



# ISO 14064-1:2018 Verification Report

**Revision 0**

**INSTITUTE**

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**Report Author**

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## ISO 14064-1:2018 Verification Statement

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<b>Verifier/s</b>	Baycan Taşdelen		
<b>Indipendent Reviewer</b>	Bengi Çiftçi		
<b>Statement No</b>	SG-GNL-7500/2022		
<b>Statement Date</b>	11.07.2023		

<b>Scope</b>	Electricity production
<b>Verification Period</b>	01.01.2022 – 31.12.2022
<b>Emissions Report Date</b>	08.06.2023
<b>Verification Criteria</b>	ISO 14064-1:2018, ISO 14064-3:2019
<b>The Aim &amp; Scope of the Verification</b>	Independently and objectively monitoring the compliance of the emissions, directly and indirectly controlled by the establishment, with the requirements of the greenhouse gas reporting standard EN ISO 14064-1:2018
<b>Method Used</b>	Based on Calculation
<b>Consolidate Methode</b>	<input checked="" type="checkbox"/> Operational Control <input type="checkbox"/> Financial Control <input type="checkbox"/> Equity Share
<b>Level of Assurance &amp; Materiality</b>	<input checked="" type="checkbox"/> Verified at Reasonable Assurance Level (5%) <input type="checkbox"/> Verified at Limited Assurance Level
<b>Evaluation by Verification Criteria</b>	The evaluation made by the verification team suggests that the greenhouse gas report meets the verification criteria.
<b>Verification Result</b>	QSI confirms that the greenhouse gas statement report of the organization is prepared in accordance with the requirements of EN ISO 14064-1 for the above-mentioned verification period according to EN ISO 14064-3 standard & ISO 17029:2019 and ISO 14065:2020 principles.

## 1- Organisational Boundaries

Alaşehir Jeotermal Tesisi Alhan Mah. İstasyon Sok. No:6 45600 Alaşehir Manisa

## 2- Reporting Boundaries

The organization has developed a risk-based method to determine indirect greenhouse gas emissions by importance criteria.

For indirect emissions in the less important category, they are included in the calculation if sufficient data is available.

Following the materiality analysis made by the organization, the following emissions have been taken into account.

### 1- Direct greenhouse gas emissions and removals

- 1.1- Stationary combustion
- 1.2- Mobile Combustion / on-road
- 1.3- Mobile Combustion / off-road
- 1.4- Emission Leaks - Gases
- 1.4- Emission Leaks - Jeothermal

### 2 - Indirect greenhouse gas emissions from imported energy;

- \* Electricity consumption

### 3 - Indirect greenhouse gas emissions from transport;

- 3.1- Transport of purchased products/capital goods
- 3.3- Employee commuting to and from work
- 3-4 & 3-5- Business travel by clients and employees

### 4 - Indirect greenhouse gas emissions from products used by the organization;

- 4.1- Production of purchased products/raw materials
- 4.4- Purchased capital goods
- 4.5- Supply of purchased energy
- 4.6- Transport and disposal of waste from the operation

### 3- Exclusions from Reporting Boundary

During the verification, Category 5 was not calculated due to the fact that the company operates in the service sector, and Category 6 was not calculated because there was no other emission sources.

### 4- NCN's

There were no outstanding nonconformities.

### 5- Verification Explanation

The purpose of the verification is to establish a reasonable trust level opinion on the above-mentioned greenhouse gas statements, including:

- a) Compliance with the requirements of TS EN ISO 14064-1 standard,
- b) The acceptability of the emissions calculated in 2019.

The verification activities are based on TS EN ISO 14064-3:2019. In this context, the following verification activities were carried out;

- Reviewing of documentation, controls and methods, including other verification reports,
- Preparation of the risk assessment and verification plan,
- Evaluation of greenhouse gas information management, documentation, records, controls and methods of the organization,
- Documentation of verification findings and observations in the verification report,
- Assessment and documentation of non-conformities and reconciliations of observations in the verification report,
- Preparing the verification statement and completing the verification.

During the verification process, a risk assessment was made, a sample plan and a verification plan were created, and within the framework of this planning, documents were reviewed and site visits were made for the following purposes;

- Selection and management of greenhouse gas information and data,
- Processes for collecting, processing, combining and reporting greenhouse gas information and data,
- Processes and systems created for the accuracy of greenhouse gas information and data,
- Studies conducted to design and maintain the greenhouse gas information system,
- Systems and processes that ensure the continuity of the greenhouse gas information system,

- Other systems supporting greenhouse gas information system
- Results of previous evaluations, if available and applicable

Findings determined during the document review and site visit were presented to the organization with the Greenhouse Gas Verification Correction Table. The purpose of presenting the verification findings is to agree on the greenhouse gas statement and to identify the issues that need to be clarified.

Correction actions (CA) have been reported and adjusted within the reporting period.

In addition, the verification team requested an explanation from the organization in cases where there was not enough or enough clear information to decide that the report meets the requirements of TS EN ISO 14064-1:2018.

The responses sent by the organization regarding the explanation and correction activities were evaluated and it was determined that the deficiencies that required explanation and correction were corrected.

The verification activity results and the verification report were subjected to a technical review and approved by the technical reviewer.

## **6- Greenhouse Gas Information System and Control**

In order to carry out the greenhouse gas information system and controls by the organization, a document system that explains how to document and archive including information management system activities consistent with the intended use of the greenhouse gas statement, which ensures the accuracy and completeness of the greenhouse gas statement and complies with the relevant principles of EN ISO 14064-1:2018 has been prepared.

Data collection, processing and reporting processes have been verified by field audits.

## **7- Methodology**

The calculation methodology is stated as multiplying the activity data by the emission factor.

TIER-1 is accepted in the calculation methods. However, TIER 2 approach is applied in electricity emission calculations.

Emission factors are compiled from IPCC and DEFRA 2022. The electricity emission factor was compiled from national inventory. Emission factors for indirect emissions, and intensity and sub-thermal values are compiled from internationally recognized sources.



# Greenhouse Gas Verification Statement

*The inventory of Greenhouse Gas emissions of*

**Zorlu Jeotermal Elektrik Uretim A.S.**

**Organizational Boundaries**

Erenkoy Osmaniye Ceseli Koyleri Mevkii Alasehir/Manisa 45600 Turkey

has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

**ISO 14064-1:2018**

Direct GHG Emissions	: 65,993.65 t of CO <sub>2</sub> eq
Indirect GHG Emissions from imported energy	: 102.93 t of CO <sub>2</sub> eq
Indirect GHG Emissions from transportation	: 276.77 t of CO <sub>2</sub> eq
Indirect GHG Emissions from products used by organization	: 3.26 t of CO <sub>2</sub> eq
Indirect GHG Emissions associated with the use of products from the organization	: 0,00 t of CO <sub>2</sub> eq
Indirect GHG Emissions from other sources	: 0,00 t of CO <sub>2</sub> eq
Emissions from the combustion of biomass	: Nil
Total GHG Emissions	: <b>66,377 t of CO<sub>2</sub> eq</b>
Level of Assurance	: Reasonable
Reporting Period	: 01.01.2022 - 31.12.2022
Verification Report Date	: 25.07.2023
Statement No	: SG-GNL-7500 / 2022

Authorized by  
**Okay Kayhanlı – Director**

