judgments (Continued)

Within the frame of these valuations, the following basic assumptions has been used:

Companies	Valuated powerplant type	Valuation period	Valuation company	Valuation method	Valuation assumptions		
					Weighted capital cost rate (%) (USD)	Electricity Sales Price (cent/kWh)(*)	Electricity Sales Volume (kWh/year)
Zorlu Doğal	Kızıldere I Geothermal Energy Powerplant	31.12.2018	Avrupa Gayrimenkul	INA	10	5-6 cent	45.300.150
Zorlu Doğal	Kızıldere II Geothermal Energy Powerplant	30.09.2018	Avrupa Gayrimenkul	INA	10	6-11,2 cent	483.201.600
Zorlu Doğal	Kızıldere III Geothermal Energy Powerplant	30.09.2018	Avrupa Gayrimenkul	INA	10	6-11,2 cent	889.824.375- 1.032.196.275
Zorlu Doğal	Tokat/Ataköy Hydroelectric Energy Powerplant	31.12.2018	Avrupa Gayrimenkul	INA	10	5-6 cent	10.974.716
Zorlu Doğal	Eskişehir/Beyköy Hydroelectric Energy Powerplant	31.12.2018	Avrupa Gayrimenkul	INA	10	5-6 cent	62.333.006
Zorlu Doğal	Kars/Çıldır Hydroelectric Energy Powerplant	31.12.2018	Avrupa Gayrimenkul	INA	10	5-6 cent	30.483.118
Zorlu Doğal	Rize/İkizdere Hydroelectric Energy Powerplant	31.12.2018	Avrupa Gayrimenkul	INA	10	5-6 cent	139.878.235
Zorlu Doğal	Erzurum/Kuzgun Hydroelectric Energy Powerplant	31.12.2018	Avrupa Gayrimenkul	INA	10	5-6 cent	23.443.906
Zorlu Doğal	Tunceli/Mercan Hydroelectric Energy Powerplant	31.12.2018	Avrupa Gayrimenkul	INA	10	5-6 cent	80.970.782
Zorlu Doğal	Erzincan/Tercan Hydroelectric Energy Powerplant	31.12.2018	Avrupa Gayrimenkul	INA	10	5-6 cent	42.711.570
Rotor	Gökçedağ Wind Energy Powerplant	31.12.2018	Avrupa Gayrimenkul	INA	10	6-7,30 cent	387.316.283
Zorlu Jeotermal	Alaşehir I Geothermal Energy Powerplant	30.09.2018	Avrupa Gayrimenkul	INA	10	6-11,2 cent	252.386.550
Zorlu Rüzgar	Sarteppe/Demirciler Geothermal Energy Powerplants	31.12.2018	Avrupa Gayrimenkul	INA	10	6-8,7 cent	213.059.548
Zorlu Enerji Pakistan	Jhimpir Geothermal Energy Powerplant	30.09.2018	A A Baig & Co. Chartered Accountants	INA	9,69	7-15 cent	159.010.300

(*) Represents the minimum and maximum sales volume which was used in DCF calculation.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.8 Critical accounting estimates, assumptions and judgments (Continued)

d) Uninvoiced sales

The costs of active energy and retail sale services provided to the customer but not invoiced are recognised 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 2019, the Group is subject to certain lawsuits. Depending on the reviews of legal counsels, Group is evaluating the probable results of these lawsuits and reserving required provisions in consolidated financial statements.

f) 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 the conditions indicate impairment. Recoverable values of cash generating units are determined based on the fair value calculations. Fair value calculations include cash flow projections after discounted tax, and these projections, which are determined in TL, are based on the long-term plans prepared by the Group management. As at 31 December 2019, the results of the impairment tests (details provided below) carried out on the basis of cash-generating units do not indicate goodwill impairment.

OEDAŞ:

OEDAŞ operations were found to be separate cash generating unit, and the recoverable amount of the cash generating units were determined based on fair value calculations. Fair value calculations included cash flow projections during the licence period, and the projections in TL were based on the long-term plans prepared by the Group. For the fair value calculations, the cost of capital rate for OEDAŞ was considered to be variable from year to year and to be between 13% and 8%, and the inflation rate was considered to be variable until 2026 and to be fixed at 8% after 2026. The Group also considered expense efficiency in its said fair value calculations, and accepted that expense efficiency was fixed at an average of 15% annually. For the said fair value calculations, the inflation rate used to calculate discounted cash flows being 10% higher/lower causes a decrease/increase of TL91,834 thousand/ TL95,213 thousand, and cost of capital rate being 10% higher/lower causes an decrease/increase of TL409,375 thousand/ TL483,868 thousand in the equity value calculated on discounted cash flow of the OEDAS. Said expense efficiency being 10% higher/lower causes a TL39,348 thousand increase/decrease in the equity value calculated on discounted cash flow of the OEDAS. As a result of sensitivity analysis carried out on the basis of all scenario do not indicate goodwill impairment.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)**2.8 Critical accounting estimates, assumptions and judgments (Continued)****OEPSAŞ:**

OEPSAŞ's activities are considered as separate cash generating units, and recoverable amount of these cash generating units were determined based on fair value calculations. Fair value calculations included cash flow projections during the licence period, and the projections in TL were based on the long-term plans prepared by the Group. In the cash flow projections used in the fair value calculations, the individual customer profit margin rate is 4% in 2020, decreases to 3% by the end of the license period and continues to trend downward. For OEPSAŞ, the cost of capital rate is variable by year and is considered to be 19%-15%. The individual customer profit margin rate used to calculate discounted cash flows being 10% lower/higher causes a decrease/increase of TL26,434 thousand in the equity value calculated on discounted cash flow of the OEPSAS. The cost of capital rate used in the said fair value calculations being 10% higher/lower causes a TL61,099 thousand/ TL73,918 thousand decrease/increase in the equity value calculated on discounted cash flow of the OEPSAS. As a result of sensitivity analysis carried out on the basis of all scenario do not indicate goodwill impairment.

TRAKYA:

Trakya's operations were found to be separate cash generating unit, and the recoverable amount of the cash generating units were determined based on fair value calculations. Fair value calculations included cash flow projections during the licence period, and the projections in TL were based on the long-term plans prepared by the Group. For the fair value calculations, the capital cost rate for Trakya was considered to be variable from year to year and to be between 17% and 14%, and the inflation rate was considered to be variable until 2021 and to be fixed at 10% after 2023. The Group also considered expense efficiency in its said fair value calculations, and accepted that expense efficiency was fixed at an average of 2.5% annually.

For the said fair value calculations, the inflation rate used to calculate discounted cash flows being 10% higher/lower causes a decrease/increase of TL10,472 thousand, and capital cost rate being 20% higher/lower causes a decrease/increase of TL108,806 thousand/ TL112,608 thousand. Said expense efficiency being 20% higher/lower causes a decrease/increase of TL5,969 thousand/ TL5,715 thousand.

GAZDAŞ:

Gazdaş's operations were found to be separate cash generating unit, and the recoverable amount of the cash generating units were determined based on fair value calculations. Fair value calculations included cash flow projections during the licence period, and the projections in TL were based on the long-term plans prepared by the Group. For the fair value calculations, the capital cost rate for Gazdaş was considered to be variable from year to year and to be between 17% and 14%, and the inflation rate was considered to be variable until 2021 and to be fixed at 10% after 2023. The Group also considered expense efficiency in its said fair value calculations, and accepted that expense efficiency was fixed at an average of 2.5% annually.

For the said fair value calculations, the inflation rate used to calculate discounted cash flows being 10% higher/lower causes a decrease/increase of TL6,969 thousand/ TL6,969 thousand, and capital cost rate being 20% higher/lower causes a decrease/increase of TL64,424 thousand/ TL68,796 thousand. Said expense efficiency being 20% higher/lower causes a decrease/increase of TL2,984 thousand/ TL2,857 thousand.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.9 Financial risk management

Financial risk factors

The Group is subject to with various financial risks including liquidity risk, market risk (foreign currency risk and interest rate risk), funding risk, capital risk management 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 manage the risks by conducting periodic analysis studies on the liquidity risks that the group 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 and weakening the ability to close open positions.

Table below is Group's breakdown of liabilities according to their contractual maturity is based on the maturity dates from the date. The Group management considers that all the financial assets shown above liquidity risk that are not impaired for each of the reporting dates under review are of good credit quality.

As at 31 December 2019 and 2018, the analysis of Group's financial liabilities according to their maturities is as follows:

Non-derivative financial liabilities (1)(2):

		Total cash outflows in accordance with contract	Less than 3 months	3-12 months	1-5 years	Over 5 years
2019	Book value					
Financial liabilities	12,673,105	15,847,905	1,790,105	3,170,881	7,806,893	3,080,026
Lease liabilities	79,774	205,241	7,542	26,568	51,257	119,874
Trade payables	2,122,545	2,122,545	2,122,545	-	-	-
Other payables and other liabilities	1,059,289	1,059,289	1,041,409	-	17,880	-
	15,934,713	19,234,980	4,961,601	3,197,449	7,876,030	3,199,900

		Total cash outflows in accordance with contract	Less than 3 months	3-12 months	1-5 years	Over 5 years
2018	Book value					
Financial liabilities	11,216,602	15,832,426	1,359,302	2,340,343	8,594,125	3,538,656
Lease liabilities	34,521	34,521	1,884	5,654	26,983	-
Trade payables	1,514,021	1,514,021	1,514,021	-	-	-
Other payables and other liabilities	974,572	974,572	897,244	-	77,328	-
	13,739,716	18,355,540	3,772,451	2,345,997	8,698,436	3,538,656

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.9 Financial risk management (Continued)

- (1) Maturity analysis has been applied on financial instruments and this analyse does not include legal liabilities.
- (2) Amounts above are cash flows which has not been discounted belongs to contracts. Since discounted amounts are on immetarial level, balances with maturity less than 3 months are equivalent to their book value.

Derivative financial liabilities (1)(2):

2019	Carrying value	3 months or less	3 - 12 months	1 - 5 years	5 year and more
Derivative financial liabilities held for hedging	(145,019)	(11,390)	(21,780)	(97,522)	(14,327)
Derivative financial assets held for hedging	-	-	-	-	-
2018	Book value	Less than 3 months	3-12 months	1-5 years	Over 5 years
Derivative financial liabilities held for hedging	(41,598)	(1,003)	(7,519)	(27,288)	(5,788)
Derivative financial assets held for hedging	5,148	161	4,987	-	-

(b) Market risk

Interest rate risk

The Company is exposed to interest risk at national and international markets due to its funding of its investments with various financing sources. Considering that corporate investments are financed from non-capital resources, an increase in interest rates seems to be an important risk factor. In order to minimize the foreign exchange risk, the Group has uses interest rate swap derivatives.

The Group's interest rate position is as of 31 December 2019 and 2018 as follows:

	2019	2018
Fixed interest rate financial instruments		
Cash and cash equivalents	655,500	478,705
Financial assets	10,008	-
Other receivables	2,343,005	2,109,160
Other payables	(70,634)	(77,650)
Financial liabilities (*)	(4,181,677)	(5,940,817)
Variable interest rate financial instruments		
Other receivables	129,516	94,781
Receivables from service concession arrangements	2,308,845	1,325,932
Security deposits received	(799,378)	(680,706)
Financial liabilities	(8,571,202)	(5,310,306)

- (*) The borrowings with variable interest rates whose interest rate is fixed are taken into consideration in the fixed rate financial borrowings.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.9 Financial risk management (Continued)

If interest rates of borrowings with floating rates had been 100 basis points higher/lower with all other variables held constant, loss before taxation of the Group would be TL85,712 thousand higher/lower (2018: TL53,103 thousand).

Foreign exchange risk

The sources used by the Company in financing its investments are predominantly foreign currency denominated. The Company is exposed to foreign exchange risk arising from the translation of the amounts denominated in USD and EUR. 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 hedged by the foreign exchange gains arising from the sales indexed to USD mainly (Note 18).

Foreign currency denominated assets and liabilities held by the Group as at 31 December 2019 and 31 December 2018 are as follows:

	31 December 2019	31 December 2018
Assets	2,467,776	2,377,341
Liabilities	(9,823,133)	(9,546,047)
Net position of derivative financial instruments	(412,369)	(365,212)
Foreign currency position, (net)	(7,767,726)	(7,533,918)

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONDENSED CONSOLIDATED INTERIM FINANCIAL INFORMATION FOR THE PERIOD BETWEEN 1 JANUARY - 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.9 Financial risk management (Continued)

TL equivalent of assets and liabilities denominated in foreign currency held by the Group at 31 December 2019 and 31 December 2018 are as follows:

	31 December 2019					31 December 2018				
	TL equivalent	USD	Euro	NIS	JPY	TL equivalent	USD	Euro	NIS	JPY
Cash and cash equivalents	115,212	14,822	4,079	20	1	206,719	39,087	67	488	1
Trade receivables	13,635	1,794	447	-	-	8,754	1,531	116	-	-
Due from related parties – short-term	1,157,805	172,518	20,000	-	-	936,574	171,854	5,033	1,523	-
Due from related parties – long-term	1,164,669	154,585	9,340	107,377	-	1,184,359	224,788	-	1,267	-
Other	16,455	1,137	1,459	-	-	40,935	3,011	4,163	-	-
Total assets	2,467,776	344,856	35,325	107,397	1	2,377,341	440,271	9,379	3,278	1
Trade payables	362,223	45,173	14,117	-	-	421,230	54,670	22,166	-	-
Short term financial liabilities	2,474,135	371,223	40,447	-	-	2,153,988	353,493	48,821	-	-
Due to related parties – short-term	2,886	486	-	-	-	2,694	512	-	-	-
Due to related parties – long-term	-	-	-	-	-	2,120	403	-	-	-
Long-term financial liabilities	6,975,439	1,114,972	52,970	-	-	6,950,469	1,273,724	41,396	-	-
Other	8,450	1,422	-	-	-	15,546	2,955	-	-	-
Total liabilities	9,823,133	1,533,276	107,534	-	-	9,546,047	1,685,757	112,383	-	-
Net foreign currency position	(7,355,357)	(1,188,420)	(72,209)	107,397	1	(7,168,706)	(1,245,486)	(103,004)	3,278	1
Net position of derivative financial instruments	(412,369)	(69,420)	-	-	-	(365,212)	(69,420)	-	-	-
Net foreign currency position	(7,767,726)	(1,257,840)	(72,209)	107,397	1	(7,533,918)	(1,314,906)	(103,004)	3,278	1

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.9 Financial risk management (Continued)

The Group is mainly exposed to foreign exchange risk through the impact of rate changes in the translation of USD, EUR and NIS currencies denominated assets and liabilities to local currency. As at 31 December 2019 and 31 December 2018, had the TL appreciated or depreciated by 10% and 20% respectively against USD, EUR and NIS with all other variables held constant, the effect over current period consolidated net loss and equity would be as follows:

	31 December 2019 Gain/(Loss)		31 December 2019 Equity	
	Appreciation of foreign currency	Depreciation of foreign currency	Appreciation of foreign currency	Depreciation of foreign currency
In case of 10% appreciation of USD against TL:				
USD net asset/liability	(747,182)	747,182	(747,182)	747,182
Amount hedged for USD risk (-)	782,956	(782,956)	-	-
USD net effect	35,774	(35,774)	(747,182)	747,182
In case of 10% appreciation of EUR against TL:				
EUR net asset/liability	(48,023)	48,023	(48,023)	48,023
Amount hedged for EUR risk (-)	-	-	-	-
EUR net effect	(48,023)	48,023	(48,023)	48,023
In case of 10% appreciation of NIS against TL:				
NIS net asset/liability	18,433	(18,433)	18,433	(18,433)
Amount hedged for NIS risk (-)	-	-	-	-
NIS net effect	18,433	(18,433)	18,433	(18,433)
Total net effect	6,184	(6,184)	(776,772)	776,772

The Group uses investment loans amounting to USD1,318,064 thousand and EUR16,714 thousand as a hedging instrument against the USD spot exchange rate risk the Group is exposed to due to highly probable YEKDEM sales income, and applies cash flow hedge accounting as a result of the effectiveness tests performed. The sensitivity analysis of the foreign currency hedged loans amounting to EUR16,714 thousand belonging to Zorlu Rüzgar is not included in the table above, since all assets and liabilities of Zorlu Rüzgar are classified as non-current assets / liabilities classified as held for sale.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE FINANCIAL STATEMENTS AT 31 DECEMBER 2018

(Amounts expressed in thousands Turkish Lira ("TL") unless otherwise indicated)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.9 Financial risk management (Continued)

	31 December 2018		31 December 2018	
	Gain/(Loss)		Equity	
	Appreciation of foreign currency	Depreciation of foreign currency	Appreciation of foreign currency	Depreciation of foreign currency
In case of 20% appreciation of USD against TL:				
USD net asset/liability	(1,383,518)	1,383,518	(1,383,518)	1,383,518
Amount hedged for USD risk (-)	1,034,726	(1,034,726)	-	-
USD net effect	(348,792)	348,792	(1,383,518)	1,383,518
In case of 20% appreciation of EUR against TL:				
EUR net asset/liability	(124,182)	124,182	(124,182)	124,182
Amount hedged for EUR risk (-)	-	-	-	-
EUR net effect	(124,182)	124,182	(124,182)	124,182
In case of 20% appreciation of NIS against TL:				
NIS net asset/liability	916	(916)	916	(916)
Amount hedged for NIS risk (-)	-	-	-	-
NIS net effect	916	(916)	916	(916)
Total net effect	(472,058)	472,058	(1,506,784)	1,506,784

(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 can not 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 management

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.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.9 Financial risk management (Continued)

As of 31 December 2019 and 2018, net debt to equity ratio is as follows:

	31 December 2019	31 December 2018
Total financial liabilities (Note 6)	12,752,879	11,251,123
Less: Cash and cash equivalents (Note 4)	(832,715)	(598,576)
Net debt	11,920,164	10,652,547
Total equity	2,599,127	3,379,810
Net debt to equity ratio	4.6	3.2

(e) Credit risk

The Group's exposure to credit risk is limited to the carrying amount of financial assets recognized at the financial position date.

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.

In respect of trade and other receivables, the Group is not exposed to any significant credit risk exposure to any single counterparty or any group of counterparties having similar characteristics. The credit risk for liquid funds and other short-term financial assets is considered negligible, since the counterparties are reputable banks with high quality external credit ratings.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT (Continued)

Credit risks exposed through types of financial instruments	Receivables						Cash at bank
	Trade receivables		Service concession arrangements		Other receivables		
	Related parties	Third parties	Related parties	Third parties	Related parties	Third parties	
Maximum credit risk exposed as of balance sheet date as of 31 December 2019 (A+B+C+D)	12,877	891,066	-	2,308,845	2,413,657	58,864	832,645
- The part of maximum risk under guarantee with collaterals, etc	-	402,408	-	-	-	-	-
A. Net book value of financial assets that are neither past due nor impaired	10,623	574,468	-	2,308,845	2,413,657	58,864	832,645
- The part under guarantee with collaterals, etc	-	184,188	-	-	-	-	-
B. Net book value of financial assets that are renegotiated, if not that will be accepted as part due or impaired	2,254	316,598	-	-	-	-	-
- The part under guarantee with collaterals, etc	-	218,220	-	-	-	-	-
C. Net book value of impaired assets	-	-	-	-	-	-	-
- Past due (gross carrying amount)	-	88,844	-	-	-	-	-
- Impairment (-)	-	(88,844)	-	-	-	-	-
- The part under guarantee with collaterals, etc	-	-	-	-	-	-	-
- Not past due (gross carrying amount)	-	-	-	-	-	-	-
- Impairment (-)	-	-	-	-	-	-	-
- The part under guarantee with collaterals, etc	-	-	-	-	-	-	-
D. Off-balance sheet items with credit risk	-	-	-	-	-	-	-

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT (Continued)

Credit risks exposed through types of financial instruments	Receivables						Cash at bank
	Trade receivables		Service concession arrangements		Other receivables		
	Related parties	Third parties	Related parties	Third parties	Related parties	Third parties	
Maximum credit risk exposed as of balance sheet date as of 31 December 2018 (A+B+C+D)	23,185	609,263	-	1,325,932	2,170,672	33,269	598,576
- The part of maximum risk under guarantee with collaterals, etc	-	178,176	-	-	-	-	-
A. Net book value of financial assets that are neither past due nor impaired	23,081	525,165	-	1,325,932	2,170,672	33,269	598,576
- The part under guarantee with collaterals, etc	-	154,326	-	-	-	-	-
B. Net book value of financial assets that are renegotiated, if not that will be accepted as part due or impaired	104	84,098	-	-	-	-	-
- The part under guarantee with collaterals, etc	-	23,850	-	-	-	-	-
C. Net book value of impaired assets	-	-	-	-	-	-	-
- Past due (gross carrying amount)	-	65,279	-	-	-	-	-
- Impairment (-)	-	(65,279)	-	-	-	-	-
- The part under guarantee with collaterals, etc	-	-	-	-	-	-	-
- Not past due (gross carrying amount)	-	-	-	-	-	-	-
- Impairment (-)	-	-	-	-	-	-	-
- The part under guarantee with collaterals, etc	-	-	-	-	-	-	-
D. Off-balance sheet items with credit risk	-	-	-	-	-	-	-

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AT 31 DECEMBER 2019**

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.9 Financial risk management (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 value of financial instruments that are not traded in an active market 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. Inputs for the asset or liability that are not based on observable market data.

The following methods and assumptions were used to estimate the fair value of the Group’s financial instruments:

Monetary assets

Foreign currency denominated balances are translated into Turkish Lira with the rates at the balance sheet date. The fair values of balances denominated in foreign currencies, which are translated at period-end exchange rates, are considered to approximate their carrying values.

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 allowances for uncollectibility are estimated to approximate to their fair values.

Monetary liabilities

The fair values of short term bank borrowings and other monetary liabilities are considered to approximate to their respective carrying values due to their short-term nature.

Since long term foreign currency loans generally have floating interest rate fair value is close to their book value. Fair value of long term bank loans are discounted amounts of contractual cash flows with the market interest rate.

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 asset or liability, either directly or indirectly.

Level 3: Inputs for the asset or liability that are not based on observable market data.

Fair values of translated foreign currency balances with year-end foreign exchange rates are considered to approximate their carrying values.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.9 Financial risk management (Continued)

The fair value of financial instruments that are not traded in an active market 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 of 31 December 2019 and 2018 are as follows:

Derivative financial instruments	2019	2018
Level 1	-	-
Level 2	(145,019)	(36,450)
Level 3	-	-
	(145,019)	(36,450)

The fair value of powerplants belonging to Zorlu Enerji is determined by using “market approach and cost method” (Level 2) and fair values of all other power plants are determined by using “income approach - discounted cash flow analysis” (Level 3).

31 December 2019 31 December 2018

Property, plant and equipment

Level 1	-	-
Level 2	191,203	240,942
Level 3	7,644,581	7,922,174
	7,835,784	8,163,116

The details of fair values of all other power plants are determined by using “income approach - discounted cash flow analysis” (Level 3) are as follows:

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 2 - BASIS OF PRESENTATION OF FINANCIAL STATEMENTS (Continued)

2.9 Financial risk management (Continued)

	1 January 2019	AAdditions	Transfers	Currency translation difference	31 December 2019
Cost:					
Rotor	1,004,053	4,434	419	-	1,008,906
Zorlu Jeotermal	990,545	6,394	7,906	-	1,004,845
Zorlu Enerji Pakistan	778,177	22,611	-	11,839	812,627
Zorlu Doğal	6,371,554	28,937	55,150	-	6,455,641
	9,144,329	62,376	63,475	11,839	9,282,019
Amortisation:					
Rotor	255,521	35,852	-	-	291,373
Zorlu Jeotermal	156,184	36,866	-	-	193,050
Zorlu Enerji Pakistan	150,550	31,879	-	3,590	186,019
Zorlu Doğal	659,900	307,096	-	-	966,996
	1,222,155	411,693	-	3,590	1,637,438
Net book value	7,922,174				7,644,581

	1 January 2018	Additions	Transfers	Revaluation fund increase	Currency translation difference	31 December 2018
Cost:						
Rotor	650,582	669	-	352,802	-	1,004,053
Zorlu Jeotermal	690,028	1,436	34,690	264,391	-	990,545
Zorlu Enerji Pakistan	593,201	60,908	-	74,500	49,568	778,177
Zorlu Doğal	3,059,489	-	1,079,639	2,232,426	-	6,371,554
	4,993,300	63,013	1,114,329	2,924,119	49,568	9,144,329
Amortisation:						
Rotor	223,941	31,580	-	-	-	255,521
Zorlu Jeotermal	100,490	55,694	-	-	-	156,184
Zorlu Enerji Pakistan	113,463	24,857	-	-	12,230	150,550
Zorlu Doğal	413,969	245,931	-	-	-	659,900
	851,863	358,062	-	-	12,230	1,222,155
Net book value	4,141,437					7,922,174

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 3 - SEGMENT REPORTING

Group management has determined the reportable parts of the Group as distribution of electricity and distribution of gas, retail and wholesale of electricity and producing and trading according to the activity groups.

Decision making authority of the Group considers Earnings before interest, taxes, depreciation and amortization ("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 2019	Electricity distribution	Gas distribution and parent	Retail and wholesale	Production/trading and other (***)	Consolidation adjustments	Consolidation total
Revenue	1,793,017	1,557,199	4,026,730	2,737,315	(1,753,125)	8,361,136
Cost of sales	(1,525,997)	(1,476,382)	(3,795,118)	(1,754,153)	1,751,643	(6,800,007)
Gross profit	267,020	80,817	231,612	983,162	(1,482)	1,561,129
Operating expenses	(60,468)	(26,473)	(83,222)	(73,556)	(15,263)	(258,982)
Amortisation and depreciation expenses (*)	14,228	9,360	4,448	424,936	17,804	470,776
Weighted average cost of capital ("WACC") correction (**)	168,824	91,804	-	-	-	260,628
EBITDA	389,604	155,508	152,838	1,334,542	1,059	2,033,551
Financial income	26,703	10,590	112,563	911,751	(407,179)	654,428
Financial expenses	(208,256)	(171,863)	(75,771)	(2,186,644)	408,699	(2,233,835)
Tax income/(expense)	(37,730)	(10,115)	(29,072)	(15,853)	14,227	(78,543)

1 January - 31 December 2018	Electricity distribution	Gas distribution and parent	Retail and wholesale	Production/trading and other (***)	Consolidation adjustments	Consolidation total
Revenue	763,045	704,754	3,072,193	2,063,128	(1,181,820)	5,421,300
Cost of sales	(483,109)	(642,793)	(2,842,066)	(1,222,970)	1,195,517	(3,995,421)
Gross profit	279,936	61,961	230,127	840,158	13,697	1,425,879
Operating expenses	(52,907)	(14,068)	(56,508)	(65,019)	(15,284)	(203,786)
Amortisation and depreciation expenses (*)	-	6,984	4,733	394,546	4,047	410,310
Weighted average cost of capital ("WACC") correction (**)	106,590	28,737	-	-	-	135,327
EBITDA	333,619	83,614	178,352	1,169,685	2,460	1,767,730
Financial income	5,547	228	251,154	1,590,444	(753,246)	1,094,127
Financial expenses	(76,379)	(216,418)	(250,907)	(2,505,956)	750,757	(2,298,903)
Tax income/(expense)	(53,833)	49,730	(26,956)	91,777	14,227	74,945

1 January - 31 December 2019	Electricity distribution	Gas distribution and parent	Retail and wholesale	Production/trading and other	Consolidation adjustments	Consolidation total
Segment assets	2,371,452	1,552,960	1,158,285	19,313,203	(5,107,738)	19,288,164
Associates	-	-	-	532,402	-	532,402
Segment liabilities	1,851,879	2,565,008	1,015,942	14,615,349	(2,826,739)	17,221,439
1 January - 31 December 2018	Electricity distribution	Gas distribution and parent	Retail and wholesale	Production/trading and other	Consolidation adjustments	Consolidation total
Segment assets	1,306,160	1,542,412	955,470	18,731,610	(4,542,693)	17,992,959
Associates	-	-	-	378,523	-	378,523
Segment liabilities	929,032	2,354,948	927,665	13,065,592	(2,285,565)	14,991,672

(*) An amortisation and depreciation amount of TL470,776 thousand (31 December 2018: TL410,310 thousand) has been presented in operating expenses, and amount of TL112,382 thousand (31 December 2018: TL79,622) has been presented in other operating expenses.

(**) WACC correction which is related to OEDAŞ, Gazdaş and Trakya, amounts to TL260,628 thousand which is presented in the other income is considered in EBITDA calculation (31 December 2018: TL135,327 thousand).

(***) Zorlu Osmangazi that owns all shares of Oedaş and Oepsaş is included.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(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:

	31 December 2019	31 December 2018
EBITDA (*)	2,033,551	1,767,730
Amortisation and depreciation expenses	(470,776)	(410,310)
Interest income related to distribution activities	(260,628)	(135,327)
Financial income	654,428	1,094,127
Financial expenses	(2,233,835)	(2,298,903)
Other operating (expenses)/ income	83,099	(61,581)
Share of profit of associates	64,302	44,923
(Loss)/ profit before tax from continued operations	(129,859)	659

(*) When considering the Group's EBITDA related to the year ending 31 December 2019, the EBITDA of Dorad amounting to TL247,432 thousand (31 December 2018: TL197,249 thousand), which is equivalent to the shares the Group owns, must also be considered.

NOTE 4 - CASH AND CASH EQUIVALENTS

	31 December 2019	31 December 2018
Cash	70	-
Banks		
- Time deposits	655,500	478,705
- Demand deposits	177,145	119,871
	832,715	598,576

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 2019 (%)	31 December 2018 (%)
USD	0.57	0.79
PKR	11.95	5.76
TL	9.25	15.65
EUR	0.04	-

The details of cash and cash equivalents include the following for the purpose of the consolidated statements of cash flows as at 31 December 2019 and 2018:

	31 December 2019	31 December 2018
Cash and cash equivalents	832,715	598,576
Less: Restricted cash (*)	(9,691)	(15,893)
	823,024	582,683

(*) The Group's total restricted cash amount to TL19,699 thousand, together with the restricted cash amount to TL10,008 thousand in short-term financial investments (Note 12).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 5 - RECEIVABLES FROM SERVICE CONCESSION ARRANGEMENT

	31 December 2019	31 December 2018
Short-term receivables from service concession arrangement	258,074	158,453
Long-term receivables from service concession arrangement	2,050,771	1,167,479
	2,308,845	1,325,932

The receivables from service concession arrangement represent the amounts of the investments not yet recovered by the tariff.

As at 31 December 2019, TL1.658,544 of the receivables from service concession arrangement is related to OEDAŞ (31 December 2018: TL726,794) and TL650,301 thousand is related to Gazdaş and Trakya (31 December 2018: TL599,138).

The maturity analysis of receivables from service concession arrangements has shown as below;

	31 December 2019	31 December 2018
Up to 1 years	258,074	158,453
Between 1 to 3 years	516,148	316,906
Between 3 to 5 years	516,148	316,906
More than 5 years	1,018,475	533,667
	2,308,845	1,325,932

The movements of the receivables from service concession arrangement for OEDAŞ are as follows:

	1 January - 31 December 2019	1 January - 31 December 2018
Opening balance	726,794	639,334
Additions	1,060,302	51,463
Collections (-)	(214,576)	(93,800)
Indexation differences	86,024	129,797
Closing balance	1,658,544	726,794

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 5 - RECEIVABLES FROM SERVICE CONCESSION ARRANGEMENT (Continued)

The movements of the receivables from service concession arrangement for gas distribution companies are as follows:

	1 January - 31 December 2019	1 January - 31 December 2018
Opening balance	599,138	-
Additions due to acquisition	-	494,568
Gross investment (*)	58,226	116,789
Subscriber connection fee (*)	(47,011)	(46,287)
Net investment	11,215	70,502
Collections (-)	(30,967)	(17,146)
Indexation differences	70,915	51,214
Closing balance	650,301	599,138

(*) In the scope of natural gas distribution operations, the Group collects a subscription fee from each subscriber to provide resources for the infrastructure investments in the region where the subscriber resides and for transporting the natural gas to the subscriber. Subscriber connection fees, determined by EMRA, are collected once, during the signing of the connection contract, and these fees are not refunded. In this scope, subscriber connection investments and collections carried out in the period are presented as gross amounts.

NOTE 6 - FINANCIAL LIABILITIES

The detail of financial liabilities of the Group as at 31 December 2019 and 31 December 2018 is as follows:

	31 December 2019	31 December 2018
Short-term bank borrowings	1,149,529	763,761
Issued bonds	439,396	97,335
Financial leasing liabilities	29,739	7,538
Total short-term financial liabilities	1,618,664	868,634
Short-term portion of long-term bank borrowings	2,776,792	2,076,080
Issued bonds	31,969	253,751
Other issued securities	310,678	164,183
Total short-term portion of long term financial liabilities	3,119,439	2,494,014
Long-term bank borrowings	7,925,219	7,606,374
Financial leasing liabilities	50,035	26,983
Issued bonds	39,522	-
Other issued marketable securities	-	255,118
Total long-term financial liabilities	8,014,776	7,888,475
Total financial liabilities	12,752,879	11,251,123

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 6 - FINANCIAL LIABILITIES (Continued)

The detail of short-term bank borrowings and financial leasing liabilities of the Group as at 31 December 2019 and 31 December 2018 is as follows:

	Original currency		Weighted average effective interest rate per annum (%)		TL equivalent	
	31 December 2019	31 December 2018	31 December 2019	31 December 2018	31 December 2019	31 December 2018
USD	35,163	31,510	8.32	8.51	208,874	165,773
EUR	690	11,374	8.36	8.01	4,592	68,563
TL	1,405,110	626,594	21.38	33.54	1,405,110	626,594
PKR	2,296	206,050	4.5	4.5	88	7,704
					1,618,664	868,634

The detail of short-term portion of long-term bank borrowings, issued bonds and other issued securities of the Group as at 31 December 2019 and 31 December 2018 is as follows:

	Original currency		Weighted average effective interest rate per annum (%)		TL equivalent	
	31 December 2019	31 December 2018	31 December 2019	31 December 2018	31 December 2019	31 December 2018
USD	336,060	321,983	8.39	8.61	1,996,261	1,693,921
EUR	39,757	37,447	5.16	4.59	264,407	225,731
TL	850,616	566,157	22.10	25.45	850,616	566,157
Other	211,006	219,431	16.13	11.13	8,155	8,205
					3,119,439	2,494,014

The detail of long-term bank borrowings, issued bonds and other long-term borrowings of the Group as at 31 December 2019 and 31 December 2018 is as follows:

	Original currency		Weighted average effective interest rate per annum (%)		TL equivalent	
	31 December 2019	31 December 2018	31 December 2019	31 December 2018	31 December 2019	31 December 2018
USD	1,114,972	1,273,724	8.39	8.61	6,623,157	6,700,932
EUR	52,970	41,396	5.16	4.59	352,282	249,537
TL	1,012,054	914,600	22.10	25.45	1,012,054	914,600
Other	495,458	625,992	16.13	11.13	27,283	23,406
					8,014,776	7,888,475

The loan obtained from financial institutions by Zorlu Enerji and its subsidiaries including loan agreement commissions amounting TL89,066 thousand (31 December 2018: TL120,111 thousands) regarding the aforementioned loan were deducted from the total loan amount.

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NOTE 6 - FINANCIAL LIABILITIES (Continued)

Letters of guarantees given, pledges and mortgages related to financial liabilities are explained in Note 17. The redemption schedule of the borrowings as at 31 December 2019 and 31 December 2018 is as follows:

	31 December 2019	31 December 2018
Up to 1 year	4,738,103	3,362,648
Up to 1 to 2 years	1,532,293	1,842,454
Up to 2 to 3 years	1,355,826	1,222,805
Up to 3 to 4 years	1,949,324	1,188,407
Up to 4 to 5 years	724,049	1,587,117
More than 5 years	2,453,284	2,047,692
	12,752,879	11,251,123

The movements of financial liabilities for the period 1 January - 31 December 2019 and 2018 are as follow:

	2019	2018
As at 1 January	11,251,123	7,389,473
Cash inflows from borrowings	1,690,158	2,777,007
Cash inflows from issued debt instruments	777,264	259,588
Cash inflows from other financial liabilities	-	6,785
Cash outflows due to the repayment of bank borrowings	(1,555,561)	(1,812,643)
Cash outflows from debt repayments of issued debt instruments	(586,712)	(475,350)
Cash outflows related to debt payments due to lease agreements	(25,821)	-
The impact of transition to IFRS 16	65,023	-
Interest expense related to lease liabilities	12,140	-
Change in exchange differences and interest accruals	1,166,628	2,911,724
Effect of business combination	-	656,913
Liabilities related to asset held for sale	9,392	(372,574)
Other classifications	(50,755)	(89,800)
As at 31 December	12,752,879	11,251,123

The Group has an obligation to comply with the various loan commitments in the loan agreements. Financial ratios are in compliance with the provisions of the loan agreements.

As at 31 December 2019, the book value of the bank borrowings is TL12,752,879 thousand and fair value is TL12,965,824 thousand. Fair value is calculated by discounting the cash outflows according to the remaining maturities of the financial liabilities with the rates calculated considering the changing country risk premium and market interest rate changes.

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NOTE 7 - TRADE RECEIVABLES AND PAYABLES

a) Trade receivables:

	31 December 2019	31 December 2018
Trade receivables from related parties (Note 27)	12,877	23,185
	12,877	23,185
Trade receivables from third parties	973,685	670,069
Notes receivables and cheques	6,225	4,473
Less: Allowance for doubtful receivables	(88,844)	(65,279)
	891,066	609,263

Movement for allowance for doubtful receivables is as follows:

	2019	2018
Opening Balance-1 January	65,279	60,604
Additions due to acquisition	-	1,204
Provisions related to the current period	32,112	4,160
Provision no longer required	(8,547)	(689)
Closing Balance-31 December	88,844	65,279

Trade receivables amounting to TL88,844 thousand (31 December 2018: TL65,279 thousand) have passed the due date and impaired as of 31 December 2019. As of 31 December 2019 and 2018 the aging schedules are as follows:

	31 December 2019	31 December 2018
More than 12 months	88,844	65,279
	88,844	65,279

Past experience of the Group at collecting its receivables is considered in providing doubtful receivable provisions. The Group believes that no other trade receivable collection risk is present.

The Group has receivable that is past due but not impaired in the amount of TL318,852 thousand (31 December 2018: TL84,098 thousand) and TL218,220 thousand of the amount is under guarantee with collaterals (31 December 2018: TL23,850 thousand).

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 7 - TRADE RECEIVABLES AND PAYABLES (Continued)

b) Trade payables:

	31 December 2019	31 December 2018
Short term payables to third parties	2,049,603	1,386,797
Short term trade payables to related parties (Note 27)	72,942	127,224
	2,122,545	1,514,021

As of 31 December 2019 and 2018, the average maturity of trade payables is less than 3 months and unearned finance income from credit sales does not exist.

NOTE 8 - OTHER RECEIVABLES AND PAYABLES

a) Short-term other receivables:

	31 December 2019	31 December 2018
Other receivables from related parties (Note 27)	1,248,988	986,313
Short-term other receivables	58,737	33,269
	1,307,725	1,019,582

b) Long-term other receivables:

	31 December 2019	31 December 2018
Other receivables from related parties (Note 27)	1,164,669	1,184,359
Long-term other receivables	127	-
	1,164,796	1,184,359

c) Short-term other payables:

	31 December 2019	31 December 2018
Deposit received	799,378	680,706
Other payables to related parties (Note 27)	30,079	28,604
Other short-term payables	23,543	29,032
	853,000	738,342

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(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 8 - OTHER RECEIVABLES AND PAYABLES (Continued)

Movement for deposit received is as follows:

	2019	2018
1 January	680,706	203,145
Effect of business combination	-	328,996
Additions and payments, net (*)	84,578	64,142
Indexation on deposits (Note 24)	34,094	84,423
31 December	799,378	680,706

(*) The balance amounts consists of the indexation effect of paid deposits amounting TL28,985 thousand (31 December 2018: TL9,821 thousand) (Note 24).

d) Long-term other payables:

	31 December 2019	31 December 2018
Other long-term payables	17,012	20,014
	17,012	20,014

NOTE 9 - INVENTORIES

	31 December 2019	31 December 2018
Direct materials and merchandise	40,684	33,605
Trade goods and other	22,291	9,416
	62,975	43,021

NOTE 10 - OTHER ASSETS AND LIABILITIES

a) Other current assets:

	31 December 2019	31 December 2018
Income accruals regarding natural gas sale	83,091	71,521
VAT receivable	51,827	131,745
Income accruals regarding unbilled electricity	29,782	8,943
Advances given	17,154	12,864
Revenue difference correction component (*)	16,835	-
Prepaid expenses	9,486	6,378
Prepaid taxes and funds	9,123	6,303
Quality indicator income accruals	9,013	9,180
Insurance income accruals	8,353	38,231
Renewable energy sources price (YEK)	-	74,150
Other	22,445	27,272
	257,109	386,587

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 10 - OTHER ASSETS AND LIABILITIES (Continued)

- (*) EMRA regulates the distribution companies' revenues and expenses by setting ceiling amounts for distribution revenue and non-controlling expenses. Excess or shortage portions of revenue and expense ceilings are charged to two years' later tariffs which is set by EMRA. These portions of revenues and expenses are considered as an adjustment to the tariffs set by EMRA in the following second year from the origination.

b) Other non-current assets:

	31 December 2019	31 December 2018
VAT receivable	55,390	15,619
Income accruals from non-controlling expenses (*)	45,640	22,906
Revenue difference correction component (*)	15,496	29,538
Other	1,336	1,002
	117,862	69,065

- (*) EMRA regulates the distribution companies' revenues and expenses by setting ceiling amounts for distribution revenue and non-controlling expenses. Excess or shortage portions of revenue and expense ceilings are charged to two years' later tariffs which is set by EMRA. These portions of revenues and expenses are considered as an adjustment to the tariffs set by EMRA in the following second year from the origination.

c) Other current liabilities

	31 December 2019	31 December 2018
Taxes and funds payable (including VAT)	95,536	105,933
Revenue difference correction component (*)	57,320	6,210
Due to personnel	10,665	8,431
Deferred natural gas distribution revenue	6,135	7,632
Advances received	1,767	18,230
Other	16,986	12,466
	188,409	158,902

- (*) Within the framework of EMRA regulations, some expenses of electricity distribution companies are limited by a specified cap. Collection through tariff for deferred distribution revenue exceed the EMRA cap. (In previous years, this extra collected amount was considered an adjustment to the system operation revenue cap determined by EMRA in the second year and is collected with the 2018 system operation revenue cap.)

d) Other non-current liabilities

	31 December 2019	31 December 2018
Investment difference correction component (*)	-	55,851
Other	868	1,463
	868	57,314

- (*) In case of difference between the net investment expenditures made by distribution companies and the investment ceiling considered in the tariff calculations within the framework of the Communiqué Regarding the Arrangement of Distribution System Revenue published by EMRA, the corresponding amortization, real fair value and tax difference amounts, are reflected to the tariff calculations in the following periods taking into consideration in the component calculations.

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NOTE 11 - ASSETS AND LIABILITIES HELD FOR SALE

Negotiations for the sale of Zorlu Rüzgar, assessed in the scope of the IFRS 5 “Assets Held-for-Sale and Discontinued Operations”, were announced to the public with the material event disclosure of Zorlu Enerji dated 30 October 2018. After the fulfilment of the requirements of IFRS 5, the assets and liabilities related to this subsidiary were classified as “assets held for sale” and “liabilities related to assets as held for sale”. In addition to the assets of Zorlu Rüzgar, the gas turbines at the Lüleburgaz and Bursa power plants, whose sales are expected to be completed in 2020, were classified as “assets held for sale”.

a) Assets held for sale

The details of assets held for sale for Zorlu Rüzgar are presented below.

	31 December 2019	31 December 2018
Cash and cash equivalents	37,399	31,138
Trade receivables	6,662	4,216
Inventories	220	-
Other current assets	2,755	3,678
Other long term receivables	1,538	136
Property, plant and equipment	559,134	565,149
	607,708	604,317

The details of the gas turbines of the Lüleburgaz and Bursa power plants were classified as assets held for sale are as follows:

Tangible assets	Cost	Accumulated amortisation	Net Book Value
Property, plant and equipment	93,740	(66,479)	27,261
	93,740	(66,479)	27,261

The sale of property, plant and equipment amounting to TL27,261 thousand in the Lüleburgaz and Bursa power plants was completed in February 2020 as per the Turbine Sale Contract between the Company and Proenergy Services LLC. As the sales price of the gas turbines in the Lüleburgaz power plant is lower than the net book value, TL7,749 thousand of the revaluation increase fund of the property, plant and equipment, which is the residual amount after deferred tax impact and which is carried under equity related to these gas turbines, was written off. As a result, TL17,574 thousand, which is the residual amount after the revaluation increase of the property, plant and equipment sold, was classified under assets held for sale within the scope of the TFRS 5 “Non-current Assets Held for Sale and Discontinued Operations”.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

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NOTE 11 - ASSETS AND LIABILITIES HELD FOR SALE (Continued)

b) Liabilities held for sale

The details of liabilities held for sale for Zorlu Rüzgar are presented below.

	31 December 2019	31 December 2018
Financial liabilities	363,182	372,574
Derivative financial instruments	11,925	6,764
Trade payables	2,553	2,168
Other payables	-	46
Other long-term provisions	-	34
Other current liabilities	424	1,480
Deferred tax liabilities	26,879	23,616
	404,963	406,682

NOTE 12 - FINANCIAL ASSETS

Short-term financial assets

	31 December 2019	31 December 2018
Time deposits between 3 and 12 months (*)	10,008	-
	10,008	-

(*) It is included restricted deposits between 3 months and 1 year.

Long-term financial assets

	31 December 2019	31 December 2018
Long-term securities (*)	246	246
	246	246

(*) Zorlu Enerji participated with 246,291 shares (share amount: TL246) and in a ratio of 0.4% in the ownership of Enerji Piyasaları İşletme Anonim Şirketi (EPIAŞ) which is established with a capital of TL61,573 thousand.

The cost of the long-term securities converges to its fair value.

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NOTE 13 - ASSOCIATES

Movement of associates for the period is as follows:

	2019	2018
1 January	378,523	258,379
Share of gain of associates	64,302	44,923
Change on associates (*)	89,577	75,221
31 December	532,402	378,523

(*) As at 31 December 2019 change on associates amounting to TL89,577 thousand relates to the currency translation difference (31 December 2018: TL75,221 thousand).

The information of associates' of Dorad financial statements is summarized as follows:

	31 December 2019	31 December 2018
Total Assets	9,245,143	6,731,550
Total Equity	2,078,183	1,474,676
Share (%)	25	25
Group's share on total equity (*)	519,546	368,669
Group's share on income for the year	64,302	44,923
Revenue	4,302,928	3,521,151
Financial income/ (expense), net	(303,433)	(272,381)
Amortisation and depreciation expenses	(352,455)	(291,747)
Tax expense	(76,112)	(44,882)

(*) The share of Ezotech and Solad in the shareholders' equity of the Group (42.15%) is TL12,856 thousand (31 December 2018: TL9,854 thousand).

The Group's EBITDA amount related to Dorad as of 31 December 2019 and equivalent to the main shareholder Zorlu Enerji's shares, is TL247,432 thousand (31 December 2018: TL197,249 thousand).

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NOTE 14 - RIGHT OF USE ASSETS

As of 31 December 2019 and 1 January 2019, the details of right of use assets accounted in the condensed consolidated interim financial information are as follows:

	31 December 2019	1 January 2019
Land	27,062	27,882
Buildings	7,188	4,637
Vehicles	14,284	29,055
Total right of use assets	48,534	61,574

The movements for the right of use assets are as follows:

	31 December 2018	IFRS 16 effect	Additions	31 December 2019
Cost				
Land	-	27,882	-	27,882
Buildings	-	4,637	3,440	8,077
Vehicles	-	29,055	9	29,064
	-	61,574	3,449	65,023
Accumulated depreciation				
Land	-	-	820	820
Buildings	-	-	889	889
Vehicles	-	-	14,780	14,780
	-	-	16,489	16,489
Net book value	-			48,534

Current period depreciation expenses are accounted in cost of sales and operating expenses.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2018

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NOTE 15 - PROPERTY, PLANT AND EQUIPMENT

	1 January 2019	Additions (*)	Transfers (***)	Disposals	Fixed assets held for sale (**)	Currency translation difference	31 December 2019
Cost:							
Land	134,777	3,194	-	-	-	-	137,971
Land improvements	247,319	5,925	7,906	-	-	-	261,150
Buildings	48,077	2	-	-	-	-	48,079
Plant and machinery	9,187,035	37,795	49,866	(2,593)	(93,740)	11,132	9,189,495
Motor vehicles	4,706	210	12,569	-	-	-	17,485
Furniture and fixtures	42,686	2,392	-	(1,142)	-	6	43,942
Construction work in progress (*)	727,930	177,072	(244,657)	(3,608)	-	1,757	658,494
Leasehold improvements	11,556	2,854	1,750	(757)	-	-	15,403
	10,404,086	229,444	(172,566)	(8,100)	(93,740)	12,895	10,372,019
Accumulated depreciation:							
Land improvements	42,590	9,555	-	-	-	-	52,145
Buildings	9,998	1,344	-	-	-	-	11,342
Plant and machinery	1,467,802	399,092	(208)	(1,705)	(66,479)	3,027	1,801,529
Motor vehicles	2,654	1,130	5,209	-	-	-	8,993
Furniture and fixtures	22,423	12,520	(1,118)	(48)	-	-	33,777
Leasehold improvements	2,796	2,296	(1,457)	(18)	-	-	3,617
	1,548,263	425,937	2,426	(1,771)	(66,479)	3,027	1,911,403
Net book value	8,855,823						8,460,616

(*) TL85,733 thousand of the total investment amount of the Group is related to Kızıldere IV and improvement of Kızıldere III project, TL35,414 thousand to OEDAŞ, TL13,909 thousand to Alaşehir II project, TL42,016 thousand to Solar Pakistan project and the remaining amount is related to the other projects of the Group.

(**) The remaining net value of TL17,574 thousand for the property, plant and equipment in the Lüleburgaz and Bursa plants, having a cost of TL93,740 thousand, accumulated depreciation of TL66,479 thousand and a net book value of TL27,261 thousand after deducting the impairment of TRY 9,687 thousand, was classified under assets held for sale within the scope of the TFRS 5 "Non-current Assets Held for Sale and Discontinued Operations" standard.

(***) The total investment amount of the Group is TL244,657 thousand and TL144,545 thousand is related to OEDAŞ investments and transferred to receivables from service concession arrangements, TL49,866 thousand is related to Kızıldere III project and transferred to property, plant and equipment, TL7,906 thousand is related to Alaşehir I investments and transferred to land improvements, TL42,340 thousand is related to the other projects of the Group and transferred to inventories.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

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NOTE 15 - PROPERTY, PLANT AND EQUIPMENT (Continued)

	1 January 2018	Additions (*)	Transfers (**)	Revaluation fund increase	Impairment on revaluation of fixed assets	Disposals	Fixed assets held for sale	Effect of business combination	Currency translation difference	31 December 2018
Cost:										
Land	57,699	479	(7)	76,950	-	(68)	(1,150)	874	-	134,777
Land improvements	164,605	79	34,690	50,635	(540)	(1,155)	(995)	-	-	247,319
Buildings	43,100	78	-	15,235	(231)	(3,558)	(7,254)	707	-	48,077
Plant and machinery	5,460,502	61,954	708,779	3,499,637	(1,229)	(128)	(598,315)	5,262	50,573	9,187,035
Motor vehicles	1,595	965	-	-	-	(224)	(77)	2,447	-	4,706
Furniture and fixtures	28,180	6,024	375	-	-	(111)	(423)	8,539	102	42,686
Construction work in progress (*)	764,202	662,964	(712,289)	-	-	-	(10)	-	13,063	727,930
Leasehold improvements	7,492	1,649	-	-	-	(4)	-	2,419	-	11,556
	6,527,375	734,192	31,548	3,642,457	(2,000)	(5,248)	(608,224)	20,248	63,738	10,404,086
Accumulated depreciation:										
Land improvements	33,332	9,328	-	-	-	-	(70)	-	-	42,590
Buildings	11,386	819	-	-	-	(2,122)	(215)	130	-	9,998
Plant and machinery	1,133,492	362,467	2,235	-	-	(128)	(42,459)	396	11,799	1,467,802
Motor vehicles	843	427	-	-	-	-	(26)	1,410	-	2,654
Furniture and fixtures	12,342	4,573	-	-	-	(83)	(225)	5,816	-	22,423
Leasehold improvements	40	1,384	-	-	-	-	(80)	1,452	-	2,796
	1,191,435	378,998	2,235	-	-	(2,333)	(43,075)	9,204	11,799	1,548,263
Net book value	5,335,940									8,855,823

(*) The total investment amount of the Group in 2018, TL 249,641 thousand of the total investments amounting is related to Kızıldere III JES project, TL 205,913 thousand to OEDAŞ, TL 80,313 thousand to Alaşehir II JES project, TL 93,032 thousand to Solar Pakistan project, TL 15,258 thousand Tekkehaham is related to the JES project and TL 18,807 thousand is related to the other projects of the Group

(**) The amounts are related to Kızıldere III geothermal power plant of Zorlu Doğal and the coal boiler of Zorlu Enerji.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

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NOTE 15 - PROPERTY, PLANT AND EQUIPMENT (Continued)

As of 31 December 2019, the net book value of tangible assets acquired by the Group through finance lease amounts is TL35,095 thousand (31 December 2018: TL39,186 thousand).

Group has chosen 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 2018, the Group has revalued its power plants and the revaluation fund has been accounted in the consolidated balance sheet. The valuation studies related to the domestic power plants at the mentioned date have been performed by Avrupa 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 2019 and 31 December 2018, the movements for revaluation fund are as follows:

1 January 2018	648,807
Revaluation fund	2,897,799
Depreciation transfer	(130,625)
31 December 2018	3,415,981
1 January 2019	3,415,981
Depreciation transfer	(196,342)
Revaluation fund	(7,749)
31 December 2019	3,211,890

If the Group has not adopted the revaluation model in accordance with IAS 16, the net book values of the property, plant and equipment as of 31 December 2019 and 2018 are as follows:

	31 December 2019	31 December 2018
Land	82,255	79,061
Land improvements	116,380	107,808
Buildings	22,314	24,195
Plant and machinery	3,260,242	3,708,607

Collateral, pledges and mortgages on property, plant and equipment are presented in Note 17.

Breakdown of depreciation and amortisation expenses under cost of sales, operating expense and other operating expense have been presented in Note 23 and Note 24.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 16 - INTANGIBLE ASSETS

	1 January 2019	Additions	Transfers	Currency Translation	Disposals	31 December 2019
Cost						
Rights	2,532,911	4,188	(11,821)	279	(111)	2,525,446
-Service concession arrangements	2,031,944	-	-	-	-	2,031,944
-Customer relationships	352,574	-	-	-	-	352,574
- Contract cost	90,472	-	-	-	-	90,472
-Other rights	57,921	4,188	(11,821)	279	(111)	50,456
Goodwill	622,750	-	-	-	-	622,750
Licenses	11,456	1,247	-	-	(450)	12,253
	3,167,117	5,435	(11,821)	279	(561)	3,160,449
Accumulated amortization						
Rights	209,892	139,704	(3,751)	-	(98)	345,747
-Service concession arrangements	122,248	112,382	-	-	-	234,630
-Customer relationships	33,998	17,804	-	-	-	51,802
-Contract cost	28,885	3,422	-	-	-	32,307
-Other rights	24,761	6,096	(3,751)	-	(98)	27,008
Licenses	1,454	1,028	-	-	(161)	2,321
	211,346	140,732	(3,751)	-	(259)	348,068
Net book value	2,955,771					2,812,381

	1 January 2018	Additions	Transfers	Translation	Disposals	Currency to acquisition	Additions due 31 December 2018
Cost							
Rights	1,334,814	14,651	(31,548)	9	(470)	1,215,455	2,532,911
-Service concession arrangements	918,126	-	-	-	-	1,113,818	2,031,944
-Customer relationships	352,574	-	-	-	-	-	352,574
- Contract cost	-	-	-	-	-	90,472	90,472
-Other rights	64,114	14,651	(31,548)	9	(470)	11,165	57,921
Goodwill	485,368	-	-	-	-	137,382	622,750
Licenses	4,537	1,426	-	-	-	5,493	11,456
	1,824,719	16,077	(31,548)	9	(470)	1,358,330	3,167,117
Accumulated amortization							
Rights	69,523	110,509	(2,235)	-	(76)	32,171	209,892
-Service concession arrangements	42,626	79,622	-	-	-	-	122,248
-Customer relationships	16,194	17,804	-	-	-	-	33,998
-Contract cost	-	1,712	-	-	-	27,173	28,885
-Other rights	10,703	11,371	(2,235)	-	(76)	4,998	24,761
Licenses	1,029	425	-	-	-	-	1,454
	70,552	110,934	(2,235)	-	(76)	32,171	211,346
Net book value	1,754,167						2,955,771

Breakdown of depreciation and amortisation expenses under cost of sales, operating expense and other operating expense have been presented in Note 23 and Note 24.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 17 - PROVISIONS, CONTINGENT ASSETS AND LIABILITIES

17.1 Short-term other provision

	31 December 2019	31 December 2018
Short-term provisions	11,141	16,198
	11,141	16,198

TL10,779 thousand of short-term other provision consist of provision for legal disputes and the movement has been shown as below:

	2019	2018
1 January	15,894	42,347
Effect of business combination	-	1,796
Cancellations of provision for legal disputes / payments	(5,115)	(28,249)
31 December	10,779	15,894

17.2 Long-term other provision

	31 December 2019	31 December 2018
Long-term provisions for employment benefits	32,584	23,281
	32,584	23,281

17.3 Contingent assets

	Currency	31 December 2019		31 December 2018	
		Original amount	TL equivalent	Original amount	TL equivalent
Letters of guarantees received	TL	388,536	388,536	283,041	283,041
Letters of guarantees received	USD	5,477	32,534	6,405	33,696
Letters of guarantees received	EUR	2,810	18,688	3,866	23,304
Cheques received	TL	11,720	11,720	19,168	19,168
Cheques received	USD	615	3,653	1,076	5,661
Cheques received	EUR	169	1,124	229	1,380
		456,255		366,250	

Guarantee letters received consist of the letters, cheques and notes received from customers in relation to the Group's operations.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 17 - PROVISIONS, CONTINGENT ASSETS AND LIABILITIES (Continued)

The commitments and contingent liabilities of the Group are summarized as follows:

	Original currency	31 December 2019		31 December 2018	
		Original amount	TL equivalent	Original equivalent	TL amount
Letters of guarantees given	TL	2,838,785	2,838,785	2,803,751	2,803,751
Letters of guarantees given	EUR	168,374	1,119,788	180,786	1,089,777
Letters of guarantees given	USD	156,304	928,477	166,853	877,797
Letters of guarantees given	PKR	1,875,000	71,494	1,875,000	70,106
Letters of guarantees given	NIS	7,298	12,526	-	-
			4,971,070		4,841,431

Letters of guarantees 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.

17.4 Letters of guarantees/pledges/mortgages given

The Group’s guarantees, pledges and mortgages (“GPM”) as at 31 December 2019 and 31 December 2018 are summarized as follows:

	31 December 2019			31 December 2018	
	Original currency	Original amount	TL equivalent	Original equivalent	TL amount
GPM's given by the Group					
Total amount of GPM's given for companies' own legal entity	USD	135,804	806,703	143,807	756,554
	EUR	160,704	1,068,778	173,136	1,043,663
	TL	2,812,250	2,812,250	2,775,233	2,775,233
	PKR	1,875,000	71,494	1,875,000	70,106
Total amount of GPM given for the subsidiaries and associates in the full scope of consolidation	TL	26,535	26,535	28,518	28,518
	USD	550	3,267	564	2,967
	EUR	7,320	48,682	7,300	44,004
Total amount of GPM given for the purpose of maintaining operating activities	USD	19,950	118,507	22,482	118,276
	EUR	350	2,328	350	2,110
	NIS	7,298	12,526	-	-
Total amount of other GPMs given		-	-	-	-
			4,971,070		4,841,431

The ratio of other guarantees, pledges and mortgages given by the Group to the total equity is 0% as at 31 December 2019 (31 December 2018: 0%).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 17 - PROVISIONS, CONTINGENT ASSETS AND LIABILITIES (Continued)

Details concerning the guarantees, pledges and mortgages that the Company and its subsidiaries gave within the scope of project financing loans and on behalf of their legal entities are given below:

Rotor Elektrik Üretim AŞ

Rotor has signed a long-term loan agreement with the consortium of a group of financial institutions amounts to EUR130 million as at 8 May 2009 related to the 135 MW electricity production powerplant located in Osmaniye. In addition to the loan agreement, mortgage, commercial enterprise pledge, share pledge, account pledge, assignment of receivables and assignment of insurance receivables agreements are signed. As per mortgage agreement signed between the Company and the Bank, a pledge amounts to EUR130,000,000 has placed on the property of the Company. As per commercial pledge agreement, a commercial pledge amounts to TL501,725,000 has placed on Company's fixed assets and it is included in the collateral, pledges and mortgages given by the Company note. Commercial enterprise pledge upper limit is EUR235,000,000. Zorlu Holding and Zorlu Enerji are guarantor for Rotor's loan obtained from the consortium of several financial institutions amounting EUR130 million.

Zorlu Enerji Pakistan Ltd.

As at 26 October 2011, Zorlu Enerji Pakistan Ltd. subsidiary of Zorlu Enerji, signed a long term loan agreement with International Finance Corporation ("IFC"), the Asian Development Bank ("ADB"), Eco Trade and Development Bank ("ECO") and local consortium leader Habib Bank Limited ("HBL") amounting USD111million with a maturity of up to 12 years for financing of its wind energy power plant with a capacity of 56.4 MW in Pakistan/Jhimpir established in Jhimpir, the Sindh region of Pakistan. Zorlu Holding is guarantor for this loan. In addition to the loan agreement, account pledge, share pledge, assignment of insurance receivables, pledge on deed, assignment of project rights and mortgage agreements are signed. As per mortgage agreement signed between Zorlu Enerji Pakistan and the Bank, a pledge amounts to USD118,625,000 and PKR1,875,000,000 has placed on the property of the Company.

Zorlu Doğal Elektrik Üretimi AŞ

On 27 October 2015, a loan agreement amounts to USD815 million (USD785 million in cash and USD30 million in non-cash) and having a 14 years term has been signed on 27 October 2015 between Zorlu Doğal, Akbank TAŞ, Türkiye Garanti Bankası AŞ, Türkiye İş Bankası AŞ and Türkiye Sınai Kalkınma Bankası AŞ for the refinancing of its existing debts and for financing the investment in the Kızıldere III geothermal power plant, which is planned to be constructed in Denizli. In addition to the said loan agreement, account pledge, share pledge, assignment of receivables and assignment of shareholder receivables agreement are signed. Also, Zorlu Doğal signed a loan agreement amounts to USD190 million with 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 (65.5 MW) of the Kızıldere III Geothermal Energy Plant. In addition to the loan contract, they also signed contracts for an account pledge, a share pledge, the transfer of receivables and stakeholder receivables transfers. EPIAŞ's receivable transfer amount cap in the scope of the transfer of receivables agreement is TL9,500,000 thousand. Since EPIAŞ's receivable transfer amount is the cap, it is not included in the collateral, pledges and mortgages given by the Company note. Zorlu Holding and Zorlu Enerji are guarantor for Zorlu Doğal's loan obtained amounts to USD975 million.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 17 - PROVISIONS, CONTINGENT ASSETS AND LIABILITIES (Continued)

Zorlu Jeotermal Enerji Elektrik Üretimi AŞ

The 14 year term loan agreement has been signed on 25 November 2013 between Zorlu Jeotermal and Yapı Kredi AŞ with a credit line up to USD113million in order to finance the project. Pursuant to the material disclosure dated 24 June 2015, the project capacity was increased to 45MW. Hence, an amended loan agreement was signed between aforementioned parties and the credit line were increased to USD148 million. In addition to the said loan agreement, account pledge, share pledge, assignment of receivables and assignment of shareholder receivables agreement are signed. In addition to the aforementioned credit agreement, account pledge, share pledge, consecutive lending and takeover contracts were signed. As per the Commercial Enterprise Pledge Contract, a commercial enterprise lien equal to TL1,060,800 thousand was granted. As per the transfer of receivables agreement, the cap for the receivable transfer amount of EPIAŞ was determined to be TL2,155,000 thousand. Since the EPIAŞ receivable transfer amount is the cap, it is not included in the collateral, pledges and mortgages given by the Company note. Zorlu Holding is guarantor for Zorlu Jeotermal's loan obtained from Yapı ve Kredi AŞ amounting USD148 million.

Zorlu Rüzgar Enerjisi Elektrik Üretimi AŞ

Pursuant to the material disclosure dated 24 November 2014, Zorlu Rüzgar, which is 100% subsidiary of the Company, signed two loan agreements amounts to EUR40 million with Türkiye Sınai Kalkınma Bankası and EUR41.3 million with Bayerische Landesbank as a part of ECA financing with German Trade Finance Agency (Euler Hermes) contribution, in order to finance Sarıtepe and Demirciler wind power plant projects which are planned to established in Bahçe/Osmaniye and to have 80.3 MW installed capacity. In addition to the loan agreement, account pledge, share pledge, assignment of receivables, assignment of electricity production license, and commercial enterprise pledge agreements are signed. As per commercial pledge agreement, a commercial pledge amounts to TL193 thousand has placed on Company's fixed assets. As per the transfer of receivables agreement, the cap for the EPIAŞ receivable transfer amount is TL870,000 thousand. Since the EPIAŞ receivable transfer amount is the cap, it is not included in the collateral, pledges and mortgages given by the Company note. Zorlu Enerji is guarantor for Zorlu Rüzgar's loan obtained amounts to EUR80,6 million loan obtained from Türkiye Sınai Kalkınma Bankası and Bayerische Landesbank.

Zorlu Enerji Elektrik Üretim AŞ

Since Katılım Varlık Kiralama AŞ and TFKB Varlık Kiralama AŞ is the issuer and Zorlu Enerji is the beneficiary of the funds in the sukuk transaction, which amounts to TL200 million and was issued on 20 April 2018 and also amounts to TL100 million and was issued on 24 March 2015, Zorlu Enerji and Zorlu Holding became the guarantor of Katılım Varlık Kiralama AŞ and TFKB Varlık Kiralama AŞ.

As per the sale of the Lüleburgaz steam generator of Zorlu Enerji, a sell and lease-back financial leasing agreement was signed between Şeker Finansal Kiralama AŞ and Zorlu Enerji on 24 August 2017. Zorlu Holding is guarantor for the financial leasing liabilities of Zorlu Enerji resulted from sell and lease back 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 ("Zorluteks") were transferred to Şeker Finansal Kiralama AŞ in the scope of financial leasing transactions.

Zorlu Holding is guarantor for Zorlu Enerji's loan obtained from Export Development Canada amounts to USD100 million and loan obtained from Kuwait Investment Authority amounts to USD250 million.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 17 - PROVISIONS, CONTINGENT ASSETS AND LIABILITIES (Continued)

Gazdaş

On 29 June 2015, a loan agreement with a term of 12 years for the amount of USD102 million was signed with Akbank and Yapı ve Kredi Bankası for use in the expansion investments to be made by Gazdaş in the scope of natural gas distribution licence 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 said loan agreement, an account pledge agreement, transfer of consecutive receivables and a share collateral agreement, a licence transfer contract and an account pledge agreement worth TL29,250 thousand were signed.

Trakya

On 29 June 2015, a loan agreement with a term of 12 years for the amount of USD114 million was signed with Akbank and Yapı ve Kredi Bankası for use in the expansion investments to be made by Trakya in the scope of natural gas distribution licence 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 said loan agreement, an account pledge agreement, transfer of consecutive receivables and a share collateral agreement, a licence transfer contract and an account pledge agreement worth TL63,500 thousand were signed.

OEDAŞ

OEDAŞ, the European Bank for Reconstruction and Development ("EBRD"), the International Finance Corporation ("IFC"), Nederlandse Financierings Maatschappij Voor Ontwikkelingslanden N.V. ("FMO") and Denizbank AŞ signed project financing agreements for a loan with a maximum amount of USD330 million. In addition to the loan agreement, agreements for receivable transfer, account pledge, transfer of consecutive receivables and share collateral amounting to TL147,743 thousand were signed. Zorlu Enerji Elektrik Üretim AŞ ("Zorlu Enerji"), Zorlu Holding and Zorlu Osmangazi were co-signers as the guarantors for OEDAŞ's loan in the amount of TL1.133 million, which was provided from EBRD, IFC, FMO and Denizbank. And also, TL52,126 thousand and TL1,150,050 thousand shares pledge agreements were signed for OEPSAŞ and Zorlu Osmangazi, respectively.

17.5 Electricity buying and selling commitments

Zorlu Elektrik Toptan

As of 2020, there are sales commitments of 218.400 MWh related to first six months of 2020. As of 31 December 2019, within the scope of electricity energy purchase agreements with energy companies, within 2019, it has committed to take 651,600 MWh energy and all of the energy undertaken has been taken. In 2020, Zorlu Elektrik Toptan has no committed to purchase. In relation to electricity purchase and sale operations and in the scope of the risk sharing agreements signed with energy firms as of 31 December 2019, it carried out 87.600 MWh of transactions in 2019 and committed to carry out 43.920 MWh of transactions in 2020.

OEPSAŞ

OEPSAŞ has no any energy selling commitment regarding other energy companies for the years 2019 and 2020. Within scope of buying commitment among energy companies, the Company committed to buy 550.800 MWh energy for 2019 and fulfilled all energy buying commitment as at 31 December 2019. The Company committed to buy 1.317.600 MWh energy for the year 2020.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

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NOTE 18 - DERIVATIVE FINANCIAL INSTRUMENTS

Derivative financial instruments

31 December 2019								
	Contract amount (USD)	Contract amount (EUR)	Contract amount (TL)	Total contract amount (TL)	Fair value asset	Fair value liability	Carried at fair value through profit or loss (***)	Carried at fair value under equity (**)
Cross currency swap agreements held for hedging	-	32,381	-	215,353	-	(5,894)	84	(10,916)
Cross currency swap agreements (*)	69,420	-	-	412,369	-	(2,541)	(350)	-
Interest rate swap agreements	-	-	-	-	-	-	(5,148)	-
Interest rate swap agreements held for hedging	575,235	-	-	3,417,011	-	(136,584)	(28,237)	(74,510)
	644,655	32,381	-	4,044,733	-	(145,019)	(33,651)	(85,426)
31 December 2018								
	Contract amount (USD)	Contract amount (EUR)	Contract amount (TL)	Total contract amount (TL)	Fair value asset	Fair value liability	Carried at fair value through profit or loss	Carried at fair value under equity (*)
Cross currency swap agreements held for hedging	-	32,381	-	195,193	-	(3,651)	(2,929)	(4,929)
Cross currency swap agreements	69,420	-	-	365,212	-	(2,191)	(27,909)	-
Interest rate swap agreements	-	-	340,630	340,630	5,148	-	12,679	-
Interest rate swap agreements held for hedging	655,235	-	-	3,447,126	-	(35,756)	(233)	(16,434)
	724,655	32,381	340,630	4,348,161	5,148	(41,598)	(18,392)	(21,363)

(*) The contract amount demonstrates the original contract amounts at the transaction date of cross currency transactions. The remaining portion of these transaction is USD58,438 thousand and EUR26,667 thousand.

(**) The amount was presented as netted off deferred tax in “Hedge Reserves” account under equity.

(***) The amount presents the passive parts of cross currency swap transactions for a cash flow hedge amounts to TL84 thousand for which the fair value difference is recognised under profit/(loss), and interest rate swap transactions for a cash flow hedge of TL29,023 thousand as a result of effectiveness tests.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

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NOTE 18 - DERIVATIVE FINANCIAL INSTRUMENTS (Continued)

Derivative financial instruments are initially recognized in the consolidated balance sheet at cost and subsequently are re-measured at their fair value. The derivative instruments of the Group consist of interest rate swap 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 firm commitment (“cash flow hedge”). Interest rate swap transactions provide effective economic hedges under the Group risk management position and qualify for hedge accounting under the 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 ineffective portion is recognized in the consolidated income statement. Amounts recognized under equity are transferred to the consolidated income statement in the period in which the hedged firm commitment or forecasted transaction affects the consolidated income statement.

As at 31 December 2019, the Group has a forward sales commitment amounts to EUR32,381 thousand and USD69,420 thousand against a purchase commitment of USD37,719 thousand and TL314,554 thousand.

Non-derivative financial instruments

	<u>31 December 2019</u>			<u>31 December 2018</u>		
	Original amount	Carried at fair value through other comprehensive income		Original amount	Carried at fair value through other comprehensive income	
	USD	EUR	(TL) (*)	USD	EUR	(TL) (*)
Hedged amount for foreign currency risk	1,318,064	16,714	(2,550,169)	983,412	20,524	(1,962,737)
	1,318,064	16,714	(2,550,169)	983,412	20,524	(1,962,737)

(*) The Group uses investment loans amounting to USD1,318,064 thousand and EUR16,714 thousand as a hedging instrument against the USD spot exchange rate risk the Group is exposed to due to highly probable YEKDEM sales income, and applies cash flow hedge accounting as a result of the effectiveness tests performed.

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 18 - DERIVATIVE FINANCIAL INSTRUMENTS (Continued)

The movement of derivative financial instruments is as follows:

	2019	2018
1 January	(36,450)	(6,672)
Related to income statement		
- Financial income/(expense) (Note 26)	(33,651)	(18,392)
Related to other comprehensive income		
- Hedge reserves	(80,079)	(46,095)
Addition due to acquisition	-	27,945
Transfer to liabilities of asset groups held for sale	5,161	6,764
31 December	(145,019)	(36,450)

The movement of non-derivative financial instruments is as follows:

	2019	2018
1 January	(1,962,737)	(610,552)
Related to other comprehensive income		
- Hedge reserves	(587,432)	(1,352,185)
31 December	(2,550,169)	(1,962,737)

NOTE 19 - PROVISIONS FOR EMPLOYMENT BENEFITS

Long - term provisions related to employee benefits

	31 December 2019	31 December 2018
Provision for employee termination benefits	32,584	23,281
	32,584	23,281

Movement of provision for employee termination benefits is as follows:

	2019	2018
1 January	23,281	12,949
Additions due to acquisition	-	2,510
Service cost	6,436	5,790
Interest cost	3,766	3,669
Cancellation of provisions	(1,419)	(724)
Termination benefits paid	(3,165)	(3,514)
Actuarial loss	3,685	2,635
Transfer to liabilities related to asset held for sale	-	(34)
31 December	32,584	23,281

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 19 - PROVISIONS FOR EMPLOYMENT BENEFITS (Continued)

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 TL6,380 for each year of service as of 31 December 2019 (31 December 2018: TL5,434).

Termination benefits liability is not dependent on any funding legally and any funding requirement does not exist.

The provision has been calculated by estimating the present value of the future probable obligation of the Group arising from the retirement of employees.

IAS 19 requires actuarial valuation methods to be developed to estimate the enterprise’s obligation under defined benefit plans. Accordingly, the following actuarial assumptions were used in the calculation of the total liability:

	2019	2018
Discount rate (%)	5.1	5.6
Probability of retirement (%)	92.2	92.1

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 TL6,730 for each period of service as of 1 January 2020 (1 January 2019: TL6,018).

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 20 - EQUITY

Share capital

	31 December 2019	31 December 2018
Limit on registered share capital	3,000,000	3,000,000
Issued capital	2,000,000	2,000,000

The Group’s shareholders and shareholding structure as at 31 December 2019 and 31 December 2018 are as follows:

	Share (%)	31 December 2019	Share (%)	31 December 2018
Zorlu Holding (*)	48.72	974,478	48.72	974,478
Korteks	17.55	350,949	17.55	350,949
Publicly held	31.98	639,623	31.98	639,623
Other	1.75	34,950	1.75	34,950
	100.00	2,000,000	100.0	2,000,000
Adjustment to share capital		110,948		110,948
Total		2,110,948		2,110,948

(*) TL329,207 thousand and the portion equivalent to 16.46% of the total capital represent the shares that belong to Zorlu Holding.

NOTE 21 - TAXES ON INCOME

	31 December 2019	31 December 2018
Corporate and income taxes expense	71,686	13,408
Less: Prepaid taxes	(49,803)	(16,814)
Current period income tax (asset)/ liability	21,883	(3,406)

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. Accordingly tax considerations reflected in these consolidated financial statements have calculated separately for each of the companies in the scope of the consolidation.

In Turkey, corporation tax is payable at a rate of 22% as at 31 December 2020 and 2019.

Corporations are required to pay advance corporation tax quarterly at the rate of 20% on their corporate income. Advance tax is declared by the 14th and paid by the 17th of the second month following each calendar quarter end. Advance tax paid by corporations is credited against the annual corporation tax liability. If, despite offsetting, there remains a paid advance tax amount, it may be refunded or offset against other liabilities to the government. Within the scope of the Law regarding Amendments to Certain Tax Laws and Other Laws No. 7061, which went into effect after promulgation in the Official Gazette dated 5 December 2017, the corporate income tax rate was raised from 20% to 22% for 2018, 2019 and 2020.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 21 - TAXES ON INCOME (Continued)

The taxation on income and expense for the Group for the period ended 31 December 2019 and 2018 is summarised as follows:

	1 January - 31 December 2019	1 January - 31 December 2018
Current period tax expense	(71,686)	(13,408)
Deferred tax (expense)/income	(6,857)	88,353
Total tax (expense)/ income	(78,543)	74,945

The reconciliation of taxation on income for the years ended 31 December 2019 and 31 December 2018 as follows:

	1 January - 31 December 2019	1 January - 31 December 2018
Profit before tax	(129,859)	659
Local tax rate	22%	22%
Tax expense calculated with effective tax rate	28,569	(145)
Deductions and exemptions	67,821	136,024
Additions	(66,106)	(103,938)
Tax losses and other tax advantages (net effect)	(113,786)	26,243
Effect of tax rate change	(12,796)	5,798
Share of profit of associates	14,146	9,883
Other	3,609	1,080
Current income tax (expense)/ income	(78,543)	74,945

Deferred taxes

The Group recognizes deferred income tax based on all temporary differences arising between their financial statements as reported for IFRS and its statutory tax financial statements.

Within the scope of the Law regarding Amendments to Certain Tax Laws and Other Laws No. 7061, which went into effect after promulgation in the Official Gazette dated 5 December 2017, the corporate income tax rate was raised from 20% to 22% for 2018, 2019 and 2020. As per the said law, in the financial statements dated 31 December 2019, the deferred tax assets and liabilities were calculated using a tax rate of 22% for the portion of the temporary differences that will have a tax impact in 2019 and 2020, and using a tax rate of 20% for the portion of the temporary differences that will have a tax impact in 2021 and thereafter (31 December 2018: 20%).

	31 December 2019	31 December 2018
Deferred tax assets	375,127	312,084
Deferred tax liabilities	(662,013)	(761,300)
Deferred tax assets/(liabilities), net	(286,886)	(449,216)

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 21 - TAXES ON INCOME (Continued)

	Temporary differences		Deferred tax assets/(liabilities)	
	31 December 2019	31 December 2018	31 December 2019	31 December 2018
Property, plant and equipment	2,197,689	3,513,914	(406,133)	(696,572)
Carry forward tax losses	(2,754,617)	(2,307,599)	568,043	492,729
Receivables from service concession arrangements	2,308,845	1,325,932	(495,996)	(280,267)
Credit commission and unearned credit finance expense	345,922	240,208	(70,438)	(48,258)
Indexation of deposits received	(295,038)	(260,944)	64,908	57,408
Derivative instruments	(145,019)	(36,450)	29,004	7,339
Investment incentive	(76,388)	(71,151)	15,278	14,230
Provision for employee termination benefits	(32,584)	(23,281)	7,169	5,065
Other	(5,809)	6,983	1,279	(890)
Deferred tax assets/(liabilities), net			(286,886)	(449,216)

The movements in deferred tax assets and liabilities for the years ended 31 December 2019 and 2018 are as follows:

	31 December 2019	31 December 2018
1 January	(449,216)	(57,414)
Charged to statement of profit or loss	(6,857)	88,353
Charged to other comprehensive income	165,924	(396,811)
Transfer to assets/(liabilities) held for sale	3,263	23,616
Deferred tax assets (liabilities) accounted due to the acquisition, net	-	(106,960)
31 December	(286,886)	(449,216)

Analyse of deferred tax assets and liabilities is as follows:

	31 December 2019	31 December 2018
Deferred tax assets:		
- will be utilized over 12 months	189,986	174,062
- will be utilized less than 12 months	185,141	138,022
	375,127	312,084
Deferred tax liabilities:		
- will be realised over 12 months	(605,237)	(726,440)
- will be realised less than 12 months	(56,776)	(34,860)
	(662,013)	(761,300)
Deferred tax assets/(liabilities), net	(286,886)	(449,216)

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 21 - TAXES ON INCOME (Continued)

As of 31 December 2019, the Group recognized deferred tax assets for the carry forward tax losses amounting to TL2,754,617 thousand (31 December 2018: TL2,307,599 thousand) for which the Group believes it will not utilize in the future, For the remaining carry forward tax losses amounting to TL471,693 thousand (31 December 2018: TL130,747 thousand). The Group's tax losses and deferred tax assets as of the balance sheet date are as follows:

Due date	Losses
2020	222,885
2021	322,382
2022	360,348
2023	1,272,446
2024	576,556
	2,754,617

The Group's expiration dates of unrecognized carry forward tax losses are as follows:

Due date	Losses
2020	182
2021	51,263
2022	185
2023	378
2024	419,685
	471,693

NOTE 22 - REVENUE

	1 January - 31 December 2019	1 January - 31 December 2018
Income from electricity sales and trading activities	3,146,874	2,339,939
Retail electricity sales income	1,859,149	1,601,330
Natural gas sales income	1,323,442	517,005
Income from investment activities	1,118,528	168,252
Distribution system income	645,160	590,493
System usage income	154,010	60,574
General lighting income	56,335	45,468
Transmission service income	16,041	7,384
Other	41,597	90,855
	8,361,136	5,421,300

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(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 23 - EXPENSES BY NATURE

	1 January - 31 December 2019	1 January - 31 December 2018
Direct materials and merchandise expenses	4,613,955	2,477,329
Expense from investment activities	1,056,967	168,252
Depreciation and amortisation (*)	470,776	410,310
Employee and personnel expenses (**)	224,201	152,233
Other	693,090	991,083
	7,058,989	4,199,207

(*) The total amount of depreciation and amortization is TL583,158 thousand (31 December 2018: TL489,932 thousand) and TL470,776 thousand (31 December 2018: TL410,310 thousand) of the amount of the depreciation and amortization under the expenses by the nature, TL112,382 thousand of the amount of amortization under the other operating expense (31 December 2018: TL79,622 thousand).

(**) The total amount of employee and personnel expenses is TL224,201 thousand and TL16,822 thousand of the amount accounted under selling and marketing expenses (31 December 2018: TL15,806 thousand), TL57,151 thousand of amount accounted under general and administrative expense (31 December 2018: TL50,436 thousand) and TL150,228 thousand of the amount is accounted under cost of sales (31 December 2018: TL85,991 thousand).

NOTE 24 - OTHER OPERATING INCOME AND EXPENSE

a) Other operating income:

	1 January - 31 December 2019	1 January - 31 December 2018
Interest income from distribution activities (*)	260,628	135,327
Gain on sale of subsidiaries	29,546	-
Interest income	25,268	11,118
Provisions released	8,547	2,579
Risk sharing income	3,548	13,953
Foreign exchange difference from trading activities	56	26,783
Other	24,923	46,396
Total	352,516	236,156

(*) This amount represents the profit earned on investment performed by electricity distribution segment.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 24 - OTHER OPERATING INCOME AND EXPENSE (Continued)

b) Other operating expense:

	1 January - 31 December 2019	1 January - 31 December 2018
Depreciation of service concession arrangements	112,382	79,622
Indexation of deposits received (Note 8)	63,079	94,244
Interest expense	34,442	57,306
Provisions expenses	25,089	23,831
Foreign exchange difference from trading activities	9,599	35,438
Other	24,826	7,296
Total	269,417	297,737

NOTE 25 - SHARE OF PROFIT OF ASSOCIATES

	2019	2018
Profit share in associates	64,302	44,923

NOTE 26 - FINANCIAL INCOME AND EXPENSES

a) Financial income:

	1 January - 31 December 2019	1 January - 31 December 2018
Foreign exchange gains	434,659	898,171
Interest income	219,769	195,956
Financial income	654,428	1,094,127

b) Financial expense:

	1 January - 31 December 2019	1 January - 31 December 2018
Interest expense (*)	1,592,539	1,176,394
Foreign exchange loss (*)	556,661	1,057,237
Bank commission and other financial expenses	50,984	46,880
Loss on derivative instruments	33,651	18,392
Financial expenses	2,233,835	2,298,903

(*) As at 31 December 2019, capitalized borrowing cost amounts to TL83,594 thousand (31 December 2018: TL68,985 thousand).

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira (“TL”), unless otherwise indicated.)

NOTE 27 - RELATED PARTY TRANSACTIONS

i) Related party balances:

- (1) Shareholder
- (2) Associates
- (3) Related parties

a) Short-term trade receivables from related parties

	31 December 2019	31 December 2018
Korteks (1)	3,890	13,985
Zorluteks Tekstil Ticaret ve Sanayi AŞ (“Zorluteks”) (3)	2,619	5,359
Other (3)	6,368	3,841
	12,877	23,185

b) Short-term other receivables from the related parties

	31 December 2019	31 December 2018
Zorlu Holding (*) (1)	986,473	648,347
Zorlu Endüstriyel ve Enerji Tesisleri İnşaat Ticaret AŞ (“Zorlu Endüstriyel”) (**) (3)	136,802	94,957
Zorlu O&M Enerji Tesisleri İşletme ve Bakım Hizmetleri AŞ (“Zorlu O&M”) (***) (3)	48,940	177,746
Other (3)	76,773	65,263
	1,248,988	986,313

(*) The maturity of TL986,473 thousand portion of the Group’s total receivables from Zorlu Holding amounts to TL1,846,951 thousand is less than one year. TL122 million of short term receivables is back-to-back loans and the applied interest rate is 24.7%. The applied interest rate is between 7.75% and 9.75% for the remaining amounts to USD20.9 million and EUR20 million of back-to-back loans. The remaining short term receivables amounts to USD102 million is provided for financing purpose and the applied interest rate that determined in market condition is 7% for USD (31 December 2018: 9%).

(**) The Group's receivable from Zorlu Endüstriyel is in USD and is provided for financing purpose. The interest rate of the USD receivable is 7% which is determined in the market conditions and is applied for USD (31 December 2018: 9%).

(***) The Group's receivable from Zorlu O&M is in USD and is in the nature of back-to-back loans and the interest rate is 11.75%. The interest rate of the financing receivable in USD is 7% which is determined in the market conditions and is applied for USD (31 December 2018: 9%).

ZORLU ENERJİ ELEKTRİK ÜRETİM AŞ

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

(Amounts expressed in thousands of Turkish Lira ("TL"), unless otherwise indicated.)

NOTE 27 - RELATED PARTY TRANSACTIONS (Continued)

c) Long-term other receivables from related parties

	31 December 2019	31 December 2018
Zorlu Holding (*) (1)	860,478	928,168
Ezotech (**) (2)	184,291	147,452
Edeltech (**) (3)	100,371	92,062
Solad (**) (2)	19,529	16,677
	1,164,669	1,184,359

(*) TL860,478 thousand portion Zorlu Enerji's total receivables amounting to TL1,846,951 thousand from Zorlu Holding is more than one year. The amounts to USD18.8 million and EUR9.3 million is the back-to-back loans and the applied interest rates are 8% and 11.75%, respectively. The remaining short term receivables amounts to USD115.6 million is provided for financing purpose and the applied interest rate that determined in market condition is 7% for USD (31 December 2018: 9%).

(**) The receivables from Dorad, Ezotech, Solad and Edeltech consist of the amounts provided for the power plant projects in Israel.

d) Short-term trade payables to related parties

	31 December 2019	31 December 2018
Zorlu Doğal Gaz Tedarik Ticaret AŞ ("Zorlu Doğal Gaz Tedarik") (*) (3)	38,363	36,256
Zorlu O&M (*) (3)	10,371	5,288
Zorlu Endüstriyel (*) (3)	6,807	5,078
Zorlu Doğal Gaz İthalat İhracat ve Toptan AŞ ("Zorlu Doğal Gaz") (*) (3)	3,620	67,997
Other (3)	13,781	12,605
	72,942	127,224

e) Short-term other payables to related parties

	31 December 2019	31 December 2018
Zorlu Endüstriyel (3)	5,449	2,119
Korteks (1)	-	6,085
Other (3)	24,630	20,400
	30,079	28,604

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AT 31 DECEMBER 2019

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NOTE 27 - RELATED PARTY TRANSACTIONS (Continued)

f) Short-term bank borrowings

	31 December 2019	31 December 2018
Zorlu Faktoring (3)	39,892	39,920
	39,892	39,920

ii) Transactions carried out with related parties for the period 1 January - 31 December 2019 and 2018 are as follows:

	Sales	Purchases	Operating expenses and other income/ (expenses), net	Interest income/ (expenses), net	Foreign exchange income/(expenses), net
1 January - 31 December 2019					
Korteks	126,102	-	30	(1,380)	3,350
Zorluteks	73,176	(14)	(57)	(359)	592
Zorlu Tesis Yönetimi AŞ	43,571	-	(985)	-	-
Meta Nikel Kobalt Madencilik Sanayi ve Ticaret AŞ ("Meta Nikel")	12,103	-	(34)	-	-
Zorlu Holding	142	(15)	(12,676)	152,663	178,880
Zorlu O&M	756	(70,412)	(643)	4,017	17,789
Zorlu Endüstriyel	35	(294)	(1,244)	8,473	16,818
Edeltech	-	-	20	3,311	12,012
Zorlu Doğal Gaz Tedarik	163	(315,344)	6	(1,093)	(2,017)
Diğer	6,083	(9,743)	(11,556)	1,859	33,221
	262,131	(395,822)	(27,139)	167,491	260,645

	Sales	Purchases	Operating expenses and other income/ (expenses), net	Interest income/ (expenses), net	Foreign exchange income/(expenses), net
1 January - 31 December 2018					
Korteks	101,610	-	-	8,385	44,330
Zorluteks	52,296	(14)	117	(1,073)	(447)
Zorlu Tesis Yönetimi	34,243	-	(721)	1,079	-
Meta Nikel	19,887	-	(27)	1,157	-
Zorlu O&M	1,095	(74,568)	826	5,307	74,575
Zorlu Doğal Gaz	-	(8,820)	(2,072)	(4,683)	(59,566)
Zorlu Endüstriyel	481	(191)	222	15,643	44,462
Zorlu Holding	163	-	(10,652)	120,193	524,219
Dorad	-	-	-	3,629	8,523
Edeltech	-	-	35	4,863	27,740
Zorlu Doğal Gaz Tedarik	-	(128,310)	-	(5)	(16)
Diğer	2,971	(529)	(8,597)	(125)	45,281
	212,746	(212,432)	(20,869)	154,370	709,101

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NOTE 27 - RELATED PARTY TRANSACTIONS (Continued)

Sales to related parties generally indicate the electricity sale transactions carried out within the framework of the main operations. Purchase and sale transactions also include service purchases and sales between related companies.

Interest income (loss) and foreign exchange differences are related to financing nature related party balances.

iii) Key management compensations for the periods between 1 January - 31 December 2019 and 2018 are as follows:

For the purpose of this consolidated financial statements, key management compensation consists of the payments made to Group shareholders and top management (General Manager and Vice General Managers and directors).

	1 January - 31 December 2019	1 January - 31 December 2018
Salaries	9,842	9,116

NOTE 28 - INCOME PER SHARE

Income per share disclosed in the accompanying consolidated statement of income are determined by dividing net income/(expense) by the weighted average number of shares in existence during the year concerned.

	1 January - 31 December 2019	1 January - 31 December 2018
Net (loss)/ income for equity holders of the Group	(189,293)	95,492
Weighted average value of each of the issued share	200,000,000	179,166,667
Profit/ (loss) per 100 share (TL)	(0.095)	0.048

Nominal value of each of the issued share as of 31 December 2019 and 2018 is 1 Kr.

NOTE 29 - EVENTS OCCURRING AFTER REPORTING PERIOD

- As per the material disclosure dated 22 January 2020, the Energy Market Regulatory Authority approved a pre-licence application for the Tekkehamam II Geothermal Energy Power Plant Project planned to be built in Sarayköy, Denizli with installed power of 35 MW, and issued a pre-licence valid for 30 months for the project.
- As per the material disclosure date 3 February 2020, the Energy Market Regulatory Authority issued a supply licence for Zorlu Trade, a 100% subsidiary of the Company, to trade electric energy and/or capacity trade under the Electricity Market Law and relevant legislation. This licence will be valid for 20 years starting from 23 January 2020.

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NOTE 29 - EVENTS OCCURING AFTER REPORTING PERIOD (Continued)

- As per material event disclosure dated 5 February 2020, the sales transaction of all the shares of Zorlu Rüzgar Enerjisi Üretimi AŞ which is 100% subsidiary of the Zorlu Enerji, to İmbat Enerji AŞ, which is 100% subsidiary of Akfen Yenilenebilir Enerji AŞ, had been completed
- The sale of plant, machinery and equipment in the Lüleburgaz and Bursa plants amounting to TL27,261 was completed in February 2020 as per the Turbine Sale Contract between the Company and Proenergy Services LLC.
- Covid 19 (Coronavirus) virus which was declared a pandemic by the World Health Organization starting last period of 2019 during the first months of 2020, is thought to be the effect in Turkey and international markets. As material disclosure dated 25 March 2020, the Company has announced that, all the necessary actions has been taken because of Coronavirus.

(Covid-19) which is experienced globally and is effective in our country and continues its electricity generation, electricity and gas distribution activities without interruption with all its power plants and fields. The Group evaluates the impact of the pandemic as non-adjusting subsequent events and has been evaluating the possible effects of the pandemic on subsequent accounting estimates and assumptions.

- As per the material event disclosure dated 13 March 2020, the Group declared that application to the Capital Markets Board for a lease certificate issuance that cannot exceed TL450 million was approved.
- As per the material event disclosure dated 26 March 2020, Zorlu Doğal Elektrik Üretimi AŞ, Zorlu Enerji's fully owned affiliate, the application to EMRA to amend the generation license 54 months to 72 months of its Kızıldere IV Geothermal Power Plant which is planned to be built in Denizli and Aydın provinces was approved.
- As per the material event disclosure dated 16 April 2020, Zorlu Jeotermal Enerji Elektrik Üretimi AŞ, Zorlu Enerji's fully owned affiliate, the application to EMRA to amend the generation license to 24 March 2012 of its Alaşehir II GPP Project that be developed in Manisa was approved.
- As per the material event disclosure dated 10 April 2020, in order to establish a more effective and focused structure on renewable energy activity and to evaluate the public offering of the new company shares; as a result of partial division in universally, in accordance with the relevant legislation provisions, Zorlu Enerji's 100% subsidiary of Zorlu Jeotermal Enerji Elektrik Üretimi AŞ, Zorlu Doğal Elektrik Üretimi AŞ, and Rotor Elektrik Üretim AŞ, application has been made regarding the transfer of all 100% shares Zorlu Yenilenebilir Enerji AŞ, which will be established with a capital of TL 1.045.000.000, to a joint stock company.

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