

# NEAR-TERM AND NET-ZERO TARGET VALIDATION REPORT

Zorlu Enerji Elektrik Üretim A.Ş.

21 May 2024



## ABOUT THE SCIENCE BASED TARGETS INITIATIVE

The Science Based Targets initiative (SBTi) is a corporate climate action organization that enables companies and financial institutions worldwide to play their part in combating the climate crisis.

We develop standards, tools and guidance which allow companies to set greenhouse gas (GHG) emissions reductions targets in line with what is needed to keep global heating below catastrophic levels and reach net-zero by 2050 at latest.

The SBTi is incorporated as a charity, with a subsidiary which will host our target validation services. Our partners are CDP, the United Nations Global Compact, the We Mean Business Coalition, the World Resources Institute (WRI), and the World Wide Fund for Nature (WWF).

#### SBTI GLOBAL MOMENTUM BY THE NUMBERS



Data collected in 31/12/2022



## INTRODUCTION

This report presents the results and recommendations of the submitted targets assessed against the SBTi Net-Zero Criteria and guidance. This includes an overview of the GHG emissions sources and inventory, target setting methodologies and ambition, emissions included in the target boundary, and company-specific feedback from the validation process, if applicable. A detailed overview of the criteria is provided in the appendix. The approved target language, which will be listed on the SBTi website and should be used in all company communications, is as follows:

Overall Net-Zero Target: Zorlu Enerji Elektrik Üretim A.Ş. commits to reach net-zero greenhouse gas emissions across the value chain by 2040.

**Near-Term Targets:** Zorlu Enerji Élektrik Üretim A.Ş. (Zorlu Enerji) commits to reduce scope 1 GHG emissions from electricity and heat generation 73.71% per MWh by 2030 from a 2021 base year. Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) also commits to reduce absolute scope 2 GHG emissions 42% within the same timeframe. Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) further commits to reduce scope 1 and 3 GHG emissions from fuel and energy related activities covering all sold electricity 73.71% per MWh within the same timeframe. Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) further commits to reduce all other absolute scope 3 GHG emissions 25% within the same timeframe.

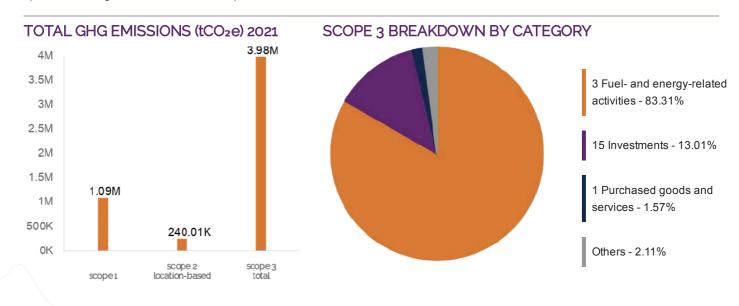
Long-Term Targets: Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) commits to reduce scope 1 GHG emissions from electricity and heat generation 97.7% per MWh by 2040 from a 2021 base year.

Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) also commits to reduce absolute scope 2 GHG emissions 90% within the same timeframe.

Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) further commits to reduce scope 1 and 3 GHG emissions from fuel and energy related activities covering all sold electricity 97.8% per MWh within the same timeframe. Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) further commits to reduce all other absolute scope 3 GHG emissions 90% within the same timeframe

## GHG INVENTORY OVERVIEW

Zorlu Enerji Elektrik Üretim A.Ş. has submitted 2 GHG inventories for review by SBTi's Target Validation Team. In the calendar year of 2021 the company has reported total of 5,311,219 GHG emissions (tCO2e) in the full minimum boundary (scopes 1, 2 and 3). In the calendar year of 2022 the company has reported total of 4,549,260 GHG emissions (tCO2e). Zorlu Enerji Elektrik Üretim A.Ş. has reported no emissions outside of minimum boundary. Zorlu Enerji Elektrik Üretim A.Ş. has reported no emissions from the combustion, processing and distribution phase of bioenergy and the land use emissions and removals, associated with bioenergy feedstocks. The full breakdown of Zorlu Enerji Elektrik Üretim A.Ş.'s GHG inventory, including optional and biogenic CO2 emissions, is provided below.



## 2021 GHG INVENTORY

		Minimum boundary emissions	Share of total emissions (location-based scope 2)	Share of total emissions (market-based scope 2)	Percentage excluded from inventory	Outside minimum boundary (optional)	Bioenergy emissions	Bioenergy removals	Biogenic total
2 K	Scope 1	1,087,685.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SCOPE 1 & 2	Scope 2 location-based	240,009.82	N/A	N/A	N/A	N/A	N/A	N/A	N/A
χ, L	Scope 2 market-based	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Purchased goods and services	62,711.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2. Capital goods	665.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Fuel- and energy-related activities	3,318,497.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Upstream transportation and distribution	59,284.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5. Waste generated in operations	2,083.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6. Business travel	9,657.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Щ	7. Employee commuting	10,012.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SCOPE 3	8. Upstream leased assets	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
й	Downstream transportation and distribution	240.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10. Processing of sold products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11. Use of sold products	1,700.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12. End-of-life treatment of sold products	340.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	13. Downstream leased assets	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	14. Franchises	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	15. Investments	518,331.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A

## 2022 GHG INVENTORY

		Minimum boundary emissions	Share of total emissions (location-based scope 2)	Share of total emissions (market-based scope 2)	Percentage excluded from inventory	Outside minimum boundary (optional)	Biogenic emissions	Biogenic removals	Biogenic total
2 K	Scope 1	1,058,791.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SCOPE 1 & 2	Scope 2 location-based	231,565.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
χ, L	Scope 2 market-based	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Purchased goods and services	89,044.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2. Capital goods	1,786.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Fuel- and energy-related activities	2,476,488.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Upstream transportation and distribution	6,457.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5. Waste generated in operations	29,211.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6. Business travel	71,970.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ш	7. Employee commuting	12,108.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SCOPE 3	8. Upstream leased assets	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
й	Downstream transportation and distribution	640.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10. Processing of sold products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11. Use of sold products	8,779.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12. End-of-life treatment of sold products	1,755.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	13. Downstream leased assets	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	14. Franchises	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	15. Investments	560,658.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A

## OVERVIEW OF SCIENCE-BASED TARGETS

## Net-Zero Target

Zorlu Enerji Elektrik Üretim A.Ş. commits to reach net-zero greenhouse gas emissions across the value chain by 2040.

## Near-Term Targets

Zorlu Enerji Elektrik Üretim A.Ş. has submitted 4 near-term targets for review by the SBTi. All targets have been assessed against the SBTi's quantitative and qualitative criteria, alongside the Criteria Assessment Indicators. For approval, a company's targets must comply with all applicable requirements. The following is an overview of the approved targets:

Target wording	Public?	Base year	Most recent year	Target year	Туре	Target value	Method used
Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) commits to reduce scope 1 GHG emissions from electricity and heat generation 73.71% per MWh by 2030 from a 2021 base year.	Yes	2021	2022	2030	Intensity	73.7%	SDA (power)
Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) also commits to reduce absolute scope 2 GHG emissions 42% within the same timeframe.	Yes	2021	2022	2030	Absolute	42.0%	Absolute contraction
Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) further commits to reduce scope 1 and 3 GHG emissions from fuel and energy related activities covering all sold electricity 73.71% per MWh within the same timeframe.	Yes	2021	2022	2030	Intensity	73.7%	SDA (power)
Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) further commits to reduce all other absolute scope 3 GHG emissions 25% within the same timeframe.	Yes	2021	2022	2030	Absolute	25.0%	Absolute contraction

## OVERVIEW OF SCIENCE-BASED TARGETS

## Net-Zero Target

Zorlu Enerji Elektrik Üretim A.Ş. commits to reach net-zero greenhouse gas emissions across the value chain by 2040.

## Long-Term Targets

Zorlu Enerji Elektrik Üretim A.Ş. has submitted 4 long-term targets for review by the SBTi. All targets have been assessed against the SBTi's quantitative and qualitative criteria, alongside the Criteria Assessment Indicators. For approval, a company's targets must comply with all applicable requirements. The following is an overview of the approved targets:

Target wording	Public?	Base year	Most recent year	Target year	Туре	Target value	Method used
Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) commits to reduce scope 1 GHG emissions from electricity and heat generation 97.7% per MWh by 2040 from a 2021 base year.	Yes	2021	2022	2040	Intensity	97.7%	Physical intensity convergence
Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) also commits to reduce absolute scope 2 GHG emissions 90% within the same timeframe.	Yes	2021	2022	2040	Absolute	90.0%	Absolute contraction
Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) further commits to reduce scope 1 and 3 GHG emissions from fuel and energy related activities covering all sold electricity 97.8% per MWh within the same timeframe.	Yes	2021	2022	2040	Intensity	97.8%	Physical intensity convergence
Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) further commits to reduce all other absolute scope 3 GHG emissions 90% within the same timeframe.	Yes	2021	2022	2040	Absolute	90.0%	Absolute contraction

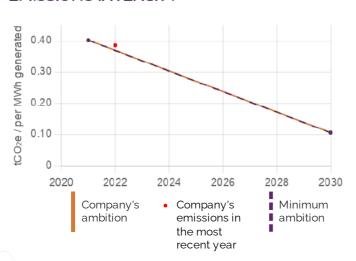
Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) commits to reduce scope 1 GHG emissions from electricity and heat generation 73.71% per MWh by 2030 from a 2021 base year.

Activity Unit: per MWh generated Base Year Activity: 2,708,415 Most Recent Year Activity: 2,753,096

Target Year Activity: 3,085,547 Public: Yes

## Temperature classification: 1.5°C

#### **EMISSIONS INTENSITY**



GHG Inventory breakdown	Minimum boundary emissions	Outside minimum boundary	Biogenic Total
Scope 1	100.00%	N/A	N/A
Scope 2 location-based	N/A	N/A	N/A
Scope 3 total	0.00%	N/A	N/A
Purchased goods and services	N/A	N/A	N/A
2. Capital goods	N/A	N/A	N/A
3. Fuel- and energy-related activities	N/A	N/A	N/A
4. Upstream transportation and distribution	N/A	N/A	N/A
5. Waste generated in operations	N/A	N/A	N/A
6. Business travel	N/A	N/A	N/A
7. Employee commuting	N/A	N/A	N/A
8. Upstream leased assets	N/A	N/A	N/A
9. Downstream transportation and distribution	N/A	N/A	N/A
10. Processing of sold products	N/A	N/A	N/A
11. Use of sold products	N/A	N/A	N/A
12. End-of-life treatment of sold products	N/A	N/A	N/A
13. Downstream leased assets	N/A	N/A	N/A
14. Franchises	N/A	N/A	N/A
15. Investments	N/A	N/A	N/A

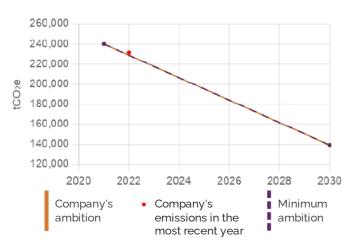
Zorlu Enerji Elektrik Üretim A.Ş. | Target Validation Report | 21 May 2024

Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) also commits to reduce absolute scope 2 GHG emissions 42% within the same timeframe.

Public: Yes

## Temperature classification: 1.5°C

#### **ABSOLUTE EMISSIONS**



GHG Inventory breakdown	Minimum boundary emissions	Outside minimum boundary	Biogenic Total
Scope 1	N/A	N/A	N/A
Scope 2 location-based	100.00%	N/A	N/A
Scope 3 total	0.00%	N/A	N/A
Purchased goods and services	N/A	N/A	N/A
2. Capital goods	N/A	N/A	N/A
3. Fuel- and energy-related activities	N/A	N/A	N/A
4. Upstream transportation and distribution	N/A	N/A	N/A
5. Waste generated in operations	N/A	N/A	N/A
6. Business travel	N/A	N/A	N/A
7. Employee commuting	N/A	N/A	N/A
8. Upstream leased assets	N/A	N/A	N/A
9. Downstream transportation and distribution	N/A	N/A	N/A
10. Processing of sold products	N/A	N/A	N/A
11. Use of sold products	N/A	N/A	N/A
12. End-of-life treatment of sold products	N/A	N/A	N/A
13. Downstream leased assets	N/A	N/A	N/A
14. Franchises	N/A	N/A	N/A
15. Investments	N/A	N/A	N/A

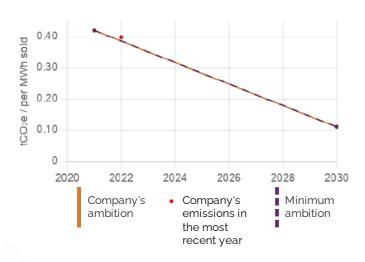
Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) further commits to reduce scope 1 and 3 GHG emissions from fuel and energy related activities covering all sold electricity 73.71% per MWh within the same timeframe.

Activity Unit: per MWh sold Base Year Activity: 10,316,402 Most Recent Year Activity: 8,756,357

Target Year Activity: 11,763,833 Public: Yes

## Temperature classification: 1.5°C

#### **EMISSIONS INTENSITY**



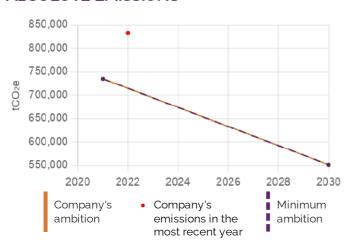
GHG Inventory breakdown	Minimum boundary emissions	Outside minimum boundary	Biogenic Total
Scope 1	100.00%	N/A	N/A
Scope 2 location-based	N/A	N/A	N/A
Scope 3 total	81.54%	N/A	N/A
Purchased goods and services	N/A	N/A	N/A
2. Capital goods	N/A	N/A	N/A
3. Fuel- and energy-related activities	97.88%	N/A	N/A
4. Upstream transportation and distribution	N/A	N/A	N/A
5. Waste generated in operations	N/A	N/A	N/A
6. Business travel	N/A	N/A	N/A
7. Employee commuting	N/A	N/A	N/A
8. Upstream leased assets	N/A	N/A	N/A
9. Downstream transportation and distribution	N/A	N/A	N/A
10. Processing of sold products	N/A	N/A	N/A
11. Use of sold products	N/A	N/A	N/A
12. End-of-life treatment of sold products	N/A	N/A	N/A
13. Downstream leased assets	N/A	N/A	N/A
14. Franchises	N/A	N/A	N/A
15. Investments	N/A	N/A	N/A

Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) further commits to reduce all other absolute scope 3 GHG emissions 25% within the same timeframe.

Public: Yes

## Temperature classification: N/A

#### **ABSOLUTE EMISSIONS**



GHG Inventory breakdown	Minimum boundary emissions	Outside minimum boundary	Biogenic Total
Scope 1	N/A	N/A	N/A
Scope 2 location-based	N/A	N/A	N/A
Scope 3 total	18.45%	N/A	N/A
Purchased goods and services	100.00%	N/A	N/A
2. Capital goods	100.00%	N/A	N/A
Fuel- and energy-related activities	2.12%	N/A	N/A
4. Upstream transportation and distribution	100.00%	N/A	N/A
5. Waste generated in operations	100.00%	N/A	N/A
6. Business travel	100.00%	N/A	N/A
7. Employee commuting	100.00%	N/A	N/A
8. Upstream leased assets	N/A	N/A	N/A
Downstream transportation and distribution	100.00%	N/A	N/A
10. Processing of sold products	N/A	N/A	N/A
11. Use of sold products	100.00%	N/A	N/A
12. End-of-life treatment of sold products	N/A	N/A	N/A
13. Downstream leased assets	N/A	N/A	N/A
14. Franchises	N/A	N/A	N/A
15. Investments	100.00%	N/A	N/A

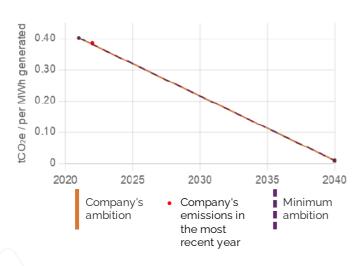
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Activity Unit: per MWh generated Base Year Activity: 2,708,416 Most Recent Year Activity: 2,753,096

Target Year Activity: 3,085,547 Public: Yes Sector pathway: Power generation

### Temperature classification: 1.5°C

#### **EMISSIONS INTENSITY**



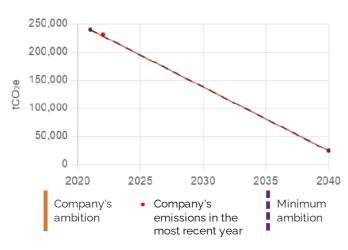
GHG Inventory breakdown	Minimum boundary emissions	Outside minimum boundary	Biogenic Total
Scope 1	100.00%	N/A	N/A
Scope 2 location-based	N/A	N/A	N/A
Scope 3 total	0.00%	N/A	N/A
Purchased goods and services	N/A	N/A	N/A
2. Capital goods	N/A	N/A	N/A
3. Fuel- and energy-related activities	N/A	N/A	N/A
4. Upstream transportation and distribution	N/A	N/A	N/A
5. Waste generated in operations	N/A	N/A	N/A
6. Business travel	N/A	N/A	N/A
7. Employee commuting	N/A	N/A	N/A
8. Upstream leased assets	N/A	N/A	N/A
9. Downstream transportation and distribution	N/A	N/A	N/A
10. Processing of sold products	N/A	N/A	N/A
11. Use of sold products	N/A	N/A	N/A
12. End-of-life treatment of sold products	N/A	N/A	N/A
13. Downstream leased assets	N/A	N/A	N/A
14. Franchises	N/A	N/A	N/A
15. Investments	N/A	N/A	N/A

Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) also commits to reduce absolute scope 2 GHG emissions 90% within the same timeframe.

Public: Yes Sector pathway: Cross-sector pathway

## Temperature classification: 1.5°C

#### **ABSOLUTE EMISSIONS**



GHG Inventory breakdown	Minimum boundary emissions	Outside minimum boundary	Biogenic Total
Scope 1	N/A	N/A	N/A
Scope 2 location-based	100.00%	N/A	N/A
Scope 3 total	0.00%	N/A	N/A
1. Purchased goods and services	N/A	N/A	N/A
2. Capital goods	N/A	N/A	N/A
3. Fuel- and energy-related activities	N/A	N/A	N/A
4. Upstream transportation and distribution	N/A	N/A	N/A
5. Waste generated in operations	N/A	N/A	N/A
6. Business travel	N/A	N/A	N/A
7. Employee commuting	N/A	N/A	N/A
8. Upstream leased assets	N/A	N/A	N/A
Downstream transportation and distribution	N/A	N/A	N/A
10. Processing of sold products	N/A	N/A	N/A
11. Use of sold products	N/A	N/A	N/A
12. End-of-life treatment of sold products	N/A	N/A	N/A
13. Downstream leased assets	N/A	N/A	N/A
14. Franchises	N/A	N/A	N/A
15. Investments	N/A	N/A	N/A

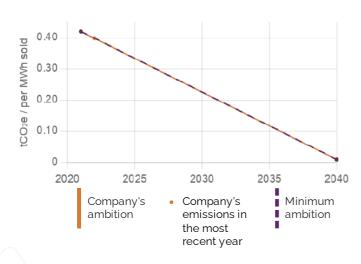
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Activity Unit: per MWh sold Base Year Activity: 10,316,402 Most Recent Year Activity: 8,756,357

Target Year Activity: 11,763,833 Public: Yes Sector pathway: Power generation

### Temperature classification: 1.5°C

#### **EMISSIONS INTENSITY**



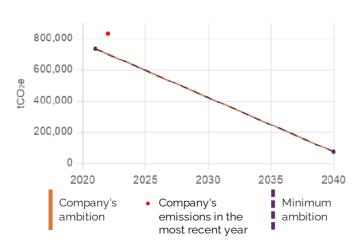
GHG Inventory breakdown	Minimum boundary emissions	Outside minimum boundary	Biogenic Total
Scope 1	100.00%	N/A	N/A
Scope 2 location-based	N/A	N/A	N/A
Scope 3 total	81.54%	N/A	N/A
1. Purchased goods and services	N/A	N/A	N/A
2. Capital goods	N/A	N/A	N/A
3. Fuel- and energy-related activities	97.88%	N/A	N/A
4. Upstream transportation and distribution	N/A	N/A	N/A
5. Waste generated in operations	N/A	N/A	N/A
6. Business travel	N/A	N/A	N/A
7. Employee commuting	N/A	N/A	N/A
8. Upstream leased assets	N/A	N/A	N/A
9. Downstream transportation and distribution	N/A	N/A	N/A
10. Processing of sold products	N/A	N/A	N/A
11. Use of sold products	N/A	N/A	N/A
12. End-of-life treatment of sold products	N/A	N/A	N/A
13. Downstream leased assets	N/A	N/A	N/A
14. Franchises	N/A	N/A	N/A
15. Investments	N/A	N/A	N/A

Zorlu Enerji Elektrik Üretim A.Ş. (Zorlu Enerji) further commits to reduce all other absolute scope 3 GHG emissions 90% within the same timeframe.

Public: Yes Sector pathway: Cross-sector pathway

## Temperature classification: N/A

#### **ABSOLUTE EMISSIONS**



GHG Inventory breakdown	Minimum boundary emissions	Outside minimum boundary	Biogenic Total
Scope 1	N/A	N/A	N/A
Scope 2 location-based	N/A	N/A	N/A
Scope 3 total	18.45%	N/A	N/A
Purchased goods and services	100.00%	N/A	N/A
2. Capital goods	100.00%	N/A	N/A
3. Fuel- and energy-related activities	2.12%	N/A	N/A
4. Upstream transportation and distribution	100.00%	N/A	N/A
5. Waste generated in operations	100.00%	N/A	N/A
6. Business travel	100.00%	N/A	N/A
7. Employee commuting	100.00%	N/A	N/A
8. Upstream leased assets	N/A	N/A	N/A
Downstream transportation and distribution	100.00%	N/A	N/A
10. Processing of sold products	N/A	N/A	N/A
11. Use of sold products	100.00%	N/A	N/A
12. End-of-life treatment of sold products	N/A	N/A	N/A
13. Downstream leased assets	N/A	N/A	N/A
14. Franchises	N/A	N/A	N/A
15. Investments	100.00%	N/A	N/A





#### I. GHG EMISSIONS INVENTORY AND TARGET BOUNDARY

1. Organizational boundary	Operational control was chosen by Zorlu Enerji Elektrik Üretim A.Ş. as the consolidation approach, and all subsidiaries have been accounted for in the inventory boundary. Therefore, the target submission complies with Criterion 1.	Compliant
2. Greenhouse gases	All GHGs have been included in the inventory and target boundary. The target submission therefore complies with Criterion 2.	Compliant
3. Scope 1 and Scope 2	Zorlu Enerji Elektrik Üretim A.Ş. has set 3 long-term targets over company-wide scope 1 and 2 emissions. The target submission therefore complies with Criterion 3.	Compliant
4. Requirement to have a scope 3 target	Zorlu Enerji Elektrik Üretim A.Ş.'s scope 3 emissions amount to 75.00% in scope 3 base year of 2021, which is more than 40% threshold set by SBTi. Additionally, the company is requered to set a target due to sector-specific guidance. Zorlu Enerji Elektrik Üretim A.Ş. has set 2 targets covering scope 3, including emissions from activities covered by the sectoral requirements. Therefore, the target submission complies with Criterion 4. Additionally, Zorlu Enerji Elektrik Üretim A.Ş. has set 2 long-term targets covering scope 3 emissions. Therefore, the target submission complies with Criterion 4.	Compliant



## OVERVIEW OF COMPLIANCE WITH SBTI CRITERIA

5. Scope 1, 2, and 3 allowable exclusions	Zorlu Enerji Elektrik Üretim A.Ş. has set 3 long-term targets over scope 1 and 2 that collectively cover 100.00% of the Zorlu Enerji Elektrik Üretim A.Ş.'s scope 1 and 2 emissions in the base year of 2021, which is more than 95% threshold set by SBTi. And Zorlu Enerji Elektrik Üretim A.Ş. has excluded 0.00% of emissions from scope 3 inventory in 2021, which is less than 5% threshold set by SBTi. The target submission therefore complies with Criterion 5.	Compliant
6. Scope 3 emissions coverage for near-term targets	Zorlu Enerji Elektrik Üretim A.Ş. has set 2 near-term targets over scope 3 that collectively cover 99.99% of total reported and excluded scope 3 emissions, which passes SBTi threshold of two thirds of scope 3 emissions beeing covered by near-term targets. Therefore submission complies with Criterion 6.	Compliant
7. Scope 3 emissions coverage for long-term targets	Zorlu Enerji Elektrik Üretim A.Ş. has set 2 long-term targets over scope 3 that collectively cover 99.99% of Zorlu Enerji Elektrik Üretim A.Ş.'s scope 3 emissions in the base year of 2021, which is more than the 90% threshold set by SBTi. And Zorlu Enerji Elektrik Üretim A.Ş. has excluded 0.00% of emissions from scope 3 inventory in 2021, which is less than the 5% threshold set by SBTi. The target submission therefore complies with Criterion 7.	Compliant



#### II. METHOD VALIDITY

8. Method validity  Near-term and long-term targets have been modeled using the latest version of methods and tools approved by the initiative. Therefore the submission complies with Criterion 8.	nt
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## III. EMISSIONS ACCOUNTING REQUIREMENTS

9. Scope 2 accounting approach	A location-based approach is used to account for scope 2 emissions and to track performance. The target submission therefore complies with Criterion 9.	Compliant
10. Scope 3 screening	A complete screening or inventory has been carried out by Zorlu Enerji Elektrik Üretim A.Ş. with scope 3 GHG emissions accounting for 75.00% of the total emissions. The target submission therefore complies with Criterion 10.	Compliant
11. Bioenergy accounting	Zorlu Enerji Elektrik Üretim A.Ş. does not have emissions from the combustion, processing and distribution phase of bioenergy or the land use emissions and removals associated with bioenergy feedstocks, and therefore Criterion 11 is not applicable.	N/A
12. Carbon credits	The submitted targets do not include carbon credits. Therefore, the target submission complies with Criterion 12.	Compliant
13. Avoided emissions	The submitted targets do not include avoided emissions. Therefore, the target submission complies with Criterion 13.	Compliant



#### IV. TARGET FORMULATION

14. State of net-zero emissions	Zorlu Enerji Elektrik Üretim A.Ş. has set 4 targets to reach a state of net-zero emissions, which involves: (a) reducing their scope 1, 2 and 3 emissions to zero or to a residual level that is consistent with reaching net-zero emissions at the global or sector level in eligible 1.5°C scenarios or sector pathways and; (b) committing to neutralize any residual emissions at the net-zero target date and any GHG emissions released into the atmosphere thereafter. Therefore, the target submission complies with Criterion 14.	Compliant
15. Net-zero target structure	Zorlu Enerji Elektrik Üretim A.Ş. has set both, near-term and long-term science-based emission reduction targets according to the requirements. Therefore, the target submission complies with Criterion 15.	Compliant
16. Base year	Zorlu Enerji Elektrik Üretim A.Ş. uses base year of 2021 for both its long-term and as near-term science-based targets. The base year is no earlier than 2015. Therefore, the target submission complies with Criterion 16.	Compliant



17. Target year(s)	The target year of near-term emissions reduction target(s) 2030 is between five and ten years from the submission date of February 1, 2024. The target years of net-zero and long-term targets of 2040 comply with all relevant Criteria as well, namely not being further than 2050 (or as prescribed by sector-specific requirements). Therefore the target submission complies with Criterion 17.	Compliant
18. Progress to date	The targeted near-term reduction between the base year and the most recent year leads to emissions reductions in line with a 1.5°C pathway. The target submission therefore complies with Criterion 18.	Compliant
29. Target formulation	Zorlu Enerji Elektrik Üretim A.Ş. has publicly set a net-zero target, that clearly and transparently communicates each of the relevant components of the target, including: the net-zero target year of 2040; magnitude of emissions reductions that will be achieved for near-term and long-term science-based targets; and the net-zero base year of 2021. The target submission therefore complies with Criterion 29.	Compliant

#### V. AMBITION

19. Level of ambition for scope 1 and 2 targets  The proposed near- and long-term reduction in scope 1 and 2 emissions is aligned with a rate of decarbonization consistent to keep global temperature increase to 1.5°C compared to pre-industrial temperatures. The target submission therefore complies with Criterion 19.			
global temperature increase to 1.5°C compared to pre-industrial temperatures. The target submission therefore complies with Criterion	9. Level of ambition for scope 1	The proposed near- and long-term reduction in scope 1 and 2	ompliant
	nd 2 targets	global temperature increase to 1.5°C compared to pre-industrial temperatures. The target submission therefore complies with Criterion	



20. Absolute targets	Absolute long-term reductions are as ambitious as the minimum emissions reductions required to align with the SBTi's 1.5°C temperature pathways. The target submission therefore complies with Criterion 20.	Compliant
21. Intensity targets	The proposed long-term scope 1 and 2 intensity target(s) are aligned with the minimum reductions required to align with the SBTi's 1.5°C temperature pathways. The target submission therefore complies with Criterion 21.	Compliant
22. Level of ambition for scope 3 emissions reduction targets	The scope 3 near-term target meets the minimum level of ambition required. Moreover, Zorlu Enerji Elektrik Üretim A.Ş. has set 2 uniquely modeled scope 3 long-term targets, all of which meet the minimum level of ambition required by relevant models. The target submission therefore complies with Criterion 22.	Compliant
23. Supplier or customer engagement targets	No supplier or customer engagement target was submitted for validation, and therefore Criterion 23 is not applicable.	N/A
24. Absolute targets (scope 3)	Absolute scope 3 targets are at least as ambitious as the minimum of the approved range of emissions scenarios consistent with the well-below 2°C goal (near-term targets), the 1.5°C goal (long-term targets), or aligned with the relevant 1.5°C sector-specific absolute pathway (long-term targets only). The target submission therefore complies with Criterion 24.	Compliant



25. Intensity targets (scope 3)	Intensity targets for scope 3 are not modelled using an approved sector-specific physical intensity pathway where applicable to companies' business activities or using eligible physical intensity or economic intensity approaches. The target submission therefore complies with Criterion 25.	Compliant
26. Combined scope targets	No combined scope 1+2+3 long-term targets were submitted, and therefore Criterion 26 is not applicable.	N/A
27. Renewable electricity	No dedicated renewable electricity targets have been submitted, and therefore Criterion 27 is not applicable.	N/A
28. Neutralization of unabated emissions to reach net-zero	Zorlu Enerji Elektrik Üretim A.Ş. has committed to neutralizing any residual emissions. The target submission therefore complies with Criterion 28.	Compliant
37. Fossil fuel sales or distribution	Zorlu Enerji Elektrik Üretim A.Ş. is not involved in the distribution of natural gas or other fossil fuel products, and therefore Criterion 37 is not applicable.	N/A

## VI. SECTOR SPECIFIC GUIDANCE

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35. Requirements from sector-	Zorlu Enerji Elektrik Üretim A.Ş. followed relevant sector-specific	Compliant
specific guidance	guidance. The target submission therefore complies with Criterion 35.	



36. Companies in the fossil fuel production business or with significant revenue from fossil fuel business lines

Zorlu Enerji Elektrik Üretim A.Ş. is not involved in exploration, extraction, mining and/or production of oil, natural gas, coal or other fossil fuels, nor does the company derive 50% or more of its revenue from fossil fuels. The target submission therefore complies with Criterion 36.

Compliant

#### VII. REPORTING AND RECALCULATION

30. Frequency	Zorlu Enerji Elektrik Üretim A.Ş. has committed to publicly reporting its full GHG inventory and target progress annually in a disclosed location. The target submission therefore complies with Criterion 30.	Compliant
31. Reporting completeness	Zorlu Enerji Elektrik Üretim A.Ş. has committed to publicly report information pertaining to progress against validated targets, including separately reporting emissions and removals in the annual GHG Inventory, as specified by current SBTi Criteria. The target submission therefore complies with Criterion 31.	Compliant
32. Mandatory target recalculation	Zorlu Enerji Elektrik Üretim A.Ş. agrees to review and if necessary, recalculate and revalidate its targets following the most recent criteria at a minimum of every 5 years. Zorlu Enerji Elektrik Üretim A.Ş. has set a 5% significance threshold for emission recalculations. The target submission therefore complies with Criterion 32.	Compliant



33. Triggered target recalculation	Zorlu Enerji Elektrik Üretim A.Ş. has agreed that its targets shall be recalculated, as needed, to reflect significant changes that could compromise relevance and consistency of the existing target. The target submission therefore complies with Criterion 33.	Compliant
34. Target validity	Zorlu Enerji Elektrik Üretim A.Ş. agrees to publicly announce its targets by November, 2024. The target submission therefore complies with Criterion 34.	Compliant



## COMMUNICATION OF YOUR TARGETS

Consult the <u>SBTi communications pack</u> for information on publicly announcing your approved target(s). The SBTi plans to publish your approved target wording and temperature alignment on <u>our website</u> on the first Thursday following 21st of June, 2024.

To request a different publication date, contact the SBTi communications team at <a href="mailto:communications@sciencebasedtargets.org">communications@sciencebasedtargets.org</a> as soon as possible (please note this needs to be a Thursday). The SBTi requires approved target(s) to be published within six months from the date of target validation.

- @ScienceTargets
- in /science-based-targets
- @sciencebasedtargetsinitiat2481
- sciencebasedtargets.org/newsletter



## MANDATORY REPORTING OF PROGRESS AGAINST TARGETS

To ensure maximum transparency, accountability, and corporate leadership, Zorlu Enerji Elektrik Üretim A.Ş. must publicly report the progress against any published targets on an annual basis along with your company-wide GHG emissions inventory as per criterion 25 of the SBTi Criteria and Recommendations (version 5.1).

When reporting progress against approved targets companies should disclose the following elements:

- Target description following the exact SBTi-aligned wording including target information such as the target type, coverage, base year and target year.
- Target progress from the target base year to the reporting year in terms of
  emissions reductions, share of renewable electricity, or supplier/ customer
  engagement (annual breakdowns are preferable). Variability between years is
  expected, so it is important to show trends over multiple years.
- Details on substantial emissions variations and targets reviews following the SBTi criteria about mandatory target review and target recalculation criteria.
- Actions towards meeting the target, including information on emission reduction projects in implementation and planning phase that will contribute to the achievement of their targets.
- Full GHG emissions inventory in accordance with the GHG Protocol Corporate Standard. Companies must report all emissions scopes (1, 2 and 3) and all scope 3 categories, including those that do not fall within a target boundary.

Please consult the Procedure for Validation of SBTi Targets for more guidance.



## MANDATORY TARGET REVIEW AND TARGET RECALCULATION

The IPCC special report on 1.5C highlighted the necessity to halve emissions by 2030 and to reach net-zero emissions by mid-century. Your science-based targets are a key element of your decarbonization trajectory while maximizing transparency and accountability.

In line with the SBTi Criteria, your company must review its targets against the latest criteria and guidance within five years, and if necessary, recalculate and revalidate for continued recognition by the SBTi.

The following changes should trigger a target recalculation:

- Scope 3 emissions become 40% or more of aggregated scope 1, 2 and 3 emissions.
- Emissions of exclusions in the inventory or target boundary change significantly.
- Significant changes in company structure and activities (e.g. acquisitions, divestitures, mergers, insourcing or outsourcing, shifts in goods or service offerings).
- Significant adjustments to the base year inventory or changes in data to set targets such as growth projections (e.g. discovery of significant errors or a number of cumulative errors that are collectively significant).
- Other significant changes to projections/assumptions used in setting the science-based targets.

Please consult CRITERION 26 and recommendation 11 of the <u>SBTi criteria and recommendations (version 5.1)</u>, and <u>the Procedure for Validation of SBTi Targets</u> for further guidance.

