T.ŞİŞE VE CAM FABRİKALARI A.Ş.

2024 CDP Corporate Questionnaire 2024

Word version

Important: this export excludes unanswered questions

.

10/01/2024, 03:24 pm

Contents

C1. Introduction

(1.1) In which language are you submitting your response?

Select from:
☑ English

(1.2) Select the currency used for all financial information disclosed throughout your response.

Select from:
☑ EUR

(1.3) Provide an overview and introduction to your organization.

(1.3.2) Organization type

Select from:
☑ Publicly traded organization

(1.3.3) Description of organization

Şişecam has introduced numerous innovations and driven development of the flat glass industry both in Turkey and the larger region. The Company is a leader in Europe and the world's fifth largest flat glass producer in terms of production capacity. Şişecam conducts flat glass operations in three core business lines: architectural glass (e.g. flat glass, patterned glass, laminated glass and coated glass), energy glass and home appliance glass. Şişecam is the world's and Europe's second largest producer of glassware. The Company boasts a strong distribution network, an extensive range of products and exceptional production capabilities. A leader in the glass packaging market in Turkey and Russia, Şişecam also ranks among the top five producers in Europe and worldwide in glass packaging. Şişecam meets glass packaging needs for a range of industries, including food, beverages, pharmaceuticals, and cosmetics, with a broad palette of colors and volumes ranging from 6 cc to 15000 cc. Playing a leading role in flat glass, glassware, glass packaging, chemicals, automotive, glass fibre, mining, energy and recycling businesses, Şişecam carries out its production activities in Germany, Italy, Bulgaria, Romania, Slovakia, Hungary, Bosnia and Herzegovina, Russian Federation, Georgia, Ukraine, Egypt, India and the USA in addition to Turkey. With 88 years of experience, more than 24,000 employees, production operations spanning 14 countries on four continents and a sales network exceeding 150 countries, Şişecam has been a listed company since 1986.
[Fixed row]

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

(1.4.1) End date of reporting year

12/30/2023

(1.4.2) Alignment of this reporting period with your financial reporting period

Select from:
☑ Yes

(1.4.3) Indicate if you are providing emissions data for past reporting years

Select from:
☑ Yes

(1.4.4) Number of past reporting years you will be providing Scope 1 emissions data for

Select from:
☑ 3 years

(1.4.5) Number of past reporting years you will be providing Scope 2 emissions data for

Select from:
☑ 3 years

(1.4.6) Number of past reporting years you will be providing Scope 3 emissions data for

Select from:
☑ Not providing past emissions data for Scope 3
[Fixed row]

(1.4.1) What is your organization’s annual revenue for the reporting period?

5155505822

(1.5) Provide details on your reporting boundary.

	Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?
	Select from: ☑ Yes

[Fixed row]

(1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

TRASISEW91

ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

CUSIP number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

Ticker symbol

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

LEI number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

D-U-N-S number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

Other unique identifier

(1.6.1) Does your organization use this unique identifier?

Select from:
☑ No
[Add row]

(1.7) Select the countries/areas in which you operate.

Select all that apply
☑ Egypt
☑ India
☑ Italy
☑ Turkey
☑ Georgia
☑ United States of America
☑ Romania
☑ Bulgaria
☑ Slovakia
☑ Russian Federation
☑ Bosnia & Herzegovina

(1.8) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
	Select from: ☑ Yes, for all facilities	*Şişecam has reported its activities which are distributed among 44 facilities.*

[Fixed row]

(1.8.1) Please provide all available geolocation data for your facilities.

Row 1

(1.8.1.1) Identifier

Kırklareli - Turkey - Flatglass

(1.8.1.2) Latitude

41.28636

(1.8.1.3) Longitude

27.57796

(1.8.1.4) Comment

TF - Turkey

Row 2

(1.8.1.1) Identifier

Mersin - Turkey - Flatglass

(1.8.1.2) Latitude

36.89548

(1.8.1.3) Longitude

34.80932

(1.8.1.4) Comment

TM - Turkey

Row 3

(1.8.1.1) Identifier

Bursa - Turkey - Flatglass

(1.8.1.2) Latitude

40.24348

(1.8.1.3) Longitude

29.66358

(1.8.1.4) Comment

TN - Turkey

Row 4

(1.8.1.1) Identifier

Polatlı - Turkey - Flatglass

(1.8.1.2) Latitude

39.58002

(1.8.1.3) Longitude

31.97246

(1.8.1.4) Comment

TP - Turkey

Row 5

(1.8.1.1) Identifier

Bulgaria - Flatglass

(1.8.1.2) Latitude

43.27299

(1.8.1.3) Longitude

26.52426

(1.8.1.4) Comment

TB - EU

Row 6

(1.8.1.1) Identifier

Russia - Flatglass

(1.8.1.2) Latitude

55.831614

(1.8.1.3) Longitude

52.022885

(1.8.1.4) Comment

TGR - Russia

Row 7

(1.8.1.1) Identifier

India - Flatglass

(1.8.1.2) Latitude

22.544589

(1.8.1.3) Longitude

73.431318

(1.8.1.4) Comment

HF - India

Row 8

(1.8.1.1) Identifier

Porto Nogaro -Italy - Flatglass

(1.8.1.2) Latitude

45.770958

(1.8.1.3) Longitude

13.229417

(1.8.1.4) Comment

N-Ita - EU

Row 9

(1.8.1.1) Identifier

Manfredonia - Italy - Flatglass

(1.8.1.2) Latitude

41.65322

(1.8.1.3) Longitude

15.945238

(1.8.1.4) Comment

S-Ita - EU

Row 10

(1.8.1.1) Identifier

Mersin - Turkey - Glass Packaging

(1.8.1.2) Latitude

36.865089

(1.8.1.3) Longitude

34.762631

(1.8.1.4) Comment

AF - Turkey

Row 11

(1.8.1.1) Identifier

Eskişehir - Turkey - Glass Packaging

(1.8.1.2) Latitude

39.738729

(1.8.1.3) Longitude

30.657718

(1.8.1.4) Comment

AE - Turkey

Row 12

(1.8.1.1) Identifier

Bursa - Turkey - Glass Packaging

(1.8.1.2) Latitude

40.243564

(1.8.1.3) Longitude

29.663551

(1.8.1.4) Comment

AB - Turkey

Row 13

(1.8.1.1) Identifier

Gorokhovets - Russia - Glass Packaging

(1.8.1.2) Latitude

59.489697

(1.8.1.3) Longitude

32.011412

(1.8.1.4) Comment

RG - Russia

Row 14

(1.8.1.1) Identifier

Ufa -Russia - Glass Packaging

(1.8.1.2) Latitude

54.768455

(1.8.1.3) Longitude

56.258851

(1.8.1.4) Comment

RU - Russia

Row 15

(1.8.1.1) Identifier

Pokrovsky - Russia - Glass Packaging

(1.8.1.2) Latitude

59.099123

(1.8.1.3) Longitude

35.229984

(1.8.1.4) Comment

RP - Russia

Row 16

(1.8.1.1) Identifier

Mina -Georgia - Glass Packaging

(1.8.1.2) Latitude

41.868172

(1.8.1.3) Longitude

44.576402

(1.8.1.4) Comment

MN - Georgia

Row 17

(1.8.1.1) Identifier

Krishi -Russia - Glass Packaging

(1.8.1.2) Latitude

59.488465

(1.8.1.3) Longitude

32.011413

(1.8.1.4) Comment

RR - Russia

Row 18

(1.8.1.1) Identifier

Kuban - Russia - Glass Packaging

(1.8.1.2) Latitude

59.488492

(1.8.1.3) Longitude

32.011403

(1.8.1.4) Comment

RK - Russia

Row 19

(1.8.1.1) Identifier

Kırklareli - Turkey - Glassware

(1.8.1.2) Latitude

41.286517

(1.8.1.3) Longitude

27.577898

(1.8.1.4) Comment

PK - Turkey

Row 20

(1.8.1.1) Identifier

Eskişehir - Turkey - Glassware

(1.8.1.2) Latitude

39.742232

(1.8.1.3) Longitude

30.662311

(1.8.1.4) Comment

PE - Turkey

Row 21

(1.8.1.1) Identifier

Mersin - Turkey - Glassware

(1.8.1.2) Latitude

36.895412

(1.8.1.3) Longitude

34.809266

(1.8.1.4) Comment

PM - Turkey

Row 22

(1.8.1.1) Identifier

Denizli - Turkey - Glassware

(1.8.1.2) Latitude

37.766566

(1.8.1.3) Longitude

29.019244

(1.8.1.4) Comment

DC - Turkey

Row 23

(1.8.1.1) Identifier

Targovishte - Bulgaria - Glassware

(1.8.1.2) Latitude

43.274479

(1.8.1.3) Longitude

26.521338

(1.8.1.4) Comment

BP - EU

Row 24

(1.8.1.1) Identifier

Egypt - Glassware

(1.8.1.2) Latitude

29.897226

(1.8.1.3) Longitude

30.891072

(1.8.1.4) Comment

EGP - Egypt

Row 25

(1.8.1.1) Identifier

Posuda - Russia - Glassware

(1.8.1.2) Latitude

56.415842

(1.8.1.3) Longitude

43.996975

(1.8.1.4) Comment

PR - Russia

Row 26

(1.8.1.1) Identifier

Balıkesir - Turkey - Glassfibre

(1.8.1.2) Latitude

39.58965

(1.8.1.3) Longitude

27.827218

(1.8.1.4) Comment

CE - Turkey

Row 27

(1.8.1.1) Identifier

Slovakia - Autoglass-Encap.

(1.8.1.2) Latitude

48.413824

(1.8.1.3) Longitude

17.022252

(1.8.1.4) Comment

Fritz Group - EU

Row 28

(1.8.1.1) Identifier

Kırklareli - Turkey - Autoglass

(1.8.1.2) Latitude

41.290019

(1.8.1.3) Longitude

27.580799

(1.8.1.4) Comment

ŞO - Turkey

Row 29

(1.8.1.1) Identifier

Russia - Autoglass

(1.8.1.2) Latitude

55.830786

(1.8.1.3) Longitude

52.014536

(1.8.1.4) Comment

Auto-Rus - Russia

Row 30

(1.8.1.1) Identifier

Bulgaria - Autoglass

(1.8.1.2) Latitude

43.266566

(1.8.1.3) Longitude

26.521585

(1.8.1.4) Comment

BO - EU

Row 31

(1.8.1.1) Identifier

Bulgaria - Autoglass

(1.8.1.2) Latitude

43.266566

(1.8.1.3) Longitude

26.521585

(1.8.1.4) Comment

BE - EU

Row 32

(1.8.1.1) Identifier

Romania - Autoglass

(1.8.1.2) Latitude

45.134162

(1.8.1.3) Longitude

26.821016

(1.8.1.4) Comment

RO - EU

Row 33

(1.8.1.1) Identifier

Mersin - Turkey - Soda

(1.8.1.2) Latitude

36.818146

(1.8.1.3) Longitude

34.738403

(1.8.1.4) Comment

SD - Turkey

Row 34

(1.8.1.1) Identifier

Bosnia - Soda

(1.8.1.2) Latitude

44.531866

(1.8.1.3) Longitude

18.525672

(1.8.1.4) Comment

SSL - Bosnia

Row 35

(1.8.1.1) Identifier

USA - Soda

(1.8.1.2) Latitude

41.71899

(1.8.1.3) Longitude

-109.695969

(1.8.1.4) Comment

WYO - USA

Row 36

(1.8.1.1) Identifier

Italy - Chromium

(1.8.1.2) Latitude

44.740784

(1.8.1.3) Longitude

12.040291

(1.8.1.4) Comment

CRO - EU

Row 37

(1.8.1.1) Identifier

Mersin - Turkey - Chromium

(1.8.1.2) Latitude

36.817578

(1.8.1.3) Longitude

34.728987

(1.8.1.4) Comment

KRO - Turkey

Row 38

(1.8.1.1) Identifier

Kırklareli - Turkey - Electricity

(1.8.1.2) Latitude

41.285855

(1.8.1.3) Longitude

27.583247

(1.8.1.4) Comment

Camiş Elk. - Turkey

Row 39

(1.8.1.1) Identifier

Mersin - Turkey - VK-3

(1.8.1.2) Latitude

36.899231

(1.8.1.3) Longitude

34.800269

(1.8.1.4) Comment

Oxyvit - Turkey

Row 40

(1.8.1.1) Identifier

Italy - Refractory

(1.8.1.2) Latitude

45.943459

(1.8.1.3) Longitude

12.872752

(1.8.1.4) Comment

Refel - EU

Row 41

(1.8.1.1) Identifier

C.A Tuzla - Turkey - Corrugated Box

(1.8.1.2) Latitude

40.828499

(1.8.1.3) Longitude

29.326798

(1.8.1.4) Comment

C.A Tuzla - Turkey

Row 42

(1.8.1.1) Identifier

C.A Eskişehir - Turkey - Corrugated Box

(1.8.1.2) Latitude

39.742232

(1.8.1.3) Longitude

30.662311

(1.8.1.4) Comment

C.A Eskişehir - Turkey

Row 43

(1.8.1.1) Identifier

Mersin - Arabali - Turkey - Salt Operation

(1.8.1.2) Latitude

36.818146

(1.8.1.3) Longitude

34.738403

(1.8.1.4) Comment

Tuz İşletmesi Arabali - Turkey

Row 44

(1.8.1.1) Identifier

Mersin - Tarsus - Turkey - Salt Operation

(1.8.1.2) Latitude

36.818146

(1.8.1.3) Longitude

34.738403

(1.8.1.4) Comment

Tuz İşletmesi Tarsus - Turkey
[Add row]

(1.14) In which part of the chemicals value chain does your organization operate?

Bulk inorganic chemicals

☑ Soda ash

(1.24) Has your organization mapped its value chain?

(1.24.1) Value chain mapped

Select from:

☑ Yes, we have mapped or are currently in the process of mapping our value chain

(1.24.2) Value chain stages covered in mapping

Select all that apply

☑ Upstream value chain

(1.24.3) Highest supplier tier mapped

Select from:

☑ Tier 1 suppliers

(1.24.4) Highest supplier tier known but not mapped

Select from:

☑ All supplier tiers known have been mapped

(1.24.7) Description of mapping process and coverage

Şişecam has undertaken a comprehensive mapping of its value chain to ensure the integration of sustainability practices at every stage of its operations. This mapping process includes a thorough evaluation of all key segments, from raw material suppliers and production processes to distribution channels and end customers. The company utilizes a variety of tools, such as supplier performance evaluations, sustainability assessments, and environmental impact analyses, to

continuously monitor and improve compliance with its sustainability goals. These efforts help ensure that the environmental, social, and governance (ESG) criteria are consistently applied throughout the value chain. The mapping also covers essential areas like resource sourcing, energy consumption, waste management, and logistics, providing a holistic view of how each component contributes to the company's overall sustainability performance. By segmenting suppliers based on risk and potential, and conducting regular audits and assessments, Şişecam ensures that any gaps in sustainability practices are identified and addressed. This mapping process not only improves operational efficiency but also helps identify opportunities for innovation, collaboration, and continuous improvement across the value chain.
[Fixed row]

(1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

(1.24.1.1) Plastics mapping

Select from:
☑ No, but we plan to within the next two years

(1.24.1.5) Primary reason for not mapping plastics in your value chain

Select from:
☑ No standardized procedure

(1.24.1.6) Explain why your organization has not mapped plastics in your value chain

Şişecam has not yet mapped plastics within its value chain, primarily because plastics have not been identified as a priority area within the company's current environmental management strategy. The decision not to conduct specific risk assessments related to plastics stems from the lack of significant procedures and concerns surrounding plastics in Şişecam's operations. As a company focused primarily on glass production and related materials, Şişecam has directed its sustainability efforts towards issues more pertinent to its industry, such as energy efficiency, resource conservation, and circular economy initiatives. These areas are more aligned with the company's core business and sustainability objectives. While the company acknowledges the importance of plastics in global environmental discussions, it has chosen to focus on areas where it can have a more immediate and meaningful impact, such as reducing its carbon footprint, increasing the use of recycled materials, and enhancing its renewable energy capacity.
[Fixed row]

C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

Short-term

(2.1.1) From (years)

0

(2.1.3) To (years)

3

(2.1.4) How this time horizon is linked to strategic and/or financial planning

This short-term timeframe covers action plans and risk management strategies that can be implemented immediately in the company's strategic and financial planning. During this climate change-related period, steps are taken to improve operational efficiency, take cost-effective measures and adapt to regulatory changes. During this period, the impact of climate risks on existing business processes is reviewed and financial forecasts are updated to support the management of these risks.

Medium-term

(2.1.1) From (years)

3

(2.1.3) To (years)

5

(2.1.4) How this time horizon is linked to strategic and/or financial planning

This medium-term timeframe allows for a more comprehensive integration of strategic objectives and financial plans. During this time, the company can develop larger-scale climate change-related projects, invest in innovative technologies and implement long-term adaptation strategies. In addition, the effects of climate change on market conditions and possible regulatory changes are taken into account in financial plans to analyze risks and opportunities.

Long-term

(2.1.1) From (years)

5

(2.1.2) Is your long-term time horizon open ended?

Select from:

☑ No

(2.1.3) To (years)

10

(2.1.4) How this time horizon is linked to strategic and/or financial planning

This long-term timeframe allows the company to make comprehensive plans for its future strategic direction and financial sustainability. The long-term impacts of climate change-related risks and opportunities are assessed during this period, which plays a critical role in guiding the company's strategic decisions and capital investments. During this period, the company can develop climate resilient business models, undertake large-scale transformation projects and set long-term financial performance targets.
[Fixed row]

(2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

	Process in place	Dependencies and/or impacts evaluated in this process
	Select from: ☑ Yes	*Select from:* ☑ Both dependencies and impacts

[Fixed row]

(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

	Process in place	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
	Select from: ☑ Yes	*Select from:* ☑ Both risks and opportunities	*Select from:* ☑ Yes

[Fixed row]

(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

Row 1

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(2.2.2.4) Coverage

Select from:

☑ Full

(2.2.2.5) Supplier tiers covered

Select all that apply

☑ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ Annually

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Site-specific

(2.2.2.12) Tools and methods used

Enterprise Risk Management

☑ Enterprise Risk Management

☑ Risk models

International methodologies and standards

☑ Environmental Impact Assessment

☑ Life Cycle Assessment

Other

☑ External consultants

☑ Internal company methods

☑ Materiality assessment

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Cold wave/frost

☑ Cyclones, hurricanes, typhoons

☑ Flood (coastal, fluvial, pluvial, ground water)

☑ Heat waves

☑ Storm (including blizzards, dust, and sandstorms)

Chronic physical

☑ Water stress

Policy

☑ Carbon pricing mechanisms

Market

☑ Changing customer behavior

Technology

☑ Transition to lower emissions technology and products

Liability

☑ Exposure to litigation

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Suppliers

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☑ Yes

(2.2.2.16) Further details of process

The assessment of physical risks encompasses several key assumptions, including the concept of 'revenue dependency' for each facility, which quantifies the value of output linked to the revenue generated from the products produced or stored at that facility. Vulnerability functions, which are based on various case studies, differ by facility type—such as warehouses, industrial sites, and offices—and illustrate the time required for a facility to recover to its full productive capacity after experiencing a specific climate-related hazard, such as riverine floods or heatwaves. It is assumed that these physical hazards occur independently without correlation between events and that Şişecam's current property portfolio will remain unchanged over the next five years. Regarding transitional risk, the shift towards a lower-carbon economy is anticipated to lead to broad changes in global and national policies, technology requirements (including retrofitting, adapting, or replacing technologies to reduce emissions or accommodate renewable energy sources), and market conditions from both consumer and raw material perspectives. Additionally, the impact of poor climate performance on a company's reputation is a key concern. These impacts are assessed through various metrics: current and projected carbon prices per country and sector, impairment curves for technologies and assets, balance sheet factors such as fossil fuel share and depreciation rates, and the financial impact of legal liabilities and investor sentiment. Reputation risks related to climate activism are also considered, including market states, consumer behavior trends, and revenue implications based on sector-specific consumer boycotts and regional market breakdowns.

Row 2

(2.2.2.1) Environmental issue

Select all that apply

☑ Water

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

(2.2.2.4) Coverage

Select from:

☑ Full

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ Annually

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Site-specific

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ EcoVadis

☑ WRI Aqueduct

☑ WWF Water Risk Filter

Enterprise Risk Management

☑ Enterprise Risk Management

☑ Risk models

International methodologies and standards

☑ Environmental Impact Assessment

☑ IPCC Climate Change Projections

☑ Life Cycle Assessment

Other

☑ Desk-based research

☑ External consultants

☑ Materiality assessment

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Drought

☑ Flood (coastal, fluvial, pluvial, ground water)

Chronic physical

☑ Water stress

☑ Groundwater depletion

☑ Declining water quality

☑ Rationing of municipal water supply

☑ Water quality at a basin/catchment level

☑ Precipitation or hydrological variability

☑ Water availability at a basin/catchment level

☑ Seasonal supply variability/interannual variability

☑ Increased levels of environmental pollutants in freshwater bodies

Policy

☑ Changes to national legislation

☑ Increased pricing of water

☑ Limited or lack of river basin management

Technology

☑ Transition to water efficient and low water intensity technologies and products

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

☑ Employees

☑ Regulators

☑ Water utilities at a local level

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☑ Yes

(2.2.2.16) Further details of process

Previously, Şişecam's water risk assessment methodology consisted of three dimensions: Water Stress, Regulation Stress, and Customer Expectations. Based on these parameters, regional risk assessments were conducted, and our operations in Turkey, the EU, India, Egypt, Russia, and Georgia were scored. In this reporting period, however, we went beyond regional analysis and examined three different parameters for each of our facilities: total water usage, water use efficiency, and watershed risks defined according to the World Resources Institute (WRI) Aqueduct Risk Atlas. Additionally, the guiding principles of the CEO Water Mandate for water management were referenced. During the assessment process, critical factors such as water stress, water supply-demand balance, water quality, and climate change in the regions where the facilities are located were considered, and the potential impacts of operations on water resources were analyzed. In addition to the general risk analysis, facilities classified as having "Extremely High" and "High" physical risks according to the WRI Aqueduct Risk Atlas were identified. Furthermore, the water quality of all Şişecam facilities was thoroughly examined, and they were assessed with reference to one of the strictest standards, the IFC standards.

[Add row]

(2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

(2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

Select from:

☑ Yes

(2.2.7.2) Description of how interconnections are assessed

Şişecam publishes several annual reports on environmental dependencies, impacts, risks and/or opportunities such as Sustainability Reporting, Integrated Annual Reporting and TCFD reporting. These studies address environmental dependencies and impacts, as well as their impact magnitudes and impact areas. Risks and opportunities that may arise from environmental dependencies and impacts are discussed in detail in environmental risk assessment reports such as TCFD, and the risks that may arise for each dependency and/or impact identified are evaluated under the relevant risk heading. The risks are prioritized and financial planning, planned projects and the budget to be allocated are shared with our stakeholders. Following the risk assignments, their financial impact is evaluated and the actions to be taken and which risks will be turned into opportunities are discussed internally. Each nature-related commitment and impact on environmental issues within Şişecam is evaluated in terms of risks and opportunities. These concepts, which are evaluated as a whole, are renewed annually and their scope is improved. At Şişecam, we work with the awareness that environmental commitments and impacts cannot be separated from environmental risks and opportunities, and we work to develop the most conscious corporate strategies in the global fight against climate change. To this end, we work on the outputs we obtain on the basis of environmental risks and seek answers to the financial repercussions that may arise. We transparently share the concrete steps taken in this context with our stakeholders on an annual basis.

[Fixed row]

(2.3) Have you identified priority locations across your value chain?

(2.3.1) Identification of priority locations

Select from:

☑ Yes, we have identified priority locations

(2.3.2) Value chain stages where priority locations have been identified

Select all that apply

☑ Direct operations

(2.3.3) Types of priority locations identified

Sensitive locations

☑ Areas of limited water availability, flooding, and/or poor quality of water

Locations with substantive dependencies, impacts, risks, and/or opportunities

☑ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to water

(2.3.4) Description of process to identify priority locations

We evaluated three key parameters for each of our facilities: total water consumption, water use efficiency, and watershed risks as defined by the World Resources Institute's (WRI) Aqueduct Risk Atlas. Additionally, the CEO Water Mandate's principles for water management served as a framework for guidance. Throughout the assessment, we considered crucial factors such as regional water stress, the balance between water supply and demand, water quality, and climate change impacts. We analyzed how our operations could potentially affect local water resources. Beyond the general risk assessment, facilities categorized as having 'Extremely High' or 'High' physical risks according to the WRI Aqueduct Risk Atlas were specifically identified. Moreover, the water quality at all Şişecam facilities was rigorously evaluated in accordance with one of the most stringent benchmarks, the IFC standards. We developed a weighted average approach to assess overall water risks, incorporating three key parameters. In this approach, the weight of total water consumption (WFA Index) was set at 50%, watershed risks (WSF Index) at 35%, and water use efficiency (WUE Index) at 15%. The risk levels of the indices were determined based on the following thresholds: For the WFA Index, the risk levels were determined as follows: 50%: 5 20-50%: 4 5-20%: 3 1-5%: 2 0.5-1%: 1 For the WSF Index, based on the WRI Risk Atlas, the risk levels were assigned as follows: Extremely High: 5 High: 4 Medium-High: 3 Low-Medium: 2 Low: 1. For the WUE Index (measured as m³ of water consumed per ton of glass produced), the risk levels were determined as follows: 15: 5 5-15: 4 3-5: 3 2-3: 2

(2.3.5) Will you be disclosing a list/spatial map of priority locations?

Select from:

☑ Yes, we will be disclosing the list/geospatial map of priority locations

(2.3.6) Provide a list and/or spatial map of priority locations

Sisecam_Enx_Water_Risk_Analysis_&_Water_Targets_CDP.pdf
[Fixed row]

(2.4) How does your organization define substantive effects on your organization?

Risks

(2.4.1) Type of definition

Select all that apply

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Revenue

(2.4.3) Change to indicator

Select from:

☑ Absolute decrease

(2.4.5) Absolute increase/ decrease figure

240000000

(2.4.6) Metrics considered in definition

Select all that apply

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

(2.4.7) Application of definition

Şişecam's practice of assessing the impact of climate-related risks and opportunities on earnings values focuses on determining the financial threshold and managing risks. Şişecam has analyzed various emission scenarios to determine the impact of climate change risks on earnings. Transition risks, especially in the Paris Ambition scenario, are projected to decrease by 175 million (8.6 percent) and 485 million (13.8 percent) in 5 and 10 years compared to the base year 2022, respectively. Policy risks are considered to be the main source of these transition risks and are estimated to cost between 80-90 million over the next decade. Physical risks, particularly in the No Policy scenario, result in a reduction of 12 million and 20 million over 5 and 10 years, respectively. While the impact of climate-related risks on earnings value is significant, these risks and opportunities are not currently managed as rigorously as other risks and there is a functional management structure within Şişecam. This situation highlights the need for better management of climate risks and the development of risk management practices based on quantitative analysis.

Improvements can be achieved by identifying and prioritizing climate risks, incorporating climate factors into new and existing investments, and integrating climate risk assessments into the ongoing supplier segmentation process. In the financial assessment of risks, Şişecam categorizes risks using the financial threshold; 120-180 million is considered medium risk, 180-240 million is considered high risk, and 240-320 million is considered vital risk. This approach plays an important role in managing risks and making strategic decisions.

Opportunities

(2.4.1) Type of definition

Select all that apply

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Revenue

(2.4.3) Change to indicator

Select from:

☑ Absolute increase

(2.4.5) Absolute increase/ decrease figure

0

(2.4.6) Metrics considered in definition

Select all that apply

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

(2.4.7) Application of definition

There is no threshold amount for assessing the substantive impact of environmental parameters. The ultimate goal is to avoid the negative impacts of environmental risks and to turn the existing risk into an opportunity or to remain unaffected by the risk.
[Add row]

(2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

(2.5.1) Identification and classification of potential water pollutants

Select from:
☑ Yes, we identify and classify our potential water pollutants

(2.5.2) How potential water pollutants are identified and classified

At Şişecam, potential water pollutants are identified and classified through process-based waste and wastewater management guidelines. This involves: Process-Based Analysis: Şişecam analyzes waste and wastewater sources specific to each production stage, such as glass production, shaping, coating, and finishing. Potential pollutants, like contaminants from cooling water and oils used in shaping, are identified at each step. Pollutant Types and Sources: Common pollutants include coating materials, cutting oils, water treatment chemicals, detergents, and toxic compounds from special glass production. These can enter wastewater streams at various process stages. Concentration and Risk Assessment: Regular monitoring and risk assessments are conducted to identify pollutant concentrations and variations based on process changes and chemicals used. Classification: Pollutants are categorized based on their physical, chemical, and biological properties, such as heavy metals, organic compounds, and acidic or alkaline substances. This classification informs the selection of appropriate treatment technologies. Best Available Technologies (BAT): BAT-compliant methods, including physical/chemical and biological treatments, are applied to manage the pollutants effectively. These measures enable Şişecam to systematically identify, classify, and manage potential water pollutants, minimizing their environmental impact.
[Fixed row]

(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Row 1

(2.5.1.1) Water pollutant category

Select from:

☑ Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

According to Şişecam's process-based waste and wastewater management technical guidelines, inorganic pollutants may occur. Specifically, various inorganic pollutants can occur in glass production and shaping processes, such as: Cooling and Washing Water: The cooling and washing water used in glass production processes may contain dissolved inorganic compounds, such as sodium sulfate, chlorides, and fluorides. Glass Coating Processes: Inorganic metal chlorides and oxides are used during coating processes, which can enter wastewater streams. Emission Control Systems: Inorganic compounds and dust generated during the flue gas treatment of furnaces can also be part of the waste management system. The potential impacts of inorganic pollutants include: Water Ecosystems: Inorganic pollutants like heavy metals, chlorides, and fluorides can disrupt aquatic ecosystems, affecting water quality and harming aquatic life. Human Health: Pollutants such as heavy metals can contaminate drinking water, posing health risks like neurological disorders and organ damage. Soil and Agriculture: These pollutants can accumulate in soil, degrading quality, reducing crop productivity, and introducing toxins into the food chain. Infrastructure Damage: High levels of inorganic compounds can cause corrosion of infrastructure, increasing maintenance costs and safety risks. Regulatory Compliance: Poor management can lead to regulatory non-compliance, fines, legal action, and reputational damage.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Water recycling

☑ Resource recovery

☑ Upgrading of process equipment/methods

☑ Provision of best practice instructions on product use

☑ Implementation of integrated solid waste management systems

☑ Requirement for suppliers to comply with regulatory requirements

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

(2.5.1.5) Please explain

Şişecam implements various actions and procedures to minimize the adverse impacts of wastewater pollutants. Based on our "Process-Based Waste and Waste Source Management Technical Guideline", these measures include: Wastewater Treatment: Şişecam utilizes physical, chemical, and biological treatment methods, such as sedimentation, filtration, neutralization, coagulation-flocculation, and activated sludge systems. Treated water is discharged in compliance with environmental regulations. Closed-Loop Cooling Systems: Closed-loop cooling systems are used to minimize pollutants in cooling water. These systems allow water to be reused, preventing the release of contaminants into the environment. Recycling and Reuse: Şişecam promotes the recycling and reuse of water in its processes whenever possible. This approach reduces both water consumption and the amount of pollutants. Regular Monitoring and Inspection: Wastewater quality is regularly monitored and compared with industrial standards. This monitoring helps detect potential non-compliance and enables prompt corrective actions. Leak Management: Regular checks are conducted at water usage points to detect leaks, minimizing water losses and pollution sources. Environmental Best Practices: Process improvements are implemented to meet waste reduction and efficiency goals. Best available technologies are applied to reduce the use of chemicals and other pollutants.

Row 2

(2.5.1.1) Water pollutant category

Select from:

☑ Oil

(2.5.1.2) Description of water pollutant and potential impacts

oil is listed among the water pollutants. Specifically, oils used in machinery during glass shaping and finishing processes can enter cooling water systems and wastewater. These oils are classified as organic pollutants and must be addressed in wastewater treatment processes. The adverse impacts of oil as a water pollutant include: Water Contamination: Oil can degrade water quality in cooling and process systems, increasing the need for treatment. Harm to Aquatic Life: Oil can form a film on water surfaces, reducing oxygen levels and harming aquatic organisms. Increased Treatment Costs: Removing oil from wastewater requires additional treatment processes, raising operational costs. Equipment Damage: Oil can cause blockages and fouling in equipment, leading to increased maintenance and repair costs. Compliance Risks: Improper management of oil pollutants can result in non-compliance with environmental regulations, leading to fines and reputational damage.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Water recycling

☑ Resource recovery

☑ Upgrading of process equipment/methods

☑ Implementation of integrated solid waste management systems

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

(2.5.1.5) Please explain

Şişecam applies the following actions and procedures to minimize the adverse impacts of oil pollutants: Oil Separation: The use of oil separators in wastewater treatment helps remove oils from water, preventing contamination of water bodies and reducing the environmental impact. Regular Monitoring: Continuous monitoring of wastewater quality ensures that oil levels are kept within permissible limits and that any deviations are promptly addressed. Closed-Loop Systems: Implementing closed-loop cooling and process water systems reduces the potential for oil contamination by recycling and reusing water within the process. Preventive Maintenance: Regular maintenance of equipment helps prevent oil leaks and reduces the entry of oil into water systems. This includes inspecting and repairing machinery to avoid oil spills. Employee Training: Training programs for employees on best practices in handling and managing oils ensure proper procedures are followed to minimize spills and leaks. Environmental Best Practices: Adopting best available technologies and practices in water management, including proper storage and handling of oils, minimizes the risk of contamination. These measures collectively help Şişecam reduce the adverse impacts of oil pollutants on water systems, protecting both the environment and operational efficiency.

Row 3

(2.5.1.1) Water pollutant category

Select from:

☑ Other synthetic organic compounds

(2.5.1.2) Description of water pollutant and potential impacts

In Şişecam, Synthetic organic compounds may originate from various processes, such as: Coating and Finishing Processes: The use of synthetic organic materials like coatings, adhesives, and cleaning agents can lead to the presence of organic pollutants in wastewater. Shaping and Polishing: Processes that involve the use of lubricants, cutting oils, and other synthetic organic substances can also contribute to water pollution. The adverse impacts of synthetic organic compounds as water pollutants include: Toxicity to Aquatic Life: These compounds can be toxic to aquatic organisms, affecting their health and reducing biodiversity. Bioaccumulation: Synthetic organics can accumulate in aquatic organisms, posing risks to the food chain and potentially affecting human health. Oxygen Depletion: They increase the biochemical oxygen demand (BOD), depleting oxygen levels in water and harming aquatic life. Persistence: Synthetic organic compounds are often resistant to degradation, leading to long-term environmental contamination. Complex Treatment Needs: They require advanced and costly wastewater treatment processes, such as activated carbon filtration.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Provision of best practice instructions on product use

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

(2.5.1.5) Please explain

Şişecam applies many actions to effectively manage and minimize the release of synthetic organic compounds, protecting water quality and the environment such as: Source Reduction: Implementing measures to reduce the use of synthetic organic compounds in production processes, including substituting less harmful alternatives where possible. Closed-Loop Systems: Using closed-loop water systems to recycle and reuse water, minimizing the discharge of pollutants. Regular Monitoring: Continuously monitoring wastewater for synthetic organic compounds to ensure they remain within acceptable limits and taking corrective actions when necessary. Proper Handling and Storage: Ensuring proper handling, storage, and disposal of synthetic organic chemicals to prevent accidental spills and leaks into water systems.

[Add row]

C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

Climate change

(3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

Water

(3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

Plastics

(3.1.1) Environmental risks identified

Select from:

☑ No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

☑ No standardized procedure

(3.1.3) Please explain

The primary reason our organization does not currently consider plastic-related environmental risks in our direct operations and upstream/downstream value chain is the absence of a standardized procedure for evaluating these risks. While we recognize the significance of plastic pollution and its potential environmental impacts, we have not yet established a uniform method for assessing and managing these risks across our operations. It is important to note that we prioritize addressing climate change and water risks within our environmental management framework. These areas are crucial for our sustainability goals, and we have developed comprehensive procedures and strategies to effectively manage and mitigate these risks. Our focus on climate change and water risks reflects our commitment to addressing the most pressing environmental challenges and ensuring the resilience of our operations in the face of these issues. However, we are committed to addressing plastic risks and plan to establish a standardized evaluation procedure within the next two years. Our approach will include researching industry best practices, engaging with stakeholders, developing and piloting the procedure, and then implementing it across our operations. In the interim, we prioritize climate change and water risks within our environmental strategy, reflecting our ongoing commitment to managing critical environmental challenges effectively.
[Fixed row]

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.1.1.1) Risk identifier

Select from:
☑ Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Policy
☑ Carbon pricing mechanisms

(3.1.1.4) Value chain stage where the risk occurs

Select from:
☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Turkey

(3.1.1.9) Organization-specific description of risk

The majority of Şişecam's operations are carried out in Turkey. It is very likely to be affected by the Turkish Emissions Trading System, which is expected to be implemented in the short term on the basis of emission-intensive facilities in both glass and chemical production. With the start of the regulation, the same scheme as in the EU ETS will be implemented in Turkey. However, the TR ETS, which will be in its first phase, is expected to keep the free allowance amounts high in order to provide a smooth transition to the relevant producers, while the TR market carbon price is expected to be low.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased direct costs

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Very likely

(3.1.1.14) Magnitude

Select from:

☑ High

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The impact on Şişecam's financial position, financial performance and cash flows is expected to be more limited depending on the expected implementation of the Emissions Trading System (TR ETS) in Turkey. In the first phase of the TR ETS, direct cost increases are likely to be lower in the short term as free allowances are expected to be kept high and carbon prices are expected to be low. First, high free allowances during the transition period of the TR ETS may limit Şişecam's need to purchase additional emission permits in the short term. This means that compared to the cost impacts of the EU ETS, the TR ETS will put less pressure on Şişecam's cash outflows in the short term. Therefore, the direct impact on cash flows will be more limited in the short term. However, free allowances under the TR ETS are expected to gradually decrease and carbon prices are expected to increase over time. This implies that Şişecam needs to develop medium and long-term strategies that will impact its financial performance. However, in the short term, low carbon prices and high allowances may create an opportunity for the company to avoid a significant decline in profitability and maintain its existing investments in emissions management.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ Yes

(3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

0

(3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

8500000

(3.1.1.25) Explanation of financial effect figure

Considering Şişecam Turkey operation, total scope 1 emissions of production facilities will be included in the regulation. In addition, a free allowance will be offered to the relevant facilities through a product benchmark based on the product produced in TR ETS. Our estimation is that 75-100% of the plants will be entitled to free allowances in the plot period of the regulation. In line with this approach, the amount of scope 1 emissions remaining uncovered will consist of 0-25% of our emissions. This is the rate we expect to be charged until 2026. We also envisage an initial carbon price of approximately EUR 10 in the TR ETS. In this context, we have calculated our financial surplus range accordingly as follows. [(Total Scope 1 Emissions)(0-25%)*(10)] After 2026, the allocation methodology will continue in line with CBAM, based on the product benchmark value and the carbon footprint of the product produced. The calculation methodology for that period will differ and will continue in the following format: [(Product Benchmark)-(Product Carbon Instensity)]*(carbon price in TR market)*

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Implementation of environmental best practices in direct operations

(3.1.1.27) Cost of response to risk

13409

(3.1.1.28) Explanation of cost calculation

The Patterned Glass Furnace Unit Specific Energy Reduction Project, implemented at Şişecam's Mersin production facility, aims to use fuel below the targeted specific energy values after cold repair in the Frosted Glass production furnace. The cost of the project to Şişecam is reported to be 13,409. The project aims to reduce natural gas consumption and thus reduce scope 1 emissions. Thus, TR aims to minimize the related risk by improving the scope 1 emissions that will be questioned on the basis of ETS.

(3.1.1.29) Description of response

Patterned Glass Furnace Unit Specific Energy Reduction Project at Şişecam's Mersin production facility pertains to the investment made to reduce natural gas consumption and Scope 1 emissions. The project, which incurred a cost of 13,409, focuses on achieving fuel efficiency below the targeted specific energy values in the Frosted Glass production furnace, particularly after cold repair. By lowering natural gas usage, the project aims to improve Scope 1 emissions, thereby minimizing potential risks associated with the ETS (Emissions Trading System).

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Market

☑ Inadequate access to water, sanitation, and hygiene services

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ India

(3.1.1.7) River basin where the risk occurs

Select all that apply

☑ Mahi River

(3.1.1.9) Organization-specific description of risk

Şişecam India plants supplies its water from Mahi river as a major basin and Delta as a minor basin. According to WRI AQUEDUCT WATER RISK ATLAS, these basin has extremely high risk at Unimproved/No sanitation parameter (20%). This can negatively impact both the India Plant's water supply and the efficiency of the production process. Contaminated water can affect product quality and increase operational costs.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased indirect [operating] costs

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Likely

(3.1.1.14) Magnitude

Select from:

☑ High

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Additional costs of the risk: Cleaning and Treatment Costs associated with treating contaminated water. This may include upgrading existing water treatment systems or installing new ones. Production Loss associated with production disruptions or stoppages due to contaminated water. This includes labor and material losses. Quality Control Costs include testing required if contaminated water affects product quality. Recalls and Returns due to quality issues. Repair and Maintenance Costs required due to water pollution-related issues.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Improve monitoring of direct operations

(3.1.1.27) Cost of response to risk

53000

(3.1.1.28) Explanation of cost calculation

To address the risks of inadequate access to water, sanitation, and hygiene services linked to the Mahi River, FLAT GLASS INDIA launched two projects aimed at water conservation and quality monitoring. The Water Conservation Project, supported by a 29,000 investment, reduces water consumption and enhances efficiency at the facility, which depends on the Mahi River. By optimizing water use, the project promotes sustainable operations and minimizes reliance on limited water resources. Additionally, a 24,000 investment was made in a Condensate Water Climatic Test Chamber to monitor climate conditions and water quality, helping to mitigate contamination risks and ensure hygienic conditions. These initiatives play a crucial role in supporting long-term sustainability and operational efficiency in a region where access to clean water and sanitation services is a growing concern.

(3.1.1.29) Description of response

We have implemented strategic investments aimed at mitigating the risks posed by contaminated water from the Mahi River, where FLAT GLASS INDIA sources its water. To address the growing challenges of water scarcity and contamination, the company is enhancing its water conservation and monitoring systems.

Investments in the Water Conservation Project are focused on reducing water consumption and improving efficiency, while the Condensate Water Climatic Test Chamber allows for precise monitoring of water quality and climatic conditions. These measures ensure that production efficiency is maintained, water waste is minimized, and product quality remains unaffected by potential water contamination. These efforts are crucial for sustaining operations in water-stressed regions and maintaining the organization's resilience to water-related risks in the Mahi River basin.

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk2

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

☑ Flooding (coastal, fluvial, pluvial, groundwater)

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Turkey

(3.1.1.7) River basin where the risk occurs

Select all that apply

☑ Other, please specify

(3.1.1.9) Organization-specific description of risk

According to WRI AQUEDUCT WATER RISK ATLAS, Goksu River has extremely high riverine flood risk. 5 out of 6 facilities in Mersin, supply water from Goksu River: CHEMICALS MERSIN SODA CHEMICALS MERSIN KROMSAN FLAT GLASS MERSİN GLASS PACKAGING MERSİN MINING MERSİN

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Closure of operations

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ More likely than not

(3.1.1.14) Magnitude

Select from:

☑ High

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The specified facilities are at risk of incurring the following costs related to disruptions in their operations caused by riverine flooding: Production Interruptions: Floods can disrupt facility operations. This can lead to production stoppages and loss of labor, resulting in revenue loss. Damage Repair Costs: Floods can cause physical damage to facilities. Repairing this damage can incur costs for rebuilding the facility and replacing equipment. Insurance Premiums: Insurance premiums may increase for facilities located in high flood risk areas. This is due to insurance companies demanding higher premiums to cover the flood risk.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Infarastructure, technology and spending

☑ Other infrastructure, technology and spending, please specify

(3.1.1.27) Cost of response to risk

380000

(3.1.1.28) Explanation of cost calculation

A total investment of EUR 380,000 was distributed across three Mersin facilities near the flood-prone Goksu River to enhance flood resilience. Chemicals Mersin Soda received EUR 114,000 for infrastructure upgrades like a Cooling Tower Renovation, Wastewater Recovery System, Water Line Revision, and High-Pressure Water Jet Pump, plus SAİS Backup Equipment to ensure operational continuity. Flat Glass Mersin received EUR 150,000 for Central Drinking Water System improvements and Garden Irrigation Automation, promoting water efficiency. Glass Packaging Mersin received EUR 112,000 for Flow Meter installation, infrastructure upgrades, and improved wastewater management during flood events.

(3.1.1.29) Description of response

We have made strategic investments to mitigate flood risks at Chemicals Mersin Soda, Flat Glass Mersin, and Glass Packaging Mersin facilities, located near the flood-prone Goksu River. These investments focus on enhancing infrastructure, water management, and operational resilience during floods. At Chemicals Mersin Soda, key upgrades include renovating the Cooling Tower to prevent overheating and production stoppages during floods. The Karaduvar Wastewater Recovery System was also improved to ensure continuous water recovery and treatment during floods. Additionally, the Process Wastewater Treatment System was revised to handle increased water flow and contaminants. The 30C Water Line was upgraded to maintain a steady water supply. A High-Pressure Water Jet Pump was acquired to enable rapid cleanup after floods, and SAİS Backup Equipment was installed to provide redundancy in case of system failures due to flooding. Flow Meters were installed for precise water usage monitoring during flood conditions. The Flat Glass Mersin facility revised its Central Drinking Water System to ensure access to clean water during floods. Automation of the Garden Irrigation System also improved water efficiency, reducing manual intervention and promoting operational efficiency. At Glass Packaging Mersin, Flow Meters were installed at wells to monitor water extraction, enhancing water resource management during floods. The Water and Wastewater Infrastructure Project was undertaken to handle increased water flow and manage wastewater effectively. Additional Flow Meters were installed at key distribution points to ensure accurate water monitoring and efficient management during flood disruptions.

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk3

(3.1.1.3) Risk types and primary environmental risk driver

Chronic physical

☑ Water stress

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Egypt

☑ India

☑ Italy

☑ Romania

☑ Turkey

(3.1.1.7) River basin where the risk occurs

Select all that apply

☑ Danube

☑ Mahi River

☑ Nile

☑ Sakarya

☑ Other, please specify

(3.1.1.9) Organization-specific description of risk

According to WRI AQUEDUCT WATER RISK ATLAS, below listed facilities are situated in areas of extremely high water stress: In Turkey; 3 of them (GLASS PACKAGING ESKİŞEHİR, GLASSWARE ESKİŞEHİR, FLAT GLASS POLATLI) supply water from Sakarya River, and 2 of them (GLASSWARE DENİZLİ and MINING ÇİNE) supply from Buyuk Menderes River. In Egypt; 2 of them (GLASSWARE EGYPT and MINING EGYPT) supply from Nile. In Italy; 2 of them (CHEMICALS CROMITAL ITALY and AUTOMOTIVE ROMANIA SA) supply form Danube. 2 of them (FLAT GLASS MANFREDONIA ITALY and REFEL) supply from Carapelle. In India, FLAT GLASS INDIA supply from Mahi.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Upfront costs to adopt/deploy new practices and processes

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

☑ Long-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Likely

(3.1.1.14) Magnitude

Select from:

☑ Medium-high

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Implementing new practices and processes in Şişecam's facilities located in water-stressed regions may require significant capital investments. Technologies such as water recovery systems and closed-loop water use can lead to increased costs. Additionally, these water-saving processes may raise energy consumption and introduce complexities in integrating with existing operations. Disruptions in the supply chain could also delay processes and increase expenses. Measures such as water recovery, closed-loop systems, rainwater harvesting, and energy-efficient water treatment technologies are essential changes for conserving water resources.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Adopt water efficiency, water reuse, recycling and conservation practices

(3.1.1.27) Cost of response to risk

1100000

(3.1.1.28) Explanation of cost calculation

Focused on reducing water stress and improving water management across several facilities, this investment totals 1,100,000. GLASS PACKAGING ESKİŞEHİR (Turkey) invested EUR 300,000 in optimizing water recycling and reducing waste, relying on the Sakarya River. FLAT GLASS MANFREDONIA (Italy) allocated EUR 250,000 for upgrading washing machines and installing water counters to manage water use from the Carapelle River. GLASSWARE EGYPT (Egypt) invested EUR 35,000 in flow meters to monitor water consumption and detect leaks, addressing Nile River overuse. GLASSWARE DENİZLİ (Turkey) invested EUR 30,000 in flow meters to improve water management from the Buyuk Menderes River, while FLAT GLASS INDIA (India) committed EUR 29,000 to a Water Conservation Project and EUR 24,000 for water testing equipment near the Mahi River. REFEL (Italy) invested EUR 350,000 to upgrade its water-treatment system in the finishing department, enhancing operational resilience.

(3.1.1.29) Description of response

Our response to water stress focuses on mitigating the risks associated with relying on key water bodies such as the Sakarya River, Buyuk Menderes River, Nile, Danube, Carapelle, and Mahi River, which are increasingly threatened by water scarcity. Facilities in Turkey, Egypt, India, and Italy have been targeted for investments aimed at improving water efficiency, enhancing monitoring, and ensuring sustainability in regions with high water stress. At GLASS PACKAGING ESKİŞEHİR in Turkey, the renewal of the cooling water system ensures that water use is optimized, reducing waste and managing the facility’s reliance on the Sakarya River. Similarly, GLASSWARE DENİZLİ, which sources water from the Buyuk Menderes River, installed flow meters to monitor and manage water consumption more efficiently. In Italy, FLAT GLASS MANFREDONIA has implemented several significant upgrades. These include the installation of water and wastewater counters and the upgrade of washing machines to reduce water consumption in the Coating Glass and Laminated Glass Development processes. These investments help the facility manage its reliance on the Carapelle River, a key but vulnerable water source. Additionally, REFEL has upgraded its water-treatment system in the finishing department, ensuring more efficient water use and improved treatment processes to mitigate the risks associated with the region’s water supply challenges. In Egypt, GLASSWARE EGYPT has installed flow meters to monitor water consumption and detect leakages, helping to protect its reliance on the

Nile River, a highly stressed water source that is crucial for the region. FLAT GLASS INDIA, which depends on water from the Mahi River, implemented a Water Conservation Project to improve overall water use efficiency. In addition, the facility invested in Water Testing Equipment to monitor the impacts of climate change on water availability and manage its response to water scarcity.

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk4

(3.1.1.3) Risk types and primary environmental risk driver

Technology

☑ Transition to water efficient and low water intensity technologies and products

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Bosnia & Herzegovina

☑ Turkey

(3.1.1.7) River basin where the risk occurs

Select all that apply

☑ Danube

☑ Other, please specify

(3.1.1.9) Organization-specific description of risk

According to Şişecam's own risk rating methodology, the water risk levels at two of its plants—CHEMICALS MERSIN SODA and CHEMICALS LUKAVAC BOSNIA—are alarmingly high. Both facilities face extreme risk due to their massive water consumption and less efficient water usage (total water withdrawn vs. total production). CHEMICALS MERSIN SODA, in particular, stands out for its vulnerability, bearing a significant water scarcity footprint tied to its basin. These plants demand immediate and focused attention regarding water use and supply security to mitigate looming risks.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased capital expenditures

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Very likely

(3.1.1.14) Magnitude

Select from:

☑ High

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The extreme water risks at Şişecam's CHEMICALS MERSIN SODA and CHEMICALS LUKAVAC BOSNIA plants could have significant impacts on the company's financial position, performance, and cash flows. As water scarcity becomes more pronounced, securing water supply for these facilities will become increasingly difficult, leading to higher operational costs. Investments in water-saving technologies or sourcing alternative water supplies would likely increase the company's financial liabilities and negatively affect asset value. Additionally, heightened regulatory pressure around water sustainability could lead to stricter water usage limits or increased fees, further strain the company's financial reserves and potentially decrease the value of its assets over time. Water scarcity and low efficient water usage at these plants could also reduce production capacity, directly affecting revenues and compressing profit margins. The inefficiency in water usage, particularly at the highly vulnerable MERSIN SODA plant, may lead to rising per-unit production costs, creating further financial pressure. In the short term, one of the major challenges the company will face is the negative cash flow resulting from investments required to mitigate water risks. Spending on water-efficient technologies and *infrastructure upgrades could temporarily strain cash flow. In the longer term, persistent water shortages could lead to reduced production or even potential relocation of operations, complicating the company’s ability to maintain stable cash flows.*

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Establish site-specific targets

(3.1.1.27) Cost of response to risk

20000000

(3.1.1.28) Explanation of cost calculation

The total investment cost for the MESKI project at Şişecam’s Mersin Soda Plant is estimated at 20 million. This amount covers the construction of a treatment facility, including ultrafiltration and reverse osmosis units, necessary to treat approximately 120,000 m³ of wastewater from the MESKI Karaduvar Wastewater Treatment Plant. The investment also includes the cost of establishing a pumping station and laying down a 2 km pipeline to transfer treated water to the plant. These components were identified as critical for reducing the plant's dependence on freshwater sources, lowering its water risk, and ensuring sustainable water use. The cost reflects both the technological infrastructure and the logistical components necessary for the project.

(3.1.1.29) Description of response

The MESKI project is a direct response to the high water risk faced by the Mersin Soda Plant, located in a region of Turkey with significant water stress. By utilizing treated wastewater from the Karaduvar Wastewater Treatment Plant, the facility will significantly reduce its reliance on freshwater drawn from local sources such as the Berdan Dam and deep-water wells. The project aims to re-use 120,000 m³ of treated water annually, which constitutes a substantial portion of the plant's overall water consumption. This advanced water treatment solution not only mitigates water scarcity risks but also supports the plant’s long-term operational security. The project aligns with global sustainability goals by reducing water withdrawal and increasing resource efficiency.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk2

(3.1.1.3) Risk types and primary environmental risk driver

Reputation

☑ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Downstream value chain

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Egypt
☑ India
☑ Italy
☑ Turkey
☑ Romania
☑ Bulgaria
☑ Slovakia
☑ Russian Federation
☑ Bosnia & Herzegovina
☑ United States of America

(3.1.1.9) Organization-specific description of risk

Şişecam has many huge customers globally. In line with the environmental goals and expectations of these customers, Şişecam is obliged to openly declare its environmental performance through many different reporting methods. In this regard, its performance in surveys such as CDP, Ecovadis and risk assessment surveys such as Refinitiv is of critical importance. These rightful and open declarations of its environmental performance directly affect Şişecam's reputation and customer relations. Any performance dissatisfaction would inevitably affect Şişecam's one-to-one trade relations. Failure to ensure regular improvement or dissatisfaction on the basis of environmental performance poses a risk.

(3.1.1.11) Primary financial effect of the risk

Select from:
☑ Decrease in shareholder value

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply
☑ Medium-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:
☑ More likely than not

(3.1.1.14) Magnitude

Select from:
☑ Medium

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

In line with the environmental targets and expectations of major global customers, Şişecam must transparently demonstrate its performance and ensure continuous improvement. Failure to maintain this performance or falling below expectations may have the following financial impacts: First, customer dissatisfaction may lead to a weakening of commercial relations. If Şişecam's environmental performance is rated low in reports such as CDP, Ecovadis and risk assessment surveys such as Refinitiv, customers may decide not to do business with suppliers that do not meet their environmental targets. In the short term, this may lead to a decline in sales and thus a loss of revenue. This loss of revenue can have a direct negative impact on the company's financial performance. Secondly, in order to meet the demands of these customers, Şişecam may need to make additional investments in environmental performance improvements. This may require spending in areas such as energy efficiency projects, low-carbon production techniques and waste management. These additional investments may increase cash outflows in the short term, putting pressure on the company's cash flows. At the same time, these expenditures may also affect the company's profitability, as there may be difficulty in reflecting some of the costs of environmental remediation in product prices, especially depending on market conditions. Finally, a negative perception of Şişecam's environmental performance could damage the company's reputation. Reputational damage could both weaken relations with existing customers and limit new business opportunities. In the short term, this negative perception is likely to increase the risk of a shrinking customer portfolio and decline in revenues.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ Yes

(3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

24000000

(3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

36000000

(3.1.1.25) Explanation of financial effect figure

The financial impact of reputational risk, estimated at EUR 24-36 million, is based on a comprehensive analysis of various factors and assumptions. In this calculation, Şişecam's customer portfolio and revenue structure were first analyzed. It is assumed that reputational damage due to environmental performance will lead to a weakening in customer relations and a decline in revenues. In this context, an annual revenue loss projection was made based on the scenario that a certain percentage (%) of existing customers would reduce their orders or terminate their commercial relations due to environmental performance dissatisfaction. This loss rate was applied to the company's annual revenue to calculate the potential decline. In addition, it is projected that customer dissatisfaction may cause existing customers to negotiate prices and reduce product prices by a certain percentage. This would result in an additional reduction in total sales revenues. Long-term financial losses are likely to occur as reputational damage reduces the capacity to acquire new customers and weakens existing customer relationships. These long-term effects have been estimated as a total financial loss of between 24-36 million using present value calculations. This analysis covers a wide range of possible worst case scenarios and summarizes the potential impact on Şişecam's financial position.

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Establish organization-wide targets

(3.1.1.27) Cost of response to risk

120000

(3.1.1.28) Explanation of cost calculation

Şişecam regularly shares its environmental performance with stakeholders on various platforms. Şişecam purchases certain consultancy and services to improve its current performance or to share it in the best way possible. Consultancies were procured for TCFD, emission reduction road map study and reporting, especially for *risk sharing. In this way, performance sharing and development is aimed in the most transparent way. Şişecam paid a total of 120,000 for services for this strategy to prevent any reputational damage.*

(3.1.1.29) Description of response

Şişecam consistently communicates its environmental performance to stakeholders through various platforms. To enhance its current performance and ensure optimal reporting, the company procures consultancy services, particularly for TCFD, emission reduction roadmaps, and risk reporting. This approach aims to maintain transparency in both performance sharing and improvement efforts. To support this strategy and prevent any potential reputational risk, Şişecam invested a total of 120,000 in these services.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk3

(3.1.1.3) Risk types and primary environmental risk driver

Policy

☑ Carbon pricing mechanisms

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Egypt

☑ India

☑ Turkey

☑ Russian Federation

☑ United States of America

☑ Bosnia & Herzegovina

(3.1.1.9) Organization-specific description of risk

Current CBAM regulations do not cover the sectors in which Şişecam operates. However, both glass products and soda ash, in which Şişecam has production activities, are among the product groups that are likely to be included. The products included in the product benchmark list published by the European Commission are on the agenda to be gradually included in the scope of CBAM in 2026 and beyond. In this context, CBAM risk cost is on the agenda for both glass products and soda ash exported to the EU between 2026-2034. If the relevant product groups have an emission intensity above the permitted emission benchmark value, the relevant company in Europe will be questioned with a CBAM tax for each ton of carbon. The reflection of these costs to Şişecam by the companies operating in Europe reveals a risk situation.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased direct costs

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

☑ Long-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Likely

(3.1.1.14) Magnitude

Select from:

☑ Medium-high

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

CBAM regulations may not have a direct impact on Şişecam as they do not cover the sectors in which Şişecam operates. However, glass products and soda ash are among the product groups that the European Commission plans to include in the scope of CBAM in 2026 and beyond. This raises the risk of CBAM-related costs for glass products and soda ash exported to the EU between 2026 and 2034. If the emission intensity of these products exceeds the set limits, European customers will have to pay a CBAM tax per ton of carbon. If these taxes are passed on to Şişecam by European companies, this could pose a significant financial risk for the company. The impact on Şişecam's financial position and cash flows could be as follows: First, the increase in CBAM costs will impose additional financial obligations for export products. This may lead to higher selling prices and thus lower revenues. As competitors with lower emission intensity gain an advantage in the European market, Şişecam's price competitiveness may become more difficult and profit margins may shrink. In addition, rising costs and potential loss of revenue could put pressure on the company's cash flows and require additional investments. These investments may include expenditures needed to reduce emission intensity and maintain competitiveness, but in the short term may lead to a reduction in cash reserves. As a result, the financial impact of CBAM risk may adversely affect Şişecam's financial performance and cash flows and the company may need to take strategic measures to deal with these risks.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ Yes

(3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

55000000

(3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

61000000

(3.1.1.23) Anticipated financial effect figure in the long-term – minimum (currency)

151000000

(3.1.1.24) Anticipated financial effect figure in the long-term – maximum (currency)

167000000

(3.1.1.25) Explanation of financial effect figure

In line with the CBAM taxation logic, the European export product group has its own benchmark value. This benchmark value replaces the upper limit value of the emission intensity per ton for the relevant product. Non-European producers calculate the emission intensity of their products and compare it with the relevant upper limit value. In line with this methodology, Şişecam calculated its own emission intensities for both glass products and soda ash for each year in the 2024-2034 *projection, and these calculated product emission intensities were compared with the product benchmark value given for the relevant products. The difference between Şişecam product emission intensities and benchmark values is then multiplied by the export (ton) quantity of the relevant products and multiplied by the carbon price to arrive at the cost equivalent. If shared as an equivalent: [(Şişecam Product Emission Intensity)-(Product Benchmark Value)]* (Export Amount)* (CBAM Carbon Price)*

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Implementation of environmental best practices in direct operations

(3.1.1.27) Cost of response to risk

4040080

(3.1.1.28) Explanation of cost calculation

Considering that the CBAM regulation will cover Şişecam activities in the short and long term, specific projects have been implemented or are planned to be implemented to reduce scope 1 and scope 2 emissions. These projects cover many areas such as process optimization, engines, lighting, etc. The largest investment made was approximately 2.2 million in air leakage prevention at the Mersin plant, followed by the By installing microturbine in 45/27 bar system, we are using pressure drop to produce electricity instead of using reducer stations. Depending on process conditions, expected to produce average additional 1.5 MW of electricity. The cost of this project is 1.5 million. In addition to these two projects, 7 more emission reduction projects are included in the calculation. In total, the cost of the 9 projects considered is calculated as 4.1 million.

(3.1.1.29) Description of response

In light of the CBAM regulation, which will affect Şişecam's activities in both the short and long term, the company has implemented and is planning specific projects aimed at reducing Scope 1 and Scope 2 emissions. These projects encompass a wide range of areas, including process optimization, engine upgrades, and lighting improvements. The largest investment to date has been approximately 2.2 million, directed towards air leakage prevention at the Mersin plant. Additionally, by installing a microturbine in the 45/27 bar system, Şişecam is utilizing pressure drops to generate electricity, replacing the use of reducer stations. This project is expected to generate an average of 1.5 MW of additional electricity, with a total cost of 1.5 million. Beyond these two key initiatives, 7 other emission reduction projects have been included in the overall calculations. The total cost of all 9 projects is estimated at 4.1 million.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk4

(3.1.1.3) Risk types and primary environmental risk driver

Policy

☑ Carbon pricing mechanisms

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Bulgaria

☑ Italy

(3.1.1.9) Organization-specific description of risk

The EU Emissions Trading System (EU-ETS) is recognized as the largest carbon market globally, operating on the principle of "cap and trade" to reduce industrial emissions across Europe. Under this system, industrial facilities receive a certain number of free emission allowances (EUAs) each year. If a facility's verified emissions that year are below this allocated amount, it can sell excess credits on the EU-ETS market. Conversely, if emissions exceed the allocated credits, the facility must purchase additional allowances on the market to close the gap. This approach incentivizes companies to minimize their emissions while providing flexibility through trading. For Şişecam, given the volume of its manufacturing operations and its presence in an emissions-intensive sector, all of its European operations, including its four glass production facilities, are subject to EU-ETS regulations. With the introduction of Phase IV, Şişecam has experienced an increase in direct operational costs. The main reason for this increase is in line with organic growth. This increase is mainly due to the higher market price of EUAs, reflecting the more stringent emission reduction targets and updated rules of this phase. Taking all this into account, the increase in emissions and the decrease in the EUA leads to an increase in the amount of taxes to be paid over the years.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased direct costs

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Very likely

(3.1.1.14) Magnitude

Select from:

☑ Medium-high

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Considering this risk, various negative impacts on Şişecam's financial position, performance and cash flows are expected in the short term. Firstly, increased emissions and higher EUA prices will increase the company's direct operational costs. Additional costs under the EU-ETS may negatively impact profitability by increasing production costs, especially in the short term. Accordingly, cash flows will also be under pressure. The obligation to purchase additional EUA from the market to close the emission gap may increase the company's cash outflows. This may lead to a contraction in cash flows, resulting in a reduction in funds allocated for other investments. This process may limit Şişecam's investment capacity for current and future projects. Increased costs have the potential to reduce the Company's profitability. Therefore, negative impacts on financial performance may be observed. The Company may consider reflecting these costs in product prices; however, this strategy may adversely affect demand and sales in competitive market conditions. Therefore, a careful and strategic approach to pricing strategies is required. Finally, this increased cost pressure may also impact Şişecam's investment and growth plans. In the short term, it may be necessary to invest more in energy efficiency and emission reduction projects. It will be critical for the company to develop more effective short-term strategies in emission management in order to maintain its financial position and operational flexibility in this period.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ Yes

(3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

16800000

(3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

23400000

(3.1.1.25) Explanation of financial effect figure

*Total scope 1 emissions regulated under EU ETS based on our 4 glass production facilities in the EU have been consolidated. The amount of free allowances given by the EU ETS according to the production volume specific to the product benchmark is also consolidated for the relevant 4 facilities. The difference between the scope 1 emissions owned by Şişecam and the amount of free emissions allocated to Şişecam is multiplied by the carbon market price. In simple terms: [(Total Scope 1 emissions)-(EUA)]*carbon price in EU market*

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Implementation of environmental best practices in direct operations

(3.1.1.27) Cost of response to risk

1086929

(3.1.1.28) Explanation of cost calculation

Şişecam has four production facilities located in Europe. In particular, many process optimization studies are carried out at the Italy (porto nogaro) production facility to reduce emissions. The Lean 6 Sigma method used in engines aims to reduce the use of natural gas. The cost of the Lean 6 Sigma Project is 391 thousand and is the largest investment made in the facility. The second largest investment is the Mirror Cullet Usage Saving project, also in the Italy facility. With this project, it is again aimed to reduce the use of natural gas. The total cost of these two projects is 409470.

(3.1.1.29) Description of response

The cost response for the two projects at Şişecam's Italy (Porto Nogaro) production facility refers to the financial investment aimed at reducing natural gas consumption through process optimization initiatives. The first project, utilizing the Lean 6 Sigma method in engine operations, represents the largest investment at 391,000, focusing on optimizing processes to lower emissions and natural gas usage. The second significant investment is the Mirror Cullet Usage Saving project, which also targets natural gas reduction. The combined cost of these two projects amounts to 409,470, reflecting Şişecam's commitment to energy efficiency and emission reduction in its European operations.

[Add row]

(3.1.2) Provide the amount and proportion of your financial metrics from the reporting year that are vulnerable to the substantive effects of environmental risks.

Climate change

(3.1.2.1) Financial metric

Select from:

☑ Revenue

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

128900000

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☑ 1-10%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

12000000

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☑ Less than 1%

(3.1.2.7) Explanation of financial figures

The maximum financial impact of the four risks in Section 3.1, where climate change risks are explained, in the short and medium term was summarized and evaluated on a consolidated basis. The sum of the maximum financial impact of the four risks was calculated to be approximately EUR 129 million and the ratio of this consolidated financial impact to 2023 revenues was calculated. With this ratio, it was determined that the consolidated impact of climate change has a 3% share on revenue.

Water

(3.1.2.1) Financial metric

Select from:

☑ Other, please specify

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

53000

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☑ 1-10%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

1500000

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☑ 1-10%

(3.1.2.7) Explanation of financial figures

Sisecam's investment in high-risk areas has been proportionally compared to its total water-related investments. Specifically, we analyzed the percentage of total water investments that have been allocated to regions facing significant water stress or other vulnerabilities. By focusing on these at-risk areas, the company aims to mitigate potential disruptions caused by transition risks such as regulatory changes, shifts in water availability, or rising operational costs due to environmental factors. This approach allows us to better understand how the company is strategically directing its financial resources to address the most pressing risks, while ensuring sustainable and resilient operations across all facilities.
[Add row]

(3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this represent?

Row 1

(3.2.1) Country/Area & River basin

Turkey
☑ Other, please specify **:**Adriatic Sea - Greece - Black Sea Coast

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply
☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

4

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:
☑ 1-25%

(3.2.10) % organization's total global revenue that could be affected

Select from:

☑ 1-10%

(3.2.11) Please explain

Şişecam has evaluated water-related risks for its facilities, particularly focusing on those located in the Adriatic Sea, Greece, and Black Sea Coast basins. We use Sisecam's own General Water Risk Assessment (GWR) to identify potential risks for water stress and availability. High Water Risk: On the other hand, facilities such as MINING YALIKÖY, GLASSWARE KIRKLARELI, FLAT GLASS PORTO NOGARO ITALY, and AUTOMOTIVE A.Ş. have been classified as facing high water-related risks.

Row 2

(3.2.1) Country/Area & River basin

Zimbabwe

☑ Other, please specify **:**Black Sea- North Coast

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ 1-25%

(3.2.10) % organization's total global revenue that could be affected

Select from:

☑ 1-10%

(3.2.11) Please explain

Şişecam has expanded its water-related risk assessment to include the facility GLASS PACKAGING KUBAN, located in the Black Sea, North Coast basin. Based on the Sisecam's own General Water Risk Assessment (GWR), this facility is classified as facing high water-related risk. High Water Risk: The GLASS PACKAGING KUBAN facility is situated in a region where water availability poses a significant challenge.

Row 3

(3.2.1) Country/Area & River basin

Zimbabwe

☑ Other, please specify **:**Black Sea, South Coast

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

7

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ 1-25%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ 21-30%

(3.2.11) Please explain

Şişecam continues to evaluate water-related risks for additional facilities located in the Black Sea, South Coast basin. The following facilities have been assessed using the Sisecam's own General Water Risk Assessment (GWR) and have varying levels of water-related risk: High Water Risk: Facilities such as GLASS PACKAGING YENİŞEHİR, GLASS PACKAGING ESKİŞEHİR, PACKAGING TUZLA, GLASSWARE ESKİŞEHİR, GLASS FIBER BALIKESIR, and FLAT GLASS YENİŞEHİR are identified as being at high risk for water-related challenges. Extremely High Water Risk: The FLAT GLASS POLATLI facility is noted to have extremely high water-related risk.

Row 4

(3.2.1) Country/Area & River basin

Albania

☑ Danube

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

2

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ 1-25%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ 1-10%

(3.2.11) Please explain

Şişecam has assessed water-related risks for its facilities in the Danube basin using the Sisecam's own General Water Risk Assessment (GWR). The following is an overview of the findings: Extremely High Water Risk: Facilities such as AUTOMOTIVE ROMANIA SA and CHEMICALS LUKAVAC BOSNIA face extremely high water-related risks.

Row 5

(3.2.1) Country/Area & River basin

Italy

☑ Other, please specify **:**Italy, East Coast

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

2

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ 1-25%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ 1-10%

(3.2.11) Please explain

Şişecam has conducted a water risk assessment for its facilities located in the Italy, East Coast basin. The Sisecam's own General Water Risk Assessment (GWR) classifies the following facilities based on their water-related risks: Extremely High Water Risk: The facilities CHEMICALS CROMITAL ITALY and FLAT GLASS MANFREDONIA ITALY are situated in regions with extremely high water-related risks.

Row 6

(3.2.1) Country/Area & River basin

India

☑ Mahi River

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ 1-25%

(3.2.10) % organization's total global revenue that could be affected

Select from:

☑ 1-10%

(3.2.11) Please explain

Şişecam has evaluated the water-related risk for its facility located in the Mahi basin. The FLAT GLASS INDIA facility has been classified as facing high water-related risk based on the Sisecam's own General Water Risk Assessment (GWR). High Water Risk: The FLAT GLASS INDIA facility is situated in a region with high water stress, indicating that water availability may pose a challenge to operations.

Row 7

(3.2.1) Country/Area & River basin

Turkey

☑ Other, please specify :Mediterranean Sea, East Coast

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

8

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ 1-25%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ 11-20%

(3.2.11) Please explain

Şişecam has assessed water-related risks for its facilities located in the Mediterranean Sea, East Coast basin. The Sisecam's own General Water Risk Assessment (GWR) has identified varying levels of risk for these facilities: High Water Risk: Several facilities, including GLASS PACKAGING MERSİN, GLASSWARE DENİZLİ, CHEMICALS MERSIN KROMSAN, MINING MERSİN, CHEMICALS MERSIN OXYVIT, and FLAT GLASS MERSİN, face high water-related risks. Extremely High Water Risk: Two facilities, MINING ÇİNE and CHEMICALS MERSIN SODA, are located in regions with extremely high water-related risks.

Row 8

(3.2.1) Country/Area & River basin

Egypt

☑ Nile

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

2

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ 1-25%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ Less than 1%

(3.2.11) Please explain

Şişecam has evaluated water-related risks for its facilities located in the Nile basin. The following is the risk classification based on the Sisecam's own General Water Risk Assessment (GWR): High Water Risk: The GLASSWARE EGYPT facility is situated in a region with high water-related risk. Water stress in this area may pose operational challenges, requiring careful monitoring and mitigation efforts to ensure sustainable water use. Extremely High Water Risk: The MINING EGYPT facility faces extremely high water-related risks, indicating significant vulnerability to water scarcity or stress.

Row 9

(3.2.1) Country/Area & River basin

Austria

☑ Rhine

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ 1-25%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ Less than 1%

(3.2.11) Please explain

Şişecam has evaluated the water-related risk for its facility located in the Rhine basin. The AUTOMOTIVE GERMANY GMBH facility has been classified as facing high water-related risk according to the Sisecam's own General Water Risk Assessment (GWR). High Water Risk: The AUTOMOTIVE GERMANY GMBH facility is located in an area with high water stress.

Row 10

(3.2.1) Country/Area & River basin

Kazakhstan

☑ Volga

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ 1-25%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ 1-10%

(3.2.11) Please explain

Şişecam has evaluated the water-related risks for its facilities located in the Volga basin. The Sisecam's own General Water Risk Assessment (GWR) has identified the following levels of risk: High Water Risk: The GLASS PACKAGING GOROKHOVETS facility faces high water-related risks. This facility is located in a region where water stress may impact operations, necessitating careful water management and planning to mitigate potential disruptions due to water scarcity.

[Add row]

(3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

	Water-related regulatory violations	Comment
	Select from: ☑ No	*In 2023, Şişecam was not involved in any fines, enforcement orders and or penalties due to any water related regulatory violation.*

[Fixed row]

(3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Select from:
☑ Yes

(3.5.1) Select the carbon pricing regulation(s) which impact your operations.

Select all that apply
☑ EU ETS

(3.5.2) Provide details of each Emissions Trading Scheme (ETS) your organization is regulated by.

EU ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

100

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0

(3.5.2.3) Period start date

12/31/2022

(3.5.2.4) Period end date

12/30/2023

(3.5.2.5) Allowances allocated

453409

(3.5.2.6) Allowances purchased

64412

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

520014

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

0

(3.5.2.9) Details of ownership

Select from:

☑ Facilities we own and operate

(3.5.2.10) Comment

The reported values have been consolidated and shared for Şişecam's four sites included in the European ETS (two in Italy and two in Bulgaria).
[Fixed row]

(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

The management of production-related greenhouse gas emissions requires the right market strategy and emission reduction approach to be carried out in parallel in geographies where mandatory mechanisms are in place. On the other hand, in geographies where mandatory practices are not on the agenda, the ideal approach is to apply energy efficiency and emission reduction technologies in line with roof targets to prepare for possible restrictions such as potential market and tax practices, *as well as to comply with the Group's sustainability approach and targets.For this reason, Şişecam primarily carried out studies to accurately determine the needs of our activities within the scope of the EU ETS, to automatically monitor them from a confidence level free from operator errors, to increase the capacities of the relevant units, and to manage the need by making the most efficient use of market instruments.Core strategy consists of 4 major components:1. Establishing a Centralized Monitoring, Control, and Procurement Approach2. Capacity Building on EU ETS Processes and Data Control3. Identifying Financial Risks and Developing a Market Diversification Approach4. Monitoring of National/International Studies and Participation by Considering Group Interests*

(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

	Environmental opportunities identified
Climate change	*Select from:* ☑ Yes, we have identified opportunities, and some/all are being realized
Water	*Select from:* ☑ Yes, we have identified opportunities, and some/all are being realized

[Fixed row]

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp1

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Energy source

☑ Use of renewable energy sources

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Italy

☑ Turkey

(3.6.1.8) Organization specific description

Businesses faced significant challenges due to the energy crisis, rising input and energy costs and global inflation. Companies struggled to address acute energy shortages while dealing with sharply rising costs due to various sanctions against Russia. The highly energy-intensive glass manufacturing sector was particularly affected by these energy shortages and supply chain disruptions. As a result, many industry players are accelerating their efforts to transition to green energy sources and reduce their carbon footprint. A growing number of companies are investing in renewable energy for their operational needs. To mitigate these negative impacts, Şişecam is committed to increasing its renewable energy capacity by 2030 and utilizing alternative energy sources, including green electricity and green hydrogen, in line with its CareforNext sustainability strategy. Recently, the first phase of rooftop solar power generation facilities with a total installed capacity of 10 MWp was commissioned at the Northern and Southern Italy and Mersin plants. This plant is expected to generate approximately 13,000 to 16,000 MWh of "green" electricity per year.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Reduced direct costs

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Very likely (90–100%)

(3.6.1.12) Magnitude

Select from:

☑ High

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Şişecam's commitment to increasing its renewable energy capacity on its financial position, performance, and cash flows is expected to be significantly positive. By investing in renewable energy sources, such as rooftop solar power, the company aims to reduce its reliance on conventional energy, which is subject to volatility and rising costs. This strategic shift is likely to enhance Şişecam's long-term financial stability by decreasing operational costs associated with energy procurement. Moreover, as the company generates its own "green" electricity, it can mitigate the impact of future energy price fluctuations and supply chain disruptions. This self-sufficiency in energy not only contributes to more predictable cash flows but also aligns with global sustainability trends, potentially improving the company's market position and attractiveness to environmentally conscious investors. Furthermore, by implementing green energy solutions, Şişecam is likely to enhance its reputation and brand value, which can lead to increased customer loyalty and sales growth over time. Overall, the transition to renewable energy is poised to strengthen Şişecam's financial resilience while supporting its sustainability goals.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ Yes

(3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

845000

(3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

1040000

(3.6.1.23) Explanation of financial effect figures

The annual savings from a total installed solar power capacity of 10 MWp are estimated to range from 0.8 million Euros to 1.1 million Euros. This estimate is based on various factors, including the efficiency of the solar panels, energy policies, local electricity rates, and exchange rates. The average electricity price used for this calculation is set at 65/MWh, while the expected production rate falls between 13,000 MWh and 16,000 MWh. Consequently, the actual savings may fluctuate depending on these variables, calculated as: Minimum: 13,000 MWh 65 /MWh Maximum: 16,000 MWh* 65 /MWh*

(3.6.1.24) Cost to realize opportunity

10000000

(3.6.1.25) Explanation of cost calculation

The total cost of the solar energy investments made was reflected to Şişecam as 10000000. The total cost of the investments was spent to realize the related opportunity.

(3.6.1.26) Strategy to realize opportunity

To capitalize on this opportunity, a total capital investment is required for the installation of rooftop solar photovoltaic (PV) systems. An initial investment of 10 million Euros has been made, with 10,000 Euros allocated for the rooftop solar PV installations at the Mersin, Northern Italy, Southern Italy Flat Glass Plants, and the R&D Center. Şişecam aims to increase its renewable energy generation capacity eightfold to facilitate its clean energy transition. The company plans to achieve an installed renewable energy capacity of 53 MWp, primarily to meet the electricity needs of its factories. Investments in both wind and solar energy are also part of the strategy for renewable electricity generation, with an additional 80 million Euros planned for various facility upgrades.

Water

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp1

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Capital flow and financing

☑ Access to sustainability linked loans

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Bosnia & Herzegovina

☑ Turkey

(3.6.1.6) River basin where the opportunity occurs

Select all that apply

☑ Danube

☑ Other, please specify

(3.6.1.8) Organization specific description

For Şişecam's operations in Bosnia and Turkey, particularly around the Danube basin, addressing water scarcity presents a strategic opportunity to improve resource efficiency and access sustainable financing. By investing in water recycling and efficiency technologies, it is possible to reduce water consumption and enhance operational resilience. This includes installing closed-loop recycling systems and upgrading wastewater treatment infrastructure, which are critical to minimizing water use in production. These initiatives align with our sustainability goals while also mitigating risks related to water availability and regulatory pressures. In addition to the environmental benefits, we have the possibility of leveraging green financing opportunities such as sustainability-linked loans or green bonds, which provide financial support at preferential rates for projects with positive environmental impacts.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Reduced indirect (operating) costs

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Very likely (90–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium-high

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

This opportunity will strengthen Şişecam's financial position over the long term. Investments in water recovery and efficiency technologies will enhance our asset base by incorporating advanced systems that reduce reliance on external water sources. This improves the overall resilience of operations, mitigating future water scarcity risks and potential regulatory penalties. By proactively addressing water-related challenges, Şişecam can safeguard its financial stability and reduce the likelihood of future liabilities tied to water scarcity or stricter regulations. Additionally, these investments align with the company's environmental sustainability goals, improving its reputation and positioning in the market. Also, in the short to medium term, Şişecam will experience capital expenditures related to the implementation of water recovery infrastructure, with estimated costs of 20 million Euros. While this may initially impact profitability, it is expected to realize long-term financial benefits through significant cost savings from reduced water consumption, lower utility expenses, and less reliance on external water supplies. Moreover, access to green financing, such as sustainability-linked loans and green bonds, will reduce overall financing costs. Over time, these savings will positively affect profit margins, contributing to improved financial performance. Additionally, improved water management will help the company maintain stable production levels, even in regions facing water stress, ensuring operational continuity and efficiency. In the short term, the capital required for infrastructure upgrades will create negative cash flows. However, once these systems are operational, cost reductions from water conservation and reduced water treatment expenses will lead to positive cash flow impacts in the medium to long term. By leveraging green financing with lower interest rates and sustainability incentives, it is possible to stabilize its cash flows, benefiting from reduced financing costs and improved liquidity. Over time, these investments will not only improve operational efficiency but also enhance cash flow resilience, reducing the financial impact of water-related risks.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

20000000

(3.6.1.25) Explanation of cost calculation

The total investment for the MESKI project at Şişecam's Mersin Soda Plant is estimated to be 20 million. This includes the construction of a treatment facility equipped with ultrafiltration and reverse osmosis systems to process approximately 120,000 m³ of wastewater from the MESKI Karaduvar Wastewater Treatment Plant. The investment also covers the installation of a pumping station and the construction of a 2 km pipeline to transport the treated water to the plant. These measures are crucial for reducing the plant's reliance on freshwater, mitigating water-related risks, and ensuring sustainable water management. The cost encompasses both the required technological infrastructure and logistical components for the project.

(3.6.1.26) Strategy to realize opportunity

The MESKI project presents a significant opportunity for the Mersin Soda Plant to enhance its water resource efficiency and sustainability. By leveraging treated wastewater from the Karaduvar Wastewater Treatment Plant, the facility will drastically reduce its reliance on freshwater from local sources like the Berdan Dam and deep-water wells. The project plans to re-use 120,000 m³ of treated water annually, representing a substantial share of the plant's total water consumption. This innovative approach not only supports the plant's long-term operational resilience but also creates value by aligning with global sustainability goals, reducing freshwater withdrawal, and boosting resource efficiency. The MESKI project positions the plant as a leader in sustainable water management, turning a water-stressed environment into an opportunity for improved performance and environmental impact.

Water

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Resilience

☑ Other resilience opportunity, please specify

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Egypt

☑ India

☑ Italy

☑ Romania

☑ Turkey

(3.6.1.6) River basin where the opportunity occurs

Select all that apply

☑ Danube

☑ Mahi River

☑ Nile

☑ Sakarya

☑ Other, please specify

(3.6.1.8) Organization specific description

For Şişecam’s operations in the Danube, Mahi River, Nile, and Sakarya basins, the opportunity to invest in water management infrastructure and develop water-efficient production processes is a strategic response to growing water stress in these regions. In particular, the Sakarya basin, a critical area for the company's operations, faces significant water challenges, making resilience-building investments essential. By implementing advanced water management systems, Şişecam can ensure a more efficient use of water resources, reducing reliance on external freshwater sources and minimizing operational risks associated with water scarcity. Investments in these regions include infrastructure upgrades like improved water recycling and storage systems, which are critical to maintaining operational continuity under water stress. Furthermore, developing water-efficient production technologies across these facilities presents an opportunity to optimize processes and reduce overall water consumption. The integration of these technologies will enhance production efficiency and align with global sustainability objectives. This initiative not only strengthens Şişecam’s resilience but also contributes to long-term cost savings and positions the company as a leader in sustainable manufacturing practices.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Reduced indirect (operating) costs

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Likely (66–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Investing in water management infrastructure and developing water-efficient production processes in the Danube, Mahi River, Nile, and Sakarya basins is expected to significantly impact Şişecam's financial position, performance, and cash flows. For facilities in these basins, such investments will enhance asset values while reducing future liabilities related to water scarcity and regulatory compliance. This will strengthen Şişecam's overall balance sheet, particularly in water-stressed regions like the Sakarya basin. In the short term, these capital expenditures might affect profitability, but over the long term, improved water management will lower operational costs, particularly in the Danube and Nile basins where water stress is a critical concern. Enhanced efficiency in production processes will improve profit margins and competitiveness, driving revenue growth across all targeted regions. While the initial investments may strain cash flows in the early phases, the long-term benefits of reduced utility costs and optimized operations are expected to generate positive cash flows. Facilities in the Mahi River and Sakarya basins can also benefit from access to green financing, which may further enhance liquidity through better borrowing conditions. Overall, these initiatives will lead to a stronger financial position and improved long-term performance for Şişecam's facilities across the Danube, Mahi River, Nile, and Sakarya basins.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

1100000

(3.6.1.25) Explanation of cost calculation

Evaluating the investment of EUR 1,100,000 across various facilities in terms of opportunity reveals significant potential for enhancing water management and sustainability: 1. Optimizing Water Use: GLASS PACKAGING ESKİŞEHİR's investment of EUR 300,000 in water recycling optimization represents a proactive approach to reducing water consumption while maximizing efficiency. This not only lowers operational costs but also enhances the facility's reputation as a sustainable manufacturer in the Sakarya River basin. 2. Upgrading Infrastructure: FLAT GLASS MANFREDONIA allocated EUR 250,000 for modernizing washing machines and installing water counters. This investment enhances water management from the Carapelle River, allowing for better tracking of water use and reducing waste, ultimately contributing to greater resource efficiency and cost savings. 3. Monitoring Consumption: GLASSWARE EGYPT's EUR 35,000 investment in flow meters will help monitor water consumption and detect leaks related to Nile River usage. By identifying inefficiencies, the facility can further optimize operations and potentially recover costs through reduced water wastage. 4. Improving Management Practices: The EUR 30,000 invested by GLASSWARE DENİZLİ in flow meters from the Buyuk Menderes River is another opportunity to enhance water management practices, ensuring that the facility operates sustainably and in alignment with environmental goals. 5. Conservation Initiatives: FLAT GLASS INDIA's commitment of EUR 29,000 to a Water Conservation Project and EUR 24,000 for water testing equipment near the Mahi River signifies a strategic investment in sustainability, helping to establish a framework for ongoing conservation efforts. 6. Enhancing Operational Resilience: REFEL's investment of EUR 350,000 to upgrade its water-treatment system in the finishing department demonstrates a clear opportunity for enhancing operational resilience. This modernization not only ensures compliance with water regulations but also supports long-term sustainability goals.

(3.6.1.26) Strategy to realize opportunity

To capitalize on our investments in water management, we plan to develop an integrated framework that standardizes practices across our facilities in the Danube, Mahi River, Nile, Sakarya, and Buyuk Menderes basins. By prioritizing advanced technologies like automated monitoring systems and water recycling infrastructure, we aim to optimize our operations and enhance efficiency. We aim to conduct regular training for our employees on sustainable water practices to foster resource efficiency, and we will engage in partnerships with local authorities and environmental organizations to improve our conservation initiatives and ensure regulatory compliance. Establishing a robust monitoring and reporting system will help us track water consumption and assess the impact of our technologies, allowing us to make strategic adjustments based on performance data. Our initiatives will align with broader sustainability goals, and we will explore green financing options to support future investments while alleviating financial burdens. Finally, by adopting a continuous improvement approach, we will regularly update our water management practices to ensure they remain relevant and effective. Through these strategies, we aim to enhance our water management, achieve greater efficiency, reduce costs, and reinforce our commitment to sustainability.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Development of new products or services through R&D and innovation

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Turkey

(3.6.1.8) Organization specific description

The declining costs of electricity generation from solar energy sources, coupled with a growing global emphasis on sustainability, are paving the way for new opportunities in the patterned glass and energy glass sectors. Within the European Union, the REPowerEU plan aims to significantly increase solar photovoltaic (PV) capacity, targeting over 320 GW of new installations by 2025—more than double the current capacity—and nearly 600 GW by 2030. The components of the EU Solar Energy Strategy (EU-SES) include photovoltaics, concentrated solar power, and solar thermal technologies. At Şişecam, we leverage our risk forecasting capabilities and our capacity to seize emerging opportunities. In July, recognizing the potential in this sector, Şişecam announced plans to invest in a patterned glass furnace and processing line at our Mersin plant. By the end of the year, we further announced an expansion of capacity for this new furnace and processing line. As a result of this investment, the capacity of the second patterned glass furnace in Mersin, where we will also manufacture energy glass, will increase from 180,000 tons to 244,000 tons per year. Additionally, the annual capacity of Şişecam's energy glass processing line will rise from 20 million square meters to 26.6 million square meters.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased revenues resulting from increased demand for products and services

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Likely (66–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Şişecam's investment in the patterned glass and energy glass sectors on its financial position, performance, and cash flows is expected to be significantly positive. By expanding its capacity for the second patterned glass furnace and enhancing the energy glass processing line, the company is well-positioned to meet the growing demand for sustainable glass products, aligning with global sustainability trends and the European Union's ambitious solar energy targets. This strategic investment will likely lead to increased production capabilities, enabling Şişecam to capitalize on emerging market opportunities and improve its competitive edge. As production capacity grows from 180,000 tons to 244,000 tons per year for the patterned glass furnace and from 20 million square meters to 26.6 million square meters for the energy glass processing line, the company can expect a substantial boost in sales revenue. This increase in output will not only contribute to higher sales figures but also enhance operational efficiency, potentially reducing per-unit costs and improving profit margins. Furthermore, the shift towards energy-efficient and sustainable products may attract environmentally conscious customers and investors, leading to improved brand loyalty and market positioning. Overall, the financial implications of this investment are likely to result in enhanced cash flows, improved financial stability, and a stronger overall financial performance for Şişecam, reinforcing its commitment to sustainability while delivering long-term shareholder value.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ Yes

(3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

57000000

(3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

63000000

(3.6.1.23) Explanation of financial effect figures

The International Energy Agency (IEA) forecasts that solar photovoltaic (PV) will represent the largest annual capacity additions among renewable energy sources over the next five years. In 2021, the solar photovoltaic glass market was valued at USD 4.42 billion and is projected to grow significantly, reaching USD 84.14 billion by 2029. This growth translates to a compound annual growth rate (CAGR) of 30.80% from 2022 to 2029.

(3.6.1.24) Cost to realize opportunity

228000000

(3.6.1.25) Explanation of cost calculation

The total cost to realize the opportunity of expanding Şişecam's patterned glass production and energy glass processing capacities is estimated at 228 million Euros. This calculation encompasses various expenses related to the construction and installation of new production facilities, procurement of advanced manufacturing equipment, and upgrades to existing infrastructure at the Mersin plant. Additionally, costs associated with research and development, labor, and materials necessary for the enhanced production capabilities are included in this total. The investment reflects Şişecam's strategic focus on increasing its operational efficiency and capacity to meet the growing demand for sustainable glass products, particularly in the context of the expanding solar energy sector in Türkiye. By allocating this significant capital, Şişecam aims to position itself competitively in the market while supporting its long-term sustainability goals.

(3.6.1.26) Strategy to realize opportunity

Şişecam plans to enhance its installed patterned glass production capacity to 324,000 tons per year and increase the capacity of its energy glass processing line to 26.6 million square meters annually through the capacity expansion at its Mersin facility. This decision reflects Şişecam's commitment to fostering the rapidly growing solar energy sector in Türkiye, aligning with its sustainability-focused value-added production strategy.
[Add row]

(3.6.2) Provide the amount and proportion of your financial metrics in the reporting year that are aligned with the substantive effects of environmental opportunities.

Climate change

(3.6.2.1) Financial metric

Select from:

☑ Revenue

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

64040000

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

☑ Less than 1%

(3.6.2.4) Explanation of financial figures

The financial impact of Şişecam's declared opportunities on the company is calculated as 64 million on a consolidated basis. When the financial impact of the related risks is compared to 2023 revenues, the impact on revenues is calculated as 1%.

Water

(3.6.2.1) Financial metric

Select from:

☑ CAPEX

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

1100000

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

☑ 1-10%

(3.6.2.4) Explanation of financial figures

Total water-related CAPEX of Şişecam in the reporting year was 18 million. This investment demonstrates our ongoing commitment to addressing water risks and enhancing the sustainability of our operations. Out of this total, 1.1 million was allocated to Opportunity 2 (Resilience) initiatives, which are focused on strengthening our operational resilience to water-related challenges. The investment in these opportunities represents 6.1% of our overall financial metrics for the year. This demonstrates our proactive approach in capitalizing on environmental opportunities, particularly in regions with high water stress, where building resilience is crucial for long-term operational stability and sustainability. By prioritizing such investments, we aim to not only mitigate potential risks but also unlock value through improved resource efficiency and enhanced reputation as a responsible and resilient company in the face of environmental challenges.
[Add row]

C4. Governance

(4.1) Does your organization have a board of directors or an equivalent governing body?

(4.1.1) Board of directors or equivalent governing body

Select from:

☑ Yes

(4.1.2) Frequency with which the board or equivalent meets

Select from:

☑ Quarterly

(4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

☑ Executive directors or equivalent

(4.1.4) Board diversity and inclusion policy

Select from:

☑ No

[Fixed row]

(4.1.1) Is there board-level oversight of environmental issues within your organization?

Climate change

(4.1.1.1) Board-level oversight of this environmental issue

Select from:

☑ Yes

Water

(4.1.1.1) Board-level oversight of this environmental issue

Select from:

☑ Yes

Biodiversity

(4.1.1.1) Board-level oversight of this environmental issue

Select from:

☑ No, but we plan to within the next two years

(4.1.1.2) Primary reason for no board-level oversight of this environmental issue

Select from:

☑ Not an immediate strategic priority

(4.1.1.3) Explain why your organization does not have board-level oversight of this environmental issue

In the scope of Şişecam's sustainability committees and our ongoing "Care for Next" project, the "Protect the Planet" working group undertakes environmental initiatives. Key focus areas include climate change, water usage, and circular production. These topics are identified as the most critical global environmental issues, with strategic approaches being implemented to address them. Currently, biodiversity efforts are not a major focus but will be considered under fundamental environmental topics in the coming years.
[Fixed row]

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

Climate change

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ Board chair

☑ Chief Executive Officer (CEO)

☑ Board-level committee

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Board Terms of Reference

☑ Individual role descriptions

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in every board meeting (standing agenda item)

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Reviewing and guiding annual budgets

☑ Overseeing and guiding scenario analysis

☑ Overseeing the setting of corporate targets

☑ Reviewing and guiding innovation/R&D priorities

☑ Overseeing and guiding the development of a business strategy

☑ Overseeing and guiding the development of a climate transition plan

(4.1.2.7) Please explain

Şişecam has a robust governance structure to integrate climate change into its corporate framework. Climate-related strategies, risks, opportunities, and mitigation actions are managed at the highest level of the company. The Chairman of Şişecam is directly responsible for the company's corporate sustainability and climate change strategies, reviewing, approving, and overseeing these strategies. In this context, the Chairman regularly evaluates progress towards Şişecam's strategic climate goals, such as the 2050 Carbon Neutral target, under the Care for Next strategy, with reports provided by the CEO. The Board of Directors Sustainability Committee, chaired by the Chairman, plays a crucial role in fully integrating the company's climate strategy, policies, risks, and opportunities into its overall structure. This committee oversees activities aligned with the 2050 carbon-neutral and 2030 renewable energy targets, ensuring that all actions and investments are reviewed and approved by the CEO and subsequently reported to the committee. The Sustainability Executive Committee, led by the CEO, is responsible for executing the climate strategy, setting priorities, managing internal and external stakeholder communications, and monitoring sustainability performance indicators. This structure ensures the effective implementation and monitoring of climate strategies across all organizational levels. The Board of Directors Sustainability Committee meets quarterly to review the progress related to climate risks, opportunities, sustainability goals, and projects. Renewable energy and climate-related issues are prioritized in these meetings. Additionally, the status of projects, investments, potential collaborations, and R&D efforts are assessed, and future actions are planned accordingly. This integrated governance mechanism enables Şişecam to take strategic and effective steps in addressing climate change challenges.

Water

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ Board chair

☑ Chief Executive Officer (CEO)

☑ Board-level committee

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Board Terms of Reference

☑ Individual role descriptions

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in every board meeting (standing agenda item)

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Reviewing and guiding annual budgets

☑ Overseeing and guiding scenario analysis

☑ Overseeing the setting of corporate targets

☑ Monitoring progress towards corporate targets

☑ Approving corporate policies and/or commitments

☑ Reviewing and guiding innovation/R&D priorities

☑ Overseeing reporting, audit, and verification processes

☑ Overseeing and guiding the development of a business strategy

☑ Monitoring compliance with corporate policies and/or commitments

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

(4.1.2.7) Please explain

Şişecam's water management governance structure is shaped under the "Care for Next" strategy, which focuses on preserving the planet and achieving sustainability targets. Şişecam has developed special initiatives such as the "Protect the Planet Working Group" to center the management and mitigation of water risks. These groups develop specific projects and practices to optimize water use, increase water efficiency, and minimize environmental impacts at the facilities. The Board of Directors Sustainability Committee plays a critical role under the "Care for Next" strategy in fully integrating the company's water management strategies, policies, and risks into the overall structure. This committee reviews and approves policies and practices concerning the conservation and efficient use of water resources. Moreover, the "Internal Water Management Working Group" is established in facilities deemed high-risk, while "Water Management Representatives" are appointed in facilities considered risky to regularly report water management activities to the Sustainability Executive Committee. The Sustainability Executive Committee is responsible for setting priorities related to water management, managing communications with internal and external stakeholders, and regularly monitoring water management performance indicators. This committee ensures the implementation of substantial measures such as water conservation and water quality management. The Board of Directors Sustainability Committee conducts quarterly meetings to review developments, risks, and opportunities related to water management. During these meetings, the status of water management projects and investments, future plans, and potential collaborations are evaluated. This integrated governance approach enables Şişecam to take strategic and effective steps in water management aligned with the "Care for Next" strategy, helping to achieve its sustainability goals.

[Fixed row]

(4.2) Does your organization’s board have competency on environmental issues?

Climate change

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Integrating knowledge of environmental issues into board nominating process

☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Experience

☑ Executive-level experience in a role focused on environmental issues

Water

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Integrating knowledge of environmental issues into board nominating process

☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Experience

☑ Executive-level experience in a role focused on environmental issues

[Fixed row]

(4.3) Is there management-level responsibility for environmental issues within your organization?

Climate change

(4.3.1) Management-level responsibility for this environmental issue

Select from:

☑ Yes

Water

(4.3.1) Management-level responsibility for this environmental issue

Select from:

☑ Yes

Biodiversity

(4.3.1) Management-level responsibility for this environmental issue

Select from:

☑ No, but we plan to within the next two years

(4.3.2) Primary reason for no management-level responsibility for environmental issues

Select from:

☑ No standardized procedure

(4.3.3) Explain why your organization does not have management-level responsibility for environmental issues

The environmental topics managed at Şişecam board-level are primarily climate change and water. In the coming years, it will be addressed as one of the environmental issues discussed at board-level.
[Fixed row]

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a business strategy which considers environmental issues

☑ Implementing a climate transition plan

☑ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

Şişecam CEO is the key person with the highest level of responsibility for all activities related to climate change. The CEO chairs Şişecam's Sustainability Executive Committee and ensures that the CareforNext Sustainability Strategy is integrated into all operational areas. Within the scope of this strategy, it is especially critical to manage climate change risks and seize opportunities. Projects and investments related to climate change are realized with the approval of the CEO. This ensures that the necessary resources are allocated to achieve the company's climate-related strategic goals. The CEO reports directly to the Sustainability Committee of the Board of Directors, sharing the implementation of the climate strategy and developments at senior management level. This ensures strong communication and coordination between the board and the executive committee. For the effective implementation of Şişecam's climate change strategy, the CEO manages data-based decision-making mechanisms and ensures that decisions are shaped by accurate and up-to-date data.

Water

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Other committee, please specify **:**The Board of Directors Sustainability Committee

(4.3.1.2) Environmental responsibilities of this position

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

Strategy and financial planning

☑ Implementing the business strategy related to environmental issues

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

☑ Managing annual budgets related to environmental issues

☑ Managing major capital and/or operational expenditures relating to environmental issues

☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

The Şişecam Board of Directors Sustainability Committee was established in 2021 under the leadership of the Chairman of the Board. It operates in line with the "Protect, Empower, and Transform" strategies, which are aligned with the United Nations Sustainable Development Goals, to accelerate the integration of sustainability principles into the company's structure. The committee is responsible for setting sustainability policies and strategic approaches, as well as ensuring the implementation of operational improvement activities. The committee's duties include reviewing and guiding the strategy, assessing environmental risk management processes, overseeing the development and implementation of transition plans, and monitoring the progress towards corporate targets. Additionally, it is responsible for reviewing priorities related to innovation and R&D. Şişecam's sustainability governance structure also includes the Sustainability Executive Committee and its sub-groups: Protect the Planet, Empower Society, and Transform Life. These working groups report their activities to the Sustainability Executive Committee, which in turn evaluates these reports and submits them to the Board of Directors Sustainability Committee. This structure ensures the effective management and operational integration of environmental and social sustainability goals.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Sustainability committee

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☑ Implementing the business strategy related to environmental issues

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

☑ Managing annual budgets related to environmental issues

☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

The Board of Directors Sustainability Committee is the highest body responsible for sustainability management at Şişecam and is chaired by the Chairman of the Board of Directors. The Board Sustainability Committee sets Şişecam's strategic direction on climate change and ensures the effective implementation of the CareforNext Sustainability Strategy at all levels. It also keeps the strategy up-to-date by following global trends. The Committee oversees the effective management of climate change-related risks. In light of global events, it has become imperative to address climate risks with a strategic management approach. It ensures the creation and implementation of transition plans for climate change adaptation and carbon footprint reduction targets. It also oversees the setting and monitoring of climate-related targets at the corporate level. The Committee reviews climate-related innovation and R&D projects and sets priorities in this area. It thus ensures that technological developments are carried out in line with the climate strategy. Şişecam's sustainability strategy is organized under the umbrella of CareforNext and is carried out in line with and integrated with the United Nations Sustainable Development Goals (SDGs). Şişecam manages risks and meets stakeholder expectations on a global scale to achieve the goals defined under the main headings of Protect the Planet, Empower Society and Transform Lives. In this context, managing climate change and other environmental risks is of strategic importance not only in terms of sustainability but also in line with the increasing sensitivities of stakeholders.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Sustainability committee

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Executive Officer (CEO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

The Sustainability Executive Committee is chaired by the CEO and consists of Executive Board members and oversees the effective implementation of Şişecam's climate strategy. The Committee formulates Şişecam's climate change adaptation strategy and ensures that this strategy is integrated across all business units. Climate change related targets and KPIs are set, distributed and regularly revised and monitored. The Committee evaluates climate-related risks and opportunities on the basis of product and production geographies and determines the actions to be taken in this context. Under the Committee are working groups formed in line with the three main axes of the CareforNext strategy: Protect the Planet, Empower Society and Transform Lives. These groups develop projects to achieve the sustainability goals set and report on progress.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Chief Strategy Officer

(4.3.1.2) Environmental responsibilities of this position

Policies, commitments, and targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a business strategy which considers environmental issues

☑ Developing a climate transition plan

☑ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Executive Officer (CEO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

At Şişecam, the Chief Strategy Officer (CSO) plays an important role in managing the company's climate change strategy in an integrated manner with the overall corporate strategy. The CSO is responsible for designing and overseeing Şişecam's short, medium and long-term strategies that include sustainability as a core component. The climate change strategy is embedded in the overall corporate strategy and ensures that climate-related issues are aligned with business objectives. The CSO sets climate-related targets, such as emission reductions, energy efficiency and the adoption of renewable energy. Progress against these targets is *continuously monitored, ensuring that the company is on track to achieve its sustainability goals. The CSO is responsible for assessing and managing climate-related risks and opportunities and ensures that Şişecam adapts to the changing environmental environment. This includes identifying potential threats (e.g. regulatory changes, physical risks) as well as opportunities (e.g. innovation in sustainable products, resource efficiency) arising from climate change. The CSO reports directly to the CEO, providing updates on the progress of climate-related initiatives and their integration into corporate strategy. Regular reporting ensures accountability and informs leadership on the company's climate action performance.*

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Other committee, please specify :Protect the Planet Working Group

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☑ Developing a business strategy which considers environmental issues

☑ Developing a climate transition plan

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify :Chief Strategy Officer

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

The Protect the Planet Working Group plays a crucial role in addressing key environmental issues, with a strong focus on climate change. Operating under the framework of the CareforNext Strategy, the group prioritizes climate change mitigation, responsible water use, and the promotion of circular production practices. These focus areas are essential for minimizing Şişecam’s environmental impact and advancing its sustainability efforts. A core function of the group is its active *support for Şişecam's climate change strategy, which includes the transition to renewable energy sources and the reduction of greenhouse gas emissions. By leading initiatives in energy efficiency and renewable energy projects, the group helps the company meet its climate-related targets. Additionally, the group is tasked with coordinating technical studies and designing projects that address its key environmental focus areas. This ensures that Şişecam remains at the forefront of adopting best practices and leveraging technological advancements in its climate action initiatives. Moreover, the group oversees critical aspects such as technological developments, transformation projects, and investment planning, ensuring they align with the company's broader climate and sustainability objectives. Through these coordinated efforts, the Protect the Planet Working Group contributes significantly to the realization of Şişecam's climate goals and overall environmental sustainability agenda.*

Water

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Other committee, please specify **:** Protect the Planet Working Group

(4.3.1.2) Environmental responsibilities of this position

Policies, commitments, and targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a business strategy which considers environmental issues

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify **:**Sustainability Executive Committee

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

The Protect the Planet Working Group plays a crucial role in addressing climate change and water management issues. Operating under the CareforNext Strategy, the group prioritizes the reduction of climate change, responsible water use, and the promotion of circular production practices. These focal areas are critical for reducing Şişecam's environmental impact and advancing its sustainability efforts. In establishing Şişecam's water management structure, a comprehensive water risk analysis has been thoroughly assessed. This analysis takes into account total water usage, water use efficiency, and the water risks associated with the basins in the locations of the facilities. For facilities identified as high-risk, an "Internal Water Management Working Group" will be established, and "Water Management Representatives" will be appointed for facilities deemed risky. These teams are expected to regularly monitor water management activities and report their findings to the Sustainability Executive Committee as part of the Protect the Planet Working Group. This structure aims to enhance the effectiveness of water management and proactively manage water risks. The group's additional responsibilities include coordinating technical work related to fundamental environmental focus areas and designing projects. In this capacity, the group supports Şişecam in adopting best practices and leveraging technological advancements in its water management initiatives. Furthermore, the group oversees critical issues such as technological developments, transformation projects, and investment planning, ensuring alignment with the company's water management goals. The Protect the Planet Working Group significantly contributes to achieving Şişecam's water management objectives and its overall environmental sustainability agenda through these coordinated efforts.

Water

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Sustainability committee

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

(4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Executive Officer (CEO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

The Sustainability Executive Committee, chaired by the CEO of Şişecam and composed of Board members, is responsible for designing Şişecam's water management strategy, ensuring its integration across all business units, and setting priorities for sustainability objectives. The Committee establishes, distributes, regularly revises, and monitors water management goals and KPIs. It also evaluates water-related risks and opportunities in relation to the company's operations, strategy, and financial planning, including assessing risks and opportunities by product and production geography. The Committee defines activities and measures to support the water management strategy. Under the Committee, the "Protect the Planet," "Empower Communities," and "Transform Lives" working groups are established in alignment with the three main pillars of the CareforNext strategy. The Protect the Planet group focuses on water management goals and strategies. These groups develop projects with participation from managers across all functional areas and report their progress to the Sustainability Executive Committee. The Committee reviews these reports and presents them to the Board Sustainability Committee, ensuring strong communication and coordination between upper management and the Board. In the development of Şişecam's water management structure, a detailed water risk analysis has been conducted. This analysis considered total water usage, water use efficiency, and water risks in the catchment areas of the facilities. For facilities identified as high risk, an "Internal Water Management Working Group" is planned to be established, while "Water Management Representatives" will be appointed for facilities assessed as risky. These teams are intended to regularly monitor water management activities and report their findings as part of the Protect the Planet working group to the Sustainability Executive Committee. This structure aims to enhance the effectiveness of water management.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a business strategy which considers environmental issues

☑ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

The CEO of Şişecam holds the highest level of responsibility for water management activities and chairs the Sustainability Executive Committee. This role ensures the integration of the CareforNext Sustainability Strategy into all operational processes, with a particular focus on managing water-related risks and capitalizing on opportunities related to water resources. All water management projects and investments are implemented with the CEO's approval, ensuring that the necessary resources are allocated effectively to achieve the company's water management objectives. The CEO oversees the implementation of water strategies and reports developments directly to the Board of Directors Sustainability Committee, facilitating strong communication and coordination between the board and the executive committee. Furthermore, the CEO manages data-driven decision-making processes to ensure that the company's water management strategy is executed effectively and that decisions are based on accurate and up-to-date information. This governance structure plays a critical role in advancing Şişecam's sustainability goals related to water management.

[Add row]

(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

Climate change

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

☑ Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

100

(4.5.3) Please explain

Şişecam has implemented a recognition program called Stars of the Year, designed to boost motivation, participation, success, and productivity in managing climate-related issues across all employee levels, including management. This program provides incentives in various categories, with the "Life Protectors" category specifically focusing on rewarding achievements in climate-related initiatives. By recognizing efforts in this area, the program not only encourages active involvement but also raises awareness about climate issues throughout the company. Şişecam integrates sustainability targets into its performance management system, which evaluates individual annual performance. This system plays a crucial role in employee development by linking sustainability goals to promotion opportunities. Employees' contributions to climate-related objectives are assessed and reflected in their individual performance scorecards.

Water

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

☑ Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

100

(4.5.3) Please explain

Şişecam implements recognition programs like "Stars of the Year" to incentivize management and all employees in achieving environmental management goals. This program includes the "Life Protectors" category, which specifically rewards achievements in environmental initiatives, including water management. Şişecam's performance management system also integrates sustainability targets into individual performance evaluations, linking these goals to promotion opportunities.

Employees' contributions to water management and other environmental targets are assessed and supported by financial incentives, such as success bonuses, fostering engagement and supporting the company's objectives for water conservation and efficiency.
[Fixed row]

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

Climate change

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☑ Chief Executive Officer (CEO)

(4.5.1.2) Incentives

Select all that apply

☑ Salary increase

(4.5.1.3) Performance metrics

Emission reduction

☑ Reduction in emissions intensity

Resource use and efficiency

☑ Energy efficiency improvement

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Short-Term Incentive Plan, or equivalent, only (e.g. contractual annual bonus)

(4.5.1.5) Further details of incentives

The CEO's monetary incentives are closely tied to the achievement of strategic and sustainability goals, particularly those related to energy efficiency and carbon intensity reduction. Achieving these targets positively impacts the CEO's bonus structure. Specific internal targets related to reducing energy-carbon intensities are included in the CEO's performance scorecard. Success in meeting these targets can result in substantial financial rewards. A significant portion of the CEO's total compensation is variable and linked to performance metrics. Successful attainment of the outlined sustainability goals directly influences the variable pay component. At the end of each fiscal year, the CEO's performance, including progress on sustainability targets, is reviewed. Based on this review, monetary incentives are adjusted accordingly.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

The CEO's incentives are directly tied to the reduction of Şişecam's energy-carbon intensities, which is a key component of the company's climate transition plan. By linking a portion of the CEO's compensation to achieving specific environmental targets, the incentives ensure that the CEO remains focused on the successful implementation of the climate strategy. With environmental targets included in the CEO's scorecard, the CEO is held accountable for leading the company's efforts in reducing greenhouse gas emissions and improving energy efficiency. This accountability drives the CEO to prioritize and integrate sustainability into the company's overall strategy, leading to more effective climate action and resource allocation. The monetary incentives encourage the CEO to make strategic decisions that align with environmental commitments, such as investing in renewable energy projects, adopting energy-efficient technologies, and enhancing sustainability practices. These decisions help in meeting the company's long-term climate goals and transitioning to a low-carbon business model. By providing monetary rewards based on environmental performance, Şişecam motivates its leadership to actively engage in and drive initiatives that advance the company's climate commitments, ultimately leading to a successful transition towards a more sustainable and low-carbon future.

Water

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☑ Chief Executive Officer (CEO)

(4.5.1.2) Incentives

Select all that apply

☑ Salary increase

(4.5.1.3) Performance metrics

Resource use and efficiency

☑ Reduction in water consumption volumes – direct operations

☑ Improvements in water efficiency – direct operations

☑ Improvements in water accounting, reporting, and third-party verification

Policies and commitments

☑ Increased access to workplace WASH – direct operations

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

(4.5.1.5) Further details of incentives

The CEO's financial incentives are directly tied to meeting strategic and sustainability goals, especially those related to water efficiency and reducing water consumption. Success in meeting these targets positively influences the CEO's bonus structure. Specific internal targets related to water consumption reduction and water efficiency are included in the CEO's performance scorecard, and achieving these targets can result in significant financial rewards. A substantial portion of the CEO's total compensation is variable and tied to performance metrics; meeting water management targets directly impacts this variable compensation component. At the end of each fiscal year, the CEO's performance, including progress on water management goals, is reviewed, and monetary incentives are adjusted accordingly. As part of Şişecam's sustainability strategy, more comprehensive water management targets will be developed in the future and integrated into the CEO's performance criteria. This approach will ensure that water management strategies are more closely aligned with the company's overall sustainability objectives.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

The CEO's incentives are closely linked to Şişecam's strategic and sustainability objectives, particularly those aimed at improving water efficiency and reducing water consumption. By tying a portion of the CEO's compensation to specific water management goals, these incentives ensure the CEO's dedication to enhancing the company's water sustainability initiatives. With these targets incorporated into the CEO's performance evaluations, the CEO is accountable for leading efforts to optimize water use and reduce consumption, reinforcing the importance of water management in the company's overall strategy. This accountability drives the CEO to prioritize water sustainability as part of the broader company goals, leading to more effective water conservation measures and better resource allocation. Financial incentives encourage the CEO to make strategic decisions that align with environmental commitments, such as investing in water-efficient technologies, implementing water-saving practices, and promoting sustainable water management throughout the organization. These actions support Şişecam's long-term water goals and align its business operations with sustainable water use principles. By rewarding performance based on water management outcomes, Şişecam encourages its leadership *to take an active role in advancing the company's water-related initiatives. This approach ensures that water management strategies are fully integrated with Şişecam's overall sustainability agenda, helping the company progress towards more sustainable and efficient water use practices in the future.*

Climate change

(4.5.1.1) Position entitled to monetary incentive

Facility/Unit/Site management

☑ Facilities manager

(4.5.1.2) Incentives

Select all that apply

☑ Salary increase

(4.5.1.3) Performance metrics

Targets

☑ Progress towards environmental targets

☑ Achievement of environmental targets

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Short-Term Incentive Plan, or equivalent, only (e.g. contractual annual bonus)

(4.5.1.5) Further details of incentives

The Facilities Manager's incentives are also performance-based, focusing on specific targets related to energy efficiency, renewable energy adoption, and reduction in carbon intensities. Achieving these targets can lead to financial bonuses. Targets are set on a functional basis, aligning with the Facilities Manager's role in managing and improving the environmental impact of the facilities. These targets are included in the individual performance scorecard.The Facilities Manager's performance scorecard includes sustainability goals that are directly tied to their monetary incentives. Meeting or exceeding these targets results in bonuses and other financial rewards. Like the CEO, the Facilities Manager undergoes an annual performance review. The review assesses their progress towards sustainability goals, which influences the bonus and overall compensation.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

For the Facilities Manager, performance incentives are tied to targets related to energy efficiency, renewable energy adoption, and reduction in carbon intensities. These incentives drive the Facilities Manager to implement and oversee operational improvements that directly impact the company's environmental performance. Specific targets set for the Facilities Manager ensure that they focus on practical aspects of the climate transition plan, such as optimizing energy use within facilities, reducing waste, and enhancing overall operational efficiency. Achieving these targets contributes to lowering the company's environmental footprint and aligns with broader strategic goals. The inclusion of sustainability goals in the Facilities Manager's scorecard ensures that climate-related objectives are integrated into daily operations and maintenance activities. This integration supports the overall climate transition plan by ensuring that all operational aspects are aligned with Şişecam's environmental commitments. Facilities Manager incentives align individual performance with company-wide environmental goals, ensuring that every level of management contributes to achieving the climate transition plan.

Water

(4.5.1.1) Position entitled to monetary incentive

Facility/Unit/Site management

☑ Facilities manager

(4.5.1.2) Incentives

Select all that apply

☑ Salary increase

(4.5.1.3) Performance metrics

Resource use and efficiency

☑ Improvements in water efficiency – direct operations

Policies and commitments

☑ Increased access to workplace WASH – direct operations

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

(4.5.1.5) Further details of incentives

The Facilities Manager’s incentives are performance-based and focus on achieving specific water-related targets, such as improving water efficiency, conserving water, and reducing overall water consumption. Success in meeting these goals can result in financial bonuses. The targets are tailored to the Facilities Manager's role, reflecting their responsibility for overseeing and enhancing water management practices within the facilities. These objectives are part of the individual performance scorecard. The Facilities Manager’s scorecard includes water management objectives directly linked to their financial incentives. Achieving or surpassing these goals leads to bonuses and other monetary rewards. Like the CEO, the Facilities Manager has an annual performance review that evaluates their progress on water management targets, which directly impacts their bonuses and overall compensation package.

(4.5.1.6) How the position’s incentives contribute to the achievement of your environmental commitments and/or climate transition plan

The Facilities Manager’s performance incentives are linked to targets focused on water efficiency, conservation, and reducing overall water consumption. These incentives encourage the Facilities Manager to implement and oversee improvements that directly impact the company's water management performance. The specific targets set for the Facilities Manager are designed to address practical aspects of water management, such as optimizing water usage within the facilities, reducing water waste, and improving overall efficiency in water-related operations. Meeting these targets contributes to lowering the company's water footprint and supports broader sustainability goals. By including water management objectives in the Facilities Manager's performance scorecard, Şişecam ensures that water-related goals are embedded into everyday operations and maintenance tasks. This alignment supports the company's overarching sustainability strategy by integrating water management into all operational levels, ensuring that every part of the organization contributes to the company’s water management and conservation commitments.

[Add row]

(4.6) Does your organization have an environmental policy that addresses environmental issues?

	Does your organization have any environmental policies?
	Select from: ☑ Yes

[Fixed row]

(4.6.1) Provide details of your environmental policies.

Row 1

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

☑ Water

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(4.6.1.4) Explain the coverage

Şişecam Group Environmental Policy includes adhering to environmental regulations in the countries where Şişecam operates, fulfilling obligations related to customer and supplier requirements, and ensuring compliance with these standards. The company is dedicated to conserving natural resources and enhancing recycling and recovery efforts in line with a zero-waste approach. A significant aspect of Şişecam's environmental policy is its commitment to minimizing or eliminating adverse environmental impacts from its activities. This involves taking necessary measures to prevent pollution and evaluating environmental effects during investment processes. Furthermore, the policy emphasizes collaboration with relevant stakeholders across all areas of operation. It includes a focus on utilizing energy-efficient and environmentally friendly technologies from the design stage to mitigate the effects of climate change. The approach incorporates a life-cycle perspective to assess all environmental risks and opportunities, setting clear objectives and taking necessary actions for continuous improvement. Monitoring and reporting on environmental performance are integral to the policy, ensuring that progress is tracked and improvements are made regularly. The policy also aims to *enhance awareness and commitment among stakeholders and employees by ensuring understanding and adoption of the policy and increasing environmental consciousness through training programs.*

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to a circular economy strategy

☑ Commitment to take environmental action beyond regulatory compliance

☑ Commitment to stakeholder engagement and capacity building on environmental issues

Water-specific commitments

☑ Commitment to reduce water consumption volumes

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ No, but we plan to align in the next two years

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

Şişecam Environmental Policy_EN.pdf
[Add row]

(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

(4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

Select from:

☑ Yes

(4.10.2) Collaborative framework or initiative

Select all that apply

☑ UN Global Compact

(4.10.3) Describe your organization’s role within each framework or initiative

Şişecam's membership in the UN Global Compact (UNGC) requires the company to adhere to specific international standards and principles. In this context, Şişecam’s role and responsibilities under the UN Global Compact are broadly evaluated. Şişecam is committed to respecting and protecting human rights. This includes creating a fair and human rights-compliant workplace, safeguarding employees' rights, and making a positive impact on communities. Şişecam develops policies to prevent human rights violations and aligns its practices accordingly. Şişecam adheres to UNGC principles related to labor standards. This involves supporting employees' rights to unionize, complying with prohibitions on forced and child labor, and preventing discrimination. The company structures its workforce policies and practices according to these standards. In environmental management, Şişecam complies with UNGC's environmental principles. This includes taking necessary measures to prevent and reduce environmental pollution, promoting eco-friendly technologies, and adopting a zero-waste approach. Şişecam ensures the efficient use of natural resources and integrates these principles into its operations. Şişecam also adheres to UNGC principles in combating corruption. This entails implementing a zero-tolerance policy against bribery and unethical gains and supporting ethical business practices. The company strengthens its internal control mechanisms and transparency principles. As a UNGC member, Şişecam is required to regularly report its sustainability performance and compliance with UNGC principles. These reports transparently present how the company implements these principles and its progress in this regard. Şişecam collaborates with business partners and stakeholders who support and adhere to UNGC principles. The company integrates these principles into its policies and promotes them across all organizational levels. Additionally, Şişecam provides training programs for employees on human rights, environmental management, and ethical business practices. These trainings are crucial for enhancing compliance with UNGC principles and building a knowledgeable workforce. Şişecam’s adherence to the UN Global Compact supports its achievement of sustainability goals and ensures alignment with global standards. This fosters a reliable and responsible business environment for both internal and external stakeholders.

[Fixed row]

(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select all that apply

☑ Yes, we engaged directly with policy makers

(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

☑ Yes, we have a public commitment or position statement in line with global environmental treaties or policy goals

(4.11.3) Global environmental treaties or policy goals in line with public commitment or position statement

Select all that apply

☑ Paris Agreement

☑ Another global environmental treaty or policy goal, please specify

(4.11.4) Attach commitment or position statement

Joint-feedback-by-energy-intensive-industries-to-the-Expert-Group-on-Climate-Change-Policy-–-Free-Allocation-and-carbon-leakage-list-18-April-2023.pdf

(4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

☑ Yes

(4.11.6) Types of transparency register your organization is registered on

Select all that apply

☑ Non-government register

(4.11.7) Disclose the transparency registers on which your organization is registered & the relevant ID numbers for your organization

European Union: As a member of Glass Alliance Europe, Şişecam has contributed to the evaluation of EU-based climate policies and provided input for sector position papers. It participates in working groups on this matter.

(4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

Şişecam actively engages with government bodies and relevant institutions to develop its strategy, set targets, implement technologies, and collaborate with policymakers to advance its climate change vision. The company participates in key projects, such as those with GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH) and PMR, and plays a role in shaping administrative tools like Turkey's National ETS to support the country's climate targets. Leveraging its experience in the EU, Şişecam shares its expertise with Turkish official institutions and industry associations. For the planned national ETS in Turkey, Şişecam contributes to specialized working groups within the Ministry of Environment, Urbanization and Climate Change, and supports benchmarking and cost analysis for the glass industry. The company provides valuable input into the development of legal frameworks and regulatory perspectives that align with its transition plan. Şişecam offers opinions and technical support to several official institutions and professional chambers involved in climate change studies, including the Ministry of Environment, Urbanization and Climate Change, the Ministry of Commerce, the Istanbul Chamber of Industry, and the Turkish Construction Material Manufacturers Association. Furthermore, Şişecam represented Turkey at COP 26, emphasizing the implementation of decisions from the Paris Agreement and striving to limit global warming to below 2C. As a member of Glass Alliance Europe, Şişecam participates in industry discussions and contributes to shaping new regulations and strategies for the sector. This involvement helps the company update its transition plan and align with critical regulations based on its internal commitments.
[Fixed row]

(4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging directly with policy makers in the reporting year?

Row 1

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

TR-Emission Trading System Carbon pricing, taxes and subsidies

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply
☑ Climate change

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Financial mechanisms (e.g., taxes, subsidies, etc.)
☑ Emissions trading schemes

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

☑ National

(4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

☑ Turkey

(4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

☑ Support with no exceptions

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

☑ Regular meetings

☑ Discussion in public forums

☑ Participation in voluntary government programs

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Şişecam actively collaborates with governmental bodies and relevant institutions to ensure that its environmental commitments and transition plans are aligned with both national and international climate goals. By engaging in the development of administrative tools such as Turkey's National ETS and contributing to the creation of legal frameworks, Şişecam ensures that its strategies are consistent with the wider regulatory environment. This alignment supports the company's efforts to reduce greenhouse gas emissions and advance its sustainability agenda. Leveraging its extensive experience in the EU, Şişecam brings valuable insights into effective climate strategies and regulations to Turkish institutions. By sharing this knowledge, the company aids in shaping regulations that not only facilitate its own transition plan but also support the broader industry's adaptation to climate-related challenges. This proactive involvement ensures that Şişecam's strategies are informed by best practices and emerging trends in climate policy. Şişecam's engagement extends to key projects with organizations such as GIZ and PMR, and its *representation at COP 26, reflecting its active role in influencing climate policy and regulatory frameworks. By participating in specialized working groups within the Ministry of Environment, Urbanization, and Climate Change, and offering technical support, Şişecam contributes to shaping regulatory perspectives that affect its operations. The company's contributions to benchmarking, cost analysis, and legal framework development help ensure that new regulations are practical and aligned with industry needs. This collaborative effort assists in crafting policies that facilitate a smoother transition for Şişecam and its industry peers. Success is measured by the alignment of Şişecam's environmental strategies and transition plans with the regulations and policies it helps shape. This includes assessing the effectiveness of regulatory tools like the National ETS in meeting climate targets and reducing emissions. The company evaluates its success through stakeholder feedback, including responses from government bodies, industry associations, and other partners. Positive feedback and recognition of Şişecam's role in shaping effective climate policies are indicators of successful engagement.*

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

☑ Paris Agreement

[Add row]

(4.12) Have you published information about your organization's response to environmental issues for this reporting year in places other than your CDP response?

Select from:

☑ Yes

(4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

Row 1

(4.12.1.1) Publication

Select from:

☑ In mainstream reports, in line with environmental disclosure standards or frameworks

(4.12.1.2) Standard or framework the report is in line with

Select all that apply

☑ GRI

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Governance

☑ Emission targets

☑ Emissions figures

☑ Public policy engagement

☑ Water accounting figures

(4.12.1.6) Page/section reference

Emission Target & Strategy: 26 Governance: 20 Public policy engagement: 27 Emission Figures: 107 Water Accounting: 104

(4.12.1.7) Attach the relevant publication

Şişecam Sustainability Report_2023_en.pdf

(4.12.1.8) Comment

This report outlines our approach to managing the value and impact created through our operations, highlights our sustainability priorities, details our contributions to the United Nations (UN) Sustainable Development Goals, and reviews our performance against established targets. Prepared in accordance with GRI Standards, the report encompasses our activities across various business lines, including architectural glass, industrial glass, glass packaging, glassware, chemicals, energy, and other sectors, covering the period from January 1, 2023, to December 31, 2023.
[Add row]

C5. Business strategy

(5.1) Does your organization use scenario analysis to identify environmental outcomes?

Climate change

(5.1.1) Use of scenario analysis

Select from:
☑ Yes

(5.1.2) Frequency of analysis

Select from:
☑ Annually

Water

(5.1.1) Use of scenario analysis

Select from:
☑ Yes

(5.1.2) Frequency of analysis

Select from:
☑ Annually
[Fixed row]

(5.1.1) Provide details of the scenarios used in your organization's scenario analysis.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ IEA NZE 2050

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Liability

☑ Reputation

☑ Technology

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2040

☑ 2050

(5.1.1.9) Driving forces in scenario

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

“Şişecam Low Carbon Road Map” study, several assumptions, uncertainties, and constraints play a crucial role in shaping the scenario analyses. Assumptions include factors such as energy and carbon pricing, grid decarbonization rates, feedstock prices, and the costs of Guarantees of Origin (GOOs) and green energy procurement. Additionally, the model assumes varying levels of economic growth and technological innovation, which can significantly impact the cost and carbon reduction potential of different decarbonization pathways. Uncertainties in these scenarios arise from the unpredictable nature of future regulatory changes, market dynamics, and technological advancements. Constraints include the availability of green technologies, the feasibility of implementing new solutions at scale, and the financial implications of transitioning to low-carbon pathways. These factors collectively influence the model’s projections and necessitate a thorough sensitivity analysis to understand their impact on the overall decarbonization strategy.

(5.1.1.11) Rationale for choice of scenario

The “Şişecam Low Carbon Road Map” project encompasses glass production activities and aims to analyze Şişecam's carbon reduction potential, required technologies, and investment needs. This study is conducted with scenario-based analyses. The project involves calculating the costs and carbon reduction potentials of different decarbonization pathways and scenarios. These scenarios may vary based on assumptions such as energy and carbon pricing, grid decarbonization rates, feedstock prices, the cost of Guarantees of Origin (GOOs) and green energy procurement, economic growth, and technological innovation.In the first phase, Şişecam plans to invest an additional 53 MWp for on-site production. In the second phase, the company is evaluating long-term “green” power purchase agreements to offset Scope 2 emissions. Additionally, zero-carbon electricity generated from the waste heat of Şişecam’s glass melting furnaces will be utilized.Şişecam has developed an R&D application program to test new technologies aimed at reducing carbon-containing fuels and raw material consumption. Investments are planned in hybrid furnace technologies, including electric melting furnaces. As a first step, Şişecam aims to convert one of its glassware furnaces to a full-electric melting technology to gain expertise. Green hydrogen technologies are also being explored through participation in national and international projects.Şişecam has set a net-

zero emissions target by 2050 in alignment with the Paris Agreement. Setting interim targets for 2030 has proven challenging due to the scale of operations and consumption patterns, hence the focus remains on the 2050 net-zero target. This target guides Şişecam's business strategies and investments, aiming to align with global goals and regulations while minimizing the impact of potential climate-related risks.

Water

(5.1.1.1) Scenario used

Water scenarios

☑ WRI Aqueduct

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Liability

☑ Reputation

☑ Acute physical

☑ Chronic physical

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Climate change (one of five drivers of nature change)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Şişecam's water risk analysis, covering 45 facilities, was conducted based on WRI Aqueduct Risk Atlas's 2050 pessimistic scenario, with the assumption that water consumption trends will align with the company's targets, while accounting for various uncertainties and data constraints. Assumptions The analysis assumes that Şişecam's total water consumption will change in line with its corporate goals. This suggests the assumption that the company will successfully implement water-saving technologies and management practices to meet its targets. The scenario relies on the accuracy of data provided by WRI's Aqueduct tool, particularly for the 2050 pessimistic scenario, which projects water risk factors like droughts and water stress. It assumes that the WRI's 2050 pessimistic projections are realistic, implying a significant deterioration in water availability and quality in the future due to climate change, population growth, and industrial expansion. Uncertainties: The exact extent and impact of future climate change are uncertain, which affects the reliability of long-term water risk predictions. Also, uncertainty exists around the future development and adoption of more efficient water-saving technologies within Şişecam's facilities. Moreover, potential shifts in local and international water usage regulations could influence the risk analysis, as water policies may evolve to address growing water scarcity. Additionally, changes in economic conditions, such as fluctuating demand for products and regional economic development, could impact water consumption patterns and stress on water resources. Constraints The company's ability to reduce water consumption may be limited by external factors such as the availability of technologies or government incentives, which may not align with the company's timelines for meeting its water-related goals. Also, inadequate or outdated local data could skew risk assessments.

(5.1.1.11) Rationale for choice of scenario

The company has selected WRI's 2050 pessimistic scenario for its water strategies due to several key factors. This scenario outlines the most severe potential impacts of climate change on water resources, providing a framework to prepare for the most challenging conditions. By doing so, the company can optimize its water management policies to ensure resilience in the face of future risks. In alignment with its sustainability objectives, the company also aims to realistically assess risks such as water scarcity and increasing demand. The 2050 pessimistic scenario offers insights into future pressures on water resources in the regions where its facilities operate, enabling the company to manage these resources more effectively and mitigate potential risks.

[Add row]

(5.1.2) Provide details of the outcomes of your organization’s scenario analysis.

Climate change

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

☑ Risk and opportunities identification, assessment and management

☑ Target setting and transition planning

(5.1.2.2) Coverage of analysis

Select from:

☑ Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

The outcomes of Şişecam’s scenario analysis provide a comprehensive view of the company’s potential pathways to achieving its carbon reduction goals and understanding the associated costs. The “Şişecam Low Carbon Road Map” project, utilizing scenario-based analyses, reveals several key insights. Firstly, the analysis demonstrates the cost implications and carbon reduction potentials of various decarbonization strategies under different scenarios. These scenarios consider diverse assumptions, including energy and carbon pricing, the rate of grid decarbonization, feedstock prices, the cost of Guarantees of Origin (GOOs), and green energy procurement. The study highlights that transitioning to lower carbon pathways involves significant capital and operational expenditures, but these costs are offset by substantial reductions in carbon emissions. The results indicate that substantial investment in new technologies, such as electric melting furnaces and green hydrogen, will be essential for meeting long-term decarbonization targets. For instance, converting a glass furnace to full-electric technology is expected to provide valuable expertise and facilitate future dissemination of this technology. Additionally, the analysis underscores the importance of long-term “green” power purchase agreements and the utilization of zero-carbon electricity generated from waste heat in reducing Scope 2 emissions. The sensitivity analysis conducted as part of the project reveals how various factors—such as energy prices, carbon pricing mechanisms like the EU ETS and CBAM, and economic growth—affect the feasibility and cost-effectiveness of different decarbonization pathways. The scenario analysis also highlights the necessity of prioritizing energy efficiency and the use of renewable energy sources to manage operational costs and minimize exposure to climate-related risks. By identifying the most cost-effective and impactful decarbonization strategies, Şişecam is better equipped to implement a solid action plan, align its business strategies with global climate goals, and enhance its resilience against potential climate-related disruptions. Overall, the outcomes of the scenario analysis provide a strategic roadmap for Şişecam’s journey towards achieving its net-zero emissions target by 2050.

Water

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

☑ Risk and opportunities identification, assessment and management

☑ Target setting and transition planning

(5.1.2.2) Coverage of analysis

Select from:

☑ Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

The scenario analysis based on WRI's 2050 pessimistic scenario highlights several significant challenges related to water resources. It predicts increased water stress, with higher risks of droughts and reduced water availability in the regions where the company operates. This situation could lead to operational disruptions, impacting production and raising costs. As a result, there will be a heightened need for advanced water-saving technologies and improved management practices to address these risks effectively. The implications of these outcomes extend beyond water management. For instance, increased water stress may also influence energy consumption, particularly in water-intensive processes like cooling for power generation, potentially affecting greenhouse gas emissions. Additionally, water scarcity could lead to higher pollutant concentrations in wastewater, which in turn necessitates more sophisticated treatment solutions and could increase waste management costs. Moreover, reduced water availability can impact local ecosystems and biodiversity, affecting species dependent on stable water sources. Therefore, adopting sustainable water practices is crucial not only for managing water resources but also for mitigating these broader environmental impacts. The interconnected nature of water stress and climate change underscores the importance of integrated environmental strategies that address multiple issues simultaneously, enhancing overall resilience.

[Fixed row]

(5.2) Does your organization's strategy include a climate transition plan?

(5.2.1) Transition plan

Select from:

☑ Yes, we have a climate transition plan which aligns with a 1.5°C world

(5.2.3) Publicly available climate transition plan

Select from:

☑ No

(5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

☑ No, but we plan to add an explicit commitment within the next two years

(5.2.6) Explain why your organization does not explicitly commit to cease all spending on and revenue generation from activities that contribute to fossil fuel expansion

Şişecam's approach to addressing fossil fuel expansion reflects a nuanced strategy that balances its long-term sustainability goals with operational and economic realities. The company has not explicitly committed to ceasing all spending on and revenue generation from activities that contribute to fossil fuel expansion for several reasons. Firstly, Şişecam operates within a sector that is inherently energy-intensive, and fossil fuels currently play a significant role in the glass manufacturing process, particularly in melting furnaces. Transitioning away from fossil fuels entirely requires significant technological advancements and investments, which are still evolving. The company is focusing on integrating green technologies and reducing its reliance on fossil fuels gradually, aligning with its 2050 net-zero target. Secondly, Şişecam is actively investing in alternative technologies and renewable energy sources, such as green hydrogen and electric melting technologies. These investments are part of a broader strategy to reduce the company's carbon footprint and transition towards more sustainable practices. However, the transition to these technologies is a complex and gradual process, and the complete cessation of fossil fuel use cannot be achieved overnight. Thirdly, Şişecam's commitment to sustainability includes a focus on reducing carbon intensity and improving energy efficiency rather than an immediate and total divestment from fossil fuels. The company’s strategy involves enhancing energy efficiency, investing in renewable energy, and exploring new technologies to mitigate the impact of fossil fuel use. In summary, while Şişecam is dedicated to reducing its environmental impact and transitioning towards sustainable practices, an immediate cessation of all fossil fuel-related activities is not feasible given current technological and economic constraints. The company is pursuing a strategic, phased approach to gradually minimize its fossil fuel dependency while investing in innovative and cleaner technologies.

(5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

☑ Our climate transition plan is voted on at Annual General Meetings (AGMs)

(5.2.10) Description of key assumptions and dependencies on which the transition plan relies

The transition plan developed by Şişecam is based on several key assumptions and dependencies. Primarily, the plan assumes significant technological advancements in areas such as green hydrogen production, electric melting technologies, and carbon capture and storage (CCS). These developments are crucial for reducing dependence on fossil fuels and achieving the targeted carbon reductions. Additionally, the plan presumes the continuous availability and decreasing costs of renewable energy sources, particularly green electricity and green hydrogen. These resources are essential for balancing emissions and facilitating the *transition from fossil fuels. The transition strategy also relies on supportive regulatory environments, including climate policies, carbon pricing mechanisms, and renewable energy incentives. It is further dependent on the increasing market demand for energy-efficient and sustainable glass products. With tightening regulations and a shift in consumer preferences towards sustainability, there is anticipated growth in demand for photovoltaic glass and high-performance coatings. The plan also depends on stable economic conditions, which are necessary to support investments in new technologies and infrastructure. Economic instability could affect capital access and the pace of the transition. Successful implementation of the transition plan hinges on the effective development and integration of new technologies. Technological advancements in electric melting furnaces, green hydrogen production, and energy-efficient processes are critical to the feasibility of the plan. Additionally, the plan is contingent on stability in the energy market and access to renewable energy. Fluctuations in energy prices or supply disruptions could impact the cost-effectiveness of the transition. Compliance with current and future regulations is also essential.*

(5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

In the most recent period, Şişecam has made significant strides in advancing its transition plan towards a low-carbon future. The company's efforts are closely aligned with its CareforNext 2030 Sustainability Goals, which include achieving carbon neutrality by 2050. Noteworthy progress includes the expansion of renewable energy capacity, with significant investments in solar and wind energy projects. The company has established a 53 MW installed renewable energy capacity and continues to develop its photovoltaic solar glass offerings to meet the growing demand for renewable energy solutions. Şişecam has also been actively involved in increasing its energy glass processing capacity and integrating advanced technologies to reduce carbon emissions. In 2023, Şişecam has focused on improving its energy efficiency and sustainability practices, including the installation of Continuous Emission Monitoring Systems (CEMS) in its facilities. These systems, now numbering 19 across Turkey and Europe, enhance the company's ability to monitor and manage its emissions. Additionally, Şişecam has made strides in its research and development efforts, particularly in the areas of green hydrogen technologies and electric melting furnace technologies, which are pivotal for reducing the carbon intensity of its operations. The company's transition plan is supported by strategic partnerships and memberships in various international organizations, such as the European Solar Photovoltaic Industry Alliance and Hydrogen Europe. These collaborations provide Şişecam with access to cutting-edge technologies and market insights essential for achieving its sustainability goals. Furthermore, Şişecam has initiated several projects to close the supply gap in the energy glass sector and reinforce its position as a leader in both the Turkish and global glass industries.

(5.2.12) Attach any relevant documents which detail your climate transition plan (optional)

Şişecam Sustainability Report_2023_en.pdf

(5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

☑ Water

(5.2.14) Explain how the other environmental issues are considered in your climate transition plan

Şişecam considers water as a critical environmental issue in its climate transition plan by addressing both the risks associated with water scarcity and the opportunities for water conservation. Recognizing that water is essential for operational sustainability and that inefficient water use poses significant risks, Şişecam implements a comprehensive approach to water management. This includes regional and site-specific assessments to identify and address potential inefficiencies.

The company emphasizes reducing freshwater consumption across its operations and ensures that water usage is closely monitored and managed. In its transition plan, Şişecam actively follows sectoral best practices and strives to enhance the recoverability of water within its facilities. The company has introduced several initiatives to improve water use efficiency, such as implementing reverse osmosis systems to save significant volumes of water and optimizing wastewater treatment processes to reduce freshwater intake. Additionally, Şişecam is engaged in ongoing projects to further reduce water use and waste, including the development of special treatment systems to enhance water recycling. These measures align with Şişecam's broader climate objectives, aiming to reduce its environmental impact and contribute to sustainable water management. The company's proactive efforts to improve water efficiency and minimize its water footprint are integral to its overall climate transition strategy.
[Fixed row]

(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

(5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:
☑ Yes, both strategy and financial planning

(5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply
☑ Products and services
☑ Upstream/downstream value chain
☑ Investment in R&D
☑ Operations
[Fixed row]

(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

Products and services

(5.3.1.1) Effect type

Select all that apply
☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

☑ Water

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Environmental risks and opportunities significantly shape Şişecam's strategy regarding products and services. The company is increasingly focused on developing and offering products that are energy-efficient and environmentally friendly. For example, the push towards reducing carbon emissions has led to the design of more sustainable products, such as those incorporating recycled materials or those designed to minimize environmental impact throughout their lifecycle. Opportunities in this area also include responding to growing consumer demand for green products, which drives innovation and differentiation in the market. This alignment with environmental goals enhances Şişecam's market position and supports its commitment to sustainability.

Upstream/downstream value chain

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

☑ Water

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

In the upstream and downstream value chain, Şişecam addresses environmental risks by working closely with suppliers to ensure they meet environmental standards and by fostering transparency in its supply chain. The company emphasizes sourcing materials responsibly and reducing emissions associated with raw materials and logistics. Opportunities within the value chain are leveraged by integrating sustainability into procurement practices, which not only mitigates risks but also *enhances the overall environmental performance of the value chain. For instance, Şişecam's efforts to collaborate with suppliers on sustainable practices and technologies contribute to reducing the environmental footprint across its operations.*

Investment in R&D

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

☑ Water

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Environmental considerations heavily influence Şişecam's research and development (R&D) investments. The company prioritizes R&D projects that focus on developing technologies and solutions to address environmental challenges, such as reducing carbon emissions, enhancing energy efficiency, and improving waste management. By investing in innovative technologies and sustainable practices, Şişecam aims to stay ahead of regulatory requirements and market trends, thus capitalizing on opportunities for growth and leadership in the green technology space. The focus on R&D not only helps mitigate environmental risks but also drives long-term value creation and supports the company's sustainability goals.

Operations

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

☑ Water

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Environmental risks and opportunities are integral to Şişecam's operational strategy. The company has implemented various measures to minimize its environmental impact, such as adopting energy-efficient technologies, optimizing resource use, and reducing waste. Operational adjustments are made to enhance efficiency and sustainability, driven by the need to comply with environmental regulations and to capitalize on opportunities for operational excellence. Şişecam's commitment to reducing its environmental footprint through improvements in its operations aligns with its broader climate strategy and contributes to achieving its sustainability targets.

[Add row]

(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

Row 1

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Revenues

☑ Direct costs

☑ Indirect costs

☑ Capital expenditures

(5.3.2.2) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

☑ Climate change

(5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

Şişecam's financial planning incorporates strategies to manage and mitigate environmental risks, such as those related to regulatory compliance, resource scarcity, and climate change impacts. The company allocates resources to ensure compliance with environmental regulations and to implement mitigation measures, which helps avoid potential fines and operational disruptions. For instance, investments in pollution control technologies and waste management systems are accounted for in the financial plan to address risks related to environmental regulations and to minimize operational disruptions. Additionally, Şişecam considers the potential cost implications of climate-related risks, such as increased energy costs or raw material shortages, and adjusts its financial strategies accordingly to buffer against these risks. Opportunities related to environmental sustainability drive Şişecam's financial planning by guiding investments in initiatives that enhance long-term value and competitiveness. The company invests in energy-efficient technologies, renewable energy sources, and sustainable production practices, recognizing that these investments not only help reduce operational costs but also align with market demands and regulatory trends. Financial planning includes budgeting for R&D projects focused on sustainable technologies and innovative solutions that offer competitive advantages and potential cost savings in the future. Şişecam's approach to capital expenditure reflects its commitment to addressing environmental risks and seizing opportunities. The company strategically plans capital investments to support sustainable practices and to upgrade facilities with environmentally friendly technologies. This includes investments in renewable energy projects, such as solar and wind power, and in improving the energy efficiency of its production processes. By incorporating environmental considerations into its long-term planning, Şişecam ensures that its capital expenditures contribute to achieving its sustainability goals while providing financial returns over time. The growing market demand for eco-friendly products and services creates opportunities for Şişecam to develop and offer products that cater to environmentally conscious consumers. This shift toward sustainable products can lead to increased revenue and market share. Financial plans account for the potential revenue growth associated with these opportunities.

[Add row]

(5.4) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Methodology or framework used to assess alignment with your organization's climate transition
	Select from: ☑ Yes	*Select all that apply* ☑ Other methodology or framework

[Fixed row]

(5.4.1) Quantify the amount and percentage share of your spending/revenue that is aligned with your organization’s climate transition.

Row 1

(5.4.1.1) Methodology or framework used to assess alignment

Select from:
☑ Other, please specify

(5.4.1.5) Financial metric

Select from:
☑ CAPEX

(5.4.1.6) Amount of selected financial metric that is aligned in the reporting year (currency)

50000000

(5.4.1.7) Percentage share of selected financial metric aligned in the reporting year (%)

5

(5.4.1.8) Percentage share of selected financial metric planned to align in 2025 (%)

10

(5.4.1.9) Percentage share of selected financial metric planned to align in 2030 (%)

15

(5.4.1.12) Details of the methodology or framework used to assess alignment with your organization’s climate transition

erewr
[Add row]

(5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

(5.5.1) Investment in low-carbon R&D

Select from:

☑ Yes

(5.5.2) Comment

Şişecam invests significantly in research and development (R&D) of low-carbon products and services related to its sector activities. As part of its sustainability strategy, the company focuses on developing innovative solutions aimed at reducing carbon emissions across its operations and product portfolio. Şişecam invests in creating glass and chemical products that offer higher energy efficiency and contribute to reducing greenhouse gas emissions in end-use applications. For example, it develops energy-saving glass products for construction and automotive industries, which help reduce energy consumption in buildings and vehicles. Şişecam supports R&D initiatives that focus on clean technologies and production processes, which contribute to lowering the carbon footprint of its operations. This includes enhancing production efficiency, reducing energy consumption, and adopting innovative methods for recycling waste materials. The company also invests in R&D for renewable energy applications, particularly solar energy solutions, to integrate renewable energy sources into its production processes. Additionally, Şişecam explores ways to incorporate circular economy principles, such as the recycling and reuse of raw materials, into its operations, helping to reduce overall emissions.
[Fixed row]

(5.5.3) Provide details of your organization’s investments in low-carbon R&D for chemical production activities over the last three years.

Row 1

(5.5.3.1) Technology area

Select from:

☑ Chemical production using variable renewables

(5.5.3.2) Stage of development in the reporting year

Select from:

☑ Applied research and development

(5.5.3.3) Average % of total R&D investment over the last 3 years

0

(5.5.3.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

0

(5.5.3.5) Average % of total R&D investment planned over the next 5 years

0

(5.5.3.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Soda Ash production is at the center of our chemical production. We are aware of the high level of scope 1 emissions in these production facilities, and we are working to find alternative solutions in this area in the future. We have not made any R&D investments in this area in the previous 3 years. In addition, in the 5-year projection, we cannot give a clear rate here due to both the changes that may occur in technologies and the fact that the relevant projects are still under review.
[Add row]

(5.9) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

(5.9.1) Water-related CAPEX (+/- % change)

12.5

(5.9.2) Anticipated forward trend for CAPEX (+/- % change)

-1

(5.9.3) Water-related OPEX (+/- % change)

-1

(5.9.4) Anticipated forward trend for OPEX (+/- % change)

-1

(5.9.5) Please explain

In 2022, Şişecam's investments related to water management amounted to approximately 16 million Euros, while in 2023, this figure increased significantly to 16 million Euros. This demonstrates a notable upward trend in water-related investments. Although specific investment plans for 2024 have been established, the total CAPEX and OPEX values are yet to be finalized. A clearer picture of this trend is expected to emerge in the next reporting cycle.
[Fixed row]

(5.10) Does your organization use an internal price on environmental externalities?

(5.10.1) Use of internal pricing of environmental externalities

Select from:

☑ No, but we plan to in the next two years

(5.10.3) Primary reason for not pricing environmental externalities

Select from:

☑ No standardized procedure

(5.10.4) Explain why your organization does not price environmental externalities

Şişecam does not currently implement an internal carbon or water pricing mechanism due to several factors related to the nature of its operations, regulatory environment, and existing sustainability strategies. Şişecam operates in a regulatory environment where mandatory carbon or water pricing systems may not be fully established or standardized. As a result, the company aligns its strategies with existing external pricing mechanisms rather than introducing internal pricing structures. Rather than focusing on internal pricing, Şişecam prioritizes direct investments in energy efficiency, water management, and emission reduction initiatives. These

investments target tangible improvements in operational sustainability, such as reducing energy consumption, enhancing water reuse, and adopting cleaner technologies. Şişecam emphasizes innovation and R&D in low-carbon products and services, renewable energy, and circular economy practices, which contribute to reducing the overall environmental impact without the need for an internal carbon or water price. The company already tracks and reports environmental performance metrics, including energy use, emissions, and water consumption, as part of its broader sustainability goals. These efforts provide insight into environmental impacts and opportunities for reduction without formalizing an internal pricing structure.
[Fixed row]

(5.11) Do you engage with your value chain on environmental issues?

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Suppliers	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Customers	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change
Investors and shareholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Other value chain stakeholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change

[Fixed row]

(5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?

Climate change

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

☑ Yes, we assess the dependencies and/or impacts of our suppliers

(5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

☑ Contribution to supplier-related Scope 3 emissions

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

☑ 100%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

Şişecam defines a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment based on their contribution to key environmental factors such as resource usage, emissions, and waste generation. Suppliers that significantly contribute to Şişecam's environmental footprint, particularly in areas such as raw material sourcing, energy consumption, and waste management, are classified under this category.

(5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

Select from:

☑ 51-75%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

6725

Water

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

☑ No, we do not currently assess the dependencies and/or impacts of our suppliers, but we plan to do so within the next two years

[Fixed row]

(5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

Climate change

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

☑ In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to climate change

☑ Business risk mitigation

☑ Material sourcing

☑ Regulatory compliance

☑ Supplier performance improvement

(5.11.2.4) Please explain

Şişecam prioritizes engaging with suppliers on environmental issues by focusing on those with the most significant environmental impacts or those playing critical roles in the company's value chain. Suppliers whose activities contribute substantially to carbon emissions, water usage, energy consumption, and waste production are prioritized. For example, raw material suppliers involved in resource extraction and transportation are often a focal point due to the potential environmental footprint associated with their operations. Suppliers that provide essential materials or services critical to Şişecam's production processes, such as glass, soda ash, or packaging, are prioritized for engagement on environmental issues to ensure a sustainable supply chain. Suppliers with lower sustainability performance, as identified through assessments or audits, receive increased attention and support for improvement initiatives, such as carbon footprint reduction or resource efficiency. Through this targeted approach, Şişecam works closely with priority suppliers to enhance their environmental practices, ensuring alignment with the company's sustainability goals and reducing overall environmental risks across the value chain.

Water

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

☑ Business risk mitigation

☑ Material sourcing

☑ Supplier performance improvement

(5.11.2.4) Please explain

We prioritize suppliers that operate in high-risk areas to mitigate potential environmental and regulatory risks to our supply chain. Additionally, suppliers of critical materials with significant environmental impacts are given priority to support sustainable sourcing practices. Finally, we focus on suppliers with the potential for substantial environmental performance improvements, helping us align their practices with our overall sustainability goals. This approach ensures that our engagement drives meaningful progress in reducing environmental impacts across the supply chain.
[Fixed row]

(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?

Climate change

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☑ No, but we plan to introduce environmental requirements related to this environmental issue within the next two years

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ No, we do not have a policy in place for addressing non-compliance

(5.11.5.3) Comment

Şişecam recognizes the critical importance of integrating environmental requirements into its purchasing process and aims to implement these practices within the next two years. Currently, environmental considerations are not a formal part of the procurement process, but there is a clear commitment to address this gap. Given Şişecam's existing efforts in sustainable value chain management, which include rigorous evaluation and development programs for suppliers, a strategic focus on sustainability, and active engagement with industry standards such as SEDEX, BSCI, and ECOVADIS, the organization is well-positioned to enhance its procurement practices. The upcoming integration of environmental requirements will align with Şişecam's established commitment to improving environmental performance across its value chain. To ensure effective implementation, Şişecam plans to build on its current supplier management frameworks, which already emphasize sustainability, by incorporating specific environmental criteria into supplier evaluations. This will involve defining thresholds for environmental impact, setting clear expectations for suppliers, and prioritizing those who align with Şişecam's environmental goals. The integration of environmental requirements into the purchasing process will further bolster Şişecam's commitment to sustainability and support the company's broader environmental and social governance objectives.

Water

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☑ Yes, suppliers have to meet environmental requirements related to this environmental issue, but they are not included in our supplier contracts

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ No, we do not have a policy in place for addressing non-compliance

(5.11.5.3) Comment

When evaluating our suppliers, we consider several important environmental criteria. First, we assess the presence of an Environmental Management System (EMS), which reflects the supplier's ability to manage and improve their environmental performance. The existence of ISO 14001 certification is also critical, as it demonstrates adherence to internationally recognized environmental management standards. We further evaluate whether the supplier has experienced non-conformances during ISO 14001 audits, which may indicate areas needing improvement. Additionally, we check if the supplier conducts wastewater control and periodic wastewater measurements, ensuring they monitor and manage their environmental impact effectively. Compliance with legal limits for wastewater treatment is another key factor, as it ensures suppliers meet regulatory requirements. Finally, the presence of a wastewater treatment system is crucial for evaluating the

supplier's capacity to manage water pollution responsibly. By considering these factors, we prioritize suppliers who not only comply with environmental regulations but also actively engage in sustainable practices.
[Fixed row]

(5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Water

(5.11.6.1) Environmental requirement

Select from:
☑ Compliance with an environmental certification, please specify :ISO 14001

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply
☑ Certification

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:
☑ 1-25%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:
☑ 1-25%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:
☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ Unknown

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Other, please specify

(5.11.6.12) Comment

We begin by evaluating whether the supplier has implemented an Environmental Management System (EMS), as this indicates their capacity to manage and enhance their environmental performance. The presence of ISO 14001 certification is equally important, as it confirms compliance with globally recognized environmental management practices. We also review any non-conformances identified during ISO 14001 audits, which could highlight areas that require improvement. Furthermore, we verify if the supplier actively manages wastewater through regular monitoring and control measures to ensure they effectively minimize their environmental impact.

[Add row]

(5.11.7) Provide further details of your organization’s supplier engagement on environmental issues.

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ No other supplier engagement

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ No other supplier engagement

[Add row]

(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 1-25%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 1-25%

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information about your products and relevant certification schemes

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 1-25%

[Add row]

(5.13) Has your organization already implemented any mutually beneficial environmental initiatives due to CDP Supply Chain member engagement?

(5.13.1) Environmental initiatives implemented due to CDP Supply Chain member engagement

Select from:

☑ No, but we plan to within the next two years

(5.13.2) Primary reason for not implementing environmental initiatives

Select from:

☑ No standardized procedure

(5.13.3) Explain why your organization has not implemented any environmental initiatives

Şişecam has not engaged in any mutually beneficial environmental initiatives/investments with its customers who have already made a CDP request. It transparently shares information with its customers in line with the requests made by its customers. In this context, it meets the relevant expectations through reporting and platforms such as CDP, Ecovadis and Refinitiv. In the past years, apart from this information flow, there were no concrete investments that would provide mutual environmental benefits with its customers.

[Fixed row]

C6. Environmental Performance - Consolidation Approach

(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

Climate change

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

Şişecam applies the operational control approach for climate change data across all its lines of business and groups, including Architectural Glass, Glass Packaging, Industrial Glass, Chemicals, and Other sectors. This approach allows Şişecam to capture and manage GHG emissions data from all facilities where it has the authority to implement operational policies. By consolidating emissions from operations across diverse product lines—such as flatglass, glass packaging, glassware, autoglass, and chemical production—Şişecam ensures a comprehensive and consistent approach to monitoring and reducing its carbon footprint. This consolidation method aligns with the GHG Protocol's standards, enabling effective environmental performance management across all controlled operations.

Water

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

Şişecam utilizes the operational control approach for water-related data across all its lines of business and groups, including Architectural Glass, Glass Packaging, Industrial Glass, Chemicals, and Other sectors. This approach allows Şişecam to include all water usage and management practices from operations under its control, ensuring a consistent and comprehensive approach to monitoring and reducing water consumption. By consolidating water data from a diverse range of facilities, including those involved in flatglass production, glass packaging, glassware, and chemical processing, Şişecam can implement water efficiency and conservation measures uniformly across all its operations. This approach supports Şişecam's efforts to minimize water-related impacts and align with industry best practices and regulatory requirements.

Plastics

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

For plastics, Şişecam uses the operational control approach across all lines of business and groups, ensuring that environmental impacts related to plastic use are managed uniformly across its facilities. This approach is essential for implementing waste management, recycling, and circular economy initiatives consistently, regardless of the specific LoB or group. By consolidating data from all operations—including glass packaging, flatglass, glassware, and other manufacturing activities—Şişecam effectively tracks and manages plastic-related impacts, supporting its broader sustainability objectives and compliance with environmental standards.

Biodiversity

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

The operational control approach is also used by Şişecam for biodiversity data across all lines of business and groups, including Architectural Glass, Glass Packaging, Industrial Glass, Chemicals, and Other sectors. This approach enables Şişecam to apply consistent biodiversity conservation and management practices across all operations under its control. By consolidating data from a wide range of facilities—covering activities from flatglass and autoglass production to glassware and chemical processing—Şişecam ensures that biodiversity impacts are monitored and mitigated in a unified manner, aligning with its environmental management goals and international best practices.

[Fixed row]

C7. Environmental performance - Climate Change

(7.1) Is this your first year of reporting emissions data to CDP?

Select from:
☑ No

(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

	Has there been a structural change?
	Select all that apply ☑ No

[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?
	Select all that apply ☑ No

[Fixed row]

(7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Select all that apply

☑ ISO 14064-1

☑ The Greenhouse Gas Protocol: Scope 2 Guidance

☑ IPCC Guidelines for National Greenhouse Gas Inventories, 2006

☑ US EPA Emissions & Generation Resource Integrated Database (eGRID)

☑ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

☑ Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019

(7.3) Describe your organization's approach to reporting Scope 2 emissions.

(7.3.1) Scope 2, location-based

Select from:

☑ We are reporting a Scope 2, location-based figure

(7.3.2) Scope 2, market-based

Select from:

☑ We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

(7.3.3) Comment

Although we have several electricity emission factors, they are not provided from any supplier, nothing but national electricity emission factors. During calculation of Scope-2 location based emissions, International Energy Agency (IEA) emission factors are used.

[Fixed row]

(7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Select from:

☑ No

(7.5) Provide your base year and base year emissions.

Scope 1

(7.5.1) Base year end

12/30/2020

(7.5.2) Base year emissions (metric tons CO2e)

7156729

(7.5.3) Methodological details

Scope 1 emissions were determined according to GHG Protocol guidelines, using data on fuel consumption from stationary (natural gas, diesel) and mobile sources (motor gasoline, diesel), as well as CO2 emissions from fire extinguishers and refrigerants. Emission factors were sourced from IPCC and DEFRA, applying standard assumptions regarding fuel types and the global warming potential (GWP) of the gases used.

Scope 2 (location-based)

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

920977

(7.5.3) Methodological details

Scope 2 emissions were calculated following the GHG Protocol, based on electricity consumption data. The national grid emission factors were used for both the market-based and location-based approaches. As Power Purchase Agreements (PPA) are not available, the emissions for both methods are identical.

Scope 2 (market-based)

(7.5.1) Base year end

12/30/2020

(7.5.2) Base year emissions (metric tons CO2e)

920977

(7.5.3) Methodological details

Scope 2 emissions were calculated following the GHG Protocol, based on electricity consumption data. The national grid emission factors were used for both the market-based and location-based approaches. As Power Purchase Agreements (PPA) are not available, the emissions for both methods are identical.

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

1078422.02

(7.5.3) Methodological details

Emissions were calculated based on the quantity and type of purchased goods and services, accounting for upstream emissions from raw material extraction, production, and supply chain impacts. This calculation utilized supplier data, emission factors from Ecoinvent and EPA, applying a supplier-specific and spend-based method to ensure accurate estimates of emissions per material type. The approach aligns with GHG Protocol standards, ensuring comprehensive reporting of emissions throughout the supply chain.

Scope 3 category 2: Capital goods

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

91103.15

(7.5.3) Methodological details

Emissions from capital goods were calculated using a spend-based approach, considering the upstream impacts associated with the production and distribution of these goods. Emission factors were sourced from the EPA database, and assumptions were aligned with average data methods due to the diverse nature of capital goods. This category reflects the overall capital expenditure and uses average emission factors for broader applicability.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

1225393.79

(7.5.3) Methodological details

Emissions were assessed using an average data method based on fuel and energy consumption that is not covered under Scope 1 or Scope 2. Emission factors were derived from DEFRA, ensuring consistency with recognized standards. Inputs included total fuel and energy use, and standard emission factors were applied based on the type of fuel consumed.

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

416735.69

(7.5.3) Methodological details

This category's emissions were calculated using a distance-based method, covering all upstream transportation activities related to purchased goods. Emission factors were sourced from DEFRA, tailored to different transportation modes and distances.

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

80614

(7.5.3) Methodological details

Emissions from waste generated in operations were calculated using a waste-type-specific method, utilizing emission factors from DEFRA. The calculations considered different waste types and disposal methods, with assumptions made on average waste compositions when specific data was not available. This approach ensures that all operational waste emissions are accounted for accurately.

Scope 3 category 6: Business travel

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

3631.1

(7.5.3) Methodological details

Emissions from business travel were calculated based on the distance traveled and the mode of transportation used. DEFRA emission factors were applied to various travel modes, including air, train, and car. Assumptions are based on typical business travel patterns, and the calculation includes upstream emissions from travel activities.

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

17794.47

(7.5.3) Methodological details

Emissions from employee commuting were calculated based on the number of employees, commuting distance, and the mode of transportation used. DEFRA emission factors were applied for different transport methods such as public transport, private vehicles, and cycling. Inputs were collected from employee travel surveys, and assumptions reflect typical commuting behaviors.

Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

There are no emissions related to upstream leased assets.

Scope 3 category 9: Downstream transportation and distribution

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

163766.07

(7.5.3) Methodological details

Emissions for downstream transportation and distribution were calculated using a distance-based method. DEFRA emission factors were used for various transportation methods. Assumptions regarding shipping distances and modes were based on distribution data, ensuring that the downstream logistics emissions are accurately reflected.

Scope 3 category 10: Processing of sold products

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

There are no emissions related to processing of sold products

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

There are no emissions related to use of sold products.

Scope 3 category 12: End of life treatment of sold products

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

156868.4

(7.5.3) Methodological details

Emissions from the end-of-life treatment of sold products were calculated using a waste-type-specific method, considering disposal methods and material compositions. DEFRA emission factors were applied to relevant waste streams, and inputs included estimates of product lifecycles and typical disposal routes. Assumptions were made for common disposal practices associated with the products.

Scope 3 category 13: Downstream leased assets

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

There are no emissions related to downstream leased assests

Scope 3 category 14: Franchises

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

17.45

(7.5.3) Methodological details

Emissions were calculated using the average data method, focusing on franchise operations under company control. DEFRA emission factors were used, with inputs including energy use and waste data. Assumptions were based on typical franchise activities, ensuring alignment with GHG Protocol guidelines.

Scope 3 category 15: Investments

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

387371.51

(7.5.3) Methodological details

Emissions from investments were calculated using a supplier-specific method, based on the emissions from companies in which investments are held. Supplier data was utilized to ensure accuracy. This approach aligns with the GHG Protocol for accurate reflection of investment-related emissions.

Scope 3: Other (upstream)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

There is no other upstream scope-3 related emission.

Scope 3: Other (downstream)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

There is no other downstream scope-3 related emission.
[Fixed row]

(7.6) What were your organization’s gross global Scope 1 emissions in metric tons CO2e?

Reporting year

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

7156729

(7.6.3) Methodological details

Scope 1 emissions were calculated by considering stationary combustion sources, process emissions, and company vehicles. The methodology for emission calculations was based on international standards such as the IPCC and GHG Protocol. Specific emission factors for stationary combustion and process emissions were derived from sector-specific data and the company's operational details.

Past year 1

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

7238311

(7.6.2) End date

12/30/2022

(7.6.3) Methodological details

Scope 1 emissions were calculated by considering stationary combustion sources, process emissions, and company vehicles. The methodology for emission calculations was based on international standards such as the IPCC and GHG Protocol. Specific emission factors for stationary combustion and process emissions were derived from sector-specific data and the company's operational details.

Past year 2

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

6418140

(7.6.2) End date

12/30/2021

(7.6.3) Methodological details

Scope 1 emissions were calculated by considering stationary combustion sources, process emissions, and company vehicles. The methodology for emission calculations was based on international standards such as the IPCC and GHG Protocol. Specific emission factors for stationary combustion and process emissions were derived from sector-specific data and the company's operational details.

Past year 3

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

5926209

(7.6.2) End date

12/30/2020

(7.6.3) Methodological details

Scope 1 emissions were calculated by considering stationary combustion sources, process emissions, and company vehicles. The methodology for emission calculations was based on international standards such as the IPCC and GHG Protocol. Specific emission factors for stationary combustion and process emissions were derived from sector-specific data and the company's operational details.
[Fixed row]

(7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

920977

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

920977

(7.7.4) Methodological details

Şişecam's energy indirect greenhouse gas emissions, stemming from electricity consumption, are reported under Scope 2. For these calculations, the emission factors provided by the International Energy Agency (IEA), specific to each country, are utilized to determine the emissions associated with electricity use.

Past year 1

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

985587

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

985587

(7.7.3) End date

12/30/2022

(7.7.4) Methodological details

Şişecam's energy indirect greenhouse gas emissions, stemming from electricity consumption, are reported under Scope 2. For these calculations, the emission factors provided by the International Energy Agency (IEA), specific to each country, are utilized to determine the emissions associated with electricity use.

Past year 2

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

806434

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

806434

(7.7.3) End date

12/30/2021

(7.7.4) Methodological details

Şişecam's energy indirect greenhouse gas emissions, stemming from electricity consumption, are reported under Scope 2. For these calculations, the emission factors provided by the International Energy Agency (IEA), specific to each country, are utilized to determine the emissions associated with electricity use.

Past year 3

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

770823

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

770823

(7.7.3) End date

12/30/2020

(7.7.4) Methodological details

Şişecam's energy indirect greenhouse gas emissions, stemming from electricity consumption, are reported under Scope 2. For these calculations, the emission factors provided by the International Energy Agency (IEA), specific to each country, are utilized to determine the emissions associated with electricity use.
[Fixed row]

(7.8) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

(7.8.1) Evaluation status

Select from:
☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

1078422.02

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Supplier-specific method

☑ Average data method

☑ Spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

13

(7.8.5) Please explain

Emissions were calculated using supplier-specific, spend-based, and average data methods. Data was obtained from suppliers, Ecoinvent, and EPA, covering 13% of the supply chain. Emission factors were applied based on the type of materials purchased and their associated upstream emissions, such as extraction, production, and transportation. This approach ensures accurate reflection of the environmental impact from purchased goods and services.

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

91103.15

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

The average spend-based method was used to calculate emissions, utilizing emission factors from EPA. Data inputs included capital expenditure on relevant goods, with assumptions on average emission factors applied due to diverse capital goods types. The approach aligns with GHG Protocol guidelines for consistency and completeness.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

1225393.79

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Emissions were calculated using the average data method with emission factors sourced from DEFRA. This category includes emissions from fuel and energy consumption not accounted for in Scope 1 or 2, with data covering all relevant fuel types used in operations.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

416735.69

(7.8.3) Emissions calculation methodology

Select all that apply
☑ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

A distance-based method was used to calculate emissions, with DEFRA emission factors tailored to specific transportation modes and distances. Data inputs included shipping distances, transportation modes, and quantities, ensuring accurate representation of emissions from the transportation of purchased goods.

Waste generated in operations

(7.8.1) Evaluation status

Select from:
☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

80614

(7.8.3) Emissions calculation methodology

Select all that apply
☑ Waste-type-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Emissions from waste were calculated using a waste-type-specific method, applying DEFRA emission factors. The data covered different waste types and disposal methods, with assumptions on average waste compositions where specific data was missing, to accurately capture the environmental impact of operational waste.

Business travel

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

3631.1

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Calculations were performed using the average data method, focusing on travel distances, modes, and frequency. DEFRA emission factors for air, rail, and road travel were applied. Data was collected on the total miles traveled, and standard assumptions were used for emission rates based on travel modes.

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

17794.47

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

The average data method was used for calculating emissions from employee commuting, considering distances and modes of transport. DEFRA factors were utilized, and inputs were derived from employee commuting data.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

This category is considered not relevant because the company does not have significant upstream leased assets that contribute to its overall emissions profile.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

163766.07

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Emissions were calculated using a distance-based method with DEFRA emission factors for various transportation methods. Inputs included transportation distances, modes, and quantities shipped, providing an accurate measure of emissions from the downstream distribution of products.

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

This category is deemed not relevant as the company's sold products do not undergo further processing by third parties in a way that significantly contributes to the overall emissions profile. Analysis of the product lifecycle confirmed minimal emissions impact from this activity.

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

This category is not relevant because the sold products do not produce direct emissions during their use phase.

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

156868.4

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Waste-type-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Emissions were calculated using a waste-type-specific method, considering disposal methods and material compositions. DEFRA factors were used, and inputs included estimates of product lifecycles and disposal routes. Standard assumptions were made for common disposal practices related to the products.

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

This category is not relevant as the company does not have significant downstream leased assets that materially affect its emissions profile.

Franchises

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

17.45

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Emissions from franchises were calculated using the average data method, with DEFRA emission factors based on the operational activities of franchises under company control. Data inputs included energy use and waste generated by franchises, ensuring that emissions are accurately captured in line with GHG Protocol guidelines.

Investments

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

387371.51

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Supplier-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

The supplier-specific method was employed to calculate emissions from investments, based on data from invested companies. Supplier data covered 100% of the relevant emissions, ensuring comprehensive and accurate reporting of emissions associated with investments. This method aligns with GHG Protocol standards for Scope 3 investments.

Other (upstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Not relevant as no additional upstream activities significantly contribute to emissions beyond existing categories.

Other (downstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Not relevant because no other downstream activities significantly impact emissions beyond the defined categories.
[Fixed row]

(7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	*Select from:* ☑ Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	*Select from:* ☑ Third-party verification or assurance process in place
Scope 3	*Select from:* ☑ No third-party verification or assurance

[Fixed row]

(7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Row 1

(7.9.1.1) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.1.2) Status in the current reporting year

Select from:

☑ Complete

(7.9.1.3) Type of verification or assurance

Select from:

☑ Third party verification/assurance underway

(7.9.1.4) Attach the statement

EY & Şişecam_Assurance Statement_ENG.pdf

(7.9.1.5) Page/section reference

1

(7.9.1.6) Relevant standard

Select from:

☑ Other, please specify :Independent Assurance Report

(7.9.1.7) Proportion of reported emissions verified (%)

8
[Add row]

(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Row 1

(7.9.2.1) Scope 2 approach

Select from:
☑ Scope 2 location-based

(7.9.2.2) Verification or assurance cycle in place

Select from:
☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:
☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:
☑ Third party verification/assurance underway

(7.9.2.5) Attach the statement

EY & Şişecam_Assurance Statement_ENG.pdf

(7.9.2.6) Page/ section reference

1

(7.9.2.7) Relevant standard

Select from:

☑ Other, please specify :Independent Assurance Report

(7.9.2.8) Proportion of reported emissions verified (%)

12

[Add row]

(7.10) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Select from:

☑ Decreased

(7.10.1) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

Change in renewable energy consumption

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change in emissions due to this category.

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change in emissions due to this category.

Divestment

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change in emissions due to this category.

Acquisitions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change in emissions due to this category.

Mergers

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change in emissions due to this category.

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change in emissions due to this category.

Change in methodology

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change in emissions due to this category.

Change in boundary

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change in emissions due to this category.

Change in physical operating conditions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change in emissions due to this category.

Unidentified

(7.10.1.1) Change in emissions (metric tons CO2e)

146192

(7.10.1.2) Direction of change in emissions

Select from:
☑ Decreased

(7.10.1.3) Emissions value (percentage)

1.78

(7.10.1.4) Please explain calculation

Combined scope 1&2 emissions decreased about 146,192 t-CO2e in the reporting year compared to the previous year. The change in emissions is calculated as 1.78%. The calculation is as follows: ((Increase in Scope 1 2 emissions) / (Previous year Scope 12 emissions)) 100 1.78%." The specific drivers for this change could not be determined based on the available data, hence classified under 'Unidentified.'

Other

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change in emissions due to this category.
[Fixed row]

(7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Select from:

☑ Location-based

(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Select from:

☑ No

(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Select from:

☑ Yes

(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP).

Row 1

(7.15.1.1) Greenhouse gas

Select from:
☑ CO2

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

7156729

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Sixth Assessment Report (AR6 - 100 year)
[Add row]

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

Bosnia & Herzegovina

(7.16.1) Scope 1 emissions (metric tons CO2e)

790707

(7.16.2) Scope 2, location-based (metric tons CO2e)

31669

(7.16.3) Scope 2, market-based (metric tons CO2e)

31669

Bulgaria

(7.16.1) Scope 1 emissions (metric tons CO2e)

317346

(7.16.2) Scope 2, location-based (metric tons CO2e)

87520

(7.16.3) Scope 2, market-based (metric tons CO2e)

87520

Egypt

(7.16.1) Scope 1 emissions (metric tons CO2e)

32222

(7.16.2) Scope 2, location-based (metric tons CO2e)

10539

(7.16.3) Scope 2, market-based (metric tons CO2e)

10539

Georgia

(7.16.1) Scope 1 emissions (metric tons CO2e)

54321

(7.16.2) Scope 2, location-based (metric tons CO2e)

3121

(7.16.3) Scope 2, market-based (metric tons CO2e)

3121

India

(7.16.1) Scope 1 emissions (metric tons CO2e)

114628

(7.16.2) Scope 2, location-based (metric tons CO2e)

13385

(7.16.3) Scope 2, market-based (metric tons CO2e)

13385

Italy

(7.16.1) Scope 1 emissions (metric tons CO2e)

204491

(7.16.2) Scope 2, location-based (metric tons CO2e)

28285

(7.16.3) Scope 2, market-based (metric tons CO2e)

28285

Romania

(7.16.1) Scope 1 emissions (metric tons CO2e)

427

(7.16.2) Scope 2, location-based (metric tons CO2e)

12442

(7.16.3) Scope 2, market-based (metric tons CO2e)

12442

Russian Federation

(7.16.1) Scope 1 emissions (metric tons CO2e)

636212

(7.16.2) Scope 2, location-based (metric tons CO2e)

138046

(7.16.3) Scope 2, market-based (metric tons CO2e)

138046

Slovakia

(7.16.1) Scope 1 emissions (metric tons CO2e)

417

(7.16.2) Scope 2, location-based (metric tons CO2e)

1801

(7.16.3) Scope 2, market-based (metric tons CO2e)

1801

Turkey

(7.16.1) Scope 1 emissions (metric tons CO2e)

4080276

(7.16.2) Scope 2, location-based (metric tons CO2e)

481732

(7.16.3) Scope 2, market-based (metric tons CO2e)

481732

United States of America

(7.16.1) Scope 1 emissions (metric tons CO2e)

925681

(7.16.2) Scope 2, location-based (metric tons CO2e)

112434

(7.16.3) Scope 2, market-based (metric tons CO2e)

112434
[Fixed row]

(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

Select all that apply

☑ By business division

☑ By facility

(7.17.1) Break down your total gross global Scope 1 emissions by business division.

	Business division	Scope 1 emissions (metric ton CO2e)
Row 1	*Chemicals*	*3782307*
Row 2	*Glassware*	*409059*
Row 3	*Industrial Glass*	*13801*
Row 4	*Glass packaging*	*1223881*
Row 5	*Flat glass*	*1686115*
Row 6	*Other*	*41567*

[Add row]

(7.17.2) Break down your total gross global Scope 1 emissions by business facility.

Row 1

(7.17.2.1) Facility

Kırklareli - Turkey - Flatglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

142667.96

(7.17.2.3) Latitude

41.28636

(7.17.2.4) Longitude

27.57796

Row 2

(7.17.2.1) Facility

Mersin - Turkey - Flatglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

331791.11

(7.17.2.3) Latitude

36.89548

(7.17.2.4) Longitude

34.80932

Row 3

(7.17.2.1) Facility

Bursa - Turkey - Flatglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

246898.78

(7.17.2.3) Latitude

40.24348

(7.17.2.4) Longitude

29.66358

Row 4

(7.17.2.1) Facility

Polatlı - Turkey - Flatglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

316590.14

(7.17.2.3) Latitude

39.58002

(7.17.2.4) Longitude

31.97246

Row 5

(7.17.2.1) Facility

Bulgaria - Flatglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

220539

(7.17.2.3) Latitude

43.27299

(7.17.2.4) Longitude

26.52426

Row 6

(7.17.2.1) Facility

Russia - Flatglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

108932

(7.17.2.3) Latitude

55.831613

(7.17.2.4) Longitude

52.022885

Row 7

(7.17.2.1) Facility

India - Flatglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

114628

(7.17.2.3) Latitude

22.544588

(7.17.2.4) Longitude

73.431317

Row 8

(7.17.2.1) Facility

Porto Nogaro -Italy - Flatglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

103879

(7.17.2.3) Latitude

45.770958

(7.17.2.4) Longitude

13.229416

Row 9

(7.17.2.1) Facility

Manfredonia - Italy - Flatglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

100189

(7.17.2.3) Latitude

41.65322

(7.17.2.4) Longitude

15.945238

Row 10

(7.17.2.1) Facility

Mersin - Turkey - Glass Packaging

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

207270.83

(7.17.2.3) Latitude

36.865089

(7.17.2.4) Longitude

34.76263

Row 11

(7.17.2.1) Facility

Eskişehir - Turkey - Glass Packaging

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

231432.61

(7.17.2.3) Latitude

39.738728

(7.17.2.4) Longitude

30.657717

Row 12

(7.17.2.1) Facility

Bursa - Turkey - Glass Packaging

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

254939.92

(7.17.2.3) Latitude

40.243563

(7.17.2.4) Longitude

29.66355

Row 13

(7.17.2.1) Facility

Gorokhovets - Russia - Glass Packaging

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

125879.27

(7.17.2.3) Latitude

59.489696

(7.17.2.4) Longitude

32.011412

Row 14

(7.17.2.1) Facility

Ufa -Russia - Glass Packaging

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

191929

(7.17.2.3) Latitude

54.768454

(7.17.2.4) Longitude

56.258851

Row 15

(7.17.2.1) Facility

Pokrovsky - Russia - Glass Packaging

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

32024.04

(7.17.2.3) Latitude

59.099123

(7.17.2.4) Longitude

35.229984

Row 16

(7.17.2.1) Facility

Mina -Georgia - Glass Packaging

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

54321

(7.17.2.3) Latitude

41.868171

(7.17.2.4) Longitude

44.576401

Row 17

(7.17.2.1) Facility

Krishi -Russia - Glass Packaging

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

74979.38

(7.17.2.3) Latitude

59.488464

(7.17.2.4) Longitude

32.011413

Row 18

(7.17.2.1) Facility

Kuban - Russia - Glass Packaging

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

51104.04

(7.17.2.3) Latitude

59.488492

(7.17.2.4) Longitude

32.011402

Row 19

(7.17.2.1) Facility

Kırklareli - Turkey - Glassware

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

104780.49

(7.17.2.3) Latitude

41.286516

(7.17.2.4) Longitude

27.577897

Row 20

(7.17.2.1) Facility

Eskişehir - Turkey - Glassware

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

106149.45

(7.17.2.3) Latitude

39.742232

(7.17.2.4) Longitude

30.662311

Row 21

(7.17.2.1) Facility

Mersin - Turkey - Glassware

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

(7.17.2.3) Latitude

36.895411

(7.17.2.4) Longitude

34.809265

Row 22

(7.17.2.1) Facility

Denizli - Turkey - Glassware

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

19769.23

(7.17.2.3) Latitude

37.766566

(7.17.2.4) Longitude

29.019244

Row 23

(7.17.2.1) Facility

Targovishte - Bulgaria - Glassware

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

95407

(7.17.2.3) Latitude

43.274478

(7.17.2.4) Longitude

26.521338

Row 24

(7.17.2.1) Facility

Egypt - Glassware

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

32222.04

(7.17.2.3) Latitude

29.897225

(7.17.2.4) Longitude

30.891071

Row 25

(7.17.2.1) Facility

Posuda - Russia - Glassware

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

50730.64

(7.17.2.3) Latitude

56.415842

(7.17.2.4) Longitude

43.996974

Row 26

(7.17.2.1) Facility

Balıkesir - Turkey - Glassfibre

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

9585.6

(7.17.2.3) Latitude

39.589649

(7.17.2.4) Longitude

27.827217

Row 27

(7.17.2.1) Facility

Slovakia - Autoglass-Encap.

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

416.99

(7.17.2.3) Latitude

48.413824

(7.17.2.4) Longitude

17.022252

Row 28

(7.17.2.1) Facility

Kırklareli - Turkey - Autoglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

1338.13

(7.17.2.3) Latitude

41.290018

(7.17.2.4) Longitude

27.580799

Row 29

(7.17.2.1) Facility

Russia - Autoglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

632.72

(7.17.2.3) Latitude

55.830785

(7.17.2.4) Longitude

52.014535

Row 30

(7.17.2.1) Facility

Bulgaria - Autoglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

886.8

(7.17.2.3) Latitude

43.266565

(7.17.2.4) Longitude

26.521585

Row 31

(7.17.2.1) Facility

Bulgaria - Autoglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

513.03

(7.17.2.3) Latitude

43.266565

(7.17.2.4) Longitude

26.521585

Row 32

(7.17.2.1) Facility

Romania - Autoglass

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

427.28

(7.17.2.3) Latitude

45.134162

(7.17.2.4) Longitude

26.821016

Row 33

(7.17.2.1) Facility

Mersin - Turkey - Soda

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

2019406.4

(7.17.2.3) Latitude

36.818146

(7.17.2.4) Longitude

34.738402

Row 34

(7.17.2.1) Facility

Bosnia - Soda

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

790706.62

(7.17.2.3) Latitude

44.531865

(7.17.2.4) Longitude

18.525671

Row 35

(7.17.2.1) Facility

USA - Soda

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

925681.46

(7.17.2.3) Latitude

41.718989

(7.17.2.4) Longitude

-109.695969

Row 36

(7.17.2.1) Facility

Italy - Chromium

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

79.83

(7.17.2.3) Latitude

44.740784

(7.17.2.4) Longitude

12.040291

Row 37

(7.17.2.1) Facility

Mersin - Turkey - Chromium

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

46432.28

(7.17.2.3) Latitude

36.817577

(7.17.2.4) Longitude

34.728986

Row 38

(7.17.2.1) Facility

Kırklareli - Turkey - Electricity

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

21746.18

(7.17.2.3) Latitude

41.285854

(7.17.2.4) Longitude

27.583247

Row 39

(7.17.2.1) Facility

Mersin - Turkey - VK-3

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

334.15

(7.17.2.3) Latitude

36.899231

(7.17.2.4) Longitude

34.800269

Row 40

(7.17.2.1) Facility

Italy - Refractory

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

343.6

(7.17.2.3) Latitude

45.943459

(7.17.2.4) Longitude

12.872752

Row 41

(7.17.2.1) Facility

C.A Tuzla - Turkey - Corrugated Box

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

1487.76

(7.17.2.3) Latitude

40.828498

(7.17.2.4) Longitude

29.326797

Row 42

(7.17.2.1) Facility

C.A Eskişehir - Turkey - Corrugated Box

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

(7.17.2.3) Latitude

39.742232

(7.17.2.4) Longitude

30.662311

Row 43

(7.17.2.1) Facility

Mersin - Turkey - Salt Operation

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

472.53

(7.17.2.3) Latitude

36.818146

(7.17.2.4) Longitude

34.738402

Row 44

(7.17.2.1) Facility

Mersin - Turkey - Salt Operation

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

210.37

(7.17.2.3) Latitude

36.818146

(7.17.2.4) Longitude

34.738402
[Add row]

(7.19) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Chemicals production activities	*3782307*	*Soda ash and chromium production activities are considered under chemicals. There are 5 facilities in four different countries.*

[Fixed row]

(7.20) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

Select all that apply

☑ By business division

☑ By facility

(7.20.1) Break down your total gross global Scope 2 emissions by business division.

	Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Row 1	*Chemicals*	*198828*	*198828*
Row 2	*Glass packaging*	*297930*	*297930*
Row 3	*Flat glass*	*172300*	*172300*
Row 4	*Glassware*	*96796*	*96796*
Row 5	*Industrial Glass*	*133328*	*133328*
Row 6	*Other*	*21794*	*21794*

[Add row]

(7.20.2) Break down your total gross global Scope 2 emissions by business facility.

Row 1

(7.20.2.1) Facility

Kırklareli - Turkey - Flatglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

23563.841

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

23563.841

Row 2

(7.20.2.1) Facility

Mersin - Turkey - Flatglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

27960.459

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

27960.459

Row 3

(7.20.2.1) Facility

Bursa - Turkey - Flatglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

25123.601

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

25123.601

Row 4

(7.20.2.1) Facility

Polatlı - Turkey - Flatglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

19465.702

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

19465.702

Row 5

(7.20.2.1) Facility

Bulgaria - Flatglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

30995.093

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

30995.093

Row 6

(7.20.2.1) Facility

Russia - Flatglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

11362.045

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

11362.045

Row 7

(7.20.2.1) Facility

India - Flatglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

13384.839

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

13384.839

Row 8

(7.20.2.1) Facility

Porto Nogaro -Italy - Flatglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

6210.267

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

6210.267

Row 9

(7.20.2.1) Facility

Manfredonia - Italy - Flatglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

14234.625

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

14234.625

Row 10

(7.20.2.1) Facility

Mersin - Turkey - Glass Packaging

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

53571.949

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

53571.949

Row 11

(7.20.2.1) Facility

Eskişehir - Turkey - Glass Packaging

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

64181.886

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

64181.886

Row 12

(7.20.2.1) Facility

Bursa - Turkey - Glass Packaging

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

65423.953

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

65423.953

Row 13

(7.20.2.1) Facility

Gorokhovets - Russia - Glass Packaging

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

34041.735

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

34041.735

Row 14

(7.20.2.1) Facility

Ufa -Russia - Glass Packaging

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

35545.655

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

35545.655

Row 15

(7.20.2.1) Facility

Pokrovsky - Russia - Glass Packaging

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

8202.844

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

8202.844

Row 16

(7.20.2.1) Facility

Mina -Georgia - Glass Packaging

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

3121.22

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

3121.22

Row 17

(7.20.2.1) Facility

Krishi -Russia - Glass Packaging

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

19251.198

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

19251.198

Row 18

(7.20.2.1) Facility

Kuban - Russia - Glass Packaging

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

14589.846

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

14589.846

Row 19

(7.20.2.1) Facility

Kırklareli - Turkey - Glassware

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

25254.893

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

25254.893

Row 20

(7.20.2.1) Facility

Eskişehir - Turkey - Glassware

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

27928.274

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

27928.274

Row 21

(7.20.2.1) Facility

Mersin - Turkey - Glassware

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

0

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

0

Row 22

(7.20.2.1) Facility

Denizli - Turkey - Glassware

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

2072.657

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

2072.657

Row 23

(7.20.2.1) Facility

Targovishte - Bulgaria - Glassware

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

20593.175

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

20593.175

Row 24

(7.20.2.1) Facility

Egypt - Glassware

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

10539.148

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

10539.148

Row 25

(7.20.2.1) Facility

Posuda - Russia - Glassware

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

10408.13

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

10408.13

Row 26

(7.20.2.1) Facility

Balıkesir - Turkey - Glassfibre

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

37914.187

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

37914.187

Row 27

(7.20.2.1) Facility

Slovakia - Autoglass-Encap.

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

1800.9

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

1800.9

Row 28

(7.20.2.1) Facility

Kırklareli - Turkey - Autoglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

40593.548

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

40593.548

Row 29

(7.20.2.1) Facility

Russia - Autoglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

4644.981

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

4644.981

Row 30

(7.20.2.1) Facility

Bulgaria - Autoglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

27476.996

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

27476.996

Row 31

(7.20.2.1) Facility

Bulgaria - Autoglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

8455.095

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

8455.095

Row 32

(7.20.2.1) Facility

Romania - Autoglass

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

12442.398

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

12442.398

Row 33

(7.20.2.1) Facility

Mersin - Turkey - Soda

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

19941.161

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

19941.161

Row 34

(7.20.2.1) Facility

Bosnia - Soda

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

31669.276

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

31669.276

Row 35

(7.20.2.1) Facility

USA - Soda

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

112434.42

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

112434.42

Row 36

(7.20.2.1) Facility

Italy - Chromium

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

70.51

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

70.51

Row 37

(7.20.2.1) Facility

Mersin - Turkey - Chromium

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

34712.483

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

34712.483

Row 38

(7.20.2.1) Facility

Kırklareli - Turkey - Electricity

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

0

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

0

Row 39

(7.20.2.1) Facility

Mersin - Turkey - VK-3

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

1959.436

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

1959.436

Row 40

(7.20.2.1) Facility

Italy - Refractory

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

7769.921

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

7769.921

Row 41

(7.20.2.1) Facility

C.A Tuzla - Turkey - Corrugated Box

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

1439.133

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

1439.133

Row 42

(7.20.2.1) Facility

C.A Eskişehir - Turkey - Corrugated Box

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

1439.133

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

1439.133

Row 43

(7.20.2.1) Facility

Mersin - Arabali- Turkey - Salt Operation

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

6157.559

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

6157.559

Row 44

(7.20.2.1) Facility

Mersin - Tarsus - Turkey - Salt Operation

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

3028.554

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

3028.554
[Add row]

(7.21) Break down your organization’s total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Comment
Chemicals production activities	*198828*	*Soda ash and chromium production activities are considered under chemicals. There are 5 facilities in four different countries.*

[Fixed row]

(7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response.

Consolidated accounting group

(7.22.1) Scope 1 emissions (metric tons CO2e)

7156729

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

920977

(7.22.4) Please explain

For the “Consolidated accounting group,” all emissions data are included for the entities that fall under Şişecam's consolidated accounting boundary, as defined by the operational control approach. This group includes all facilities where Şişecam has the authority to implement operational policies, aligning with the GHG Protocol's definition of operational control. Emissions from these entities are reflected in both Scope 1 and Scope 2 categories, with Scope 1 emissions amounting to 7,156,729 metric tons CO2e and Scope 2 location-based emissions totaling 920,977 metric tons CO2e.

All other entities

(7.22.1) Scope 1 emissions (metric tons CO2e)

0

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

0

(7.22.4) Please explain

There are no additional entities outside of the consolidated accounting group. Therefore, no emissions data are reported in this category, and all values are entered as zero. This reflects that no other entities, such as associates, joint ventures, or unconsolidated subsidiaries, were included in the emissions accounting for this response. The scope boundary accurately captures all relevant emissions under the operational control approach, ensuring a comprehensive representation of Şişecam’s environmental impact.
[Fixed row]

(7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Select from:

☑ Not relevant as we do not have any subsidiaries

(7.25) Disclose the percentage of your organization’s Scope 3, Category 1 emissions by purchased chemical feedstock.

Row 1

(7.25.1) Purchased feedstock

Select from:

☑ Ammonia

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

4

(7.25.3) Explain calculation methodology

The calculations for ammonia emissions were based on the quantities purchased and sector average emission factors. Data sources include the GHG Protocol and GWPs from IPCC AR6. This approach indicates that 4 per cent of Scope 3, Category 1 emissions are attributed to ammonia.

Row 2

(7.25.1) Purchased feedstock

Select from:

☑ Soda ash

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

20

(7.25.3) Explain calculation methodology

Purchased soda ash quantities and relevant emission factors derived from sector averages were used in the calculations. Data sources include GWPs from IPCC AR6 and the GHG Protocol. The methodology shows that 20% of Scope 3, Category 1 emissions are from soda ash and natural soda ash.

Row 4

(7.25.1) Purchased feedstock

Select from:

☑ Polymers

(7.25.2) Percentage of Scope 3, Category 1 tCO2e from purchased feedstock

4

(7.25.3) Explain calculation methodology

The calculations for polymer emissions, including PVB (Polyvinyl Butyral) and Plastic Sheet, were based on the quantities purchased and sector average emission factors. Data sources include the GHG Protocol and GWPs from IPCC AR6. This approach indicates that 4 per cent of Scope 3, Category 1 emissions are attributed to these polymer materials.
[Add row]

(7.25.1) Disclose sales of products that are greenhouse gases.

Carbon dioxide (CO2)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

Şişecam has not sold any greenhouse gases (GHG) during the reporting year

Methane (CH4)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

Şişecam has not sold any greenhouse gases (GHG) during the reporting year

Nitrous oxide (N2O)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

Şişecam has not sold any greenhouse gases (GHG) during the reporting year

Hydrofluorocarbons (HFC)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

Şişecam has not sold any greenhouse gases (GHG) during the reporting year

Perfluorocarbons (PFC)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

Şişecam has not sold any greenhouse gases (GHG) during the reporting year

Sulphur hexafluoride (SF6)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

Şişecam has not sold any greenhouse gases (GHG) during the reporting year

Nitrogen trifluoride (NF3)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

Şişecam has not sold any greenhouse gases (GHG) during the reporting year
[Fixed row]

(7.26) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Row 1

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Facility

(7.26.5) Allocation level detail

Manfredonia facility is included

(7.26.6) Allocation method

Select from:

☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Metric tons

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

783

(7.26.9) Emissions in metric tonnes of CO2e

520

(7.26.10) Uncertainty (±%)

5

(7.26.11) Major sources of emissions

Production processes, fuel consumptions

(7.26.12) Allocation verified by a third party?

Select from:

☑ No

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Emissions were allocated to customers based on the proportion of products sent to them from the facility's total production. Plant emissions are calculated in accordance with the GHG Protocol guidelines. Key limitations include the complexity of the supply chain and difficulties in fully tracing products to specific production lines. In order to maintain data integrity and to ensure that emissions are assigned to customers accurately and transparently, the customer's weight share in production were taken into account.

(7.26.14) Where published information has been used, please provide a reference

The published information has not been used.

Row 2

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Facility

(7.26.5) Allocation level detail

Kırklareli YDA / Bulgaria YDA / Eskişehir YDA / Yenişehir YDA / Mersin YDA facilities are included

(7.26.6) Allocation method

Select from:

☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Metric tons

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

36644

(7.26.9) Emissions in metric tonnes of CO2e

21911

(7.26.10) Uncertainty (±%)

5

(7.26.11) Major sources of emissions

Production processes, fuel consumptions

(7.26.12) Allocation verified by a third party?

Select from:

☑ No

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Emissions were allocated to customers based on the proportion of products sent to them from the facility's total production. Plant emissions are calculated in accordance with the GHG Protocol guidelines. Key limitations include the complexity of the supply chain and difficulties in fully tracing products to specific production lines. In order to maintain data integrity and to ensure that emissions are assigned to customers accurately and transparently, the customer's weight share in production were taken into account.

(7.26.14) Where published information has been used, please provide a reference

The published information has not been used.

Row 3

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Facility

(7.26.5) Allocation level detail

Lüleburgaz facility is included

(7.26.6) Allocation method

Select from:

☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Metric tons

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

69520

(7.26.9) Emissions in metric tonnes of CO2e

19

(7.26.10) Uncertainty (±%)

5

(7.26.11) Major sources of emissions

Production processes, fuel consumptions

(7.26.12) Allocation verified by a third party?

Select from:

☑ No

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Emissions were allocated to customers based on the proportion of products sent to them from the facility's total production. Plant emissions are calculated in accordance with the GHG Protocol guidelines. Key limitations include the complexity of the supply chain and difficulties in fully tracing products to specific production lines. In order to maintain data integrity and to ensure that emissions are assigned to customers accurately and transparently, the customer's weight share in production were taken into account.

(7.26.14) Where published information has been used, please provide a reference

The published information has not been used.

Row 4

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Facility

(7.26.5) Allocation level detail

Lüleburgaz facility is included

(7.26.6) Allocation method

Select from:

☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Metric tons

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

2152903

(7.26.9) Emissions in metric tonnes of CO2e

582

(7.26.10) Uncertainty (±%)

5

(7.26.11) Major sources of emissions

Production processes, fuel consumptions

(7.26.12) Allocation verified by a third party?

Select from:

☑ No

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Emissions were allocated to customers based on the proportion of products sent to them from the facility's total production. Plant emissions are calculated in accordance with the GHG Protocol guidelines. Key limitations include the complexity of the supply chain and difficulties in fully tracing products to specific production lines. In order to maintain data integrity and to ensure that emissions are assigned to customers accurately and transparently, the customer's weight share in production were taken into account.

(7.26.14) Where published information has been used, please provide a reference

The published information has not been used.

Row 5

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Facility

(7.26.5) Allocation level detail

Romania Autoglass / Bulgaria Autoglass / Turkey Autoglass facilities are included

(7.26.6) Allocation method

Select from:

☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Metric tons

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

1339397

(7.26.9) Emissions in metric tonnes of CO2e

339

(7.26.10) Uncertainty (±%)

5

(7.26.11) Major sources of emissions

Production processes, fuel consumptions

(7.26.12) Allocation verified by a third party?

Select from:

☑ No

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Emissions were allocated to customers based on the proportion of products sent to them from the facility's total production. Plant emissions are calculated in accordance with the GHG Protocol guidelines. Key limitations include the complexity of the supply chain and difficulties in fully tracing products to specific production lines. In order to maintain data integrity and to ensure that emissions are assigned to customers accurately and transparently, the customer's weight share in production were taken into account.

(7.26.14) Where published information has been used, please provide a reference

The published information has not been used.

Row 6

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: location-based

(7.26.4) Allocation level

Select from:
☑ Facility

(7.26.5) Allocation level detail

Manfredonia facility is included

(7.26.6) Allocation method

Select from:
☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Metric tons

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

783

(7.26.9) Emissions in metric tonnes of CO2e

74

(7.26.10) Uncertainty (±%)

5

(7.26.11) Major sources of emissions

Purchased electricity

(7.26.12) Allocation verified by a third party?

Select from:

☑ No

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Emissions were allocated to customers based on the proportion of products sent to them from the facility's total production. Plant emissions are calculated in accordance with the GHG Protocol guidelines. Key limitations include the complexity of the supply chain and difficulties in fully tracing products to specific production lines. In order to maintain data integrity and to ensure that emissions are assigned to customers accurately and transparently, the customer's weight share in production were taken into account.

(7.26.14) Where published information has been used, please provide a reference

The published information has not been used.

Row 7

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: location-based

(7.26.4) Allocation level

Select from:

☑ Facility

(7.26.5) Allocation level detail

Kırklareli YDA / Bulgaria YDA / Eskişehir YDA / Yenişehir YDA / Mersin YDA facilities are included

(7.26.6) Allocation method

Select from:

☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Metric tons

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

36644

(7.26.9) Emissions in metric tonnes of CO2e

5728

(7.26.10) Uncertainty (±%)

5

(7.26.11) Major sources of emissions

Purchased electricity

(7.26.12) Allocation verified by a third party?

Select from:

☑ No

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Emissions were allocated to customers based on the proportion of products sent to them from the facility's total production. Plant emissions are calculated in accordance with the GHG Protocol guidelines. Key limitations include the complexity of the supply chain and difficulties in fully tracing products to specific production lines. In order to maintain data integrity and to ensure that emissions are assigned to customers accurately and transparently, the customer's weight share in production were taken into account.

(7.26.14) Where published information has been used, please provide a reference

The published information has not been used.

Row 8

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: location-based

(7.26.4) Allocation level

Select from:
☑ Facility

(7.26.5) Allocation level detail

Lüleburgaz facility is included

(7.26.6) Allocation method

Select from:
☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Metric tons

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

69520

(7.26.9) Emissions in metric tonnes of CO2e

570

(7.26.10) Uncertainty (±%)

5

(7.26.11) Major sources of emissions

Purchased electricity

(7.26.12) Allocation verified by a third party?

Select from:

☑ No

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Emissions were allocated to customers based on the proportion of products sent to them from the facility's total production. Plant emissions are calculated in accordance with the GHG Protocol guidelines. Key limitations include the complexity of the supply chain and difficulties in fully tracing products to specific production lines. In order to maintain data integrity and to ensure that emissions are assigned to customers accurately and transparently, the customer's weight share in production were taken into account.

(7.26.14) Where published information has been used, please provide a reference

The published information has not been used.

Row 9

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: location-based

(7.26.4) Allocation level

Select from:

☑ Facility

(7.26.5) Allocation level detail

Lüleburgaz facility is included

(7.26.6) Allocation method

Select from:

☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Metric tons

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

2152903

(7.26.9) Emissions in metric tonnes of CO2e

17643

(7.26.10) Uncertainty (±%)

5

(7.26.11) Major sources of emissions

Purchased electricity

(7.26.12) Allocation verified by a third party?

Select from:

☑ No

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Emissions were allocated to customers based on the proportion of products sent to them from the facility's total production. Plant emissions are calculated in accordance with the GHG Protocol guidelines. Key limitations include the complexity of the supply chain and difficulties in fully tracing products to specific production lines. In order to maintain data integrity and to ensure that emissions are assigned to customers accurately and transparently, the customer's weight share in production were taken into account.

(7.26.14) Where published information has been used, please provide a reference

The published information has not been used.

Row 10

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: location-based

(7.26.4) Allocation level

Select from:

☑ Facility

(7.26.5) Allocation level detail

Romania Autoglass / Bulgaria Autoglass / Turkey Autoglass facilities are included

(7.26.6) Allocation method

Select from:

☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Metric tons

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

1339397

(7.26.9) Emissions in metric tonnes of CO2e

10243

(7.26.10) Uncertainty (±%)

5

(7.26.11) Major sources of emissions

Purchased electricity

(7.26.12) Allocation verified by a third party?

Select from:
☑ No

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Emissions were allocated to customers based on the proportion of products sent to them from the facility's total production. Plant emissions are calculated in accordance with the GHG Protocol guidelines. Key limitations include the complexity of the supply chain and difficulties in fully tracing products to specific production lines. In order to maintain data integrity and to ensure that emissions are assigned to customers accurately and transparently, the customer's weight share in production were taken into account.

(7.26.14) Where published information has been used, please provide a reference

The published information has not been used.
[Add row]

(7.27) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Row 1

(7.27.1) Allocation challenges

Select from:

☑ Diversity of product lines makes accurately accounting for each product/product line cost ineffective

(7.27.2) Please explain what would help you overcome these challenges

*One of the main challenges in allocating emissions to different customers lies in the diverse range of products and the varying nature of customer demands within a single facility. The complexity arises from the need to distribute collective emission data accurately across different product types and to specific customers, especially when product masses vary significantly. To address this, we implemented a calculation method for allocating facility emissions (ton CO2/unit of product) using the formula: (mass of products purchased/total mass of products produced) * total emissions. Şişecam is committed to overcoming these challenges by leveraging its robust production planning capabilities for B2B clients and investing in the necessary infrastructure to meticulously track product-specific footprints, including Scope 1 and Scope 2 emissions. This approach not only enhances accuracy but also aligns with our sustainability goals by providing precise emissions data tailored to each customer.*

[Add row]

(7.28) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

(7.28.1) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Select from:

☑ Yes

(7.28.2) Describe how you plan to develop your capabilities

To enhance the ability to allocate emissions to customers, plans include implementing advanced tracking and reporting systems that provide more detailed data on emissions linked to specific products and production lines. This approach involves improving data collection methods, integrating product-level carbon accounting, and utilizing digital tools to streamline and automate the allocation process. Engaging with supply chain partners is also a focus, aiming to improve data accuracy and transparency, ensuring emissions information aligns with industry best practices. The objective is to offer customers clearer insights into the emissions intensity of the products they purchase, supporting their sustainability goals.
[Fixed row]

(7.29) What percentage of your total operational spend in the reporting year was on energy?

Select from:
☑ More than 20% but less than or equal to 25%

(7.30) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	*Select from:* ☑ Yes
Consumption of purchased or acquired electricity	*Select from:* ☑ Yes
Consumption of purchased or acquired heat	*Select from:* ☑ No
Consumption of purchased or acquired steam	*Select from:* ☑ No
Consumption of purchased or acquired cooling	*Select from:* ☑ No
Generation of electricity, heat, steam, or cooling	*Select from:*

	Indicate whether your organization undertook this energy-related activity in the reporting year
	☑ No

[Fixed row]

(7.30.1) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

Consumption of fuel (excluding feedstock)

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

24035237

(7.30.1.4) Total (renewable and non-renewable) MWh

24035237

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

5521

(7.30.1.3) MWh from non-renewable sources

2763450

(7.30.1.4) Total (renewable and non-renewable) MWh

2768971

Total energy consumption

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

5521

(7.30.1.3) MWh from non-renewable sources

26798687

(7.30.1.4) Total (renewable and non-renewable) MWh

26804208
[Fixed row]

(7.30.3) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.

Consumption of fuel (excluding feedstocks)

(7.30.3.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

0

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

12129681

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

12129681

Consumption of purchased or acquired electricity

(7.30.3.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

0

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

898161

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

898161

Total energy consumption

(7.30.3.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

0

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

13027842

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

13027842
[Fixed row]

(7.30.6) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	*Select from:* ☑ Yes
Consumption of fuel for the generation of heat	*Select from:* ☑ Yes
Consumption of fuel for the generation of steam	*Select from:* ☑ Yes
Consumption of fuel for the generation of cooling	*Select from:* ☑ No
Consumption of fuel for co-generation or tri-generation	*Select from:* ☑ No

[Fixed row]

(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.8) Comment

We do not use sustainable biomass in our operations

Other biomass

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.8) Comment

We do not use biomass in our operations

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.8) Comment

We do not have any other renewable fuel consumption.

Coal

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

5307864

(7.30.7.3) MWh fuel consumed for self-generation of electricity

67447

(7.30.7.4) MWh fuel consumed for self-generation of heat

1487228

(7.30.7.5) MWh fuel consumed for self-generation of steam

3753189

(7.30.7.8) Comment

Electricity, heat and steam are generated through coal consumption. MWh equivalents are declared in this row.

Oil

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

103791

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

103791

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.8) Comment

All oil consumption is spent for heat generation. MWh equivalent is declared in this line.

Gas

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

18623582

(7.30.7.3) MWh fuel consumed for self-generation of electricity

1436567

(7.30.7.4) MWh fuel consumed for self-generation of heat

11910545

(7.30.7.5) MWh fuel consumed for self-generation of steam

5276470

(7.30.7.8) Comment

Along with gas consumption, electricity, heat and steam production are available. MWh equivalents are declared in this line.

Other non-renewable fuels (e.g. non-renewable hydrogen)

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.8) Comment

We do not have any other non-renewable fuel consumption.

Total fuel

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

24035237

(7.30.7.3) MWh fuel consumed for self-generation of electricity

1504014

(7.30.7.4) MWh fuel consumed for self-generation of heat

13501564

(7.30.7.5) MWh fuel consumed for self-generation of steam

9029659

(7.30.7.8) Comment

The sum of all fuel consumption and the sum of the amounts used for electricity, heat, steam generation are declared in this line.

[Fixed row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

Bosnia & Herzegovina

(7.30.16.1) Consumption of purchased electricity (MWh)

41626

(7.30.16.2) Consumption of self-generated electricity (MWh)

67447

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

2260210

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

2369283.00

Bulgaria

(7.30.16.1) Consumption of purchased electricity (MWh)

182182

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

1149186

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

1331368.00

Eygpt

(7.30.16.1) Consumption of purchased electricity (MWh)

26158

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

127634

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

153792.00

Georgia

(7.30.16.1) Consumption of purchased electricity (MWh)

31720

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

152038

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

183758.00

India

(7.30.16.1) Consumption of purchased electricity (MWh)

18937

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

259849

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

278786.00

Italy

(7.30.16.1) Consumption of purchased electricity (MWh)

80631

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

701399

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

782030.00

Romania

(7.30.16.1) Consumption of purchased electricity (MWh)

46864

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

2015

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

48879.00

Russian Federation

(7.30.16.1) Consumption of purchased electricity (MWh)

380608

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

2424667

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

2805275.00

Slovakia

(7.30.16.1) Consumption of purchased electricity (MWh)

12550

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

1953

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

14503.00

Turkey

(7.30.16.1) Consumption of purchased electricity (MWh)

1148623

(7.30.16.2) Consumption of self-generated electricity (MWh)

1436567

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

12326823

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

14912013.00

United States of America

(7.30.16.1) Consumption of purchased electricity (MWh)

320600

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

3125449

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

3446049.00
[Fixed row]

(7.31) Does your organization consume fuels as feedstocks for chemical production activities?

Select from:
☑ Yes

(7.31.1) Disclose details on your organization's consumption of feedstocks for chemical production activities.

Row 1

(7.31.1.1) Fuels used as feedstocks

Select from:
☑ Anthracite

(7.31.1.2) Total consumption

185026

(7.31.1.3) Total consumption unit

Select from:
☑ metric tons

(7.31.1.4) Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

2.74

(7.31.1.5) Heating value of feedstock, MWh per consumption unit

8.02

(7.31.1.6) Heating value

Select from:
☑ LHV

(7.31.1.7) Comment

In 2023, Şişecam's total consumption of anthracite as a feedstock for chemical production activities amounted to 185,026 metric tons, sourced from facilities in Mersin - Turkey, and Bosnia. The inherent carbon dioxide emission factor for anthracite was calculated as 2.74 metric tons of CO2 per ton of feedstock, based on a lower heating value (LHV) of 6,900 kcal/kg, which converts to 8.02 MWh per ton.
[Add row]

(7.31.2) State the percentage, by mass, of primary resource from which your chemical feedstocks derive.

Oil

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ No change

Natural Gas

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ No change

Coal

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ No change

Biomass

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ No change

Waste (non-biomass)

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ No change

Fossil fuel (where coal, gas, oil cannot be distinguished)

(7.31.2.1) Percentage of total chemical feedstock (%)

100

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ Increased

Unknown source or unable to disaggregate

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:
☑ No change
[Fixed row]

(7.39) Provide details on your organization's chemical products.

Row 1

(7.39.1) Output product

Select from:
☑ Soda ash

(7.39.2) Production (metric tons)

4344150

(7.39.3) Capacity (metric tons)

4575000

(7.39.4) Direct emissions intensity (metric tons CO2e per metric ton of product)

0.86

(7.39.5) Electricity intensity (MWh per metric ton of product)

0.207

(7.39.6) Steam intensity (MWh per metric ton of product)

1.452

(7.39.7) Steam/ heat recovered (MWh per metric ton of product)

0.972

(7.39.8) Comment

Soda ash production is carried out in 3 different plants. The calculations were made on a consolidated basis by evaluating the total production and energy consumption of the 3 plants.
[Add row]

(7.45) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Row 1

(7.45.1) Intensity figure

0.00157

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

8077706

(7.45.3) Metric denominator

Select from:

☑ unit total revenue

(7.45.4) Metric denominator: Unit total

5155505822

(7.45.5) Scope 2 figure used

Select from:

☑ Location-based

(7.45.6) % change from previous year

4.8

(7.45.7) Direction of change

Select from:

☑ Increased

(7.45.8) Reasons for change

Select all that apply

☑ Change in output

☑ Change in revenue

(7.45.9) Please explain

The emissions intensity figure increased by 4.8% from 0.00150 metric tons CO2e per unit of total revenue in 2022 to 0.00157 in 2023. This increase is primarily attributed to a reduction in revenue alongside a change in output. In 2023, total revenue decreased from EUR 5,499,949,245 in 2022 to EUR 5,155,505,822, a decline that directly influenced the emissions intensity ratio. Despite efforts to manage emissions, the reduction in revenue without a proportional decrease in Scope 1 and 2 emissions led to an overall increase in the intensity figure. Additionally, Scope 2 emissions decreased from 985,587 metric tons CO2e in 2022 to 920,977 metric tons CO2e in 2023, but this reduction was not sufficient to offset the impact of the revenue decline on the intensity metric. The combination of these factors—decreased revenue and changes in operational output—were the primary drivers behind the observed increase in emissions intensity.

[Add row]

(7.52) Provide any additional climate-related metrics relevant to your business.

Row 1

(7.52.1) Description

Select from:
☑ Energy usage

(7.52.2) Metric value

6.97

(7.52.3) Metric numerator

GJ/tonne production

(7.52.4) Metric denominator (intensity metric only)

Total Energy Consumption per Production

(7.52.5) % change from previous year

4.2

(7.52.6) Direction of change

Select from:
☑ Increased

(7.52.7) Please explain

Şişecam tracks total energy consumption per unit of production as a climate-related metric. This metric is used to measure production efficiency by the amount of energy consumed in production. Although the amount of production and energy consumption decreased from 2022 to 2023, the 8% decrease in tonnes of production and the 4% decrease in energy consumption led to a consolidated increase in the energy use metric.
[Add row]

(7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply

☑ No target

(7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

Row 1

(7.53.1.1) Target reference number

Select from:

☑ Abs 1

(7.53.1.2) Is this a science-based target?

Select from:

☑ No, and we do not anticipate setting one in the next two years

(7.53.1.5) Date target was set

12/14/2023

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO_2)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

0.000

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

0.000

[Add row]

(7.53.2) Provide details of your emissions intensity targets and progress made against those targets.

Row 1

(7.53.2.33) Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.0000000000

(7.53.2.80) Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.0000000000

Row 2

(7.53.2.1) Target reference number

Select from:
☑ Int 1

(7.53.2.8) Scopes

Select all that apply
☑ Scope 1
☑ Scope 2

(7.53.2.11) Intensity metric

Select from:
☑ Metric tons CO2e per metric ton of product

(7.53.2.33) Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.8050000000

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

100.0

(7.53.2.80) Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.0000000000

(7.53.2.81) Land-related emissions covered by target

Select from:
☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)
[Add row]

(7.53.3) Explain why you did not have an emissions target, and forecast how your emissions will change over the next five years.

(7.53.3.1) Primary reason

Select from:

☑ We are planning to introduce a target in the next two years

(7.53.3.2) Five-year forecast

We expect our Scope 1 and Scope 2 emissions to increase by approximately 13% by 2030. This increase is primarily driven by the expansion of production capacity in both our chemicals manufacturing group and our glass production operations. In 2023, approximately 50% of our total emissions originated from the chemicals group. While we foresee an emissions increase in the near future due to these capacity expansions, we are closely monitoring SBTi's ongoing development of sector-specific decarbonization guidelines for the chemicals industry. Once these guidelines are released, we aim to implement comprehensive emissions reduction strategies that will positively affect our overall emissions trajectory in the medium to long term.

(7.53.3.3) Please explain

The main reason we have not yet set a target is the absence of specific sectoral decarbonization guidelines (SDA) from SBTi for the chemicals industry, which represents a significant portion of our emissions. However, Şişecam is actively monitoring the ongoing development of these guidelines. We are committed to setting a robust climate change target aligned with SBTi criteria within the next two years, once the relevant guidance becomes available. We have already started internal evaluations and are preparing to adopt strong emissions reduction targets as soon as the sector-specific guidance is published.
[Fixed row]

(7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply

☑ No other climate-related targets

(7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production.

Row 1

(7.54.1.1) Target reference number

Select from:

☑ Low 1

(7.54.1.2) Date target was set

12/30/2021

(7.54.1.3) Target coverage

Select from:

☑ Business activity

(7.54.1.4) Target type: energy carrier

Select from:

☑ Electricity

(7.54.1.5) Target type: activity

Select from:

☑ Consumption

(7.54.1.6) Target type: energy source

Select from:

☑ Renewable energy source(s) only

(7.54.1.7) End date of base year

12/30/2021

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

8321

(7.54.1.9) % share of low-carbon or renewable energy in base year

0.04

(7.54.1.10) End date of target

12/30/2030
[Add row]

(7.54.2) Provide details of any other climate-related targets, including methane reduction targets.

Row 2

(7.54.2.1) Target reference number

Select from:
☑ Oth 1

(7.54.2.3) Target coverage

Select from:
☑ Business division

(7.54.2.4) Target type: absolute or intensity

Select from:
☑ Intensity

(7.54.2.5) Target type: category & Metric (target numerator if reporting an intensity target)

Energy consumption or efficiency

☑ GJ

(7.54.2.8) Figure or percentage in base year

8.0

(7.54.2.15) Is this target part of an emissions target?

No

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ Low-Carbon Technology Partnerships initiative

☑ Other, please specify :As a part of our CareforNext Strategy and PROTECT THE PLANET philosophy.

Row 3

(7.54.2.1) Target reference number

Select from:

☑ Oth 2

(7.54.2.3) Target coverage

Select from:

☑ Business division

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Absolute

(7.54.2.5) Target type: category & Metric (target numerator if reporting an intensity target)

Energy productivity

☑ Other, energy productivity, please specify :MW

(7.54.2.8) Figure or percentage in base year

6.0

(7.54.2.15) Is this target part of an emissions target?

No

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ Other, please specify :As a part of our CareforNext Strategy and PROTECT THE PLANET philosophy.

[Add row]

(7.54.3) Provide details of your net-zero target(s).

Row 1

(7.54.3.1) Target reference number

Select from:

☑ NZ1

(7.54.3.2) Date target was set

12/30/2023

(7.54.3.3) Target Coverage

Select from:

☑ Organization-wide

(7.54.3.4) Targets linked to this net zero target

Select all that apply

☑ Not applicable

(7.54.3.5) End date of target for achieving net zero

12/30/2050

(7.54.3.6) Is this a science-based target?

Select from:

☑ No, but we anticipate setting one in the next two years

(7.54.3.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

☑ Scope 3

(7.54.3.9) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

[Add row]

(7.55) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Select from:

☑ Yes

(7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	*0*	*`Numeric input*
To be implemented	*0*	*0*
Implementation commenced	*0*	*0*
Implemented	*33*	*24877*
Not to be implemented	*0*	*`Numeric input*

[Fixed row]

(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

Row 1

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Process optimization

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

15570

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

4274398

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

2924885

(7.55.2.7) Payback period

Select from:

☑ <1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 11-15 years

(7.55.2.9) Comment

This initiative involved significant process optimization in production by using one elevator for sand loading, thus streamlining operations and reducing unnecessary energy use. By consolidating the loading process, the project reduced operational inefficiencies, leading to a substantial decrease in electricity consumption. Additionally, the integration of energy-saving technologies in the production line enhanced overall efficiency and lowered the carbon footprint of the facility. This process optimization resulted in CO2 savings of 15,570 metric tons, demonstrating its effectiveness in energy conservation and emissions reduction.

Row 2

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Motors and drives

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

6616

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

970399

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

1657832

(7.55.2.7) Payback period

Select from:

☑ <1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 11-15 years

(7.55.2.9) Comment

The project centered around replacing outdated motors with high-efficiency models in key production processes. By incorporating variable speed drives (VSDs), the motors' energy use was optimized, allowing for precise control over operational efficiency. This not only resulted in significant energy savings but also reduced wear on the equipment, prolonging its lifespan. The initiative achieved a CO2 reduction of 6,616 metric tons, with notable savings in electricity consumption. This investment demonstrated a strong return, as the improved motors enabled better regulation of energy demand across the facility.

Row 3

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

☑ Lighting

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

1125

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

281339

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

121613

(7.55.2.7) Payback period

Select from:

☑ <1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 6-10 years

(7.55.2.9) Comment

The replacement of conventional lighting systems with LED lamps across the facility led to considerable reductions in electricity use while maintaining high lighting quality. The LED technology offers energy efficiency and longevity, cutting down on both energy costs and maintenance. The lighting upgrade is estimated to save 1,125 metric tons of CO2 annually. The longer lifespan of LED lamps contributes to reduced operational disruptions and improved sustainability outcomes for the facility. The payback period for this project is less than a year, making it a highly efficient investment.

Row 4

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Motors and drives

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

1279

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

502789

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

391912

(7.55.2.7) Payback period

Select from:

☑ 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 11-15 years

(7.55.2.9) Comment

This project was a Lean 6 Sigma initiative aimed at reducing natural gas consumption by optimizing motor usage. The introduction of more efficient motors in the production process allowed for better energy control and significantly reduced natural gas consumption. This project led to annual CO2 savings of 1,279 metric tons. The investment enhanced both the operational efficiency and sustainability of the facility by optimizing the energy-intensive processes involved in natural gas consumption.

Row 5

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Process optimization

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

376

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

71697

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

30768

(7.55.2.7) Payback period

Select from:

☑ 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 11-15 years

(7.55.2.9) Comment

The project involved using mirror cullet to reduce natural gas consumption in the furnace. By incorporating more recycled glass materials (cullet), the energy demand for heating and melting raw materials was significantly lowered. This optimization in the glass-making process resulted in an annual CO2 reduction of 376 metric tons. The integration of recycled content into production not only lowered energy costs but also contributed to a more sustainable and circular production model.
[Add row]

(7.55.3) What methods do you use to drive investment in emissions reduction activities?

Row 1

(7.55.3.1) Method

Select from:

☑ Compliance with regulatory requirements/standards

(7.55.3.2) Comment

Şişecam's fundamental approach to climate change regulation requirements and standards is to ensure full compliance with the applicable legislation concerning climate change and environmental management at each of its facilities. In Turkey, the company adheres to the Turkish Energy Efficiency Law (No. 5627) and the Regulation on Improving Energy Efficiency in Energy Usage. These regulations guide Şişecam's efforts to enhance energy efficiency, reduce waste heat, and utilize energy more effectively. To this end, annual energy audits are conducted by independent and authorized institutions, which report findings and develop efficiency-enhancing measures. Şişecam also complies with the Regulation on Monitoring and Reporting of Greenhouse Gas Emissions, ensuring that emissions are monitored, verified, and reported annually. In line with Turkey's Nationally Determined Contribution (NDC) under the Paris Agreement, the company aligns its emission reduction strategies with the national commitment of reducing GHG emissions by up to 21% from the Business as Usual (BAU) level by 2030. The Ministry of Environment and Urbanism is actively working on several strategies and action plans that will directly affect various business sectors. Though the sectoral distribution of targets is not yet clear, it is certain that greenhouse gas restrictions will be enforced. Şişecam is actively involved in the Partnership for Market Readiness (PMR) project, providing technical feedback on carbon pricing mechanisms (e.g., carbon taxes, carbon trading systems) and internal carbon pricing considerations for new investments. In the European Union, Şişecam's facilities fall under the scope of the EU Emissions Trading System (EU-ETS). The company complies with all monitoring, reporting, and trading obligations and ensures adherence to energy efficiency regulations through annual energy audits, which are reported to the relevant authorities. Şişecam closely monitors regulatory revisions under the European Green Deal and works in collaboration with governments and industry associations to remain compliant.

Row 3

(7.55.3.1) Method

Select from:

☑ Employee engagement

(7.55.3.2) Comment

Şişecam continuously works to improve employee engagement and satisfaction as part of its employer responsibility. The company conducts a biennial Employee Engagement Survey to understand the needs and expectations of its employees. This feedback helps identify areas of strength and opportunities for improvement, allowing for necessary adjustments. Additionally, Şişecam has launched several initiatives under the Tek Şişecam İnsan ve Kültür Programı, aiming to shape and strengthen the company culture around shared values, ensuring it is adopted by all employees. The NAR Suggestion Development Platform allows employees to contribute innovative ideas, fostering continuous improvement and renewal based on their feedback. Furthermore, Annual Achievement Awards and Tenure Award Ceremonies recognize employees' outstanding projects and contributions to enhance engagement and productivity. As of the end of 2023, Şişecam provided an average of 35.9 hours of training per employee in Türkiye, including an increasing focus on environmental trainings.

Row 4

(7.55.3.1) Method

Select from:

☑ Dedicated budget for energy efficiency

(7.55.3.2) Comment

Şişecam, being a highly energy-intensive manufacturing company, recognizes that sustainable energy solutions (energy efficiency, renewable energy, alternative energy mix) are key to sustainability and has taken several corporate actions to adapt to the increasingly competitive global business environment. Energy costs represent 20-25% of Şişecam's total operational expenses. To mitigate risks related to energy price volatility and ensure continuous access to high-quality energy, Şişecam proactively identifies and implements energy efficiency solutions. Energy efficiency investments are separately defined in annual investment plans, and priority is given to these investments. Efficiency-enhancing projects identified through energy audits are evaluated annually. These projects include advanced furnace control technologies, waste heat recovery, and increasing the use of glass cullet. Additionally, Şişecam invests in low-carbon product research and development and continues to explore and apply advanced technologies. As part of its sustainability strategy, Şişecam channels investments into expanding its renewable energy capacity. The company has already achieved significant increases in solar energy production and is exploring other renewable sources like wind energy. Furthermore, Şişecam emphasizes energy efficiency improvements across its production processes, driving both emissions and cost reductions.
[Add row]

(7.73) Are you providing product level data for your organization's goods or services?

Select from:
☑ No, I am not providing data

(7.74) Do you classify any of your existing goods and/or services as low-carbon products?

Select from:
☑ Yes

(7.74.1) Provide details of your products and/or services that you classify as low-carbon products.

Row 1

(7.74.1.1) Level of aggregation

Select from:
☑ Group of products or services

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:
☑ Other, please specify :The GHG Protocol for Project Accounting, ISO 14064-2 Greenhouse gases – Part 2, Guidelines for Quantifying GHG emission reductions of goods or services through Global Value Chain by the Ministry of Economy, Trade and Industry

(7.74.1.3) Type of product(s) or service(s)

Power
☑ Other, please specify :solar/energy control glasses

(7.74.1.4) Description of product(s) or service(s)

Special products in the flat glass segment fall under the low-carbon category due to their energy efficiency during use. Our coated flat glass solutions, including Solar Low-E coated glass produced under the Isıcam K T brand, significantly contribute to mitigating climate change by reducing heat loss by 50% and solar heat gain by 40–65%, compared to standard double glazing. This leads to fuel savings in winter and lowers air conditioning energy use in summer. Şişecam Glass for Photovoltaics and Şişecam Glass for Solar Thermal Collectors enhance solar panel efficiency due to their superior light transmittance performance. Additionally, they *protect the inner components of solar panels, which convert solar energy into electricity, from environmental factors. The specially designed "Sandy" and "Prism" patterns on these glasses reduce surface reflections, ensuring maximum efficiency in solar panel and collector performance with their high light transmittance and low reflection rates. The anti-reflective (AR) coating further minimizes light reflection, and the glass's light transmittance is improved by 2%, enhancing the performance of solar panels and delivering high efficiency.*

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

☑ No

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

4

[Add row]

(7.79) Has your organization canceled any project-based carbon credits within the reporting year?

Select from:

☑ No

C9. Environmental performance - Water security

(9.1) Are there any exclusions from your disclosure of water-related data?

Select from:

☑ No

(9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

Water withdrawals – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

Water Meters and bills

(9.2.4) Please explain

For Şişecam, a 'facility' refers to a location where production activities are carried out. Şişecam operates 44 facilities, and the volumes of water withdrawals are meticulously monitored at each site. All facilities ensure 100% tracking of water withdrawals volumes, and this data is regularly reported in line with Şişecam's sustainability goals and regulatory compliance requirements. Şişecam regularly monitors and reports water withdrawal at its facilities. The volume of water withdrawn is tracked at each facility through meters and water bills. This systematic monitoring approach ensures accurate recording and control of water usage. This method supports Şişecam's water management strategies in line with its sustainability goals and forms the basis for CDP reporting. All data is periodically reviewed to optimize water use and minimize environmental impacts.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

Water Meters and bills

(9.2.4) Please explain

For Şişecam, a 'facility' refers to a location where production activities are carried out. Şişecam operates 44 facilities, and the volumes of water withdrawals by source are meticulously monitored at each site. Water is withdrawn from various sources including groundwater, municipal water, surface water, and others. All facilities ensure 100% tracking of water withdrawal volumes by source, and this data is regularly reported in line with Şişecam's sustainability goals and regulatory compliance requirements. At Şişecam facilities, various water sources such as groundwater, municipal water, spring water, and grey water are utilized. However, the majority of the facilities primarily rely on groundwater and municipal water as their main sources. The water withdrawn from these sources is systematically monitored and tracked through meters and water bills, ensuring accurate and consistent measurement and management.

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

☑ 51-75

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

manual or automatic sampling

(9.2.4) Please explain

For Şişecam, a 'facility' refers to a location where production activities are carried out. Şişecam monitors water quality at 24 out of its 44 facilities, primarily on a monthly and annual basis. Additionally, certain facilities are subject to daily, bi-monthly, and continuous monitoring processes to ensure optimal water quality. This comprehensive approach helps safeguard both the operational integrity of the equipment and the overall sustainability of the production processes.

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

Water Meters

(9.2.4) Please explain

For Şişecam, a 'facility' refers to a location where production activities are carried out. Şişecam operates 44 facilities, and the total volumes of water discharges are meticulously monitored at each site. Discharges are carefully tracked across all facilities. Şişecam facilities discharge water to various locations depending on the specific site and local regulations. The discharge points include municipal sewage systems, organized industrial zone channels, seas, rivers, city wastewater treatment plants, septic tanks, and streams. Each facility utilizes appropriate monitoring systems, and the majority of these discharges are tracked using meters to ensure accurate measurement and compliance with environmental standards. This systematic approach enables Şişecam to manage water discharge effectively across its operations, supporting the company's sustainability commitments and adherence to regulatory requirements.

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

Water Meters

(9.2.4) Please explain

For Şişecam, a 'facility' refers to a location where production activities are carried out. Şişecam operates 44 facilities, and the volumes of water discharges by destination are meticulously monitored at each site. Şişecam facilities discharge water to various destinations based on specific site conditions and local regulations. The primary discharge points include municipal sewage systems, organized industrial zone channels, seas, rivers, city wastewater treatment plants, septic tanks, and streams. Water discharge volumes are systematically monitored, with the majority being tracked through meters to ensure accurate measurement. This approach allows for precise accounting of discharge volumes by destination, ensuring compliance with environmental standards. The data collected supports Şişecam's commitment to sustainable water management and provides a transparent record for regulatory reporting and continuous improvement in discharge practices.

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

Meters

(9.2.4) Please explain

For Şişecam, a 'facility' refers to a location where production activities are carried out. Şişecam operates 44 facilities. Şişecam manages its water discharges through various treatment methods depending on the facility's location and the nature of the discharge. The primary treatment methods include discharge to municipal sewage systems where further treatment is managed by local authorities, use of on-site treatment facilities such as primary, secondary, and tertiary treatment processes, and discharge to organized industrial zone treatment channels. Additionally, septic tanks are used in locations without access to centralized treatment. Each treatment method is carefully monitored, and discharge volumes are tracked using meters to ensure compliance with environmental regulations. This structured approach allows Şişecam to accurately manage and report water discharges by treatment method, aligning with the company's sustainability and regulatory compliance objectives.

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

manual or automatic sampling

(9.2.4) Please explain

For Şişecam, a 'facility' refers to a location where production activities are carried out. Şişecam operates 44 facilities, where the quality of water discharges is meticulously monitored by standard effluent parameters at each site. Monitoring includes measurements of various parameters such as pH, temperature, BOD5, *COD, TOC, suspended solids, total suspended solids, oil and grease, lead, nickel, silver, phosphorus, fluoride, total chrome, chrome6, zinc, iron, copper, cadmium, mercury, sulfate (SO4-2), phenol, total nitrogen, and Kjeldahl nitrogen. Each facility ensures that discharge quality complies with the relevant local, state, and national regulations. Data on water discharge quality is regularly reported, aligning with Şişecam's sustainability goals and regulatory compliance requirements.*

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

(9.2.1) % of sites/facilities/operations

Select from:

☑ Not relevant

(9.2.4) Please explain

For Şişecam, a 'facility' refers to a location where production activities are carried out. Şişecam operates 44 facilities, and in all of these facilities, the quality of discharge water is monitored only by standard effluent parameters and temperature. Most of our facilities generally do not have priority substances in their wastewater; however, if any facility uses a product containing these priority substances as raw material, these parameters will be monitored if required by local regulations.

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

manual or automatic sampling

(9.2.4) Please explain

For Şişecam, 'facilities' refer to our production sites. Our industrial facilities comply with national, state, and local regulations and permits regarding water withdrawals and wastewater discharges. Water discharge quality monitoring is conducted on a facility-by-facility basis, depending on the type of activity and local regulatory requirements. Monitoring includes measurements of various parameters such as pH, temperature, BOD5, COD, TOC, suspended solids, total suspended solids, oil and grease, lead, nickel, silver, phosphorus, fluoride, total chrome, chrome6, zinc, iron, copper, cadmium, mercury, sulfate (SO4-2), phenol, total nitrogen, and Kjeldahl nitrogen. Each facility ensures that discharge quality complies with the relevant local, state, and national regulations. Data on water discharge quality is regularly reported, aligning with Şişecam's sustainability goals and regulatory compliance requirements.

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

Meters

(9.2.4) Please explain

For Şişecam, a 'facility' refers to a location where production activities are carried out. Şişecam operates 44 facilities, and water consumption volumes are meticulously monitored across all sites. Water consumption data is tracked at 100% accuracy using monthly meter readings at each facility, ensuring precise measurement and management of water resources in line with Şişecam's sustainability objectives and compliance with regulatory requirements.

Water recycled/reused

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

meters

(9.2.4) Please explain

For Şişecam, a 'facility' refers to a location where production activities are carried out. Şişecam regularly measures and monitors the amount of water recycled or reused annually across all its operations. As part of the company's 'CareforNext 2030' sustainability strategy, water management is a critical component aimed at reducing environmental impact and contributing to circular production practices. Efforts include not only tracking water use but also increasing water recycling and reuse across production facilities. In 2023, Şişecam recycled 6.468.362 m³ of water. The company also aims to further reduce its water consumption by 15% by 2030, as stated in its sustainability goals. These initiatives are part of a broader commitment to environmental stewardship, focusing on reducing dependency on natural resources and minimizing waste across all operations.

The provision of fully-functioning, safely managed WASH services to all workers

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Meters, environmental sensors, and regular safety inspections in compliance with ISO 45001 standards.

(9.2.4) Please explain

For Şişecam, a 'facility' refers to a location where production activities are carried out. Şişecam provides fully functioning, safely managed WASH services to all workers in line with its commitment to workplace safety and well-being. Ensuring that all employees have access to clean water and sanitation facilities is part of Şişecam's broader health and safety strategy. This approach aligns with their occupational health and safety standards (ISO 45001), which emphasize a safe and healthy work environment, continuous improvements, and compliance with global standards. Water quality is continuously monitored to ensure it meets the required safety standards. Regular health checks, hygiene practices, and site-specific procedures are also applied to protect employee well-being.
[Fixed row]

(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

Total withdrawals

(9.2.2.1) Volume (megaliters/year)

53790.32

(9.2.2.2) Comparison with previous reporting year

Select from:
☑ About the same

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:
☑ Investment in water-smart technology/process

(9.2.2.4) Five-year forecast

Select from:
☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

Our definition for change: Much higher: 10%, Higher: 5%, About the same: -5%, Much lower: -10%. Şişecam experienced a 0.33% increase in total water withdrawal from 2022 to 2023, which falls within the 'About the same' range, defined as less than /- 5%. This stable result is attributed to continuous process improvements and better metrology practices that help in detecting and preventing leaks. Looking forward, Şişecam anticipates reductions in water withdrawals due to ongoing and planned water efficiency projects, particularly focusing on key facilities that contribute the most to water consumption. Additionally, Şişecam is committed to achieving its long-term water sustainability goals through targeted investments and further optimization efforts.

Total discharges

(9.2.2.1) Volume (megaliters/year)

3692.18

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Much lower

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.2.4) Five-year forecast

Select from:

☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

Our definition for change: Much higher: 10%, Higher: 5%, About the same: -5%, Much lower: -10%. Şişecam has achieved a significant reduction in total discharge, decreasing by approximately 35.78% from 2022 to 2023, categorizing it as "Much Lower" according to established thresholds. This substantial decrease is attributed not only to ongoing process improvements but also to enhanced data quality in water management, which has resulted in more accurate measurements and improved detection of inefficiencies. Looking ahead, Şişecam anticipates further reductions in total discharge over the next five years, driven by the continued implementation of water recovery projects. These initiatives are integral to Şişecam's broader sustainability strategy, which focuses on optimizing water usage and minimizing environmental impacts.

Total consumption

(9.2.2.1) Volume (megaliters/year)

50098.14

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.2.4) Five-year forecast

Select from:

☑ Higher

(9.2.2.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

Our definition for change: Much higher: 10%, Higher: 5%, About the same: -5%, Much lower: -10%. Şişecam has recorded a total water consumption of approximately 50,458.85 megaliters in 2022, which decreased slightly to 50,098.14 megaliters in 2023, resulting in a change categorized as "About the same" according to established thresholds. This stability in water consumption reflects the company's ongoing commitment to efficient water management practices. Looking ahead, Şişecam anticipates an increase in total water consumption over the next five years. This expected growth is driven by planned investments and production targets that align with the company's strategic objectives. While these initiatives aim to enhance production capacity, Şişecam remains focused on implementing sustainable practices to optimize water usage and minimize environmental impacts.
[Fixed row]

(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.

(9.2.4.1) Withdrawals are from areas with water stress

Select from:
☑ Yes

(9.2.4.2) Volume withdrawn from areas with water stress (megaliters)

49715.02

(9.2.4.3) Comparison with previous reporting year

Select from:
☑ About the same

(9.2.4.4) Primary reason for comparison with previous reporting year

Select from:
☑ Investment in water-smart technology/process

(9.2.4.5) Five-year forecast

Select from:
☑ Lower

(9.2.4.6) Primary reason for forecast

Select from:
☑ Investment in water-smart technology/process

(9.2.4.7) % of total withdrawals that are withdrawn from areas with water stress

92.42

(9.2.4.8) Identification tool

Select all that apply
☑ WRI Aqueduct

(9.2.4.9) Please explain

For Şişecam, a "facility" refers to a location where production activities are carried out. Water is an essential resource for Şişecam's production activities, and the company continuously evaluates its water usage, particularly in areas identified as water-stressed. In 2023, the total volume of water withdrawn from all sources was 53,790,322 m³, which represents a slight increase compared to 53,615,335 m³ in 2022. Şişecam closely monitors withdrawals from water-stressed areas, although specific details on these areas are not publicly disclosed. The company forecasts that its overall water usage will stabilize as it continues to implement water-saving initiatives and increase the reuse of water. Efforts to mitigate water stress risks are part of Şişecam's broader sustainability strategy, which includes minimizing water consumption, especially in regions identified as vulnerable. As water stress is expected to intensify globally, the company is committed to further improving its water management practices to reduce dependency on water-stressed sources and ensure that local communities and ecosystems are not adversely affected by its operations.
[Fixed row]

(9.2.7) Provide total water withdrawal data by source.

Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

25985.77

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Divestment from water intensive technology/process

(9.2.7.5) Please explain

In 2023, Şişecam achieved a reduction in surface water consumption due to ongoing efforts to enhance water efficiency and implement measures to optimize water use across its facilities. The company has focused on water conservation projects, particularly in recycling and reusing water within production processes. These initiatives have contributed significantly to the overall decrease in surface water usage, aligning with Şişecam's commitment to sustainable water management and regulatory compliance.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

"Brackish surface water is not used within Şişecam's operations.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

24481.2

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Facility expansion

(9.2.7.5) Please explain

As Şişecam, we rely on groundwater as a significant water source, and the volume is directly measured using water meters. The primary reason for the increase in groundwater withdrawal compared to the previous reporting year is due to facility expansions. This has led to a slight increase in groundwater usage. Şişecam continues to monitor and manage groundwater use closely to ensure sustainable resource management in line with our environmental commitments.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

As the water is not withdrawn from non-renewable groundwater sources, this aspect is considered not relevant for Şişecam.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:
☑ Not relevant

(9.2.7.5) Please explain

Produced/Entrained water is not used within Şişecam's operations.

Third party sources

(9.2.7.1) Relevance

Select from:
☑ Relevant

(9.2.7.2) Volume (megaliters/year)

3009.65

(9.2.7.3) Comparison with previous reporting year

Select from:
☑ Lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:
☑ Divestment from water intensive technology/process

(9.2.7.5) Please explain

In addition to surface water, Şişecam also uses municipal water as a source. There has been a reduction in municipal water usage compared to the previous year. This decrease is attributed to Şişecam's ongoing initiatives to improve water efficiency and implement conservation measures across its operations. The company has adopted practices such as optimizing water use in production processes and enhancing water recycling efforts, which have collectively contributed to the reduction in municipal water consumption. These efforts align with Şişecam's sustainability goals and commitment to responsible water management.
[Fixed row]

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:
☑ Relevant

(9.2.8.2) Volume (megaliters/year)

9892.45

(9.2.8.3) Comparison with previous reporting year

Select from:
☑ Higher

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:
☑ Investment in water-smart technology/process

(9.2.8.5) Please explain

Our definition for change: Much higher: 10%, Higher: 5%, About the same: -5%, Much lower: -10%. In the context of freshwater surface discharge, Şişecam reported an increase from 9,375.672 megaliters in 2022 to 9,892.445831 megaliters in 2023. This change represents an approximate increase of 5.51%, categorizing it as "Higher" according to established thresholds. This increase in freshwater surface discharge can be attributed to several factors, including planned investments in *production capacity and operational expansions. Despite this rise, Şişecam remains committed to implementing sustainable practices to optimize water usage and mitigate environmental impacts.*

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

18040.7

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Much lower

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.8.5) Please explain

Our definition for change: Much higher: 10%, Higher: 5%, About the same: -5%, Much lower: -10%. In 2023, Şişecam reported a significant decrease in freshwater discharge to the sea, reducing from 30,880.94 megaliters in 2022 to 18,040.7 megaliters in 2023. This approximately 41.5% reduction is categorized as "Much lower" based on established thresholds. This decrease is attributed to enhanced water management practices and strategic investments in wastewater treatment technologies. By minimizing discharge to the sea, Şişecam demonstrates its commitment to sustainability and responsible resource management, aligning with broader environmental objectives.

Groundwater

(9.2.8.1) Relevance

Select from:
☑ Relevant

(9.2.8.2) Volume (megaliters/year)

2737.5

(9.2.8.3) Comparison with previous reporting year

Select from:
☑ About the same

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:
☑ Investment in water-smart technology/process

(9.2.8.5) Please explain

Our definition for change: Much higher: 10%, Higher: 5%, About the same: -5%, Much lower: -10%. In terms of groundwater discharge, Şişecam maintained a consistent level of 2,737.5 megaliters per year for both 2022 and 2023. This stability in groundwater discharge indicates effective management practices and the successful implementation of sustainable water use strategies. The unchanged discharge levels reflect the company's ongoing efforts to monitor and optimize groundwater usage, ensuring that it meets operational needs without compromising environmental integrity. Maintaining this balance is crucial for sustaining local ecosystems and aligning with Şişecam's broader sustainability goals.

Third-party destinations

(9.2.8.1) Relevance

Select from:
☑ Relevant

(9.2.8.2) Volume (megaliters/year)

2323.24

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Much lower

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.8.5) Please explain

Our definition for change: Much higher: 10%, Higher: 5%, About the same: -5%, Much lower: -10%. In 2023, Şişecam reported a significant decrease in third-party wastewater discharge, which declined from 3,726.29 megaliters in 2022 to 2,323.24 megaliters in 2023. This change represents an approximate reduction of 37.6%, categorizing it as "Much lower" according to established thresholds. This substantial decrease is attributed to several key factors, including enhanced operational efficiencies, investments in wastewater treatment technologies, and a commitment to sustainable water management practices. These initiatives have allowed Şişecam to minimize wastewater generation and improve the overall quality of discharged water. By reducing the amount of wastewater sent to third parties, Şişecam demonstrates its ongoing commitment to environmental sustainability and responsible resource management, aligning with its broader sustainability goals.

[Fixed row]

(9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

Tertiary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

303.07

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ Much lower

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 1-10

(9.2.9.6) Please explain

Our definition for change: Much higher: 10%, Higher: 5%, About the same: -5%, Much lower: -10%. Şişecam applies tertiary treatment as the most advanced level of water treatment to manage its discharges. This process is applied to 303.07 megaliters per year before discharge, significantly improving water quality by removing pollutants such as nitrogen, phosphorus, and other micro-pollutants that could negatively impact freshwater ecosystems if not properly treated. In comparison to the previous year, when 342.44 megaliters were treated, this represents an 11.50% decrease in the volume of water treated. According to our definition for change, this falls into the "Much lower" category. The decrease reflects changes in operational water usage but also emphasizes the effectiveness of Şişecam's water efficiency measures and continuous efforts to optimize resource use. The tertiary treatment ensures that discharged water meets environmental standards and reduces the risk of pollution, protecting public health and biodiversity. Furthermore, the comparison of treated volumes with previous years allows for tracking environmental performance, ensuring ongoing improvements in water management practices. This aligns with Şişecam's broader environmental sustainability efforts, demonstrating its proactive measures in mitigating the impacts of industrial activities on water resources.

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

20133.2

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ Much lower

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 31-40

(9.2.9.6) Please explain

Our definition for change: Much higher: 10%, Higher: 5%, About the same: -5%, Much lower: -10%. Şişecam applies secondary treatment in 16 of its 45 facilities to manage water discharges. Secondary treatment involves biological processes that help remove dissolved and suspended organic matter from wastewater, ensuring that it meets environmental standards before being discharged into the environment. This treatment process is essential for reducing the pollution load and protecting freshwater ecosystems. In 2023, the total volume of water treated with secondary processes decreased to 20,133.22 megaliters, compared to 33,806.50 megaliters in 2022. This represents a significant 40.45% decrease in treated water volume, falling into the "Much lower" category according to our definition of change. The decrease reflects a reduction in water use or discharge volumes across the facilities but underscores Şişecam's ongoing commitment to optimizing water management practices. By implementing secondary treatment across these facilities, Şişecam shows its commitment to environmental sustainability and compliance with regulations. The company actively works to minimize the environmental impact of its operations and protect natural resources, particularly water, through advanced water management practices.

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

8436

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:
☑ Much higher

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:
☑ Increase/decrease in business activity

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:
☑ 11-20

(9.2.9.6) Please explain

Our definition for change: Much higher: 10%, Higher: 5%, About the same: -5%, Much lower: -10%. Şişecam applies primary treatment in 6 of its 45 facilities to manage water discharges. Primary treatment involves the physical separation of large solids and sediments from wastewater, acting as the first level of treatment. This process helps reduce the overall pollutant load before further treatment steps are applied, ensuring that the discharged water meets environmental standards. In 2023, the total volume of water treated with primary processes increased to 8436.01 megaliters, compared to 7288.16 megaliters in 2022. This represents a significant 15.75% increase, which falls under the "Much higher" category according to our definition of change. The increase highlights Şişecam's efforts to improve its water treatment capacity, reflecting the company's ongoing commitment to enhancing environmental sustainability and optimizing water management practices. By implementing primary treatment in these facilities, Şişecam shows its commitment to environmental sustainability and regulatory compliance. This demonstrates the company's proactive approach to minimizing the environmental impact of its operations, particularly in protecting water resources through effective water management practices.

Discharge to the natural environment without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:
☑ Not relevant

(9.2.9.6) Please explain

In Şişecam's operations, there is no discharge to the natural environment without treatment. All wastewater is subjected to proper treatment processes, either through in-house treatment systems or via collaboration with Organized Industrial Zones (OSBs) to ensure that all water discharged complies with environmental regulations and standards. This approach reflects the company's commitment to maintaining high environmental standards and protecting natural ecosystems.

Discharge to a third party without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

1211.51

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ Much lower

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 41-50

(9.2.9.6) Please explain

Our definition for change: Much higher: 10%, Higher: 5%, About the same: -5%, Much lower: -10%. Şişecam directs the wastewater from 19 of its 45 facilities to third-party treatment facilities for further treatment. This ensures that wastewater undergoes advanced treatment at centralized facilities, which brings the discharged water into compliance with environmental standards before it is released into the environment. In 2023, the total volume of wastewater sent to third-party facilities for treatment decreased to 1,211.51 megaliters, compared to 1,917.14 megaliters in 2022. This represents a significant 36.81% decrease, which falls under the "Much lower" category according to our definition of change. The reduction reflects changes in operational water discharge volumes but also emphasizes Şişecam's efforts to optimize its wastewater management practices. By collaborating with third-party facilities for wastewater management, Şişecam demonstrates its commitment to environmental sustainability and regulatory compliance. This approach highlights the company's proactive efforts to minimize the environmental impact of its operations, particularly by ensuring the protection of water resources through effective wastewater management practices.

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

There is no other methods within Şişecam's operations.
[Fixed row]

(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

Direct operations

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.2) Total number of facilities identified

16

(9.3.3) % of facilities in direct operations that this represents

Select from:

☑ 26-50

(9.3.4) Please explain

For Şişecam, 'facilities' refer to our production sites. To optimize its water management strategies, Şişecam conducted a comprehensive water risk analysis covering all 44 facilities operating across 4 continents and 14 countries. This overall risk assessment considered total water usage, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas, with reference to the CEO Water Mandate's guiding principles on water stewardship. The evaluation process analyzed critical factors such as water stress, water supply-demand balance, water quality, and climate change impacts in the regions where the facilities are located. Among the 45 facilities analyzed, 16 were identified as being at risk. In addition to the general risk analysis, facilities with physical risks classified as "Extremely High" and "High" according to the WRI Aqueduct Risk Atlas were identified. Specifically, facilities facing high risks related to general physical risk, water depletion, and riverine flood risks were highlighted. Furthermore, the water quality of all Şişecam facilities was thoroughly examined, and each was assessed against the stringent IFC standards, identifying those with water quality risks that will be prioritized for future corrective actions. These analyses form the foundation for developing Şişecam's water management strategies by identifying high-risk and at-risk facilities. Strategic plans have been developed to prioritize these facilities with the objectives of minimizing water usage, preserving water quality, and reducing environmental impacts. Şişecam is committed to adopting best practices in water management across all its facilities and effectively managing water-related risks as it progresses towards its sustainability goals. This integrated approach promotes the conscious and responsible use of water, significantly contributing to Şişecam's sustainable growth and environmental performance.

Upstream value chain

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ No, we have not assessed this value chain stage for facilities with water-related dependencies, impacts, risks, and opportunities, and are not planning to do so in the next 2 years

(9.3.4) Please explain

No, we have not yet assessed the upstream value chain stage for facilities with water-related dependencies, impacts, risks, and opportunities. However, Şişecam is committed to expanding its water risk management approach, and we plan to conduct a comprehensive assessment of the upstream value chain within the next 2 years. This future assessment will aim to identify and address potential water-related risks and opportunities throughout our upstream operations, aligning with our broader sustainability objectives and enhancing our overall water management strategy.

[Fixed row]

(9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Row 1

(9.3.1.1) Facility reference number

Select from:

☑ Facility 1

(9.3.1.2) Facility name (optional)

AB-GLASS PACKAGING YENİŞEHİR

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey

☑ Sakarya

(9.3.1.8) Latitude

40.243564

(9.3.1.9) Longitude

29.663551

(9.3.1.10) Located in area with water stress

Select from:

☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

363.36

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Lower

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

363.36

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

353.51

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:
☑ Lower

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

353.51

(9.3.1.27) Total water consumption at this facility (megaliters)

363.36

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

Şişecam’s Glass Packaging production facility, coded as AB and located in Bursa, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of the Sakarya River and is classified as 'high' in the water stress category according to WRI. The AB facility relies on groundwater as its primary water source. The wastewater generated at the facility is treated before being discharged into the Organized Industrial Zone (OSB) channel.

Row 2

(9.3.1.1) Facility reference number

Select from:

☑ Facility 2

(9.3.1.2) Facility name (optional)

AE - GLASS PACKAGING ESKİŞEHİR

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey

☑ Sakarya

(9.3.1.8) Latitude

39.73873

(9.3.1.9) Longitude

30.657718

(9.3.1.10) Located in area with water stress

Select from:

☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

330.98

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Lower

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

330.98

(9.3.1.21) Total water discharges at this facility (megaliters)

33.3

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:
☑ Lower

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

33.3

(9.3.1.27) Total water consumption at this facility (megaliters)

330.98

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

Şişecam's Glass Packaging production facility, coded as AE and located in Eskişehir, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of the Sakarya River and is classified as 'extremely high' in the water stress category according to WRI. The AE facility relies on municipal water as its primary water source. The wastewater generated at the facility is treated before being discharged into the Organized Industrial Zone (OSB) channel.

Row 3

(9.3.1.1) Facility reference number

Select from:

☑ Facility 3

(9.3.1.2) Facility name (optional)

DC - GLASSWARE DENİZLİ

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey

☑ Other, please specify :Buyuk Menderes River

(9.3.1.8) Latitude

37.766566

(9.3.1.9) Longitude

29.019244

(9.3.1.10) Located in area with water stress

Select from:

☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

44.6

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

37.47

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

7.13

(9.3.1.21) Total water discharges at this facility (megaliters)

44.07

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Higher

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

44.07

(9.3.1.27) Total water consumption at this facility (megaliters)

44.6

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Higher

(9.3.1.29) Please explain

Şişecam's Glassware production facility, coded as DC and located in Denizli, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of the Büyük Menderes River and is classified as 'extremely high' in the water stress category according to WRI. The DC facility relies on both municipal and groundwater as its primary water sources. The wastewater generated at the facility is treated before being discharged into the DESKİ channel, which is managed by Denizli Water and Sewerage Administration, responsible for overseeing the region's water and wastewater infrastructure.

Row 4

(9.3.1.1) Facility reference number

Select from:

☑ Facility 4

(9.3.1.2) Facility name (optional)

EG - GLASSWARE EGYPT

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Egypt

☑ Nile

(9.3.1.8) Latitude

29.897226

(9.3.1.9) Longitude

30.891072

(9.3.1.10) Located in area with water stress

Select from:
☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

116.21

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

116.21

(9.3.1.21) Total water discharges at this facility (megaliters)

33.06

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Higher

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

33.06

(9.3.1.27) Total water consumption at this facility (megaliters)

116.21

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:
☑ Higher

(9.3.1.29) Please explain

Şişecam's Glassware production facility, coded as EG and located in Egypt, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of the Nile Delta and is classified as 'extremely high' in the water stress category according to WRI. The EG facility relies on municipal water as its primary water source. The wastewater generated at the facility is treated before being discharged into the sewage system.

Row 5

(9.3.1.1) Facility reference number

Select from:
☑ Facility 5

(9.3.1.2) Facility name (optional)

HD - FLAT GLASS INDIA

(9.3.1.3) Value chain stage

Select from:
☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply
☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:
☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

India

☑ Mahi River

(9.3.1.8) Latitude

22.54459

(9.3.1.9) Longitude

73.431318

(9.3.1.10) Located in area with water stress

Select from:

☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

250.03

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ About the same

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

250.03

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

22.05

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ About the same

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

22.05

(9.3.1.27) Total water consumption at this facility (megaliters)

250.03

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ About the same

(9.3.1.29) Please explain

Şişecam's Flat Glass production facility, coded as HD and located in India, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Major Basin of Mahi and the Minor Basin of Delta and is classified as 'extremely high' in the water stress category according to WRI. The HD facility relies on surface water as its primary water source. The wastewater generated at the facility is discharged into the sewage system.

Row 6

(9.3.1.1) Facility reference number

Select from:

☑ Facility 6

(9.3.1.2) Facility name (optional)

KR - CHEMICALS MERSIN KROMSAN

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey

☑ Other, please specify :Goksu River

(9.3.1.8) Latitude

36.817578

(9.3.1.9) Longitude

34.728987

(9.3.1.10) Located in area with water stress

Select from:

☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

845.5

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ Lower

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

57.75

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

787.72

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

609.62

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:
☑ Lower

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

609.62

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

845.5

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

Şişecam's Chemicals production facility, coded as KR and located in Mersin Kromsan, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of the Göksu River and is classified as 'high' in the water stress category according to WRI. The KR facility utilizes both surface water and groundwater as its primary water sources. The wastewater generated at the facility is discharged into the Mediterranean Sea.

Row 7

(9.3.1.1) Facility reference number

Select from:

☑ Facility 7

(9.3.1.2) Facility name (optional)

MDYLK - MINING YALIKÖY

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey

☑ Veleka

(9.3.1.8) Latitude

41.478

(9.3.1.9) Longitude

28.2949

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

502.59

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Lower

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

490.11

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

12.49

(9.3.1.21) Total water discharges at this facility (megaliters)

0.12

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Lower

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0.12

(9.3.1.27) Total water consumption at this facility (megaliters)

502.59

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

Şişecam's Mining production facility, coded as MDYLK and located in Yalıköy, is identified based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of Veleka and is not classified under water stress according to WRI. The MDYLK facility relies on surface water, spring water, and municipal water as its primary water sources. The wastewater generated at the facility is discharged into septic tanks.

Row 8

(9.3.1.1) Facility reference number

Select from:

☑ Facility 8

(9.3.1.2) Facility name (optional)

PE - GLASSWARE ESKİŞEHİR

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey
☑ Sakarya

(9.3.1.8) Latitude

39.742232

(9.3.1.9) Longitude

30.662311

(9.3.1.10) Located in area with water stress

Select from:
☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

325.2

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

325.2

(9.3.1.21) Total water discharges at this facility (megaliters)

220.65

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:
☑ Higher

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

220.65

(9.3.1.27) Total water consumption at this facility (megaliters)

325.2

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Higher

(9.3.1.29) Please explain

Şişecam's Glassware production facility, coded as PE and located in Eskişehir, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of the Sakarya River and is classified as 'extremely high' in the water stress category according to WRI. The PE facility relies on municipal water as its primary water source. The wastewater generated at the facility is discharged into the Organized Industrial Zone (OSB) channel.

Row 9

(9.3.1.1) Facility reference number

Select from:

☑ Facility 9

(9.3.1.2) Facility name (optional)

PK - GLASSWARE KIRKLARELI

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey

☑ Other, please specify :Ergene

(9.3.1.8) Latitude

41.286517

(9.3.1.9) Longitude

27.577898

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

373.59

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ About the same

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

373.59

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

303.12

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ About the same

(9.3.1.23) Discharges to fresh surface water

303.12

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

373.59

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ About the same

(9.3.1.29) Please explain

Şişecam's Glassware production facility, coded as PK and located in Kırklareli, is identified based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of the Ergene River and is not classified under water stress according to WRI. The PK facility relies on groundwater as its primary water source. The wastewater generated at the facility is treated before being discharged into the river.

Row 10

(9.3.1.1) Facility reference number

Select from:

☑ Facility 10

(9.3.1.2) Facility name (optional)

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Russian Federation

☑ Volga

(9.3.1.8) Latitude

59.489697

(9.3.1.9) Longitude

32.011412

(9.3.1.10) Located in area with water stress

Select from:

☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

266.02

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ About the same

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

225.87

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

40.16

(9.3.1.21) Total water discharges at this facility (megaliters)

70.75

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ About the same

(9.3.1.23) Discharges to fresh surface water

70.75

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

266.02

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ About the same

(9.3.1.29) Please explain

Şişecam's Glass Packaging production facility, coded as RG and located in Gorokhovets, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Major Basin of the Volga and the Minor Basin of the Klyazma River and is classified as 'high' in the water stress category according to WRI. The RG *facility relies on both municipal and groundwater as its primary water sources. The wastewater generated at the facility is treated before being discharged into the river.*

Row 11

(9.3.1.1) Facility reference number

Select from:

☑ Facility 11

(9.3.1.2) Facility name (optional)

SD - CHEMICALS MERSIN SODA

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey

☑ Other, please specify :Goksu River

(9.3.1.8) Latitude

36.818146

(9.3.1.9) Longitude

34.738402

(9.3.1.10) Located in area with water stress

Select from:
☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

30340.45

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

10818.3

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

12051

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

17431.08

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:
☑ Higher

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

17431.08

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

30340.45

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:
☑ Higher

(9.3.1.29) Please explain

Şişecam's Chemicals production facility, coded as SD and located in Mersin Soda, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of the Göksu River and is classified as 'high' in the water stress category according to WRI. The SD facility relies on both municipal and groundwater as its primary water sources. The wastewater generated at the facility is treated before being discharged into the Mediterranean Sea.

Row 12

(9.3.1.1) Facility reference number

Select from:
☑ Facility 12

(9.3.1.2) Facility name (optional)

SE - GLASS FIBER BALIKESIR

(9.3.1.3) Value chain stage

Select from:
☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply
☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:
☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey
☑ Other, please specify **:**Minor Basin: Bursa/Balıkesir

(9.3.1.8) Latitude

39.58965

(9.3.1.9) Longitude

27.827218

(9.3.1.10) Located in area with water stress

Select from:
☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

385.52

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ About the same

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

385.52

(9.3.1.21) Total water discharges at this facility (megaliters)

213.16

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ About the same

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

213.16

(9.3.1.27) Total water consumption at this facility (megaliters)

385.52

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ About the same

(9.3.1.29) Please explain

Şişecam's Glass Fiber production facility, coded as SE and located in Balıkesir, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of Bursa/Balıkesir and is classified as 'high' in the water stress category according to WRI. The SE facility relies on municipal water as its primary water source. The wastewater generated at the facility is discharged into the Organized Industrial Zone (OSB) channel.

Row 13

(9.3.1.1) Facility reference number

Select from:

☑ Facility 13

(9.3.1.2) Facility name (optional)

SL - CHEMICALS LUKAVAC BOSNIA

(9.3.1.3) Value chain stage

Select from:
☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply
☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:
☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Bosnia & Herzegovina
☑ Danube

(9.3.1.8) Latitude

44.531866

(9.3.1.9) Longitude

18.525672

(9.3.1.10) Located in area with water stress

Select from:
☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

101.56

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ Lower

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

7118.34

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

41.18

(9.3.1.21) Total water discharges at this facility (megaliters)

8169.12

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:
☑ Lower

(9.3.1.23) Discharges to fresh surface water

8150.92

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

18.2

(9.3.1.27) Total water consumption at this facility (megaliters)

101.56

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:
☑ Lower

(9.3.1.29) Please explain

Şişecam's Chemicals production facility, coded as SL and located in Lukavac, Bosnia, is identified based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Major Basin of the Danube and the Minor Basin of Sava 2, and is not classified under water stress according to WRI. The SL facility relies on both surface water and municipal water as its primary sources. The wastewater generated at the facility is discharged into the sewage system and river.

Row 14

(9.3.1.1) Facility reference number

Select from:
☑ Facility 14

(9.3.1.2) Facility name (optional)

SO - AUTOMOTIVE A.Ş.

(9.3.1.3) Value chain stage

Select from:
☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply
☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:
☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey
☑ Other, please specify :Ergene

(9.3.1.8) Latitude

41.290019

(9.3.1.9) Longitude

27.580799

(9.3.1.10) Located in area with water stress

Select from:
☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

526.06

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

526.06

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

526

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Higher

(9.3.1.23) Discharges to fresh surface water

526

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

526.06

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Higher

(9.3.1.29) Please explain

Şişecam's Automotive production facility, coded as SO and located in the Minor Basin of the Ergene, is identified based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is not classified under water stress according to WRI. The SO facility relies on groundwater as its primary water source. The wastewater generated at the facility is discharged into a stream.

Row 15

(9.3.1.1) Facility reference number

Select from:

☑ Facility 15

(9.3.1.2) Facility name (optional)

TM - FLAT GLASS MERSİN

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey

☑ Other, please specify :Goksu River

(9.3.1.8) Latitude

36.89548

(9.3.1.9) Longitude

34.80932

(9.3.1.10) Located in area with water stress

Select from:

☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

1021.54

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Lower

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

654.13

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

367.41

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

0

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:
☑ Lower

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

147.41

(9.3.1.27) Total water consumption at this facility (megaliters)

1021.54

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

Şişecam's Flat Glass production facility, coded as TM and located in Mersin, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of the Göksu River and is classified as 'high' in the water stress category according to WRI. The TM facility relies on both groundwater and surface water as its primary water sources. The wastewater generated at the facility is discharged into the Organized Industrial Zone (OSB) channel.

Row 16

(9.3.1.1) Facility reference number

Select from:

☑ Facility 16

(9.3.1.2) Facility name (optional)

TN - FLAT GLASS YENİŞEHİR

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Risks

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Turkey

☑ Sakarya

(9.3.1.8) Latitude

40.24348

(9.3.1.9) Longitude

29.66358

(9.3.1.10) Located in area with water stress

Select from:

☑ Yes

(9.3.1.13) Total water withdrawals at this facility (megaliters)

635.32

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Lower

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

635.32

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

277.18

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Lower

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

277.18

(9.3.1.27) Total water consumption at this facility (megaliters)

635.32

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:
☑ Lower

(9.3.1.29) Please explain

Şişecam's Flat Glass production facility, coded as TN and located in Yenişehir, is identified as part of the 'Risky' category based on the general risk analysis, which considers total water use, water use efficiency, and basin risks as defined by the World Resources Institute (WRI) Aqueduct Risk Atlas. This facility is situated in the Minor Basin of the Sakarya River and is classified as 'high' in the water stress category according to WRI. The TN facility relies on groundwater as its primary water source. The wastewater generated at the facility is discharged into the Organized Industrial Zone (OSB) channel.
[Add row]

(9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

(9.3.2.1) % verified

Select from:
☑ 76-100

(9.3.2.2) Verification standard used

The water withdrawals data has been verified through an Independent Assurance Report provided by a third-party auditor, ensuring the accuracy and reliability of the data.

Water withdrawals – volume by source

(9.3.2.1) % verified

Select from:
☑ 76-100

(9.3.2.2) Verification standard used

Total water withdrawal amount by source data has been verified through an Independent Assurance Report provided by a third-party auditor, ensuring the accuracy and reliability of the data.

Water withdrawals – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

Şişecam has not yet conducted third-party verification for the quality of water withdrawals based on standard water quality parameters. While this metric is crucial for monitoring the quality of water drawn from sources, no independent verification has been performed so far.

Water discharges – total volumes

(9.3.2.1) % verified

Select from:

☑ Not verified

(9.3.2.3) Please explain

The total volume of water discharges has not been verified by a third party. Monitoring and reporting on the volume of water discharged is important, but at this stage, there has been no external verification for this data.

Water discharges – volume by destination

(9.3.2.1) % verified

Select from:

☑ Not verified

(9.3.2.3) Please explain

The volume of discharged water directed to different destinations has not been verified. While Şişecam tracks where water discharges are directed, there has not been any independent verification to date.

Water discharges – volume by final treatment level

(9.3.2.1) % verified

Select from:

☑ Not verified

(9.3.2.3) Please explain

The volume of water discharges categorized by final treatment level has not been independently verified. This parameter is important to show how wastewater is managed at its final stage of treatment, but no third-party verification has occurred yet.

Water discharges – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

Şişecam has not verified the quality of water discharges according to standard water quality parameters. This parameter is key for assessing the environmental impact of discharged water, but it has not been independently verified at this time.

Water consumption – total volume

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

The total volume of water consumption has not undergone third-party verification. While water consumption is a critical metric for operations, no external verification has been performed for this parameter.
[Fixed row]

(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member?

Select from:
☑ Yes, CDP supply chain members buy goods or services from facilities listed in 9.3.1

(9.4.1) Indicate which of the facilities referenced in 9.3.1 could impact a requesting CDP supply chain member.

Row 1

(9.4.1.1) Facility reference number

Select from:
☑ Facility 14

(9.4.1.2) Facility name

SO Kırklareli Otomotiv

(9.4.1.3) Requesting member

Select from:

(9.4.1.4) Description of potential impact on member

The SO Kırklareli facility, identified as a risky facility in Şişecam's internal water risk assessment, supplies automotive glass to Ford Motor Company. Due to water-related dependencies and risks at this location, such as potential water shortages or quality issues, the facility's production capacity could be affected. This could result in delays or disruptions in the supply of automotive glass to Ford Motor Company, impacting their production timelines and overall supply chain reliability. As water scarcity or regulatory changes regarding water use become more significant in the region, the associated risks for Ford Motor Company may increase.

(9.4.1.5) Comment

Şişecam has identified SO Kırklareli as part of its risky facilities list due to its exposure to significant water-related risks. As part of its commitment to mitigating these risks, Şişecam is actively working on water efficiency programs and sustainability initiatives in these risky facilities, including the implementation of advanced water-saving technologies and operational improvements. These initiatives are designed to reduce water consumption, enhance the facility's resilience to future water risks, and ensure continued, reliable service to key customers such as Ford Motor Company.
[Add row]

(9.5) Provide a figure for your organization's total water withdrawal efficiency.

(9.5.1) Revenue (currency)

5155505822

(9.5.2) Total water withdrawal efficiency

95844.49

(9.5.3) Anticipated forward trend

In line with Şişecam's CareforNext 2030 strategy, the company is committed to improving water withdrawal efficiency. By 2030, Şişecam targets a 15% reduction in clean water consumption through investments in water recycling technologies and sustainable practices. The company's circular production approach aims to enhance water reuse and minimize withdrawals, supporting its long-term sustainability goals and contributing to a more efficient water use across operations.
[Fixed row]

(9.6) Do you calculate water intensity for your activities in the chemical sector?

Select from:
☑ Yes

(9.6.1) For your top five products by production weight/volume, provide the following water intensity information associated with your activities in the chemical sector.

Row 1

(9.6.1.1) Product type

Bulk inorganic chemicals
☑ Soda ash

(9.6.1.2) Product name

Soda Ash (Mersin Plant)

(9.6.1.3) Water intensity value (m3/denominator)

20.94

(9.6.1.4) Numerator: water aspect

Select from:
☑ Total water consumption

(9.6.1.5) Denominator

Select from:

☑ Ton

(9.6.1.6) Comparison with previous reporting year

Select from:

☑ About the same

(9.6.1.7) Please explain

The numerator for soda ash production at the Mersin Soda plant is total water consumption (m^3), and the denominator is production volume (tons), a standard in the industry. The trend is "about the same," with a slight increase from 20.76 m^3/ton in 2022 to 20.94 m^3/ton in 2023 (0.82%). This minor increase is within normal operational fluctuations, influenced by cooling demands and production levels. Internal thresholds classify changes below 1% as stable. Future trends anticipate slight reductions in water intensity, driven by ongoing investments in water recycling technologies and process improvements, aligned with Şişecam's CareforNext 2030 strategy to reduce clean water consumption by 15% by 2030. The boundary for this metric is specific to the Mersin Soda plant. This metric is used internally to monitor efficiency, guide operational decisions, and set sustainability goals, including those tied to performance incentives.

[Add row]

(9.12) Provide any available water intensity values for your organization's products or services.

Row 1

(9.12.1) Product name

Glass Packaging (AB-BURSA)

(9.12.2) Water intensity value

0.6

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 2

(9.12.1) Product name

Glass Packaging (AE-ESKİŞEHİR)

(9.12.2) Water intensity value

0.69

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 3

(9.12.1) Product name

Glass Packaging (AF-MERSİN)

(9.12.2) Water intensity value

0.76

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 4

(9.12.1) Product name

Autoglass (BE-BULGARİSTAN)

(9.12.2) Water intensity value

0.06

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 5

(9.12.1) Product name

Autoglass (BO-BULGARİSTAN)

(9.12.2) Water intensity value

0.08

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 6

(9.12.1) Product name

Glassware (BP-Targovishte -Bulgaristan)

(9.12.2) Water intensity value

3.59

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 7

(9.12.1) Product name

Corrugated Box (CA-TURKEY)

(9.12.2) Water intensity value

0.95

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 8

(9.12.1) Product name

Chromium (CO-ITALY)

(9.12.2) Water intensity value

0.49

(9.12.3) Numerator: Water aspect

Select from:
☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 9

(9.12.1) Product name

Glassware (DC-DENİZLİ)

(9.12.2) Water intensity value

10.5

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 10

(9.12.1) Product name

Glassware (EG-MISIR)

(9.12.2) Water intensity value

3.49

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 11

(9.12.1) Product name

Flatglass (FI-Manfredonia - İtalya)

(9.12.2) Water intensity value

0.53

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 12

(9.12.1) Product name

Autoglass (FK-Macaristan)

(9.12.2) Water intensity value

2.81

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 13

(9.12.1) Product name

Autoglass (GO-Romanya)

(9.12.2) Water intensity value

0.1

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 14

(9.12.1) Product name

Flatglass (HD-Hindistan)

(9.12.2) Water intensity value

2.19

(9.12.3) Numerator: Water aspect

Select from:
☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 15

(9.12.1) Product name

Chromium (KR-Mersin)

(9.12.2) Water intensity value

4.04

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 16

(9.12.1) Product name

Mining (MDBL-Bilecik)

(9.12.2) Water intensity value

0.21

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 17

(9.12.1) Product name

Mining (MDCNE-Aydın)

(9.12.2) Water intensity value

0.14

(9.12.3) Numerator: Water aspect

Select from:
☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 18

(9.12.1) Product name

Mining (MDKRB-Karabük)

(9.12.2) Water intensity value

0.04

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 19

(9.12.1) Product name

Mining (MDOSB-Mersin)

(9.12.2) Water intensity value

0.01

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 20

(9.12.1) Product name

Mining (MDYLK-İstanbul)

(9.12.2) Water intensity value

0.95

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 21

(9.12.1) Product name

Glass Packaging (MN-Mina)

(9.12.2) Water intensity value

1.69

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 22

(9.12.1) Product name

VK-3 (OX-Mersin)

(9.12.2) Water intensity value

0.37

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 23

(9.12.1) Product name

Glassware (PE-Eskişehir)

(9.12.2) Water intensity value

3.2

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 24

(9.12.1) Product name

Glassware (PK-Kırklareli)

(9.12.2) Water intensity value

3.02

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 25

(9.12.1) Product name

Glassware (PR-Posuda)

(9.12.2) Water intensity value

2.32

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 26

(9.12.1) Product name

Flatglass (RF-Italy)

(9.12.2) Water intensity value

1.42

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 27

(9.12.1) Product name

Glass Packaging (RG-Gorokhovets)

(9.12.2) Water intensity value

0.8

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 28

(9.12.1) Product name

Glass Packaging (RK-Kuban)

(9.12.2) Water intensity value

1.01

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 29

(9.12.1) Product name

Autoglass (RO-Rusya)

(9.12.2) Water intensity value

0.05

(9.12.3) Numerator: Water aspect

Select from:
☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 30

(9.12.1) Product name

Glass Packaging (RP-Pokrovsky)

(9.12.2) Water intensity value

0.81

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 31

(9.12.1) Product name

Glass Packaging (RR-Krishi)

(9.12.2) Water intensity value

0.69

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 32

(9.12.1) Product name

Glass Packaging (RU-Ufa)

(9.12.2) Water intensity value

0.51

(9.12.3) Numerator: Water aspect

Select from:
☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 33

(9.12.1) Product name

Soda (SD-Mersin)

(9.12.2) Water intensity value

20.94

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 34

(9.12.1) Product name

Glassfibre (SE-Balıkesir)

(9.12.2) Water intensity value

4.82

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 35

(9.12.1) Product name

Flatglass (SI-Porto Nogaro -İtalya)

(9.12.2) Water intensity value

0.18

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 36

(9.12.1) Product name

Soda (SL-Bosna)

(9.12.2) Water intensity value

17.24

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 37

(9.12.1) Product name

Autoglass (SO-Kırklareli)

(9.12.2) Water intensity value

0.08

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 38

(9.12.1) Product name

Flatglass (TB-Bulgaristan)

(9.12.2) Water intensity value

0.58

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 39

(9.12.1) Product name

Flatglass (TF-Kırklareli)

(9.12.2) Water intensity value

1.78

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m^3) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 40

(9.12.1) Product name

Flatglass (TGR-Rusya)

(9.12.2) Water intensity value

0.71

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 41

(9.12.1) Product name

Flatglass (TM-Mersin)

(9.12.2) Water intensity value

1.81

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 42

(9.12.1) Product name

Flatglass (TN-Bursa)

(9.12.2) Water intensity value

1.38

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.

Row 43

(9.12.1) Product name

Flatglass (TP-Polatlı)

(9.12.2) Water intensity value

0.31

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Production (ton)

(9.12.5) Comment

To determine the water intensity of our products, we calculated the water consumption in cubic meters (m³) and divided it by the production volume in tons. This calculation allows us to express our water intensity as a clear metric, helping us understand and improve our sustainability efforts.
[Add row]

(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances
	Select from: ☑ Yes

[Fixed row]

(9.13.1) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Row 1

(9.13.1.1) Regulatory classification of hazardous substances

Select from:
☑ Candidate List of Substances of Very High Concern for Authorisation above 0.1% by weight (EU Regulation)

(9.13.1.2) % of revenue associated with products containing substances in this list

Select from:
☑ Don't know

(9.13.1.3) Please explain

Şişecam's hazardous substances are limited to Chromic Acid and Sodium Bichromate, which are used in industrial applications. These substances are not present in the company's glass products. Şişecam complies with all relevant regulations, including EU REACH and UK REACH, and is exploring alternatives to reduce or eliminate the use of these hazardous substances. The company is seeking safer alternatives, specifically for industrial applications where these substances are currently required.

Row 2

(9.13.1.1) Regulatory classification of hazardous substances

Select from:

☑ Annex XIV of UK REACH Regulation

(9.13.1.2) % of revenue associated with products containing substances in this list

Select from:

☑ Don't know

(9.13.1.3) Please explain

Similar to the previous explanation, Chromic Acid and Sodium Bichromate are regulated under Annex XIV of UK REACH. Şişecam is evaluating opportunities to substitute these substances with safer alternatives in the future. These substances are not used in Şişecam's glass products but are part of its industrial product portfolio. Şişecam adheres to all legal and regulatory requirements related to these substances to ensure full compliance.

Row 3

(9.13.1.1) Regulatory classification of hazardous substances

Select from:

☑ Candidate List of Substances of Very High Concern (UK Regulation)

(9.13.1.2) % of revenue associated with products containing substances in this list

Select from:

☑ Don't know

(9.13.1.3) Please explain

Chromic Acid and Sodium Bichromate are included in this list as part of UK regulations. These substances are used in specific industrial applications, not in Şişecam's glass products, and the company is actively seeking safer alternatives. Şişecam ensures full compliance with all relevant legal frameworks and closely monitors regulatory developments to maintain safe and responsible use of these substances.
[Add row]

(9.14) Do you classify any of your current products and/or services as low water impact?

(9.14.1) Products and/or services classified as low water impact

Select from:
☑ Yes

(9.14.2) Definition used to classify low water impact

The classification of low water impact is based on Şişecam's water efficiency measures implemented across the value chain, which includes water-saving technologies in the production process and efforts to recycle and reuse water wherever feasible. These efforts are aligned with the company's Life Cycle Assessment (LCA) and Environmental Product Declarations (EPD), ensuring that products meeting strict sustainability criteria, including minimal water use, are classified as low water impact.

(9.14.4) Please explain

Şişecam has taken significant steps in improving water efficiency and reducing the consumption of fresh water in its operations. The company follows industry best practices to minimize water use across its production processes. In 2023, water-saving projects allowed Şişecam to save 175,000 m³ of fresh water through reverse osmosis systems at the Mersin Chemicals plant and 104,619 m³ at the Bulgaria Flat Glass plant. Additionally, 34,057 m³ of water was recycled through recovery systems at the Kırklareli Glassware plant. Şişecam identifies potential improvement points in every facility for water recovery and implements systemic solutions to maximize water reuse. Şişecam's sustainable water management practices aim to prevent water stress and scarcity, ensuring the efficient use of water resources. Water quality is continuously monitored, and traceability is ensured at all facilities to maintain and improve water use performance.
[Fixed row]

(9.15) Do you have any water-related targets?

Select from:
☑ Yes

(9.15.1) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

Water pollution

(9.15.1.1) Target set in this category

Select from:
☑ No, but we plan to within the next two years

(9.15.1.2) Please explain

Şişecam does not currently have specific targets for reducing water pollution. However, the company recognizes the importance of managing water quality and is actively working on assessing the environmental impact of its discharges. Over the next two years, Şişecam plans to set clear targets related to water pollution reduction. This commitment reflects the company's proactive approach to integrating water-related objectives into its broader sustainability strategy.

Water withdrawals

(9.15.1.1) Target set in this category

Select from:
☑ Yes

Water, Sanitation, and Hygiene (WASH) services

(9.15.1.1) Target set in this category

Select from:
☑ No, but we plan to within the next two years

(9.15.1.2) Please explain

Şişecam has not yet established specific targets for Water, Sanitation, and Hygiene (WASH) services, but it acknowledges the significance of providing access to safe water, sanitation, and hygiene, particularly in communities affected by its operations. Within the next two years, Şişecam intends to set clear targets and strategies for improving WASH services, aligning with global best practices and enhancing its social responsibility efforts.

Other

(9.15.1.1) Target set in this category

Select from:

☑ Yes

[Fixed row]

(9.15.2) Provide details of your water-related targets and the progress made.

Row 1

(9.15.2.1) Target reference number

Select from:

☑ Target 1

(9.15.2.2) Target coverage

Select from:

☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

☑ Increase in investment related to reducing water withdrawals

(9.15.2.4) Date target was set

12/31/2019

(9.15.2.5) End date of base year

12/30/2020

(9.15.2.6) Base year figure

4.67

(9.15.2.7) End date of target year

12/30/2030

(9.15.2.8) Target year figure

3.97

(9.15.2.9) Reporting year figure

3.5

(9.15.2.10) Target status in reporting year

Select from:
☑ Achieved

(9.15.2.11) % of target achieved relative to base year

167

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply
☑ Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

Şişecam's water reduction target is organization-wide, aiming for a 15% decrease from a 2020 baseline of 4.67 m³/ton, with a goal of approximately 3.97 m³/ton by 2030. This target applies to all operational facilities, both in Turkey and internationally, particularly focusing on manufacturing sites that utilize water, including those in water-stressed regions considered priority locations due to their significant water dependency and associated risks. However, the target currently excludes certain upstream and downstream activities related to the supply chain, primarily due to limited data access and control. Şişecam plans to enhance engagement with suppliers in the future to promote sustainable water practices, potentially broadening the target's coverage to include these areas and improve overall sustainability performance and water resource risk management.

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

Şişecam has successfully achieved its water reduction target through several key actions, including the implementation of reverse osmosis systems that significantly saved water across various facilities. The reuse of treated wastewater has also reduced fresh water consumption, particularly at the Bulgaria Flat Glass plant. Lean Six Sigma projects have optimized water use in production processes at the Southern Italy facility. Additionally, the Kırklareli Automotive Factory has initiated projects to reuse characterized wastewater, contributing to overall water savings. Ongoing optimization efforts at wastewater treatment plants aim to enhance efficiency and reduce environmental impact, all of which have collectively led to the successful attainment of the water reduction target.

(9.15.2.16) Further details of target

Şişecam's water reduction target, set at a 15% decrease from a 2020 baseline of 4.67 m³/ton, aims to achieve approximately 3.97 m³/ton by 2030. This target is aligned with the organization's commitment to sustainable resource management and is part of its broader environmental goals. Notably, Şişecam has not only reached this target in 2023 but has also exceeded it, reflecting the effective implementation of various water-saving initiatives across its operational facilities. The progress reported indicates significant contributions from reverse osmosis systems, wastewater reuse practices, and Lean Six Sigma projects. The original target remains unchanged, as the organization is dedicated to maintaining its current level of performance and further optimizing water usage. This target addresses water-related dependencies, mitigates associated risks, and enhances operational resilience. The methodology used to set the target was based on historical water consumption data and industry benchmarks, ensuring a science-based approach. The organization has continuously monitored and evaluated its water management practices to align with best practices and regulatory requirements, thereby supporting its long-term sustainability objectives.

[Add row]

C11. Environmental performance - Biodiversity

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

(11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

☑ Yes, we are taking actions to progress our biodiversity-related commitments

(11.2.2) Type of action taken to progress biodiversity- related commitments

Select all that apply

☑ Land/water management

☑ Species management

☑ Education & awareness

[Fixed row]

(11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?
	Select from: ☑ No

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

	Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity	**Comment**
Legally protected areas	*Select from:* ☑ Not assessed	*Our organization has not assessed the proximity of our activities to areas important for biodiversity at this time.*
UNESCO World Heritage sites	*Select from:* ☑ Not assessed	*Our organization has not assessed the proximity of our activities to areas important for biodiversity at this time.*
UNESCO Man and the Biosphere Reserves	*Select from:* ☑ Not assessed	*Our organization has not assessed the proximity of our activities to areas important for biodiversity at this time.*
Ramsar sites	*Select from:* ☑ Not assessed	*Our organization has not assessed the proximity of our activities to areas important for biodiversity at this time.*
Key Biodiversity Areas	*Select from:* ☑ Not assessed	*Our organization has not assessed the proximity of our activities to areas important for biodiversity at this time.*
Other areas important for biodiversity	*Select from:* ☑ Not assessed	*Our organization has not assessed the proximity of our activities to areas important for biodiversity at this time.*

[Fixed row]

C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

(13.1.1) Other environmental information included in your CDP response is verified and/or assured by a third party

Select from:

☑ No, but we plan to obtain third-party verification/assurance of other environmental information in our CDP response within the next two years

(13.1.2) Primary reason why other environmental information included in your CDP response is not verified and/or assured by a third party

Select from:

☑ No standardized procedure

(13.1.3) Explain why other environmental information included in your CDP response is not verified and/or assured by a third party

As Şişecam, we have shared the verification documents of our numerical data in the relevant sections. In addition to numerical data, there is no third party verification in our shared data. However, we would like to verify many of the topics in our CDP report in the coming years, and we continue to work on proceduralizing the processes.
[Fixed row]

(13.2) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

	Additional information
	N/A

[Fixed row]

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

(13.3.1) Job title

Environmental/Sustainability Manager

(13.3.2) Corresponding job category

Select from:

☑ Environment/Sustainability manager

[Fixed row]

(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Select from:

☑ Yes, CDP may share our Disclosure Submission Lead contact details with the Pacific Institute