



## WE Soda

### Basis of reporting and data collection

Our reporting covers GHG emissions and CDP water security parameters associated with WE Soda Ltd. and its associates (Şişecam Wyoming LLC, Şişecam Chemicals Wyoming LLC, Şişecam Chemicals Resources LLC, and Pacific Soda LLC) and subsidiaries. The subsidiaries are holding companies in United States (Ciner Enterprises Inc. (CEI), Soda World US LLC, Imperial Natural Resources Trona Mining Inc., and Global Glass Industries LLC), a holding company in Malta (WE Soda Shipping Holdings Limited), a holding company in United Kingdom (WE Soda Investments Holding Plc.), a holding company (Ciner Kimya Yatırımları A.Ş.), mining facilities for production of Soda Ash and Sodium Bicarbonate in Ankara and their offices in İstanbul (Eti Soda Üretim Pazarlama Nakliyat ve Elektrik Üretim Sanayi ve Ticaret A.Ş. (Eti Soda), and Kazan Soda Elektrik Üretim A.Ş. (Kazan Soda)), as a development Project for mining facility to produce Soda Ash and Sodium Bicarbonate in United States (West Soda LLC), reseller companies (Soda World Ltd. in United Kingdom, and Soda World Europe GmbH in Germany), a foreign trade company in İstanbul (WE İç ve Dış Ticaret A.Ş. (WIDT)), and port handling services in Kocaeli (Denmar Depoculuk Nakliyat ve Ticaret A.Ş.) for the following reporting periods unless otherwise stated:

- 1 January 2024 – 31 December 2024

This reporting guidance document supports our preparation and reporting of the following indicators in our CDP responses, externally assured by ERM CVS.

Hereinafter, associates and subsidiaries will be referred to by their own names. For a more detailed WE Soda Group corporate structure chart and affiliations, please refer to Appendix.

### For the 2024 reporting period:

- Total Scope 1 GHG emissions [tCO<sub>2</sub>e]
- Total Scope 2 GHG emissions (market based) [tCO<sub>2</sub>e]
- Total Scope 2 GHG emissions (location-based) [tCO<sub>2</sub>e]
- Total Scope 1 and Scope 2 emissions (market based) [tCO<sub>2</sub>e]
- Total Scope 1 and Scope 2 emissions (location based) [tCO<sub>2</sub>e]
- Total Scope 1, Scope 2 and Scope 3 emissions (market based) [tCO<sub>2</sub>e]
- Total Scope 1, Scope 2 and Scope 3 emissions (location based) [tCO<sub>2</sub>e]
- Carbon Emissions intensity [Scope 1+2 market based tCO<sub>2</sub>e/tonne production]
- Carbon Emissions intensity [Scope 1+2 location based tCO<sub>2</sub>e/tonne production]
- Total Scope 3 GHG emissions [tCO<sub>2</sub>e], for the following categories:
  - Category 1: Purchased goods and services
  - Category 2: Capital goods

- Category 3: Fuel and energy related activities
- Category 4: Upstream transportation and distribution
- Category 5: Waste generated in operations
- Category 6: Business travel
- Category 7: Employee commuting
- Category 8: Upstream leased assets
- Category 9: Downstream transportation and distribution
- Category 10: Processing of sold products
- Category 11: Use of sold products
- Category 13: Downstream Leased Assets
- Category 15: Investments
- Water Withdrawals-total volumes [megaliter]
- Water discharges-total volumes [megaliter]
- Water consumption-total volumes [megaliter]
- Water stress area [megaliter]
- Water withdrawals – volume by source (third party sources) [megaliter]
- Water discharges – volume by destination
  - Fresh surface water, including wetlands, rivers and lakes [megaliter]
  - Discharges to groundwater [megaliter]
  - Third party destinations [megaliter]
- Water discharges – volume by final treatment level
  - Secondary treatment [megaliter]
  - Primary treatment only [megaliter]
  - Discharge to a third party without treatment [megaliter]
  - Other [megaliter]
- Water discharges – quality by standard water quality parameters
  - COD [kg]
  - BOD [kg]
  - TSS [kg]
  - Chloride [kg]
  - Iron [kg]

- Oil and Grease [kg]
- Sulphate [kg]

We have calculated our carbon footprint where we have operational control with respect to the internationally recognised standards provided by the Greenhouse Gas Protocol, published by the World Business Council for Sustainable Development and the World Resources Institute (WBCSD/WRI Protocol).

## **Operations**

WE Soda oversees associates (Şişecam Wyoming LLC, Şişecam Chemicals Wyoming LLC, Şişecam Chemicals Resources LLC, and Pacific Soda LLC) and subsidiaries. The subsidiaries are holding companies in United States (Ciner Enterprises Inc. (CEI), Soda World US LLC, Imperial Natural Resources Trona Mining Inc., and Global Glass Industries LLC), a holding company in Malta (WE Soda Shipping Holdings Limited), a holding company in United Kingdom (WE Soda Investments Holding Plc.), a holding company (Ciner Kimya Yatırımları A.Ş.), mining facilities for production of Soda Ash and Sodium Bicarbonate in Ankara and their offices in Istanbul (Eti Soda Uretim Pazarlama Nakliyat ve Elektrik Uretim Sanayi ve Ticaret A.Ş., and Kazan Soda Elektrik Uretim A.Ş.), as a development Project for mining facility to produce Soda Ash and Sodium Bicarbonate in United States (West Soda LLC), reseller companies (Soda World Ltd. in United Kingdom, and Soda World Europe GmbH in Germany), a foreign trade company in Istanbul (WE İç ve Dış Ticaret A.Ş. (WIDT)), and port handling services in Kocaeli (Denmar Depoculuk Nakliyat ve Ticaret A.Ş.).

## **Reporting boundaries**

The 2024 report furnishes data and details covering the timeframe of January 1<sup>st</sup>, 2024, to December 31<sup>st</sup>, 2024. It specifically addresses the greenhouse gas (GHG) emissions stemming from We Soda Ltd., Ciner Enterprises Inc. (CEI), Soda World US LLC, Imperial Natural Resources Trona Mining Inc., Global Glass Industries LLC, WE Soda Shipping Holdings Limited, WE Soda Investments Holding Plc, Ciner Kimya Yatırımları A.Ş., Eti Soda Uretim Pazarlama Nakliyat ve Elektrik Uretim Sanayi ve Ticaret A.Ş., Kazan Soda Elektrik Uretim A.Ş., West Soda LLC, Soda World Ltd., Soda World Europe GmbH, WE İç ve Dış Ticaret A.Ş. (WIDT), Denmar Depoculuk Nakliyat ve Ticaret A.Ş., and associates (Şişecam Wyoming LLC, Şişecam Chemicals Wyoming LLC, Şişecam Chemicals Resources LLC, and Pacific Soda LLC).

## **Methodology**

### **Scope 1**

#### **Definition:**

Direct emissions from owned or controlled sources

#### **Scope:**

Scope 1 emissions encompass emissions from stationary combustion, mobile combustion, fugitive emissions and process emissions.

- Stationary Combustion includes from fuels used on site such as natural gas, coal and other gases.
- Mobile combustion includes fuels used in on-site and out-side vehicles.
- Fugitive emissions include refrigeration gas leakage, fire extinguisher and CH<sub>4</sub> emissions from wastewater treatment.
- Process emissions include industrial applications.

Our key scope 1 emissions sources are natural gas, coal and fuel oil used for building and process heating, process emissions, with small contributions from fuels used in all vehicles and refrigerant releases and other stationary combustion gases. Primary scope 1 emissions are CO<sub>2</sub>, with small contributions from CH<sub>4</sub>, N<sub>2</sub>O and HFCs.

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

**Method:**

Our energy and carbon figures are recorded on a monthly basis from relevant source systems and records.

The carbon emission intensity metric is calculated by dividing the absolute emission by the total production amount.

**Source:**

Figures are obtained through utility bills, meter readings, scale records, laboratory analysis, direct from suppliers and through our internal systems.

When converting data into carbon emissions, for lignite and natural gas emission factors and net calorific value have been calculated through monthly analyses.

For all other scope 1 sources, for other stationary gases, mobile combustion and wastewater emission factors have been taken from IPCC 2006.

Refrigerants and Fire Extinguishers GWP value have been taken from IPCC Sixth Assessment Report (AR6). Density factors have been taken from Türkiye National Inventory and DEFRA 2024.

**Scope 2 Purchased Natural Gas**

**Definition:**

Emissions generated from the consumption of purchased heat/natural gas calculated using the GHG Protocol Scope 2 Guidance. This category includes natural gas consumption for heating, which has been reported under Scope 2 as purchased heat. The boiler used for building heating does not fall within WE Soda's operational boundaries; therefore, the associated natural gas consumption is treated as purchased heating energy used for office space and accounted for under Scope 2.

**Scope:**

Scope 2 emissions include GHG emissions from purchased of purchased heat/natural gas consumed by Ciner Kimya, WIDT, Eti Soda-office, Kazan Soda-office, WE Soda Ltd., Soda World, CEI, Imperial Natural, and Soda World US.

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

**Method:**

Natural gas consumption is allocated to each entity according to their leased floor area (m<sup>2</sup>) as a proportion of the total building area. While the allocation principle is consistent across all entities, the calculation approach differs by region:

- Türkiye (WIDT, Eti Soda, Kazan Soda, Ciner Kimya Yatırımları): Allocated natural gas expenses (TRY) are converted into energy consumption using an energy-per-TRY parameter. Emissions are calculated with IPCC emission factors.
- United States (CEI, Imperial Mining, Soda World US): The total building energy consumption, as reported in invoices, is allocated to each entity based on their leased floor area. Emissions are then calculated using EPA 2025 emission factors.
- United Kingdom (WE Soda Ltd, Soda World ): Allocated shares are based on floor area, while actual consumption data is obtained from gas meter readings (m<sup>3</sup>). Emissions are calculated using DEFRA emission factors.

**Source:**

- Expense distribution tables prepared by the Ciner Group Accounting Department (Türkiye).
- Total building invoices showing energy consumption (US).
- Gas meter readings (UK).
- Applied emission factors: IPCC (for Türkiye), EPA 2025 (for US), DEFRA (for UK).

**Scope 2 (Market Based) Purchased Electricity**

**Definition:**

Emissions generated from the consumption of purchased electricity calculated using the market-based approach as per the GHG Protocol Scope 2 Guidance.

**Scope:**

Scope 2 emissions include GHG emissions from purchased electricity consumed by Eti Soda (and offices in Istanbul), Kazan Soda (and offices in Istanbul) sites, Denmar Depoculuk, Ciner Kimya, WIDT, WE Soda Ltd., Soda World, CEI, Imperial Natural, and Soda World US. Renewable energy use certificates (YEK-G certificates) were taken into account while calculating market-based emissions.

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

**Method:**

Scope 2 (market-based) emissions are calculated using electricity consumption data obtained from utility bills, site-level meter readings, and the EPIAS (Turkish energy exchange) platform. For the portion of electricity covered by YEK-G certificates, an emission factor of zero is applied, reflecting the renewable origin of the energy. For the remaining consumption not covered by certificates, the Türkiye national grid emission factor is used.

According to the GHG Protocol Scope 2 Guidance, grid-average (location-based) emission factors are the least preferred option in the market-based hierarchy. However, as supplier-specific or residual mix emission factors were not available, location-based grid factors have been applied where necessary.

Regional approaches:

- Türkiye – Production sites (Eti Soda, Kazan Soda) and Denmar: Electricity consumption data is obtained directly from utility bills, site-level meter readings, and the EPIAS platform. Emissions

are calculated using Türkiye-specific grid emission factors under the market-based approach, with YEK-G certificates applied where relevant (zero EF).

- Türkiye – Offices (Eti Soda Istanbul Office, Kazan Soda Istanbul Office, WIDT, Ciner Kimya Yatırımları): Allocated electricity expenses (TRY) are converted into energy consumption using an energy-per-TRY parameter. Emissions are calculated using the Türkiye grid emission factor.
- United States (CEI, Imperial Mining, Soda World US): The total building electricity consumption, as reported in invoices, is allocated to each entity based on their leased floor area. Emissions are then calculated using eGRID 2023 emission factors.
- United Kingdom (WE Soda Ltd, Soda World): Allocated shares are based on floor area, while actual consumption data is obtained from meter readings (kWh). Emissions are calculated using DEFRA UK emission factors.

**Source:**

- Utility bills, site-level meter readings, and the EPIAS platform (Türkiye – Eti Soda, Kazan Soda, Denmark)
- Renewable electricity procurement data, including YEK-G certificates (Türkiye – Eti Soda, Kazan Soda)
- Expense distribution tables prepared by the Ciner Group Accounting Department (Türkiye – Eti Soda Office, Kazan Soda Office, WIDT, Ciner Kimya Yatırımları)
- Total building invoices showing electricity consumption (US)
- Meter readings (UK)
- Applied emission factors: Türkiye national grid, eGRID 2023 (US), DEFRA (UK)

**Scope 2 (Location Based) Purchased Electricity**

**Definition:**

Emissions generated from the consumption of purchased electricity, calculated using the location-based approach as per the GHG Protocol Scope 2 Guidance.

**Scope:**

Scope 2 (location-based) emissions include GHG emissions from purchased electricity consumed by Eti Soda (and offices in Istanbul), Kazan Soda (and offices in Istanbul) sites, Denmark Depoculuk, Ciner Kimya, WIDT, WE Soda Ltd., Soda World, CEI, Imperial Natural, and Soda World US calculated using Türkiye's national grid emission factor.

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

**Method:**

Regional approaches:

- Türkiye – Production sites (Eti Soda, Kazan Soda) and Denmark: Electricity consumption data is obtained directly from utility bills, site-level meter readings, and the EPIAS platform. Emissions are calculated using Türkiye-specific grid emission factors.
- Türkiye – Offices (Eti Soda Istanbul Office, Kazan Soda Istanbul Office, WIDT, Ciner Kimya Yatırımları): Allocated electricity expenses (TRY) are converted into energy consumption using an energy-per-TRY parameter. Emissions are calculated using the Türkiye grid emission factor.

- United States (CEI, Imperial Mining, Soda World US): The total building electricity consumption, as reported in invoices, is allocated to each entity based on their leased floor area. Emissions are then calculated using eGRID 2023 emission factors.
- United Kingdom (WE Soda Ltd, Soda World): Allocated shares are based on floor area, while actual consumption data is obtained from meter readings (kWh). Emissions are calculated using DEFRA UK emission factors.

**Source:**

- Utility bills, site-level meter readings, and the EPIAS platform (Türkiye – Eti Soda, Kazan Soda, Denmar)
- Expense distribution tables prepared by the Ciner Group Accounting Department (Türkiye – Eti Soda Office, Kazan Soda Office, WIDT, Ciner Kimya Yatırımları)
- Total building invoices showing electricity consumption (US)
- Meter readings (UK)
- Applied emission factors: Türkiye national grid, eGRID 2023 (US), DEFRA (UK)

**Scope 3**

**Category 1 Purchased Goods and Services**

**Definition:**

All upstream (cradle-to-gate) emissions of purchased goods and services.

**Scope:**

Extraction, production, and transportation of goods and services purchased or acquired by WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda (and offices in Istanbul), Kazan Soda (and offices in Istanbul) sites, Denmar Depoculuk, Ciner Kimya, WIDT, WE Soda Ltd., Soda World, CEI, Imperial Natural, Soda World US, and West Soda.

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

**Method:**

Purchased goods and services' invoices are recorded to the internal systems regularly.

**Source:**

Figures are obtained through invoices, direct from suppliers and through our internal systems.

Raw Materials emission factors have been taken from SimaPro 9.5.0.2 which is a sustainability and Life Cycle Assessment software and packaging materials emission factors have been taken from DEFRA 2024.

**Category 2 Capital Goods**

**Definition:** The emissions from long-term assets such as machinery and equipments.

**Scope:**

Capital goods emissions from WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda and Kazan Soda sites and Denmar Depoculuk (port handling services).

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

**Method:**

Capital goods are recorded to the internal systems simultaneously.

**Source:**

Figures are obtained through invoices and through our internal systems.

Emission factors have been taken from USEEIOv2.0.1-411.

**Category 3 Fuel and Energy Related Activities (not included in scope 1 or scope 2)****Definition:**

- **For upstream emissions of purchased fuels:** All upstream (cradle-to-gate) emissions of purchased fuels (from raw material extraction up to the point of, but excluding combustion)
- **For upstream emissions of purchased electricity:** All upstream (cradle-to-gate) emissions of purchased electricity (from raw material extraction up to the point of, but excluding, combustion by a power generator)
- **For T&D losses:** All upstream (cradle-to-gate) emissions of energy consumed in a T&D system, including emissions from combustion
- **For generation of purchased electricity that is sold to end users:** Emissions from the generation of purchased energy

**Scope:**

Extraction, production, and transportation of fuels and energy purchased or acquired by the reporting company in the reporting year, not already accounted for in scope 1 or scope 2, including:

- Upstream emissions of purchased fuels [extraction, production, and transportation of fuels consumed by WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda (and offices in Istanbul), Kazan Soda (and offices in Istanbul) sites, Denmar Depoculuk, Ciner Kimya, WIDT, WE Soda Ltd., Soda World, CEI, Imperial Natural, and Soda World US].
- Upstream emissions of purchased electricity [extraction, production, and transportation of fuels consumed in the generation of electricity, steam, heating, and cooling consumed by WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at Eti Soda (and offices in Istanbul), Kazan Soda (and offices in Istanbul) sites, Denmar Depoculuk, Ciner Kimya, WIDT, WE Soda Ltd., Soda World, CEI, Imperial Natural, and Soda World US.]Transmission and distribution (T&D) losses (generation of electricity, steam, heating and cooling that is consumed (i.e., lost) in a T&D system)

Generation of purchased electricity that is sold to end users (generation of electricity, steam, heating, and cooling that is purchased by WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda (and offices in Istanbul), Kazan Soda (and offices in Istanbul) sites, Denmar Depoculuk, Ciner Kimya, WIDT, WE Soda Ltd., Soda World, CEI, Imperial Natural, and Soda World US and sold to end users)

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product



**Method:**

Emissions are calculated from both electricity transmission and distribution (T&D) losses and natural gas transport. For electricity, T&D loss factors are applied to Scope 2 consumption using Türkiye national grid factors for Türkiye, and DEFRA factors for the United Kingdom and the United States. For natural gas, building-level consumption is allocated to each entity based on leased floor area, with emissions calculated using DEFRA emission factors.

**Source:**

Figures are obtained through utility bills, meter readings, scale records, invoices, and through our internal systems.

WTT-fuels emission factors have been taken from SimaPro 9.5.0.2 which is a sustainability and Life Cycle Assessment software and DEFRA 2024. Electricity T&D emission factors have been taken Türkiye National Inventory , DEFRA 2021, and DEFRA 2024.

**Category 4 Upstream Transportation and Distribution****Definition:**

Emissions of transportation and distribution providers that occur during use of vehicles and facilities

**Scope:**

- Transportation and distribution of products purchased by WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda and Kazan Soda sites in the reporting year (2024) between a company's tier 1 suppliers and its own operations (in vehicles and facilities not owned or controlled by WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda, Kazan Soda sites, and Soda World US.)
- Transportation and distribution services purchased by WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda, Kazan Soda sites, and Soda World US in the reporting year (2024), including inbound logistics, outbound logistics

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

**Method:**

Transportation and distribution information is recorded in our internal system via invoices for each transport.

**Source:**

Figures are obtained through bill of lading, invoices, direct from suppliers and through our internal systems.

Upstream transportation emission factors have been taken from DEFRA 2024.

**Category 5 Waste Generated in Operations****Definition:**

Emissions of the waste management suppliers that occur during disposal or treatment

**Scope:**

Disposal and treatment of waste generated in WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda (and offices in Istanbul), Kazan Soda (and offices in Istanbul) sites, Denmar Depoculuk, Ciner Kimya, WIDT, WE Soda Ltd., Soda World, CEI, Imperial Natural, and Soda World US in the reporting year (2024).

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

**Method:**

It is recorded annually with Waste Declarations reported to the Ministry of Environment, Urbanization and Climate Change.

**Source:**

Figures are obtained through scale records.

Waste emission factors have been taken from EPA and DEFRA 2024.

**Category 6 Business Travel-Flights and Hotel Stay****Definition:**

Emissions of transportation carriers that occur during use of vehicles

Emissions stemming from hotel stays

**Scope:**

Transportation of employees of WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda, Kazan Soda sites, Denmar Depoculuk, and WE Soda Ltd. for business-related activities- emissions of transportation carriers, excluding taxi's - during the reporting year 2024.

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

**Method:**

Flight and hotel tickets are bought by the tour company and records are maintained

**Source:**

Figures are obtained through flight and hotel invoices.

Business travel emission factors have been taken from DEFRA 2024.

**Category 7 Employee Commuting****Definition:**

Emissions of employees and transportation providers that occur during use of vehicles not owned or operated by the company

**Scope:**

Transportation of employees between their homes and their worksites during the reporting year 2024 [in vehicles not owned or operated by WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda, Kazan Soda sites, Denmar Depoculuk, and WIDT.]

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

**Method:**

The total kilometers for each different route are recorded on a monthly basis.

The monthly total number of routes is calculated by multiplying the daily number of trips for the working shuttle by the total number of working days of that month.

For WIDT employees, calculations were made using the same assumptions as in 2023, with no changes in routes or number of days.

**Source:**

Figures are obtained through Google Earth and Google Maps records.

Employee commuting emission factors have been taken from the ICCT.

**Category 8 Upstream Leased Assets**

**Definition:** Emissions arising from assets leased by the company in the relevant year to support its production and logistics-related activities.

**Scope:**

Upstream leased assets emissions from WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda and Kazan Soda sites, WIDT, and CEI. Only leased assets with a monthly cost exceeding 10,000 TL are considered within the scope. As a note, under Soda World Europe GmbH company, there is a warehouse in Terneuzen. This warehouse is controlled by Soda World Europe GmbH, but since the rent is first billed to WIDT, the emissions from this warehouse are listed under Scope 3.8- Upstream Leased Assets under WIDT.

**Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

**Method:**

Activity data derived from financial records is recorded in the internal system and forms the basis for calculating emissions from upstream leased assets. Emissions are calculated using relevant emission factors.

**Source:**

Activity data is derived from WE Soda's internal systems. Emission factors are sourced from the USA EPA Supply Chain Greenhouse Gas Emission Factors v1.3 (NAICS-6 classification).

## **Category 9 Downstream Transportation and Distribution**

### **Definition:**

Emissions of transportation providers, distributors, and retailers that occur during use of vehicles and facilities

### **Scope:**

Transportation and distribution of products sold by WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda and Kazan Soda sites in the reporting year 2024 between our operations and the end consumer

### **Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

### **Method:**

Transportation and distribution information is recorded in our internal system via invoices for each transport.

### **Source:**

Figures are obtained through bill of lading, invoices, direct from suppliers and through our internal systems.

Downstream transportation emission factors have been taken from DEFRA 2024.

## **Category 10 Processing of Sold Products**

### **Definition:**

"Processing of Sold Products" refers to the emissions associated with the further processing or use of a product after it has been sold to consumers or businesses.

### **Scope:**

The further processing or use of a product after it has been sold to consumers from WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda and Kazan Soda sites in the reporting year 2024.

### **Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

### **Method:**

Sales are recorded in our internal system for each transport.

### **Source:**

Figures are obtained through direct from customers and through our internal systems.

The emission factors are derived using stoichiometric calculations, assuming that the entire carbon content of Soda Ash and Sodium Bicarbonate is fully decomposed and released as CO<sub>2</sub> during processing, based on molecular weights.

### **Category 11 Use of Sold Products**

#### **Definition:**

"Use of Sold Products" refers to the emissions generated when the consumer or end-user utilizes the product after it has been sold.

#### **Scope:**

The further use of a product after it has been sold to consumers from WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda and Kazan Soda sites in the reporting year 2024.

#### **Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

#### **Method:**

Sales are recorded in our internal system for each transport.

#### **Source:**

Figures are obtained through direct from customers and through our internal systems.

The emission factors are derived using stoichiometric calculations, assuming that the entire carbon content of Soda Ash and Sodium Bicarbonate is fully decomposed and released as CO<sub>2</sub> during processing, based on molecular weights.

### **Category 13 Downstream Leased Assets**

#### **Definition:**

Emissions arising from assets owned by the company but leased out to other entities during the relevant year to support downstream production and logistics-related activities.

#### **Scope:**

Downstream leased assets emissions from WE Soda's Soda Ash and Sodium Bicarbonate production facilities located at the Eti Soda and Kazan Soda sites. Only leased assets with a monthly lease income exceeding 10,000 TL are considered within the scope.

#### **Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

#### **Method:**

Activity data derived from financial records is recorded in the internal system and forms the basis for calculating emissions from downstream leased assets. Emissions are calculated using relevant emission factors.

#### **Source:**

Activity data is derived from WE Soda's internal systems. Emission factors are sourced from the USA EPA Supply Chain Greenhouse Gas Emission Factors v1.3 (NAICS-6 classification).

## **Category 15 Investments**

### **Definition:**

Emissions arising from investments by the company during the relevant year

### **Scope:**

Emissions from equity investments of CEI under WE Soda in associate companies (Şişecam Wyoming LLC, Şişecam Chemicals Wyoming LLC, Şişecam Chemicals Resources LLC, and Pacific Soda LLC).

### **Unit:**

tCO<sub>2</sub>e, tCO<sub>2</sub>e/tonne of product

### **Method:**

For Şişecam Wyoming LLC, the verified emission values for 2023 have been calculated in proportion to this year's production volume to obtain reporting year (2024) emission values. In other companies, since emission values were not achieved, they were considered equivalent to companies with similar activities. Lastly, these associate companies' emissions were distributed to CEI in proportion to their equity shares.

### **Source:**

Verified emission reports of Şişecam Wyoming LLC (2023); production volume data (2024); internal estimates based on entities with similar activities; and CEI equity share data for allocation.

## **Carbon Emissions Intensity [Scope 1+2 market based tCO<sub>2</sub>e/tonne production]**

### **Definition:**

This metric represents the carbon emissions intensity of WE Soda's activities, calculated as the sum of Scope 1 and Scope 2 (market-based) emissions per tonne of Soda Ash and Sodium Bicarbonate produced.

### **System Boundaries:**

Includes emissions from all activities at Eti Soda, Kazan Soda, Denmar Depoculuk, WIDT, Ciner Kimya, Soda World, CEI, Imperial Natural, Soda World US, West Soda, and WE Soda Ltd.-offices. Scope 1 covers direct emissions from stationary and mobile combustion, fugitive emissions, and process emissions.

Scope 2 (market-based) covers indirect emissions from purchased electricity, and natural gas calculated using market-based emission factors (including renewable certificates where applicable).

### **Unit:**

tCO<sub>2</sub>e/tonne of product

### **Methodology:**

Scope 1 and Scope 2 (market-based) emissions are calculated using activity data obtained from multiple sources, including internal records, supplier data, and operational reports. For Scope 2 (market-based), Türkiye-specific emission factors are applied. For renewable electricity covered by YEK-G certificates, an emission factor of zero is applied; for the remaining consumption, the Türkiye national grid emission factor is used. Production data (tonnes of Soda Ash and Sodium Bicarbonate) are sourced from internal systems.

The intensity is calculated by dividing the total Scope 1 and Scope 2 (market-based) emissions by total product output from the Kazan Soda, Eti Soda facilities for the reporting period.

According to the GHG Protocol Scope 2 Guidance, grid-average (location-based) emission factors are the least preferred option in the market-based hierarchy. However, as supplier-specific or residual mix emission factors were not available, location-based grid factors have been applied where necessary.

**Source:**

Scope 1 and Scope 2 (location-based) emissions are calculated based on activity data sourced from multiple sources, including internal records, supplier data, and operational reports.

Scope 2 (market-based) emission factors are applied based on Türkiye-specific data and renewable energy certificates (YEK-G).

Production data are derived from site-level operational records at Kazan Soda and Eti Soda.

**Carbon Emissions Intensity [Scope 1+2 location based tCO<sub>2</sub>e/tonne production]**

**Definition:**

This metric represents the carbon emissions intensity of WE Soda's activities, calculated as the sum of Scope 1 and Scope 2 (location-based) emissions per tonne of Soda Ash and Sodium Bicarbonate produced.

**System Boundaries:**

Includes emissions from all production activities at Eti Soda, Kazan Soda, Denmar Depoculuk, WIDT, Ciner Kimya, Soda World, CEI, Imperial Natural, Soda World US, West Soda, and WE Soda Ltd.-offices.

Scope 1 covers direct emissions from stationary and mobile combustion, fugitive emissions, and process emissions. Scope 2 (location-based) emissions include GHG emissions from purchased electricity, and natural gas calculated using Türkiye's national grid emission factor.

**Unit:**

tCO<sub>2</sub>e/tonne of product

**Methodology:**

Scope 1 and Scope 2 (location-based) emissions are calculated using activity data obtained from multiple sources, including internal records, supplier data, and operational reports. For Scope 2 (location-based), Türkiye's national grid emission factor is applied to the total electricity consumption. Production data (tonnes of Soda Ash and Sodium Bicarbonate) are sourced from internal systems.

The intensity is calculated by dividing the total Scope 1 and Scope 2 (location-based) emissions by total product output from the Kazan Soda, Eti Soda facilities for the reporting period.

**Source:**

Scope 1 and Scope 2 (location-based) emissions are calculated based on activity data sourced from multiple sources, including internal records, supplier data, and operational reports.

Scope 2 (location-based) emissions are calculated using electricity consumption data obtained from utility bills, meter readings, and data from the EPIAS (Turkish energy exchange) platform. Türkiye's

national grid average emission factor is sourced from the national inventory. Production data are derived from site-level operational records at Kazan Soda and Eti Soda.

#### **Water Withdrawal (Total Volumes & Volume by source (third-party sources)):**

##### **Definition:**

According to GRI 303: Water and Effluents 2018; water withdrawal is sum of all water drawn from surface water, groundwater, seawater, or a third party for any use over the course of the reporting period.

##### **System Boundaries:**

All operations of Soda Ash and Sodium Bicarbonate production facilities located in Eti Soda (and offices), Kazan Soda (and offices) Denmar Depoculuk, Soda World, WE Soda Ltd., Ciner Kimya, WIDT, CEI, Imperial Natural, and Soda World US. All offices, production sub-facilities, processes and integrated wastewater treatment plants are included in the system boundaries. Within the framework of the operational control approach, water use, recycled & reused water and water discharge arising from the activities are included.

##### **Scope:**

Total third-party water withdrawal in megaliter.

##### **Unit:**

megaliter

##### **Methodology:**

Water withdrawal is monitored and recorded daily via flowmeters at production sites, and invoices. Water withdrawn from all sources, including surface water, groundwater, and municipal supply, is consolidated and reported as total water withdrawal.

According to GRI 303: Water and Effluents 2018, water stress is ability, or lack thereof, to meet the human and ecological demand for water. If the basin where the withdrawn water is facing water stress according to Aqueduct Water Risk Atlas, it is classified as a **water stress area**.

##### **Source:**

Data is obtained from site-level flowmeters and cross-checked with supplier invoices where applicable. Data is consolidated in an internal Excel working file.

#### **Total Water Consumption:**

##### **Definition:**

According to GRI 303: Water and Effluents 2018, water consumption is sum of all water that has been withdrawn and incorporated into products, used in the production of crops or generated as waste, has evaporated, transpired, or been consumed by humans or livestock, or is polluted to the point of being unusable by other users, and is therefore not released back to surface water, groundwater, seawater, or a third party over the course of the reporting period.

##### **System Boundaries:**



All operations of Soda Ash and Sodium Bicarbonate production facilities located in Eti Soda (and offices), Kazan Soda (and offices) Denmar Depoculuk, Soda World, WE Soda Ltd., Ciner Kimya, WIDT, CEI, Imperial Natural, Soda World US.

**Scope:**

Total water consumption in megaliter.

**Unit:**

megaliter

**Methodology:**

For production sites (Eti Soda and Kazan Soda) water consumption includes evaporated water and purge loss. For offices, it is assumed that 10% of the withdrawn water is lost. However, for the offices in USA (CEI, Imperial Natural, and Soda World US), water is discharged without any loss, based on the information stated in the invoices

**Source:**

Water consumption data is obtained from site-level flowmeters, invoices and some calculations.

**Total Water Discharge:**

**Definition:**

According to GRI 303: Water and Effluents 2018, water discharge is sum of effluents, used water, and unused water released to surface water, groundwater, seawater, or a third party, for which the organization has no further use, over the course of the reporting period.

**System Boundaries:**

All operations of Soda Ash and Sodium Bicarbonate production facilities located in Eti Soda (and offices), Kazan Soda (and offices) Denmar Depoculuk, Soda World, WE Soda Ltd., Ciner Kimya, WIDT, CEI, Imperial Natural, Soda World US.

**Scope:**

Total water discharge in megaliter.

**Unit:**

megaliter

**Methodology:**

For production sites (Eti Soda and Kazan Soda) water discharge includes domestic and industrial wastewater treatment discharges. For offices, it is assumed that 90% of the withdrawn water is discharged. However, for the offices in USA (CEI, Imperial Natural, and Soda World US), water is discharged without any loss, based on the information stated in the invoices.

Kazan Soda domestic, Eti Soda domestic, and Eti Soda industrial wastewater discharge volumes by destination are classified as discharges to **fresh surface water, including wetlands, rivers, and lakes**. Eti Soda and Kazan Soda mining loss and drilling loss water amounts are classified as **discharges to**

**groundwater**, and the discharge amounts from Eti Soda offices in Istanbul, Kazan Soda offices in Istanbul, Denmar Depoculuk, Soda World, WE Soda Ltd., Ciner Kimya, WIDT, CEI, Imperial Natural, and Soda World US are classified as **third party destination** water discharges.

For water discharges – volume by final treatment level; **Secondary treatment** subcategory includes Eti Soda and Kazan Soda domestic wastewater discharges, **Primary treatment only** subcategory includes Eti Soda industrial wastewater discharges, **Discharge to a third party without treatment** subcategory includes Eti Soda offices in Istanbul, Kazan Soda offices in Istanbul, Denmar Depoculuk, Soda World, WE Soda Ltd., Ciner Kimya, WIDT, CEI, Imperial Natural, and Soda World US discharged water amounts, and the last subcategory named **Other** includes Eti Soda and Kazan Soda mining and drilling loss amounts.

**Source:**

Data is sourced from invoices, discharge flowmeters and consolidated in an internal Excel working file.

**Pollution Load (Water discharges – quality by standard water quality parameters):**

**Definition:**

The mass or weight of pollutant transported in a specified unit of time from pollutant sources to a waterbody.

**System Boundaries:**

All operations of Soda Ash and Sodium Bicarbonate production facilities located in Eti Soda and Kazan Soda plants of WE Soda. All production sub-facilities and processes and integrated wastewater treatment plants are included in the system boundaries. Within the framework of the operational control approach, water use, recycled&reused water and water discharge arising from the activities are included.

**Scope:**

Industrial and domestic wastewater discharge pollutants

**Unit:**

Kilogram, kg

**Methodology:**

Domestic wastewater parameters (COD, BOD, and TSS in mg/L) are analysed by a third-party laboratory on a monthly basis for Eti Soda and on a bi-monthly basis for Kazan Soda. This frequency follows environmental permit requirements, and for the months without analysis at Kazan Soda, average values were applied.

Parameters analysed monthly by a third-party laboratory for Eti Soda industrial wastewater: COD, Chloride, Iron, Oil & Grease, and Sulphate in mg/L.

Then these pollution parameters in mg/L are multiplied by the monthly water discharge flowrates in L. Finally, pollution loads in kg are obtained.

**Source:**

Third party laboratory analysis reports for wastewater. Meter records.

## **APPENDIX: WE Soda Group Corporate Structure Chart**

