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:

☑ JPY

(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

The NSG Group (Nippon Sheet Glass Co., Ltd. and its group companies) is the world's leading supplier of glass and glazing systems, operating in the business areas of Architectural, Automotive and Creative Technology. The Group has principal operations around the world and sales in over 100 countries, employing approximately 26,000 people. The Architectural business manufactures and supplies architectural glass as well as glass for the solar energy and other sectors. The Automotive business serves the original equipment (OE) and aftermarket replacement (AGR) glazing markets. Creative Technology comprises several discrete businesses, including lenses and light guides for printers and scanners, and speciality glass fibre products such as glass cord for timing belts and glass flake. The Group offers various solutions based on its proprietary online coating technology, such as glass for thin-film solar panels, building integrated photovoltaic (BIPV), electrochromic windows and thermochromic glass, as well as low emission (low e) and *vacuum glass. These products support the increasing and evolving requirements of society for more energy efficient and smarter buildings including zero emission buildings and houses (ZEB and & ZEH). In the automotive industry, heated windshield and low e glass is expected to enhance energy saving of vehicles. Glass cord used in car engine timing belts, which can replace metal chains, also contributes to vehicles' weight reduction and energy saving. Not only are the products used to reduce energy consumption, but also to generate energy. The Group conducts its business in accordance with the NSG Group Sustainability policy. The NSG Group considers that glass has a unique role to play in society's attempt to reduce greenhouse gas emissions and mitigate the effects of climate change. The Group promotes more usage of glass to reduce the energy consumption of society, including that of buildings, vehicles, facilities and equipment, as well as to generate or conserve energy. At the same time, glass production remains energy intensive and emits a significant amount of greenhouse gas. In order to maximise the net benefit to sustainable development, it is critical for the Group to minimise the emissions from its manufacturing processes, in addition to making environmental contributions through its products. The Group's initiative to lower greenhouse gas emissions from its manufacturing processes includes a wide range of activities such as; development of low carbon fossil fuel technologies; converting the existing electricity supply contracts to certified renewable sources, and on-site self generation, including the installation of solar panels at Group sites. The Group is also conducting research to reduce greenhouse gas emission from glass furnaces such as the usage of waste heat recovery systems, the identification of alternative fuel technologies and process optimisation. As part of these initiatives the Group's initial SBT initiative targets were approved in October 2019. These targets were revised, and revalidated by the SBTi in May 2022. The new targets are based on a WB2D scenario with a 30% reduction in absolute emissions vs 2018 baseline year. The targets continue to cover Scope 1 and Scope 2 emissions and for the first time also include Scope 3 emissions across all categories. Progress against these targets in 2022/23 includes the continued development of using Hydrogen gas to replace natural gas in the manufacture of flat glass following the worlds first application in August 2021 of using Hydrogen in this way on a production furnace01. In Feb 2022, the same production furnace utilised a bio-fuel derived from waste products to replace natural gas. Both of these trials were designed to prove the technical capability for utilisation of low / zero carbon fuels which is one of the key aspects of the decarbonisation roadmap for NSG operations. These trials give a greater level of confidence in the achievement of the Groups existing mid term 2030 SBTi*

targets as well as carbon neutrality by 2050. Through these and numerous other decarbonisation and sustainability management activities, the Group aims to reduce its environmental impacts, balancing the need of all its stakeholders.
[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.

	End date of reporting year	Alignment of this reporting period with your financial reporting period	Indicate if you are providing emissions data for past reporting years
	12/31/2023	*Select from:* ☑ No	*Select from:* ☑ No

[Fixed row]

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

832537000000

(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:

☑ No

ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

JP3686800008

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:

☑ Yes

(1.6.2) Provide your unique identifier

353800TWQ62HNEKBPW95

D-U-N-S number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

690555925

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

☑ Chile
☑ Spain
☑ China
☑ Brazil
☑ India
☑ Canada
☑ Italy
☑ France
☑ Japan
☑ Mexico
☑ Norway
☑ Czechia
☑ Poland
☑ Denmark
☑ Sweden
☑ Finland
☑ Austria
☑ Germany
☑ Belgium
☑ Hungary
☑ Ireland
☑ Netherlands
☑ Romania
☑ United States of America
☑ Malaysia
☑ United Kingdom of Great Britain and Northern Ireland
☑ Viet Nam
☑ Argentina

(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: ☑ No, not currently	*We will consider providing*

	but we intend to provide it within the next two years	*this data in future years.*

[Fixed row]

(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

☑ Downstream 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:

☑ Tier 2 suppliers

(1.24.7) Description of mapping process and coverage

All Tier 1 suppliers are categorized into material groups and material categories dependant on the commodity they supply to NSG and in line with the Category Management approach. Depending on specific environmental and quality related requirements assigned to each material category, whether we consider direct or indirect material or services, suppliers are then assessed through the perspective of risk exposure. Those identified with a substantial impact are addressed as highest priority. NSG acquired an additional

sustainability risk assessment module via an existing 3rd party solution, to assess the entire portfolio of active suppliers for their sustainability risk rating. This module takes into account suppliers country of operation and industry that they represent, as well as some information available in public domain such as certificates and integrated reports (to name a few). This information is used to determine their overall sustainability risk rating. For certain materials classified as Conflict Minerals, we follow the protocol of Responsible Material Initiative to map Tier-n suppliers and achieve compliance.
[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:

☑ Lack of internal resources, capabilities, or expertise (e.g., due to organization size)

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

No Group wide stakeholder request to do so to date. Impact associated with plastics to the Groups direct or indirect activities has so far been classified as low priority / low impact based on some initial assessments at high level.
[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)

1

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

The NSG Group considers short term to be the financial reporting year. Short term operational objectives and financial budgets are defined to deliver a published forecast. Risks and opportunities to the budgets are identified, assessed and appropriately treated.

Medium-term

(2.1.1) From (years)

2

(2.1.3) To (years)

4

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

planning

he NSG Group considers medium term to be 2-4 years. This is the timescale for the published NSG Group Medium Term Revival Plan (RP24), which sets out the Group's short term business strategy, capital investment plans and key performance targets/indicators. The Group Strategic Risk Committee identifies and assesses the risks and opportunities in relation to both the RP24 period and the longer horizon beyond, in order to implement and monitor effective treatment. The process for defining the next medium term plan (FY25-FY27) commenced within the reporting year.

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)

15

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

The NSG Group considers long term to be 5 - 15 years. Financial investment business cases consider a maximum of 10-15 years. This timescale includes the average major asset lifetime (glass manufacturing furnaces) i.e. Furnace life of 15 years. The individual investment business cases and the overall strategic plan are based upon an identification and assessment of the risks and opportunities in the NSG Groups' operating environment.

[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

☑ 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

☑ Upstream value chain

☑ Downstream 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

☑ Medium-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

☑ Local

☑ Sub-national

☑ National

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ EcoVadis

Enterprise Risk Management

☑ ISO 31000 Risk Management Standard

☑ Risk models

International methodologies and standards

☑ Environmental Impact Assessment

☑ IPCC Climate Change Projections

☑ ISO 14001 Environmental Management Standard

☑ Life Cycle Assessment

Databases

☑ Nation-specific databases, tools, or standards

☑ Regional government databases

Other

☑ Scenario analysis ☑ Partner and stakeholder consultation/analysis

☑ Desk-based research

☑ External consultants

☑ Materiality assessment

☑ Internal company methods

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Drought ☑ Storm (including blizzards, dust, and sandstorms)

☑ Heat waves

☑ Cyclones, hurricanes, typhoons

☑ Heavy precipitation (rain, hail, snow/ice)

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

Chronic physical

☑ Heat stress ☑ Water availability at a basin/catchment level

☑ Water stress ☑ Changing precipitation patterns and types (rain, hail, snow/ice)

☑ Sea level rise

☑ Rationing of municipal water supply

☑ Increased severity of extreme weather events

Policy

☑ Carbon pricing mechanisms ☑ Increased difficulty in obtaining water withdrawals permit

☑ Increased pricing of water ☑ Introduction of regulatory standards for previously unregulated contaminants

☑ Changes to national legislation

☑ Increased difficulty in obtaining operations permits

☑ Changes to international law and bilateral agreements

Market

☑ Availability and/or increased cost of certified sustainable material

☑ Availability and/or increased cost of raw materials

☑ Changing customer behavior

☑ Inadequate access to water, sanitation, and hygiene services (WASH)

Reputation

☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback

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

Technology

☑ Dependency on water-intensive energy sources

☑ Transition to lower emissions technology and products

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

☑ Transition to water intensive, low carbon energy sources

☑ Unsuccessful investment in new technologies

Liability

☑ Exposure to litigation

☑ Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ NGOs ☑ Regulators

☑ Customers ☑ Local communities

☑ Employees ☑ Water utilities at a local level

☑ Investors ☑ Other water users at the basin/catchment level

☑ Suppliers

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

Select from:

☑ No

(2.2.2.16) Further details of process

NSG Group employs a two-tiered risk management framework comprising the Strategic Risk Committee (SRC) and the Enterprise Risk Management Team (ERMT), both of which are supervised by the Management Committee, and Board. The framework is designed with reference to ISO31000. The SRC's members include the executive officers, one of which is appointed Chief Risk Officer (CRO). The SRC is chaired by the CRO and composed of the CEO, CFO and CRO, the Heads of each Group Function, and the Heads of each Strategic Business Unit. The SRC determines the company-wide risk management framework, and periodically reviews strategies, policies and procedures governing risk management throughout the Group. Based on this framework, the SRC classifies the high-level risks as either those assessed as having a substantive impact on the Group as whole, or those that should be ordinarily managed by SBUs or Group functions. The SRC then monitors how those risks are being addressed and directs that additional treatment measures be taken if required. For high-level risks, the SRC appoints "risk owners" to manage the reporting of risk information and the progress of countermeasures. The CRO periodically reports to and receives feedback from the Management Committee (MC) and the Audit Committee (AC) regarding the effectiveness of the internal control system and risk *management structure. The ERM Team is chaired by the CFO, members include SBU general managers and heads of functions including accounting, finance, and operational risk. Every year this team identifies, assesses, and prioritizes risks pertaining to business execution. The impact and likelihood of the risks and opportunities identified are assessed against a standard framework of risk appetite, including financial, reputational, compliance and operational continuity measures. This enables risks and opportunities to be numerically quantified and, where assessments are beyond the defined appetite, target assessments and remediation actions can be defined. In addition to the SRC and ERMT, the Group has established a number of operational forums which also play key role in the integrated risk management process. These include the Risk Engineering Board (REB), the Sustainability Committee, the Investment and Capital Committee (ICC) and the Energy Committee. The REB reviews mitigation and adaptation programs, in association with the Group's insurers, in relation to existing and proposed operations. The insurer-provided independent risk engineering audit process assesses and scores each asset risk. The risk and recommendation database is reviewed quarterly at the REB and the highest scored risks are assigned priority action. The process has allowed us to capitalize on opportunities and include the future development of innovation energy saving and generating products in our Medium Term Plan. The ERMT manages a "bottom up" assessment of the risks and opportunities that relate to the achievement of the budget. The period of assessment for the FY2023 exercise was CFY 1, the process is operated through a network of risk champions. Each SBU Region identifies and assesses the key risks and opportunities including the cause, effect, the current impact, likelihood and the strength of mitigations and controls. For risks beyond appetite, target assessments and action plans are added. The resulting registers are approved by the SBU heads, and monitored through ongoing business management processes within the ERMT.*

[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

Within the risk management framework described in question 2.2.2., NSG Group conducted a series of specific climate-related, nature related and water related risk and opportunity assessments. This was to drill down from the overall ERM process to enable the Sustainability Committee, the Strategic Risk Committee and the Management Committee/Board to further refine the Group's pathway towards net zero, and its response to external reporting requirements. The initial climate change focused analysis was completed in 2022 and the risks and opportunities have been mapped onto the Groups risk appetite framework. The exercise included a detailed examination of both the Physical impacts of climate change and the risks and opportunities arising from the Transition to a lower-carbon economy, using scenario analysis. Three scenarios were modelled - Below 2C low carbon world; Intermediate 2C-3C; and Hothouse above 4C. The Group plan to repeat the scenario analysis on a 3-to-5-year basis. The exercise identified acute and chronic Physical risks to NSG assets and supply chains, from flood, windstorm and heat stress as well as key Transition risks and opportunities which were assessed for short, medium and long term impact. This assessment was aligned in FY2023 with a high-level review of the interdependency of these climate change related impacts with other factors including water and nature based activities. The result of this assessment was incorporated into the development of action plans to support delivery of the Groups sustainability targets including SBTi targets. The Groups STBi targets were approved by the Management Committee and Board of Directors May 2022 with the targets for all emissions to reduce by 30% by 2030 and aim to achieve carbon neutrality by 2050. Key Performance Indicators (KPI's) were identified across the SBU and central functions to monitor progress towards targets These roadmaps continue to be developed and implemented, progress against the plans is monitored at SBU level governance meetings with a summarised view being presented to the SRC in line with the target timeframes.

[Fixed row]

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

(2.3.1) Identification of priority locations

Select from:

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

(2.3.7) Primary reason for not identifying priority locations

Select from:

☑ Not an immediate strategic priority

(2.3.8) Explain why you do not identify priority locations

The NSG Group manufacturing locations all consider environmental impacts which includes assessment of the impact on nature primarily within the local environment. This assessment is completed at the start of operations, for example an assessment prior to construction of a site. As a result of reviewing these assessments across the Group we can identify what we believe are the highest direct impact sites on nature. These sites include silica sand extraction and processing. As part of the commitment of operating such sites (of which NSG Group has one), we commit to remedial actions during the lifetime of the operation and at the end of the operations life to return the land to at least the same status as before the operations started. In this case, we aim to positively impact nature locally by developing improved ecosystems promoting biodiversity. We also have a number of nature based project activities across our sites to promote biodiversity. Such examples include the installation of measures such as bee-hives, bird/bat boxes, using water (e.g. lakes) to promote wildlife, and numerous others. We also develop products that promote nature. The most relevant of which is the AviSafe bird safe glass. This reduces the impact of bird deaths associated with impact with glass in buildings. This glass is 'visible' to birds unlike standard glass. We will continue to assess nature impacts both direct and indirect across the NSG Group. Based on the assessments completed so far, within the context of environmental impact of NSG Group, the impact to nature based aspects is judged to be small. While we recognise the importance of these aspects, we focus resources on other higher priority impacts. As we implement the NSG Group decarbonization roadmap we expect nature based aspects may become more relevant. This is why we plan to introduce a more robust system for measuring the impact within the next two years. Such examples would include the utilisation of bioderived products, such as biogas or biooils. We already

utilise such fuels in some locations for specific applications. We conduct a broad sustainability impact assessment of these products to ensure we are not negatively impact nature from the utilisation of such fuels.
[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:

☑ Direct operating costs

(2.4.3) Change to indicator

Select from:

☑ Absolute increase

(2.4.5) Absolute increase/ decrease figure

50000000000

(2.4.6) Metrics considered in definition

Select all that apply

☑ Frequency of effect occurring

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

(2.4.7) Application of definition

This example focused on the impact of regulatory risk considering cost of environmental compliance. This includes the current European Emission Trading System (EUETS) carbon costs and the potential for other countries to introduce carbon taxes in order to meet their National Determined Contributions resulting from the Paris Agreement and COP26. Time horizon considered was focused on short-term, but included some assessment of mid term impact. Likelihood was identified as virtually certain. Magnitude of impact was identified as high, with a specific figure calculated as part of the quantitative analysis. Estimations of the cost impact on an annual basis were rated on the SRC index in the highest cost category (40 oku) and high likelihood for frequency. The transition risk scenario analysis activity completed in 2022 identified that the cost to NSG Group for future impact would match to the highest risk category according to the ERM framework, meaning a cost penalty to operations of 4Bn JPY. According to the various scenarios used within this analysis, the worst case assumption based on NZC 1.5degC 2050, assuming an orderly transition cost of carbon at 155 - 454 / tCO2 or a disorderly transition cost of carbon at 225 - 418 t / CO2. Based on NSG Group emissions of @3,0M tonnes (scope 1 emissions), the cost of CO2 based on the lowest price figure (155 / t) would equate to @50Bn JPY. To mitigate this risk, we operate with a continuous programme of energy and carbon efficiency improvement projects to ensure that our businesses run as energy efficiently as possible. In 2023 @220 projects were completed to improve energy efficiency and reduce carbon emissions across NSG Group operations. Implemented projects included; waste heat recovery, low carbon electrical generation capacity and process sub-metering. We have invested in energy saving technologies at multiple sites including working in partnership with 3rd party suppliers. The ISO50001 Energy Management Standard has been introduced across all UK and EUETS member operations in Germany and Italy. NSG is increasing recycled content where the level of contamination is acceptable. This reduces the amount of energy required to melt the glass and also minimises the emission of process CO2 due to decomposition of the carbonate raw materials. In the longer term, we will continue with these energy and carbon saving initiatives and UK and EUETS allowances will be purchased if these measures are insufficient.

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

45000000000

(2.4.6) Metrics considered in definition

Select all that apply

☑ Frequency of effect occurring

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

(2.4.7) Application of definition

NSG Group produces high performance glazing solutions for customers worldwide. The specific opportunity identified is increasing demand for NSG Group value added, carbon saving advanced product ranges. Global awareness of climate change and customers' recent tendency to set climate change targets is fuelling an increasing demand for development and supply of the Group's low-carbon range of products. Our low emissivity and solar control ranges have grown to comprise @25 % of the NSG Group Architectural glass SBU annual revenue. Based on current growth trends and market data, we anticipate these global sales to increase further in the short, mid and long term to support global *commitments to climate change targets. For example, one of the Groups value added, high performance technical glass products is used to manufacture solar panels. This product is a Transparent Conductive Oxide TCO) glass coating that utilises NSG Group proprietary technology to manufacture. The Group invested @40 billion Yen in 2 new furnaces in Vietnam and North America to supply glass for the increasing solar energy market in 2019, with start up of operations in 2020 and 2021. This investment in 2 float plants led to more than 30 billion Yen revenue in 2020/21. Further investments are planned to continue to expand the global capacity for manufacturing these key VA products and specifically additional capacity investment for the production of TCO products to support the increasing market volumes of solar PV glass. The first of which was the conversion of an existing standard product production line to a high performance glazing product line in 2023. The annual 45 billion Yen figure is based on a sales forecast of 30 billion Yen new sales revenue from two new float furnaces which started in Vietnam and NA in 2020/21. Further plans are in place for increased sales of high performance glazing products (solar panel glass) in future reporting years, The continued expansion of the production of glazing solutions for positive environmental impact is one of the key business strategies of NSG Growth. NSG is uniquely positioned to benefit from further expansion of the TCO solar panel market which is anticipated to grow considerably alongside general growth of solar product production.*

[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

Each manufacturing site is required to speak with regulatory authorities prior to discharging water pollutants. If necessary, the discharge is permitted and monitored at site level rather than central level.
[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:

☑ Microplastics and plastic particles

(2.5.1.2) Description of water pollutant and potential impacts

The flat glass sector uses microplastic beads as an interleavant to transport panes of glass. Without this material, the glass would scratch and workers would not be able to safely handle the product.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

☑ Downstream value chain

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Implementation of integrated solid waste management systems

☑ Procedure(s) under development/ R&D

(2.5.1.5) Please explain

The European flat glass sector is currently researching a biodegradable alternative to *microplastic. Microplastic is vacuumed from the product and water filtration systems are installed on larger sites, however, smaller downstream customers do not have these facilities and it is recognised that the product is sometimes washed into waterways.*

Row 2

(2.5.1.1) Water pollutant category

Select from:

☑ Oil

(2.5.1.2) Description of water pollutant and potential impacts

If there is a significant risk of oil spillage into a surface water drain (eg transport areas), then interceptor tanks may be installed. Oil storage areas are bunded to collect any accidental spill.No nitrates, phosphates, pathogens, pesticides used by NSG sites.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(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

(2.5.1.5) Please explain

Oil storage tanks are subject to frequest inspections in line with local regulations.

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

Solvents are use in production as thinners for printing inks and cleaners/primers for printing and guing operations.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Provision of best practice instructions on product use

☑ Reduction or phase out of hazardous substances

(2.5.1.5) Please explain

Solvents are stored in minimized quanities and small containers (1l-200l). Storage of those small containers is required with secounday containment, cabinets or trays, on sealed ground and rainwater protected.

[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:

☑ 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:

☑ Environmental risks exist, but none with the potential to have a substantive effect on our organization

(3.1.3) Please explain

NSG manufacturing processes are not reliant on large volumes of clean freshwater. Brackish water could be treated if necessary. Control processes have been installed in most facilities to recirculate water and only require topup. Processes are managed by Manufacturing Excellence's standardisation procedures (eg turn off washer sprays when *not needed, use optimal sized nozzles, install water catchers, implement controls to prevent overflows and maintain to prevent leaks, etc). Operational costs and process waste is therefore reduced as part of our ongoing global Operational Cost Saving project. Activities in water stressed areas are prioritised. Risk assessments are ongoing on further sites to confirm that this is still the current situation. We do not have any current stakeholder concerns. Flood planning and prevention strategies have been applied. When control measures are in place, water risks are within the risk appetite of the Group risk assessment process, so are therefore not considered to be a significant risk to the business. German and Polish flooding incidents in the past (long before this reporting period) led to increases in insurance premiums. Water shortages have never caused NSG to close operations, divest from regions exposed to water risk, increase insurance cover, suffer from projected sales demand or delays in business expansion. Control measures have been installed to prevent from future flooding and no risks outside of the risk appetite are identified.. During the reporting period, we have started to carry out climate change specific scenario risk analysis with external consultants to risk assess all facilities and inform senior management and The Board of any significant changes that are assessed via the Strategic Risk Committee. Water risks are routinely considered in glassmaking raw material supplier selection processes. Alternative suppliers are available incase of unforeseen problems with one particular supplier. When control measures are in place, water risks are within the risk appetite in the Group risk assessment process, so are therefore not considered to be a significant risk to the business*

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:

☑ Environmental risks exist, but none with the potential to have a substantive effect on our organization

(3.1.3) Please explain

We have not been requested to do this by stakeholders at global level

[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

☑ Germany

☑ Italy

☑ Poland

☑ United Kingdom of Great Britain and Northern Ireland

(3.1.1.9) Organization-specific description of risk

Regulatory risk considers the cost of environmental compliance. e.g. This includes the current European Emission Trading System (EUETS) carbon costs and the potential for other countries to introduce carbon taxes in order to meet their National Determined Contributions resulting from the Paris Agreement and COP26. The risk associated with higher cost of carbon was highlighted as one of the most substantive risks as part of the 2022 transitional risk scenario analysis to NSG Group. Estimations of the cost impact on an annual basis were rated on the SRC index in the highest cost category (40 oku) and high likelihood for frequency.

(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

☑ The risk has already had a substantive effect on our organization in the reporting year

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

Select from:

☑ Virtually certain

(3.1.1.14) Magnitude

Select from:

☑ High

(3.1.1.15) Effect of the risk on the financial position, financial performance and cash flows of the organization in the reporting year

Estimations of the cost impact on an annual basis were rated on the SRC index in the highest cost category (40 oku) and high likelihood for frequency. The transition risk scenario analysis activity completed in 2022 identified that the cost to NSG Group for future impact would match to the highest risk category according to the ERM framework, meaning a cost penalty to operations of 4Bn JPY. According to the various scenarios used within this analysis, the worst case assumption based on NZC 1.5degC 2050, assuming an orderly transition cost of carbon at 155 - 454 / tCO2 or a disorderly transition cost of carbon at 225 - 418 t / CO2. Based on NSG Group emissions of @3,0M tonnes (scope 1 emissions), the cost of CO2 based on the lowest price figure (155 / t) would equate to @50Bn JPY.

(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

If the cost impact of 4Bn JPY was seen on a forward looking basis in the mid term (towards 2030) this is equivalent to @0.8% of the Group revenue. Beyond 2030, within long term horizons, there is the additional risk of both higher cost of carbon as well as additional carbon emissions incorporated into such schemes, e.g. Scope 3 emissions. Mitigation measures in the mid term will deliver a reduction in the impact of these pricing schemes, for example the achievement of the 2030 30% reduction in Scope 1 2 emissions. This has the potential to reduce the 4Bn JPY revenue impact to a level of @3Bn Yen / year. The cash investment into these carbon mitigation technologies is a key aspect of the roadmap plan and considered within the overall capex investment plan of the Group. To achieve the 2030 targets it is estimated at least 10 Bn Yen of investment is required.

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

Select from:

☑ Yes

(3.1.1.18) Financial effect figure in the reporting year (currency)

50000000000

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

50000000000

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

70000000000

(3.1.1.25) Explanation of financial effect figure

Group environmental compliance risk management is classified as a strategic risk to NSG Group. The transition risk scenario analysis activity completed in 2022 identified that the cost to NSG Group for future impact would match to the highest risk category according to the ERM framework, meaning a cost penalty to operations of 4Bn JPY. According to the various scenarios used within this analysis, the worst case assumption based on NZC 1.5degC 2050, assuming an orderly transition cost of carbon at 155 - 454 / tCO2 or a disorderly transition cost of carbon at 225 - 418 t / CO2. Based on NSG Group emissions of @3,0M tonnes (scope 1 emissions), the cost of CO2 based on the lowest price figure (155 / t) would equate to @50Bn JPY (assuming 1 USD 100 JPY)

(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

1000000000

(3.1.1.28) Explanation of cost calculation

To mitigate this risk, we operate with a continuous programme of energy and carbon efficiency improvement projects to ensure that our businesses run as energy efficiently as *possible. In 2021 @250 projects were completed to improve energy efficiency and reduce carbon emissions across NSG Group operations. Implemented projects included; waste heat recovery, low carbon electrical generation capacity and process sub-metering. We have invested in energy saving technologies at multiple sites including working in partnership with 3rd party suppliers. The ISO50001 Energy Management Standard has been introduced across all UK and EUETS member operations in Germany and Italy. NSG is increasing recycled content where the level of contamination is acceptable. This reduces the amount of energy required to melt the glass and also minimises the emission of process CO2 due to decomposition of the carbonate raw materials. In the longer term, we will continue with these energy and carbon saving initiat*

(3.1.1.29) Description of response

To mitigate this risk, we operate with a continuous programme of energy and carbon efficiency improvement projects to ensure that our businesses run as energy efficiently as possible. In 2023 @220 projects were completed to improve energy efficiency and reduce carbon emissions across NSG Group operations. Implemented projects included; waste heat recovery, low carbon electrical generation capacity and process sub-metering. We have invested in energy saving technologies at multiple sites including working in partnership with 3rd party suppliers. The ISO50001 Energy Management Standard has been introduced across all UK and EUETS member operations in Germany and Italy. NSG is increasing recycled content where the level of contamination is acceptable. This reduces the amount of energy required to melt the glass and also minimises the emission of process CO2 due to decomposition of the carbonate raw materials. In the longer term, we will continue with these energy and carbon saving initiatives and UK and EUETS allowances will be purchased if these measures are insufficient.
[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:

☑ CAPEX

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

300000000

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

Select from:

☑ 11-20%

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

100000000

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

Select from:

☑ 1-10%

(3.1.2.6) Amount of CAPEX in the reporting year deployed towards risks related to this environmental issue

150000000

(3.1.2.7) Explanation of financial figures

The capex defined for investment in decarbonization activities is based on the bottom up roadmaps defined by each individual NSG manufacturing operation. These capex estimates are based on the current expectation of costs for each different technology by site. The estimate uses a standard approach to implementation cost that is defined within *the core multifunctional team which has responsibility for the overall implementation of the decarbonization roadmap for NSG Group. The central engineering function of NSG contributes significantly to this roadmap capex estimation. Examples of project activities within the roadmap include; improving furnace design for repairs and new furnace builds to deliver a step change (minimum 5% vs previous design) in energy and carbon efficiency. Application of technology to allow the use of low or zero CO2 fuel combustion, e.g. Hydrogen firing capability. Application of increased electrical heating intensity within primary glass manufacturing furnaces. Adoption of glass recycling process technology to facilitate the increased utilization of recycled glass content. The capex plan is defined year by year, with the % spend in any given year to 2030 available, The % is calculated based on a fixed assumption for total capex spending within NSG Group primary operations of 35,000,000,000 JPY. In general the % of capex spend on decarbonization measures is expected to increase YoY, however in certain years this spend may be higher than others depending on the availability to apply such technology. For example, certain technologies can only be installed at a furnace repair, therefore this restricts the opportunity to invest in a given year. Overall expectation is to invest in the region of 20,000,000,000 JPY in decarbonization measures to achieve the 2030 decarbonization targets of NSG Group*

[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	*None reported by individual sites.*

[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

☑ Chile carbon tax

☑ EU ETS

☑ Japan carbon tax

☑ UK 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

29

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

0

(3.5.2.3) Period start date

01/01/2023

(3.5.2.4) Period end date

12/31/2023

(3.5.2.5) Allowances allocated

666687

(3.5.2.6) Allowances purchased

194469

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

861156

(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

Verified by SGS

UK ETS

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

6

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

0

(3.5.2.3) Period start date

01/01/2023

(3.5.2.4) Period end date

12/31/2023

(3.5.2.5) Allowances allocated

121275

(3.5.2.6) Allowances purchased

39465

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

160740

(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

Verified by SGS

[Fixed row]

(3.5.3) Complete the following table for each of the tax systems you are regulated by.

Chile carbon tax

(3.5.3.1) Period start date

01/01/2023

(3.5.3.2) Period end date

12/31/2023

(3.5.3.3) % of total Scope 1 emissions covered by tax

80

(3.5.3.4) Total cost of tax paid

70763095

(3.5.3.5) Comment

The scope of the tax is for scope 1 emissions associated with the combustion of fuels in the primary manufacturing (float glass) furnace. The calculation is done through emission factors agreed with the environmental authority. These factors are applied to emissions of particulate matter and sulphur dioxides. Factors apply only for combustibles. In the case of nitrogen oxides, emissions measured by isokinetic analysis were used.

Japan carbon tax

(3.5.3.1) Period start date

01/01/2023

(3.5.3.2) Period end date

12/31/2023

(3.5.3.3) % of total Scope 1 emissions covered by tax

10.3

(3.5.3.4) Total cost of tax paid

86891499

(3.5.3.5) Comment

The Japanese government does not include process emissions from raw material carbonate decomposition in the tax.
[Fixed row]

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

NSG strategy for compliance with all emission regulation systems is effectively to maintain the current mixture of direct engagement with policy makers as well as trade organizations and other similar organizations. This engagement is managed within the Global sustainability team of NSG Group with close support from other relevant Group functions including representatives of R&;D, manufacturing excellence, procurement, finance and across the business units (Architectural, Automotive and Creative Technology). The Sustainability Committee and Strategic risk committee include regulatory reviews as part of the agenda for each meeting to keep abreast of current and future activities. For example, the most recent case has been related to the introduction of carbon taxes within Chile and the effective management of this at local site level and Global level to support reporting as well as mitigation measures to be implemented. All NSG Group European glass melting facilities are covered by the EU Emissions Trading System and in the UK by the UK ETS. NSG Group have for many years operated with a continuous programme of energy efficiency improvement projects to ensure that our businesses run as energy efficiently as possible. This management program continued during the reporting year, with an ever increasing emphasis not just on energy efficiency but also Green House Gas emissions efficiency / reduction. Numerous projects have been installed over a number of years as well as during the reporting year, including; waste heat recovery, low carbon electrical generation capacity, process sub-metering, investment in efficient infrastructure, etc. As well as direct investment, NSG Group also works in partnership with solution providers to support energy and carbon saving technology projects. This included the approach of 'pilot' sites to test technology installations prior to broader dissemination across NSG global locations. The ISO50001 Energy Management Standard has been introduced across all EUETS member operations in Germany, Italy and Finland as well as some key central NSG Group functional teams, e.g. engineering. NSG Group continues to increase the proportion of recycled content where the level of contamination in such recycled materials is acceptable. This reduces the amount of energy required to melt the glass and also minimises the emission of process CO2 due to decomposition of the carbonate raw materials used on the glass manufacturing process. In the short, mid and longer term, NSG Group will continue with these energy and carbon saving initiatives aiming to reduce the impact from operational energy and carbon legislation and associated costs. This ambition is now baked into the energy and carbon reduction targets announced in May 2022, to achieve 30% reduction in absolute GHG emissions by 2030 and carbon neutrality by 2050. By delivering these targets utilising a defined roadmap of actions, NSG Group will continue *to meet all legislation and regulation requirements moving forwards. The impact of future legislation during the climate transition was highlighted as one of the highest priority impacts to NSG Group based on the climate change scenario analysis started in 2021 and completed in 2022. This impact contributes and supports the requirements to utilise the management program for energy and carbon management. As well as this program, the NSG Group operations directly impacted GHG regulations (e.g EU ETS and UK ETS) will continue to purchase allowances to cover any shortfall in emissions according to the action plan implementation timescale.*

(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

Markets

☑ Increased demand for certified and sustainable materials

(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

☑ Malaysia

☑ United States of America

☑ Viet Nam

(3.6.1.8) Organization specific description

NSG Group produces high performance glazing solutions for customers worldwide. The specific opportunity identified is increasing demand for NSG Group value added, carbon saving advanced product ranges. Global awareness of climate change and customers' recent tendency to set climate change targets is fuelling an increasing demand for development and supply of the Group's low-carbon range of products. Our low emissivity and solar control ranges have grown to comprise @25 % of the NSG Group Architectural glass SBU annual revenue. Based on current growth trends and market data, we anticipate these global sales to increase further in the short, mid and long term to support global commitments to climate change targets. For example, one of the Groups value added, high performance technical glass products is used to manufacture solar panels. This product is a Transparent Conductive Oxide TCO) glass coating that utilises NSG Group proprietary *technology to manufacture. The Group invested @40 billion Yen in 2 new furnaces in Vietnam and North America to supply glass for the increasing solar energy market in 2019, with start up of operations in 2020 and 2021. This investment in 2 float plants led to more than 30 billion Yen revenue in 2020/21. In addition to these investments, a further investment of @20 billion was made to expand operations in Argentina for supply of high performance glazing products to start production in 2022. These costs are associated with either the construction o*

(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

☑ The opportunity has already had a substantive effect on our organization in the reporting year

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

Select from:

☑ Virtually certain (99–100%)

(3.6.1.12) Magnitude

Select from:

☑ High

(3.6.1.13) Effect of the opportunity on the financial position, financial performance and cash flows of the organization in the reporting period

An enhanced adoption of the TCFD framework during 2022 has reinforced the clear link *between future revenue opportunity from climate change related products manufactured by NSG. The increased sale of these climate related, Value Added (VA) products has positively contributed to the Medium Term Plan Phase 2 target achievement during the period 2021 - 2024. The recognition of the positive impact from these products has resulted in the mid to long term strategic decision of capital allocation and investment into two new float operation lines to specifically produce products dedicated to the Photovoltaic market. The plan includes investing a total of approximately 38 billion yen in the expansion of production capacity of online TCO (transparent conductive oxide) coated glass to support the growing solar market. The investment will fund the upgrade and restart of a currently dormant float line in Vietnam and the construction of a new glass production facility in the United States during 2019 - 2021 years.*

(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

The expanded global production capacity for TCO glass is expected to accelerate a shift in the company's product portfolio towards VA (value-added) products while supporting a long-term supply agreement with First Solar, the world's leading provider of comprehensive photovoltaic (PV) solar systems. The latest expansion of production of these products includes investment to upgrade operations at two manufacturing facilities. These facilities located in the USA and Malaysia require an investment of @200M to produce this high positive impact product. Global solar demand is expected to see a double-digit increase every year in the next three years and First Solar is expanding its production capacity for Series 6, the latest thin film module system with higher efficiency and energy yield. Manufactured with the online coating technology, in which a conductive oxide on the glass surface is formed during its passage through the float line, NSG Group's TCO glass is very durable with a wide range of applications. With the expanded supply capability for VA products, such as solar glass and other products, NSG Group intends to drive its growth strategy while supporting the increased use of renewable energy. The access to capital is reinforced by such investments in sustainable technology growth areas. As well as the significant investment into new production facilities, capital has continued to be spent in order to purchase energy efficient equipment. Much of this has been in conjunction with energy supplier partnerships.

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

Select from:

☑ Yes

(3.6.1.16) Financial effect figure in the reporting year (currency)

45000000000

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

45000000000

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

55000000000

(3.6.1.23) Explanation of financial effect figures

The annual 45 billion Yen figure is based on a sales forecast of 30 billion Yen new sales revenue from two new float furnaces which started in Vietnam and NA in 2020/21. A further 15 billion Yen sales revenue is forecast for the new plant that started production of high performance glazing in Argentina in 2022. Further plans are in place for increased sales of high performance glazing products (solar panel glass) in future reporting years, the first of which will be the conversion of an existing standard product production line to a high performance glazing product line in 2023. The continued expansion of the production of glazing solutions for positive environmental impact is one of the key business strategies of NSG Growth. NSG is uniquely positioned to benefit from further expansion of the TCO solar panel market which is anticipated to grow considerably alongside general growth of solar product production.

(3.6.1.24) Cost to realize opportunity

60000000000

(3.6.1.25) Explanation of cost calculation

The cost calculation is based on the investment cost required for installation of 3 new manufacturing facilities to produce the glass products

(3.6.1.26) Strategy to realize opportunity

RP24 plan to increase revenue by increasing the manufacture and sale of value added products. Investing 60 billion Yen in 3 new plants to manufacture glass for solar panels and other high performance glazing products

Water

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Resilience

☑ Increased resilience to impacts of climate change

(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

(3.6.1.6) River basin where the opportunity occurs

Select all that apply

☑ Other, please specify :Trigno River

(3.6.1.8) Organization specific description

The manufacturing operation in Italy is located within an area of water security risk. This risk was identified several years ago as being substantive to the operations at that specific site. To reduce this risk to the level of required tolerance within NSG Group, an action plan was developed focused on the recycling of process water to be reutilised back into the process after treatment. This investment continued in the reporting year with the final stages of implementation. Consequently, the water withdrawal quantity to supplement the recycling system has reduced by @60% since the start of the project (while production volume has remained stable). Investment projects included; new pipework for recovery of waste water, new filters and water treatment facility, optimisation of water demand by operation equipment, rainwater harvesting, etc. Further investments are planned in the coming years to further mitigate the risk of water shortages associated with climate change in this area.

(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

☑ The opportunity has already had a substantive effect on our organization in the reporting year

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

Select from:

☑ Virtually certain (99–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium-high

(3.6.1.13) Effect of the opportunity on the financial position, financial performance and cash flows of the organization in the reporting period

Minimal financial impact is seen at NSG Group level metrics, however at a local site level the direct financial impact as well as continuation of operational activities (significantly lower risk of water shortages) has a substantive effect.

(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

Expected increase in the level of water shortages in this area is mitigated by these measures allowing the operations to continue without any detrimental impact to local water supply within the community. Measured on a purely short term opex impact, the impact is relatively small. However, if we consider the in-direct impact on operational cost and/or loss of profitability of the operations due to line shutdowns and supply interruption to customers. The potential impact can become significant

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

Select from:

☑ Yes

(3.6.1.16) Financial effect figure in the reporting year (currency)

140000000

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

100000000

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

200000000

(3.6.1.23) Explanation of financial effect figures

The annual figure is based on the direct operational cost of utilising water at the site. The opex savings delivered from these projects are based on a 60% saving of the total water withdrawal at the site. Cost avoidance associated with any interruptions to the site activities is not included in this calculation

(3.6.1.24) Cost to realize opportunity

250000000

(3.6.1.25) Explanation of cost calculation

The cost calculation is based on the individual capex costs for investment in the new equipment installed

(3.6.1.26) Strategy to realize opportunity

The ongoing strategic importance of this site results in a preferential consideration of investments in water management activities (given it's location in a water stressed area). This strategy results in investment payback considerations that can sit outside of the normal criteria (financial) for investment projects. As climate change continues to preferentially impact water stress locations, and other locations may become categorised as water stressed. There is an increasing likelihood that further investments in water recycling / efficiency projects will be required. This is considered within the overall climate change and water impact assessment of the Group. This analysis has contributed significantly to the establishment of water withdrawal KPI's and targets for specific sites within the NSG Group.
[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:

☑ CAPEX

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

6000000000

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

Select from:

☑ 21-30%

(3.6.2.4) Explanation of financial figures

Investment in new facilities to produce high performance products for the Solar PV market.

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)

200000000

(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

Investment in water consumption efficiency projects focused primarily in water stressed areas to mitigate risk associated with future (and current) water shortages. Focus of activities is to maintain operational activities (reliability) while delivering relatively small opex benefits (if possible)

[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:

☑ More frequently than quarterly

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

Select all that apply

☑ Executive directors or equivalent

☑ Non-executive directors or equivalent

☑ Independent non-executive directors or equivalent

(4.1.4) Board diversity and inclusion policy

Select from:

☑ Yes, and it is publicly available

(4.1.5) Briefly describe what the policy covers

Corporate Governance (nsg.com) contains the public NSG Group Corporate Governance Guidelines. Article 9.The Group values the principle and wisdom of creating and maintaining diversity in the composition of the Board given specifically the development of and commitment to the businesses conducted globally and thus aims to ensure that the Board will be composed of such member with a well-balanced mix of professional skills, knowledge, expertise and experience by reference to the management objectives and strategies of the Group, and with diverse background in terms of gender, international *experience, work experience, age, etc., and at the same time its size will be maintained such that the Board can discharge its function effectively and efficiently.*

(4.1.6) Attach the policy (optional)

CorporateGovernanceGuideline2024_05_E (1).pdf

[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

NSG Group recognises the importance of biodiversity is increasing. In the reporting year biodiversity continues to be evaluated on a case by case basis but without board oversight. We do see an increasing importance of biodiversity in future years, aligned with climate change action plans in certain areas e.g. use of bio derived fuels. We expect to include board level oversight of biodiversity in the next 2 years as this topic increases in significance

[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

☑ Chief Executive Officer (CEO)

(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

(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 public policy engagement

☑ Overseeing and guiding scenario analysis

☑ Overseeing and guiding public policy engagement

☑ Overseeing the setting of corporate targets

☑ Reviewing and guiding innovation/R&D priorities

☑ Monitoring progress towards corporate targets

☑ Approving and/or overseeing employee incentives

☑ Approving corporate policies and/or commitments

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

☑ Overseeing reporting, audit, and verification processes

☑ Monitoring the implementation of a climate transition plan

☑ Overseeing and guiding the development of a business strategy

☑ Overseeing and guiding acquisitions, mergers, and divestitures

☑ Monitoring supplier compliance with organizational requirements

☑ Monitoring compliance with corporate policies and/or commitments

☑ Overseeing and guiding the development of a climate transition plan

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

(4.1.2.7) Please explain

The CEO, who is also a member of the Board of Directors (BOD), is responsible for oversight of Sustainability issues including climate-related issues from determination of *targets, aligning*

them with business strategies to reviewing the progress.

Sustainability is embedded in the NSG Group from supporting initiatives to utilize glass in order to reduce the energy consumption or to generate or conserve energy, to minimizing GHG emission, ensuring that in obtaining the raw materials natural habitats and biodiversity are preserved or enhanced.

The Board of directors establish the Group's basic policies and goals including climate-related policies and targets.

Climate-related issues are mainly discussed at the Management Committee (MC) and Sustainability Committee (SC) based on these policies and targets.

The CEO chairs both Committees. They discuss the strategies and action plans to fulfill the sustainability goals as well as risk and opportunities, review their progress and report/propose to the Board.

The Board of Directors monitors and reviews the sustainability targets, strategies and action plans to connect them to business aspects as well as associated risks and opportunities, oversee progress and provide instructions. An expert in the ESG field continued as a director in 2022, with active guidance given at board meetings and many other opportunities.

The Group risk management policies including climate-related risks are discussed at Strategic Risk Committee, which the CEO chairs and report to MC and the Board of Directors via the

Audit Committee. Chief Risk Officer ("CRO") is also appointed from among the Executive Officers.

In CY2022, in addition to the regular agenda, the BOD also monitored and decided to approve the increased ambition of NSG Group decarbonization targets, with verification by the SBTi. The commitment of NSG to TCFD was also approved with TCFD reporting *becoming a key inclusion in the NSG Integrated report in 2022.*

At another CY22 board meeting, a new ESG strategy was proposed in line with the formulation of the next mid-term management plan. The MC discussed the strategies and actions to achieve both corporate

growth and social contribution. The CEO approved the strategy outline and reported it to the board. The BOD reviewed the plan and will monitor its progress. The new MTP including the new ESG strategy identifies decarbonization as one of the key pillars for business strategy. The new MTP will commence in April 2024.

Water

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

Select all that apply

☑ Chief Executive Officer (CEO)

(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

(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 public policy engagement

☑ Overseeing and guiding scenario analysis ☑ Overseeing and guiding public policy engagement

☑ Overseeing the setting of corporate targets ☑ Reviewing and guiding innovation/R&D priorities

☑ Monitoring progress towards corporate targets ☑ Approving and/or overseeing employee incentives

☑ Approving corporate policies and/or commitments ☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

☑ Overseeing reporting, audit, and verification processes

☑ Monitoring the implementation of a climate transition plan

☑ Overseeing and guiding the development of a business strategy

☑ Overseeing and guiding acquisitions, mergers, and divestitures

☑ Monitoring supplier compliance with organizational requirements

☑ Monitoring compliance with corporate policies and/or commitments

☑ Overseeing and guiding the development of a climate transition plan

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

(4.1.2.7) Please explain

The CEO, who is also a member of the Board of Directors (BOD), is responsible for oversight of Sustainability issues including climate-related issues from determination of targets, aligning them with business strategies to reviewing the progress. The CEO is Chairman of the 6 monthly NSG Group Sustainability Committee and sits on the Strategic Risk Committee. The CEO and Sustainability Committee agreed to employ a consultant to carry out climate change scenario risk analysis during the reporting year. The CEO agreed the need for a separate NSG Group Water Policy. The policy states that the heads of the

Strategic Business Units and Group Functions are responsible for ensuring the policy is implemented. These SBU heads report to the CEO. Significant water issues and operational cost saving projects (iwater and energy) are reported to the Board. As a Board member, the CEO is responsible for oversight of Sustainability issues including climate-related issues from determination of targets, aligning them with business strategies to reviewing the progress. The need for an NSG Water Policy in addition to the NSG Environmental Policy was discussed and agreed at Board Level where Operational cost saving energy and water projects are reviewed. NSG Group employs a two-tiered risk management framework comprising the Strategic Risk Committee (SRC) and the Enterprise Risk Management Team (ERMT), both of which are supervised by the Management Committee, and ultimately the Board. The framework is designed with reference to ISO31000. The SRC's members include the executive officers. The SRC is chaired by the CRO and composed of the CEO, CFO and CRO, the Heads of each Group Function, and the Heads of each Strategic Business Unit. The Group Sustainability Director is a member of the SRC. The SRC determines the company-wide risk management framework, and periodically reviews strategies, policies and procedures governing risk management throughout the Group. Based on this framework, the SRC classifies the high-level risks as either those assessed as having a substantive impact on the Group as whole, or those that should be ordinarily managed by SBUs or Group functions. The SRC then monitors how those risks are being addressed and directs that additional treatment measures be taken if required
[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

☑ Consulting regularly with an internal, permanent, subject-expert working group

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Integrating knowledge of environmental issues into board nominating process

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

☑ 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

☑ Active member of an environmental committee or organization

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

☑ Consulting regularly with an internal, permanent, subject-expert working group

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Integrating knowledge of environmental issues into board nominating process

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

☑ 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

☑ Active member of an environmental committee or organization

[Fixed row]

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

	Management-level responsibility for this environmental issue
Climate change	*Select from:* ☑ Yes
Water	*Select from:* ☑ Yes
Biodiversity	*Select from:* ☑ Yes

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

Engagement

☑ Managing engagement in landscapes and/or jurisdictions
☑ Managing public policy engagement related to environmental issues
☑ Managing supplier compliance with environmental requirements
☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments
☑ Measuring progress towards environmental corporate targets
☑ Measuring progress towards environmental science-based targets
☑ Setting corporate environmental policies and/or commitments
☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan
☑ Implementing a climate transition plan
☑ Conducting environmental scenario analysis
☑ Managing annual budgets related to environmental issues
☑ Implementing the business strategy related to environmental issues
☑ Developing a business strategy which considers environmental issues
☑ Managing environmental reporting, audit, and verification processes
☑ Managing acquisitions, mergers, and divestitures 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)

Other

☑ Providing employee incentives related to environmental performance

(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:

☑ More frequently than quarterly

(4.3.1.6) Please explain

In the Group, climate issues are monitored by the Management Committee (MC) and Sustainability Committee (SC). The MC is constituted and established in order to enable the CEO to efficiently and adequately fulfil the basic policies and goals established by the Board of Directors as the Executive Officer having ultimate and overall responsibilities. At the SC the concrete actions for the sustainability policies and goals are managed and discussed. The principal purposes of the SC are to act as advisory body for the CEO to review the strategy, to coordinate all sustainability activities in the NSG Group and to ensure effective communication of these matters with our stakeholders. Both Committees are chaired by the CEO and attended by C-suite members, Heads of the Strategic Business Units (SBU) and global leaders of the major support departments including Sustainability, Procurement, Ethics and Compliance, Legal, R&D, Engineering, Corporate Planning, HR and Finance. Specific activities in the reporting year included; 1）SBT initiatives In 2022 the SBTi CO2 reduction target was examined and subsequently revised with a more aggressive 30% reduction target. The CEO announced the revised target at the AGM in June 2022. 2) Definition of environmental contribution products For the purpose of raising awareness of environmental contribution products inside and outside of the Group, their definition is reviewed from the standpoint of the UN SDGs. 3) Revision of internal carbon pricing The revised ICP of 100/tonne was approved by the CEO to further support departments and to incorporate CO2 emission into the evaluation criteria of a large-scale project of the Group. 4) ESG strategy In the ESG strategy, risks and *opportunities involved in various ESG items including challenges associated with climate change were evaluated. Both addressing environmental problems through GHG emission reduction and the sales expansion of environmental contribution products were taken up as one of ma*

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

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

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing public policy engagement related to environmental issues

☑ Managing supplier compliance with environmental requirements

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Measuring progress towards environmental science-based targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Conducting environmental scenario analysis

☑ Managing annual budgets related to environmental issues

☑ Implementing the business strategy related to environmental issues

☑ Developing a business strategy which considers environmental issues

☑ Managing environmental reporting, audit, and verification processes

☑ Managing acquisitions, mergers, and divestitures 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)

Other

☑ Providing employee incentives related to environmental performance

(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:

☑ More frequently than quarterly

(4.3.1.6) Please explain

Within the sustainability committee alongside climate change strategic management other matters such as water management are also reviewed. A key part of the water strategy of the Group is to manage the application of the water policy across the operations, focused on those identified within water stressed areas. The policy review in 2023 included the development of a water consumption target for these operations. 50% reduction in water withdrawal within the MTP period (FY25-FY27) vs Fy24 performance. The overall *management of water within the reporting year has also included the Energy & Carbon Management committee (ECM) overseeing operational measures for water management. The ECM committee comprises membership from senior positions within the Group functions of NSG Group (Environment Directory, Energy Procurement Director, R&D Leaders, Engineering Leaders). This committee meets on a quarterly basis to review all aspects of operational implementation of projects to achieve Group targets. The output of this meeting is then presented to the Sustainability Committee for further review / support for strategic applications / investment. Water is also managed within the Strategic Risk Committee, especially the risk of water shortage impacts. The SRC then monitors how those risks are being addressed and directs that additional treatment measures be taken if required. For high-level risks, the SRC appoints "risk owners" to manage the reporting of risk information and the progress of countermeasures.*

Biodiversity

(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

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

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing supplier compliance with environmental requirements

☑ Managing value chain engagement 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:

☑ As important matters arise

(4.3.1.6) Please explain

Biodiversity aspects are managed within both the Sustainability Committee and Energy & Carbon Management Committee. In the reporting year the assessment of high level biodiversity risk and opportunity was reviewed. This assessment highlighted that while biodiversity matters were of relatively low significance to the Group, it was necessary to ensure these matters are reviewed to monitor any changes in this impact level - proposal for an annual review was realised. Matters arising in 2023 focused on the utilisation of bio-derived alternative fuels (to natural gas) for consumption in producing low carbon products. An assessment of the wider sustainability of these fuels was introduced to ensure no detrimental impact occurs as a result of their usage. This assessment includes the analysis of the feedstock of the fuel to ensure no deforestation measure, or impact to food production has been caused. Such analysis sits alongside the requirement for Proof of Sustainability (POS) documentation of any bio derived fuel to be utilised. Other biodiversity measures continue to focus on the ongoing remediation for natural material extraction e.g. sand quarries. Such remediation is a key aspect of the environmental management plan assessed by the raw material procurement and R&D specialist teams involved in raw material sourcing. Any deviation to the expected performance of these activities is escalated to the Sustainability Committee for support to implement additional countermeasures. In the reporting year, there were no occurrences of deviations that required such additional activity.

[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

1

(4.5.3) Please explain

Approximately 1% of the total amount of C-suite monetary incentivization is provided for the management of Climate Change in relation to the total amount of all C-suite monetary incentives provided in the reporting

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

1

(4.5.3) Please explain

Approximately 1% of the total amount of C-suite monetary incentivization is provided for the management of water in relation to the total amount of all C-suite monetary incentives provided in the reporting

[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 Procurement Officer (CPO)

(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

Strategy and financial planning

☑ Achievement of climate transition plan

Resource use and efficiency

☑ Improvements in emissions data, reporting, and third-party verification

☑ Energy efficiency improvement

☑ Reduction in total energy consumption

Policies and commitments

☑ Increased supplier compliance with environmental requirements

☑ New or tighter environmental requirements applied to purchasing practices

☑ Adopting UN International Labour Organization principles

Engagement

☑ Increased engagement with suppliers on environmental issues

(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

These incentives form at least one of the personal objectives of the CPO management incentive plan. Performance against these objectives will determine the performance rating of the individual in the reporting year. This performance rating is used to define salary increase for the next year.

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

CPO has a personal objective to continue to extend the energy management programme in line with the agreed plans. They lead the procurement activities within the global multifunctional team for energy & carbon management across NSG Group tasked with achieving targets in the area of all climate impact management activities

Water

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☑ Chief Procurement Officer (CPO)

(4.5.1.2) Incentives

Select all that apply

☑ Salary increase

(4.5.1.3) Performance metrics

Resource use and efficiency

☑ Reduction of water withdrawals – direct operations

☑ Improvements in water efficiency – 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

This objective is linked to performance related pay

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

CPO has a personal objective to continue to extend the energy management programme in line with the agreed plans

Climate change

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☑ Chief Sustainability Officer (CSO)

(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

☑ Organization performance against an environmental sustainability index

☑ Reduction in absolute emissions in line with net-zero target

Strategy and financial planning

☑ Board approval of climate transition plan

☑ Achievement of climate transition plan

☑ Increased investment in environmental R&D and innovation

☑ Increased proportion of revenue from low environmental impact products or services

Emission reduction

☑ Implementation of an emissions reduction initiative

☑ Reduction in emissions intensity

☑ Increased share of renewable energy in total energy consumption

☑ Reduction in absolute emissions

Resource use and efficiency

☑ Improvements in emissions data, reporting, and third-party verification

☑ Energy efficiency improvement

☑ Reduction in total energy consumption

Engagement

☑ Increased engagement with suppliers on environmental issues

☑ Increased engagement with customers on environmental issues

☑ Increased value chain visibility (traceability, mapping)

☑ Implementation of employee awareness campaign or training program on environmental issues

(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

These climate change related incentives constitute at least 50% of the total of personal objectives of the CSO management incentive plan. Typically this would mean between 3 - 4 specific combinations of objectives to cover the aspects identified. Performance against these objectives will determine the performance rating of the individual in the reporting year. This performance rating is used to define salary increase for the next year.

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

CSO has these personal objectives to continue to extend the water management programme in line with the agreed plans. They lead the sustainability activities across NSG Group tasked with achieving targets in the area of all climate impact and water management activities

Water

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☑ Chief Sustainability Officer (CSO)

(4.5.1.2) Incentives

Select all that apply

☑ Salary increase

(4.5.1.3) Performance metrics

Resource use and efficiency

☑ Reduction of water withdrawals – direct operations

☑ Reduction in water consumption volumes – direct operations

☑ Improvements in water efficiency – direct operations

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

Pollution

☑ Reduction of water pollution incidents

☑ Reduction or phase out of hazardous substances

☑ Improvements in wastewater quality – direct operations

☑ Increase in substitution of listed environmental contaminants

☑ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations

☑ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Policies and commitments

☑ Implementation of water-related community project

(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

These water management related incentives constitute at least 10% of the total of personal objectives of the CSO management incentive plan. Typically this would mean at least one specific combinations of objectives to cover the aspects identified. Performance against these objectives will determine the performance rating of the individual in the reporting year. This performance rating is used to define salary increase for the next year.

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

CSO has a personal objective to continue to extend the water management programme in line with the agreed plans. They lead the sustainability activities across NSG Group tasked with achieving targets in the area of all climate impact and water management activities

[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

(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

All sites under NSG Operational direct control are covered by the policy. All global suppliers and customers to these sites are also covered.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to stakeholder engagement and capacity building on environmental issues

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

Select all that apply

☑ Yes, in line with the Paris Agreement

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

NSG Group Energy Policy Poster_EN_202304 (3).pdf

Row 2

(4.6.1.1) Environmental issues covered

Select all that apply

☑ 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

(4.6.1.4) Explain the coverage

All sites under NSG Operational direct control are covered by the policy. All global suppliers to these sites are also covered.

(4.6.1.5) Environmental policy content

Water-specific commitments

☑ Commitment to control/reduce/eliminate water pollution

☑ Commitment to reduce water withdrawal volumes

☑ Commitment to water stewardship and/or collective action

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

Select all that apply

☑ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

Water+Enviromental_Policies.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

☑ Japan Climate Leaders' Partnership (JCLP)

☑ Science-Based Targets Initiative (SBTi)

☑ UN Global Compact

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

Nippon Sheet Glass Co., Ltd. commits to reduce absolute scope 1 and 2 GHG emissions 30% by 2030 from a 2018 base year. Nippon Sheet Glass Co., Ltd. also commits to reduce absolute scope 3 GHG emissions 30% within the same time frame. NSG Group has been an active UNGC participant since 2012 and submits annual Communications on Progress. The NSG Group is a supporting member of the JCLP.*

[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 indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

(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

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

(4.11.4) Attach commitment or position statement

NSG_Group_Ethics_booklet_2023.pdf

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

Select from:

☑ No

(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

See also qu 13.2 NSG Group has a Code of Ethics, a sustainability policy and and environmental policy that make clear commitments to align with the principles of the UNGlobal Compact. These policies are further enhanced by the public commitment of NSG

Group to deliver a Science Based Target verified by the SBTi. Science-based targets provide a clearly-defined pathway for companies to reduce GHG emissions, helping prevent the worst impacts of climate change and future-proof

business growth. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement –

limiting global warming to well-below 2C above pre-industrial levels and pursuing efforts to limit warming to 1.5C. See p34 NSG Code of Ethics For suppliers and other business partners we will: work with those whose ethics match our own and take action if their behavior conflicts with our Code. See page 35 NSG Code of Ethics Working with Customers, Suppliers and Partners. For suppliers and other business partners we will: Work with those whose ethics match

our own, Never allow relationships to influence our business decisions and Take action if their behaviour conflicts with our Code Governance of the application and delivery

of the NSG Group sustainability policy, environmental policy and SBTi target is undertaken at the highest possible level within the organisation via the Group executive

management committee and sustainability committee. The adherence of these policies and targets, signed off by the NSG Group CEO, is a fundamental responsibility for

all employees of NSG Group. The climate strategy of NSG Group aligns directly to the overall Group strategy and mission 'Changing our surroundings, improving our

world'. The ongoing management of activities to achieve the targets established is reported on a regular basis to the governance committees of NSG Group, with the

establishment and tracking of various key performance indicators demonstrating the delivery of defined actions. The sustainability committee and various sub committees,

e.g. energy and carbon management comm ensures that the performance of these KPI's is on track to deliver and in cases where any deviation is seen, action plans implemented to ensure targets are back on track over appropriate timescales. The Sustainability comm also

ensures that the KPI's remain relevant as a measure of Group engagement in achieving the business strategy.
[Fixed row]

(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.

Row 1

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

☑ Other trade association in Europe, please specify

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to

influence the organization or individual’s position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization’s position is consistent with or differs from the organization or individual’s position, and any actions taken to influence their position

As forward-looking innovative providers of state-of-the-art products and technologies, Glass for Europe members believe that it is essential to achieve balanced solutions

that are sustainable from an economic, environmental and social standpoint. In this context Glass for Europe is particularly interested in the following European policies: -

Energy efficiency in light of glass' contribution to energy savings -EU initiatives aimed at lowering the environmental impact of manufacturing and strengthening innovation

in sustainable production -Legislation that aims to enhance the quality of glass products and their distribution Besides, Glass for Europe is involved in the discussion on the

development of standards for glass products and the subsequent CE marking. Globally, it calls on EU policies to ensure a level-playing field between EU and non-EU

manufacturing industries and a reform of the EU climate and energy policies to ensure that Europe’s low-carbon objective becomes a growth-driver for EU industries. NSG

policy is replicated at trade association level and demonstrates public policy support for mitigating climate change. In the case of Glass for Europe lobbying position being

different to NSG Group, we have the option to veto any public policy disclosure. This position is in line with members’ climate change strategy to reduce energy consumption and carbon emissions in both manufacturing processes and in product use. -Lobbying to ensure that high performance solar control glass technologies are legally required in vehicles to reduce fuel consumption and CO2 associated with air conditioning. -We are *calling for a binding energy savings target for buildings -EU Emissions Trading Scheme: maintaining carbon leakage status and Fit for 55 legislative improvement options.*

Currently promoting increased recycling of end of life glass products to reduce energy consumption and CO2 emissions from glass manufacturing. Glass for Europe has published "2050 Flat Glass in Climate-Neutral Europe" brochure. See https://glassforeurope.com/wp-content/uploads/2020/01/flat-glass-climate-neutral-europe.pdf It describes why GFE is lobbying for the following legislative policy changes: Industrial Strategy, Energy Positive Building Stock, Sustainable Transport, Achieving Climate Neutrality, Transition to a Circular Economy, Clean, Reliable and Affordable Energy and Financing the Transition

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

152000

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

Membership fee for Board presence, Environment Committee, Standardisation Committee, External Relations Committee and Automotive Strategy Committee

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on 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

☑ Biodiversity

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Water accounting figures

☑ Governance

☑ Emission targets

☑ Risks & Opportunities

☑ Value chain engagement

(4.12.1.6) Page/section reference

Risk Management pages 88-92 Climate change risk p34 Water risk page 49

Corporate Governance pages 72-87

Value Chain engagement see pages 57-60

Strategy Group strategy p5 CO2 initiatives p33

Water accounting p48

Emission targets p36

(4.12.1.7) Attach the relevant publication

IntegratedReport2023.pdf

(4.12.1.8) Comment

https://www.nsg.com/investors/ir-library/annual-reports The next version of the NSG Group Integrated Report will be published in November 24 and will be found on this website.

[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:

☑ Every two years

Water

(5.1.1) Use of scenario analysis

Select from:

☑ Yes

(5.1.2) Frequency of analysis

Select from:

☑ Every two years

[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:

☑ 1.6ºC - 1.9ºC

(5.1.1.7) Reference year

2018

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2050

☑ 2100

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

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

Finance and insurance

☑ Cost of capital

Stakeholder and customer demands

☑ Consumer sentiment

☑ Consumer attention to impact

Regulators, legal and policy regimes

☑ Global regulation

☑ Level of action (from local to global)

☑ Global targets

☑ Methodologies and expectations for science-based targets

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Direct interaction with climate

☑ On asset values, on the corporate

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Scenario indicators utilised for qualitative and quantitative analysis include; Technology indicators, e.g. change in technology use, share of global renewables, average annual efficiency improvement in iron, steel & cement industries), % of EV's for global passenger cars. Economic & social indicators, e.g. Carbon tax prices, energy price predictions, Net zero commitments, market & production, growth in material consumption. Carbon price risk calculated based on Scope 1 and Scope 2 location based emissions. Carbon prices estimates used for quantitative analysis based on the mid range average of NGFS models (NGFS

(5.1.1.11) Rationale for choice of scenario

A structured approach was followed using 3rd party input to identify and evaluate risk exposures derived from transition risk based on scenario analysis according to guidance issued by TCFD. Potential transition risks were identified and articulated using discussions with senior executives within NSG organisation and experience gathered by the 3rd party consultancy undertaking the assessment. Time horizons utilised matched those within the NSG strategic risk management framework (short, mid & long term). In addition assessments out to 2050 and 2100 were included. Financial impacts were estimated and likelihoods assessed and aligned to an adapted version of the NSG Group enterprise risk management criteria.

Water

(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

☑ Acute physical

☑ Market

☑ Chronic physical

☑ Liability

☑ Reputation

☑ Technology

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.6ºC - 1.9ºC

(5.1.1.7) Reference year

2018

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2050

☑ 2100

(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)

Finance and insurance

☑ Cost of capital

☑ Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

☑ Consumer attention to impact

Regulators, legal and policy regimes

☑ Global regulation

☑ Level of action (from local to global)

☑ Global targets

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Direct interaction with climate

☑ Perception of efficacy of climate regime

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

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Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ IEA SDS

(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

☑ Acute physical

☑ Market

☑ Chronic physical

☑ Liability

☑ Reputation

☑ Technology

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.6ºC - 1.9ºC

(5.1.1.7) Reference year

2018

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2050

☑ 2100

(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)

Finance and insurance

☑ Cost of capital

Stakeholder and customer demands

☑ Consumer sentiment

☑ Consumer attention to impact

Regulators, legal and policy regimes

☑ Global regulation

☑ Level of action (from local to global)

☑ Global targets

☑ Methodologies and expectations for science-based targets

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Direct interaction with climate

☑ Perception of efficacy of climate regime

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

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Water

(5.1.1.1) Scenario used

Climate transition scenarios

☑ IEA SDS

(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

☑ Acute physical

☑ Market

☑ Chronic physical

☑ Liability

☑ Reputation

☑ Technology

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.6ºC - 1.9ºC

(5.1.1.7) Reference year

2018

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2050

☑ 2100

(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)

Finance and insurance

☑ Cost of capital

Stakeholder and customer demands

☑ Consumer attention to impact

Regulators, legal and policy regimes

☑ Global regulation

☑ Level of action (from local to global)

☑ Global targets

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Direct interaction with climate

☑ Perception of efficacy of climate regime

Macro and microeconomy

☑ Domestic growth

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Scenario indicators utilised for qualitative and quantitative analysis include; Technology indicators, e.g. change in technology use, share of global renewables, average annual efficiency improvement in iron, steel & cement industries), % of EV's for global passenger cars. Economic & social indicators, e.g. Carbon tax prices, energy price predictions, Net *zero commitments, market & production, growth in material consumption. Carbon price risk calculated based on Scope 1 and Scope 2 location based emissions. Carbon prices estimates used for quantitative analysis based on the mid range average of NGFS models (NGFS*

(5.1.1.11) Rationale for choice of scenario

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Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ No SSP used

(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 ☑ Acute physical

☑ Market ☑ Chronic physical

☑ Liability

☑ Reputation

☑ Technology

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0ºC and above

(5.1.1.7) Reference year

2018

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2050

☑ 2100

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

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

Finance and insurance

☑ Cost of capital

Stakeholder and customer demands

☑ Consumer sentiment

☑ Consumer attention to impact

Regulators, legal and policy regimes

☑ Global targets

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Direct interaction with climate

☑ Perception of efficacy of climate regime

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Scenario indicators utilised for qualitative and quantitative analysis include; Technology indicators, e.g. change in technology use, share of global renewables, average annual efficiency improvement in iron, steel & cement industries), % of EV's for global passenger cars. Economic & social indicators, e.g. Carbon tax prices, energy price predictions, Net zero commitments, market & production, growth in material consumption. Carbon price risk calculated based on Scope 1 and Scope 2 location based emissions. Carbon prices estimates used for quantitative analysis based on the mid range average of NGFS models (NGFS

(5.1.1.11) Rationale for choice of scenario

Initial assessment at Company wide level was then further differentiated to a regional level approach and also a business division approach.

For several aspects of physical risk, e.g. flood risk, sea level rise, heat stress, the impact *assessment was carried out at individual entity level, e.g. manufacturing sites.*

Qualitative and quantitative analysis included key suppliers and key customers within the analysis activity to estimate impacts within the supply and value chain.

Acute climate risks with significant impact include; river flood, flash flood or surface water run-off.

Chronic climate risks with significant impact include; sea level rise, increase in heat and prolonged drought stress.

Water

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ No SSP used

(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

☑ Acute

physical

☑ Market ☑

Chronic physical

☑ Liability

☑ Reputation

☑ Technology

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0ºC and above

(5.1.1.7) Reference year

2018

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2050

☑ 2100

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

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

Finance and insurance

☑ Cost of capital

Stakeholder and customer demands

☑ Consumer sentiment

☑ Consumer attention to impact

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Direct interaction with climate

☑ Perception of efficacy of climate regime

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Scenario indicators utilised for qualitative and quantitative analysis include; Technology indicators, e.g. change in technology use, share of global renewables, average annual efficiency improvement in iron, steel & cement industries), % of EV's for global passenger cars. Economic & social indicators, e.g. Carbon tax prices, energy price predictions, Net zero commitments, market & production, growth in material consumption. Carbon price risk calculated based on Scope 1 and Scope 2 location based emissions. Carbon prices estimates used for quantitative analysis based on the mid range average of NGFS models (NGFS

(5.1.1.11) Rationale for choice of scenario

Initial assessment at Company wide level was then further differentiated to a regional level approach and also a business division approach.

For several aspects of physical risk, e.g. flood risk, sea level rise, heat stress, the impact assessment was carried out at individual entity level, e.g. manufacturing sites.

Qualitative and quantitative analysis included key suppliers and key customers within the analysis activity to estimate impacts within the supply and value chain.

Acute climate risks with significant impact include; river flood, flash flood or surface water *run-off.*

Chronic climate risks with significant impact include; sea level rise, increase in heat and prolonged drought stress.

[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

☑ Strategy and financial planning

☑ Resilience of business model and strategy

☑ Capacity building

☑ 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

At NSG Group level, the output of the scenario analysis has indicated a high residual transition risk that could be more severe without the decarbonisation efforts that are planned to be implemented. The Group risk exposure is primarily driven by the projected global pricing of GHG emissions. Consequently, decarbonisation presents an opportunity to reduce this transition risk exposure across all three time horizons. The residual risk exposure is moderate in the short to mid term, rising to significant in the longer term as *projected costs of GHG emissions are very significant and may impact severely on the 2035 timescale given mitigation measures focus on 2030 targets (-30%) and achievement of carbon neutrality by 2050. The transition to a low carbon economy presents a significant opportunity for NSG Group in the form of emerging consumer demands. This is driven by the outlook for building energy efficiency requirements as well as the need for energy saving components to improve aspects of electric vehicle utilisation, e.g. extending battery life. NSG's position as a manufacturer of energy saving speciality glass and glazing products means it has the means to capitalise on this change in customer preferences. The results of the analysis have identified an number of quick wins that NSG can choose to exploit, specifically in the focal areas of governance, communication, collaboration and cost management across various stakeholder levels of NSG's value chain. The findings of this climate change impact assessment have been assessed by the senior executive management team of NSG Group and cascaded down to a regional, business unit and local level to support the development of a tailored action plan. The results of the scenario analysis were used in combination with output from NSG's participation in the voluntary development and assessment of the glass manufacturing industry according to ACT methodology (2021-22) to support the development of the NSG Group strategy. In the short term, the impact of other aspects of cost management not directly related to climate change are demonstrating the level of exposure of NSG Group to factors that will be influenced by climate change in the future. The results of the transition and physical risk assessments further clarify this exposure risk and provide further clarification of the requirement for development and implementation of a climate risk mitigation strategy. These actions are being integrated into the business strategy of NSG Group within the RP24 framework and longer term into the transformation of NSG Group via the 'shine' phase.*

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 results of the water scenario analysis have identified an number of quick wins that NSG can choose to exploit, specifically in the focal areas of governance, communication, collaboration and cost management across various stakeholder levels of NSG's value chain. The findings of this water management impact assessment have been assessed by the senior executive management team of NSG Group and cascaded down to a regional, business unit and local level to support the development of a tailored action plan. This analysis has supported the development of the new MTP targets regarding water management with specific focus on areas identified as water stressed. The impact to manufacturing activities within these defined areas has been highlighted as high risk due to interruption to activities. A detailed action plan is in place for each of these locations to ensure the short, mid and long term impact is effectively mitigated and targets can be achieved.

[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:

☑ Yes

(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

The manufacturing process for production and processing of float glass is energy intensive, particularly the primary manufacturing process (float). Currently the manufacturing furnaces utilise various combinations of fossil fuel including natural gas and fuel oils. The transition plan in place identifies the replacement of these fossil fuels with alternative low carbon fuels such as Hydrogen and bio-derived fuels. Timing of the implementation of these technologies is dependent on various aspects including technical risk, commercial viability and supply chain availability. NSG Group encourages the investment of supply chain partners in the development of these non -fossil alternatives, however the current economics of these alternative solutions in the majority of cases results in significant increase in operating costs as well as capex investment required to be able to utilise these fuels. As a result, we don't currently include an explicit statement to cease all indirect revenue generation from the utilisation of fossil fuel

(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 key assumptions included within the transition plan are related to the utilisation of alternative technologies to reduce the CO2 emissions associated with our manufacturing process. The key aspects of these are within Scope 1 emissions - alternative fuel *technologies (including increased use of electricity as a heating mechanism), increased availability of glass for recycling, alternative raw materials. For Scope 2 the plan assume 100% availability of renewable energy sources. For Scope 3 the plan relies on full value chain engagement to achieve carbon neutrality. The dependency between technology solutions and supply chain availability is critical. Without investment by supply chain partners, the delivery of the transition plan is at risk as the solutions required will not be commercially viable.*

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

The decarbonization roadmap of NSG Group progressed well during the reporting year. Scope 1 emissions were effectively flat despite increased production output as well as increasing the proportion of higher embodied CO2 product manufactured. This Scope 1 performance was achieved through a combination of various project activities such as increased recycling rates, energy efficiency optimization and alternative fuel utilization. Scope 2 progressed with increased proportion of the use of 100% renewable electricity generation sources. The overall % of renewable electricity consumed across the Group increased from 32% to 35% in the reporting year. Scope 3 emissions remained stable through a combination of increases associated with increasing granularity of data across the value chain balanced with decreases achieved by various supply chain partners own decarbonization efforts

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

IntegratedReport2023_E02.pdf

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

Select all that apply

☑ Water

☑ Biodiversity

(5.2.14) Explain how the other environmental issues are considered

in your climate transition plan

The utilization of water is a key aspect of the climate transition plan as several of our decarbonization processes have reliance on water resources. For example, Carbon Capture requires the conditioning of our waste gases from the combustion process to be cooled to an appropriate temperature. This cooling will require water (in a controlled closed circuit system) to achieve the desired temperature, therefore such technology can increase the water demand locally. Water is of course also the raw material for the production of green Hydrogen. Hydrogen is an integral part of our scope 1 reduction strategy. For Biodiversity, we consider the direct impact to the Scope 1 emissions of our manufacturing operations with the action plan to utilise increased proportion of bioderived fuels. These bio based fuels will need to be effectively managed to ensure there are no detrimental impacts to the wider environment from their use. We also consider water and biodiversity in our value chain activities. For example the production of key raw materials for glass manufacturing such as silica sand require large volumes of water for processing of the material. Sand is of course a natural material currently 'mined' therefore the impact to the environment including biodiversity is absolutely critical in the management of these natural resources. These supply chain aspects are a key part of the sustainable supply chain charter that we expect all suppliers to commit too.
[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

NSG Group, following best practice defined within the TCFD framework, has continued to further refine during 2023 a KPI to measure the revenue associated with sales of climate impact related products over the mid and long term horizon. This has resulted in some key asset investment strategic decisions in this area. Specifically, the construction of two new float glass manufacturing operations dedicated to the production of products for the photovoltaic generation market. These new production facilities came on stream 2021. Conversions of existing operations to the production of high performance solar glazing are also planned to take place in 2023/24 An additional example of the commitment of all NSG *employees to recognise the impact they can have on society via the products & services the company offers is the continued utilisation of the 'Our Vision, My Action' program during 2023. Launched in 2019, this program encouraged all employees to think about how our Mission, Aspiration and Core Values might guide our actions and asked everyone to write down the individual action they will take on a piece of paper and post it on a dedicated website that can be accessed by colleagues around the world. This included the need to reduce embodied carbon and increase recycled content. The NSG Management Committee members launched the activity by posting their individual actions on this site. In the spirit of one of the Core Values "Ensure efforts to serve society," NSG Group donated one US dollar against each employee submission of My Action to The Climate Group, an international non-profit organization active in climate and energy initiatives.*

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

Increasing engagement during 2023 with several suppliers of key, high carbon impact raw materials. This greater collaboration with the supply chain is a conscious effort to establish win:win scenarios through sharing aspects such as; low carbon technologies, development of products to reduce emissions associated with our manufacturing processes, etc. Customers will receive products with lower embodied carbon. This will help to reduce their scope 3 emissions to achieve their own carbon targets and commitments and enhance our *reputation. This scope 3 activity has focused on the highest impact raw materials within the NSG supply chain and has led to a greater understanding of the activities being undertaken within the supply chain for scope 1 & 2 reduction. This is a short term horizon action repeated biannually. A significant activity was also launched at the end of 2022 to revise the existing NSG Group supplier code of conduct and also the introduction of a sustainable supply chain charter. Moving forwards, all supply chain partners of NSG Group will be expected to achieve the minimum standards set out in this charter, which include defining the existing performance and future actions to improve performance of products and services provided from a broad range of sustainability aspects including embodied CO2 content.*

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

Continuing development of energy generating and energy efficient products. Includes mid to long term strategic development product strategy with key partners in both the supply and customer chain to improve performance of products in use as well as reducing embodied carbon of products manufactured. One specific example includes the continuous development and new product launch during 2022/23 of a next generation product to improve photovoltaic generation efficiency and extend product lifetime and performance to achieve the highest industrial performance standard to date. Mid to long term development *in furnace technology to identify potential pathways to significant step changes in embodied carbon content of the flat glass process. More than 8 discrete project activities have been undertaken with significant budget commitment in capex, opex and resource support to these activities. This investment is an essential aspect of the NSG decarbonisation pathway to meet the 2030 SBT target and lay the foundation for delivery of the 2050 carbon neutral vision.*

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

Continued focus on Carbon and energy efficiency activities during 2023 has supported the achievement of targets within the final year of the current mid term plan. Key points from this short to mid term activity will be extended, with the establishment of actions for the next mid term strategy of NSG Group (MTP27 - 'Shifting the phase'). As carbon and energy cost contributes to 10% of operational spend, energy savings will mitigate the risk of current increasing energy prices and future carbon costs. For example, the current impact of legislation within Europe (EU ETS) and Japan has increased the profile of CO2 cost within those regions. This CO2 cost contributed to the establishment of the Internal Carbon price which is used as an indication of the potential cost of CO2 taxes globally. Assuming a 100/tonne ICP and 3Mt CO2 (scope 1), results in a indicative cost impact of 300M. Additional legislation impact is also resulting in a change in operational philosophy at

certain sites across the Group. This activity focuses on the level of energy intensity by energy type, resulting in additional costs/savings depending on local energy mix. Monitoring of the impact of this local legislation, driven primarily by national government commitments to climate change protocols requires some dedicated resource effort to ensure a positive impact where possible. Other specific activities during 2023 included further development and application of a world class manufacturing framework to include carbon and energy management activities. Production sites self assess their status within this framework which supports the development and implementation of projects to improve This included establishing a dedicated management team to monitor impacts, develop actions to mitigate impact, disseminate these practices across all Group operations and review the impact of these measures (standard PDCA approach). The focus of this activity was to ensure any reduction in process utilization was matched by appropriate reductions in energy consumption and carbon emission. The management team reviewed the site performance on a monthly basis while encouraging sites to reach immediately to any unexpected deviation in performance. An employee awareness program launched in 2022 and expanded in 2023 across UK operations utilising 3rd party software to guide more sustainable choices, including CO2 emission reductions.
[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

☑ Capital expenditures

☑ Capital allocation

☑ Access to capital

(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

☑ Water

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

An enhanced adoption of the TCFD framework during 2023 reinforces the clear link between future revenue opportunity from climate change related products manufactured by NSG. The increased sale of these climate related, Value Added (VA) products has positively contributed to the Medium Term Plan Phase 2 target achievement to FY24. The recognition of the positive impact from these products has resulted in the mid to long term strategic decision of capital allocation and investment into two new float operation lines to specifically produce products dedicated to the Photovoltaic market. The plan includes investing a total of approximately 38 billion yen in the expansion of production capacity of online TCO (transparent conductive oxide) coated glass to support the growing solar market. The expanded global production capacity for TCO glass is expected to accelerate a shift in the company's product portfolio towards VA products while supporting a long-term supply agreement with First Solar, the world's leading provider of comprehensive photovoltaic (PV) solar systems. The latest expansion of production of these products includes investment to upgrade operations at two manufacturing facilities. These facilities located in the USA and Malaysia require an investment of @200M to produce this high positive impact product. Global solar demand is expected to see a double-digit increase every year in the next three years. With the expanded supply capability for VA products, such as solar glass and other products, NSG Group intends to drive its growth strategy while supporting the increased use of renewable energy. The access to capital is reinforced by such investments in sustainable technology growth areas. As well as the significant investment into new production facilities, capital has continued to be spent in order to *purchase energy efficient equipment. Much of this has been in conjunction with energy supplier partnerships. Activity within TCFD framework adoption also highlights the impact of operational energy costs. This continues to emphasise the need to support the ongoing activities to improve energy & carbon impact as a result of the multiple energy efficiency initiatives. Numerous examples of project activities have been implemented during the year, reinforced by the application of the Group Internal Carbon Price. The application of the ICP is now established as a key component of the financial planning activity, managed by the Group finance teams*

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

[Fixed 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)

5

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

5

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

2

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

5

(5.9.5) Please explain

In 2023 we started to increase focus on water related expenditures for both capex and opex perspectives. Water is increasing in importance as part of the management program for sustainability with the introduction of targets focused at sites within water stressed areas. We are expecting to see increased frequency of water related (shortages) impacts on selected production sites and as a result in the last 2 years we have increased capex expenditure on projects that lead to increased capability of water recycling, water harvesting, etc. This capex is anticipated to increase further in the next 2 years associated with specific investments in water recycling facilities on one of the Group float plant locations (Italy) that can take place when that furnace is repaired. Shortages of water are expected to increase opex particularly in Europe. Important to recognise is that in several locations across the Group, the opex of water is zero or very low which can restrict investment

[Fixed row]

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

	Use of internal pricing of environmental externalities	Environmental externality priced

	Select from: ☑ Yes	*Select all that apply* ☑ Carbon

[Fixed row]

(5.10.1) Provide details of your organization's internal price on carbon.

Row 1

(5.10.1.1) Type of pricing scheme

Select from:

☑ Shadow price

(5.10.1.2) Objectives for implementing internal price

Select all that apply

☑ Navigate regulations

☑ Setting and/or achieving of climate-related policies and targets

☑ Drive energy efficiency

☑ Incentivize consideration of climate-related issues in decision making

☑ Drive low-carbon investment

☑ Incentivize consideration of climate-related issues in risk assessment

☑ Conduct cost-benefit analysis

☑ Identify and seize low-carbon opportunities

(5.10.1.3) Factors considered when determining the price

Select all that apply

☑ Alignment with the price of a carbon tax

☑ Alignment with the price of allowances under an Emissions Trading Scheme

☑ Benchmarking against peers

☑ Existing or pending legislation

☑ Scenario analysis

(5.10.1.4) Calculation methodology and assumptions made in

determining the price

The calculation of impact of the ICP takes the defined ICP (100/tonne of CO2) and applies this to the individual project CO2 impact in a single year of implementing the project. For example, if the project achieves a 100 tonne / year CO2 reduction, we would multiply the CO2 benefit (100 tonnes) by the ICP (100/tonne) resulting in a cost benefit of 10,000. This cost benefit would then be incorporated into the standard business case evaluation process for NSG Group project assessment. The ICP is based on a combination of external analysts evaluation (e.g. market prediction of the short, mid and long term evolution of CO2 pricing) and the current emission trading scheme prices (e.g. EU ETS). The ICP is reviewed on an annual basis

(5.10.1.5) Scopes covered

Select all that apply

☑ Scope 1

☑ Scope 2

(5.10.1.6) Pricing approach used – spatial variance

Select from:

☑ Uniform

(5.10.1.8) Pricing approach used – temporal variance

Select from:

☑ Static

(5.10.1.10) Minimum actual price used (currency per metric ton CO2e)

1670

(5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

1670

(5.10.1.12) Business decision-making processes the internal price is applied to

Select all that apply

☑ Capital expenditure

☑ Impact management

☑ Operations

(5.10.1.13) Internal price is mandatory within business decision-making processes

Select from:

☑ Yes, for all decision-making processes

(5.10.1.14) % total emissions in the reporting year in selected scopes this internal price covers

49

(5.10.1.15) Pricing approach is monitored and evaluated to achieve objectives

Select from:

☑ Yes

(5.10.1.16) Details of how the pricing approach is monitored and evaluated to achieve your objectives

NSG Group continued to utilise a global management system for energy and carbon efficiency projects undertaken to reduce the risk of future carbon taxes and quantify the potential carbon saving opportunities associated with a new plant design. Numerous activities have taken place, including further workshops with several internal functions (R&D, engineering, Manufacturing Excellence, EHS, Procurement) identifying and assessing the viability of energy saving opportunities. These support the development of the Group's decarbonisation strategy, the future implementation of the Group's science based target setting and the production of low embodied carbon products that will help our *customers to reduce their scope 3 emissions. The ICP is utilised directly for Scope 1 and 2 emission reduction projects. It can be utilised across Scope 3 emissions as an indication of the impact of Scope 3 project activities but cannot be used currently to support the financial business case of Scope 3 project implementation. Energy saving opportunities were prioritised according to the combination of energy and carbon price impacts. The output from the studies reveals energy saving projects that might previously not have been considered for investment to the ICC (Investment and Capital Committee). It is anticipated that continuing to use this and future studies will shift investment towards more low carbon measures. This approach is further evidenced by the climate change scenario analysis transition impact that highlighted the cost of carbon as one of the highest levels of risk to NSG Group associated with climate change. As a result of the output of this transition analysis and the increased price of carbon allowances within the EU & UK ETS, the decision was taken to increase the ICP significantly to encourage investment into mid/long term decarbonisation solutions reflects the anticipate carbon price of the future. The ICP was reviewed twice in 2023 and seen to remain relevant based on the latest predictions of carbon price from various 3rd party analysts. The NSG Group review the level of application of the internal carbon price as part of the sustainability committee activities to ensure it remains a viable method to support implementation of decarbonisation project investments, with governance of the ICP part of the sustainability committee responsibilities.*

[Add 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 ☑ Water ☑ Plastics
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

NSG Procurement Team, together with Key stakeholders, conducted a risk and impact heatmapping for all centrally and regionally managed categories of spend, to establish High Impact areas for sustainability characteristics of given products or services on various markets. The dependencies and/or impacts are considered substantial when severity of a risk is high and may result in a material business impact (e.g. environmental damage, significant health impacts, damage to reputation)

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

Select from:

☑ 26-50%

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

5858

Water

(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

☑ Dependence on water

☑ Impact on water availability

(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

NSG Procurement Team, together with Key stakeholders, conducted a risk and impact heatmapping for all centrally and regionally managed categories of spend, to establish High Impact areas for sustainability characteristics of given products or services on various markets. The dependencies and/or impacts are considered substantial when severity of a risk is high and may result in a material business impact (e.g. environmental damage, significant health impacts, damage to reputation)

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

Select from:

☑ 1-25%

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

820

[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

☑ Procurement spend

☑ Regulatory compliance

☑ Business risk mitigation

☑ Vulnerability of suppliers

☑ Strategic status of suppliers

☑ Product safety and compliance

☑ Supplier performance improvement

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

(5.11.2.4) Please explain

NSG Procurement Team, together with Key stakeholders, conducted a risk and impact heatmapping for all centrally and regionally managed categories of spend, to establish High Impact areas for sustainability characteristics of given products or services on various markets. Together with launch of NSG Group Supply Chain Charter in September 2023, such prioritization heatmaps were made available within the Charter and clearly present High, Medium, and Low Priority for 8 Key sustainability impacts, where Greenhouse Gasses and impact on climate change are one of the key focus areas. As an example, suppliers representing categories of spend with highest impact on NSG Scope 3 emissions, are prioritized for engagement to calculate and disclose their product or service carbon footprint, and present long term roadmap for decarbonization. Suppliers representing High Environmental Impact categories, are also prioritized and expected to obtain and maintain a valid certification for Environmental Management System.

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

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

(5.11.2.4) Please explain

NSG Procurement Team, together with Key stakeholders, conducted a risk and impact heatmapping for all centrally and regionally managed categories of spend, to establish High Impact areas for sustainability characteristics of given products or services on various markets. Together with launch of NSG Group Supply Chain Charter in September 2023, such prioritization heatmaps were made available within the Charter and clearly present High, Medium, and Low Priority for 8 Key sustainability impacts, where Water Stewardship and impact on environment are among the key focus areas. As an example, suppliers representing categories of spend with highest impact on Water Stewardship, are prioritized for engagement to disclose various KPI's and Sustainability metrics related to water management via 3rd party sustainability assessment platform.

[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:

☑ 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:

☑ Yes, we have a policy in place for addressing non-compliance

(5.11.5.3) Comment

Specific environmental requirements related to various environmental issues are embedded into appropriate steps of NSG purchasing processes throughout stages of supplier relationship management. Depending on the category of spend, these requirements can be a part of our Supplier Code of Conduct and/or Sustainable Supply Chain Charter. They can be related to achieving and maintain appropriate certification or disclosing appropriate information directly to Procurement Team members or via 3rd party Sustainability Performance assessment. In case of non-compliance with these requirements, appropriate Supplier Development processes are in place to support suppliers in achieving compliance such as on-site audits and/or escalation meetings.

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:

☑ Yes, we have a policy in place for addressing non-compliance

(5.11.5.3) Comment

Specific environmental requirements related to various environmental issues are embedded into appropriate steps of NSG purchasing processes throughout stages of supplier relationship management. Depending on the category of spend, these

requirements can be a part of our Supplier Code of Conduct and/or Sustainable Supply Chain Charter. They can be related to achieving and maintain appropriate certification or disclosing appropriate information directly to Procurement Team members or via 3rd party Sustainability Performance assessment. In case of non-compliance with these requirements, appropriate Supplier Development processes are in place to support suppliers in achieving compliance such as on-site audits and/or escalation meetings.
[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.

Climate change

(5.11.6.1) Environmental requirement

Select from:

☑ Environmental disclosure through a non-public platform

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier scorecard or rating

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

Select from:

☑ 51-75%

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

Select from:

☑ 51-75%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

☑ 51-75%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

☑ 26-50%

(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:

☑ 1-25%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

☑ Providing information on appropriate actions that can be taken to address non-compliance

(5.11.6.12) Comment

NSG uses a 3rd party solution for suppliers sustainability performance assessment on *various pillars of ESG, such as Environmental, Labor & Human Rights, Ethics and Sustainable Procurement aspects. Each year Procurement team has an increasing target for weighted average spend coverage that is encouraging onboarding of increasing number of our supply chain partners. We work in parallel to improve the scoring of already assessed suppliers through communication campaigns and sharing of best practices as well as promote benefits of participation among other suppliers. For some categories of spend with highest impact on climate change and environment (such as wood packaging, chemicals etc.) assessment is required together with obtaining an appropriate certification (eg. ISO14001 or national equivalent). Having a valid scorecard as an evidence of undergoing the assessment and achieving satisfying score can become a part of a supply contract and important factor in our sourcing decisions.*

Water

(5.11.6.1) Environmental requirement

Select from:

☑ Environmental disclosure through a non-public platform

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier scorecard or rating

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

Select from:

☑ 51-75%

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

Select from:

☑ 51-75%

(5.11.6.5) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue required to comply with this environmental requirement

Select from:

☑ 1-25%

(5.11.6.6) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue that are 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:

☑ 1-25%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

☑ Providing information on appropriate actions that can be taken to address non-compliance

(5.11.6.12) Comment

NSG uses a 3rd party solution for suppliers sustainability performance assessment on various pillars of ESG, such as Environmental, Labor & Human Rights, Ethics and Sustainable Procurement aspects. Each year Procurement team has an increasing target for weighted average spend coverage that is encouraging onboarding of increasing number of our supply chain partners. We work in parallel to improve the scoring of already assessed suppliers through communication campaigns and sharing of best practices as well as promote benefits of participation among other suppliers. For some categories of spend with highest impact on climate change and environment (such as wood packaging, chemicals etc.) assessment is required together with obtaining an appropriate certification (eg. ISO14001 or national equivalent). Having a valid scorecard as an evidence of undergoing the assessment and achieving satisfying score can become a part of a supply contract and important factor in our sourcing decisions.

[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:

☑ Emissions reduction

(5.11.7.3) Type and details of engagement

Capacity building

☑ Provide training, support and best practices on how to measure GHG emissions

☑ Provide training, support and best practices on how to mitigate environmental impact

Innovation and collaboration

☑ Collaborate with suppliers on innovations to reduce environmental impacts in products and services

☑ Collaborate with suppliers on innovative business models and corporate renewable energy sourcing mechanisms

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 51-75%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 1-25%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

The Energy and Carbon Management program continued with new energy and water efficiency projects implemented. Our measure of success will be to incentivize the market supply of renewable electricity and hit our target of 50% by 2024. In 2023, 35% of the Group's electricity came from renewable sources, an increase of 3% vs 2022. Carbon emissions will be reduced by producing renewable electricity onsite, directly consumed by NSG Group's operations. Many of these projects will utilize solar modules from NSG Group's customer First Solar, demonstrating products from within NSG Group. Following successful biofuel trials at the Group's Greengate site in St Helens, UK in 2022 a production run was completed in 2023 using a FAME biofuel. Transport and Warehousing activities focus on continuous incremental efficiency gains through; reducing empty driven miles, modal shift from road to rail, ship or barge and increasing the relative payload of product carried. All of these initiatives will continue to further reduce our environmental *impact. In Europe, through selection of a consolidated strategic haulier base, enhanced reporting and visibility has led to efficiency gains through better haulier, lane management and flow triangulation, which is a method to calculate optimized transport routes, improvements in our network also on supplier side by better utilization of fleet. Payload for bulk Float Glass road carriage by reducing TARE weight of the tractor and trailer units on larger proportions of the dedicated fleets has continued to improve. The manufacture and processing of glass making raw materials for use in NSG manufacturing lines makes up around 35% of scope 3 emissions or 15% of total NSG Group CO2 emissions. NSG is working closely with key supply partners to understand in detail the current primary emission factors of the raw materials to ensure the most accurate result of Scope 3 impact, including calculation method and third party verification. In addition, NSG will evaluate supplier roadmaps to 2030 and 2050 carbon reduction targets to ensure alignment with NSG targets. In 2023 NSG also successfully replaced a portion of soda ash with sodium hydroxide in the batch which led to lower CO2 emission. We also continue our efforts to increase use of recycled glass coming not only from internal sources but also returned from Customers and end users to promote circularity.*

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ Yes, please specify the environmental requirement :Addressing environmental issues under German Due Diligence Act for affected suppliers

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Total water withdrawal volumes reduction

(5.11.7.3) Type and details of engagement

Capacity building

☑ Provide training, support and best practices on how to mitigate environmental impact

Financial incentives

☑ Provide financial incentives for environmental performance

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 1-25%

(5.11.7.7) % tier 1 suppliers with substantive impacts and/or dependencies related to this environmental issue covered by engagement

Select from:

☑ 1-25%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

Throughout the sustainability assessment suppliers are asked to disclose information related to water stewardship and encouraged to share key metrics related to water withdrawal and reclaim. Within Sustainable Supply Chain Charter published in 2023, we share some of NSG best practices and expectations around water stewardship as one of key sustainability impacts. On top of that NSG became a partner in Supply Chain

Sustainability School providing all of our suppliers a free access to comprehensive training resources, e-learning and case studies also around water management. Principles described in our Charter together with aspirations for collaboration and examples of KPI's can be easily cascaded down in the value chain into Tier-n suppliers by our direct partners.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ Yes, please specify the environmental requirement :Addressing environmental issues under German Due Diligence Act for affected suppliers

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

[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

☑ Educate and work with stakeholders on understanding and measuring exposure to environmental risks

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

☑ Share information about your products and relevant certification schemes

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Align your organization’s goals to support customers’ targets and ambitions

☑ Collaborate with stakeholders in creation and review of your climate transition plan

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

☑ Run a campaign to encourage innovation to reduce environmental impacts

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 26-50%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 76-99%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

To many of our customers we are a significant proportion of their scope 3 emissions and in several cases these customers also contribute to NSG Group scope 3 emissions. Therefore it is clear that there are significant benefits to engage to deliver the common sustainability goals across our organizations. There are numerous specific examples on the scope of engagement of these different activities. These include collaboration workshops to understand common approaches that can be utilised, such as process energy efficiency programs, developing collaborations on recycling initiatives, designing for sustainability - considering a full life cycle approach to the product. These engagements can include direct engagement, such as customer 'education' events, participation at various product/trade fairs to answer questions on sustainability aspects, collaboration for end of life recycling and many others

(5.11.9.6) Effect of engagement and measures of success

We measure the level of engagement according to the number of project activities that are taking place alongside quantitative measure of the financial impact of each project implemented from a capex and opex measure. These project activities are included within the same 3K operational cost saving (OCS) program. In the reporting year, we see projects for increased recycled content delivering quantitative improvements in % of recycled content within the glass as well as improvements in energy efficiency and embodied CO2 reduction. All of these are KPI's reported across the Group operations.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Educate and work with stakeholders on understanding and measuring exposure to environmental risks

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Align your organization’s goals to support customers’ targets and ambitions

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 26-50%

(5.11.9.5) Rationale for engaging these stakeholders and scope of

engagement

In a similar way to the climate change activities with customers, we engage directly to highlight the impact of customer requirements on the water consumption of the products we produce. This also includes sharing information on initiatives that can be implemented to reduce this consumption from an operational point of view. One specific example is the opportunity for increased recycling of glass. The recycling process can require significant amounts of water in the process (this is within our supply chain Scope 3 emissions). If we can improve the initial segregation of glass at the end of life process, the further processing demand can be reduced. While this may not be the most cost or time effective process, it can lead to significant reduction in energy and water demand for the process.

(5.11.9.6) Effect of engagement and measures of success

We measure the level of engagement according to the number of project activities that are taking place alongside quantitative measure of the financial impact of each project implemented from a capex and opex measure. These project activities are included within the same 3K operational cost saving (OCS) program. In the reporting year, we see projects for reduced water consumption delivering quantitative improvements from activities within our value chain.
[Add row]

(5.12) Indicate any mutually beneficial environmental initiatives you could collaborate on with specific CDP Supply Chain members.

Row 1

(5.12.1) Requesting member

Select from:

(5.12.2) Environmental issues the initiative relates to

Select all that apply

☑ Climate change

(5.12.4) Initiative category and type

Innovation

☑ New product or service that reduces customers' products/services operational emissions

(5.12.5) Details of initiative

Increasing recycled content. Design for recycling activities

(5.12.6) Expected benefits

Select all that apply

☑ Improved resource use and efficiency

☑ Reduction of own operational emissions (own scope 1 & 2)

(5.12.7) Estimated timeframe for realization of benefits

Select from:

☑ 0-1 year

(5.12.8) Are you able to estimate the lifetime CO2e and/or water savings of this initiative?

Select from:

☑ Yes, lifetime CO2e savings only

(5.12.9) Estimated lifetime CO2e savings

200

(5.12.11) Please explain

Based on an assumption of a 2% reduction in the total CO2 footprint of the product over the lifetime of production (7 years)

Row 2

(5.12.1) Requesting member

Select from:

(5.12.2) Environmental issues the initiative relates to

Select all that apply

☑ Climate change

(5.12.4) Initiative category and type

Innovation

☑ New product or service that reduces customers' products/services operational emissions

(5.12.5) Details of initiative

Increasing recycled content. Design for recycling activities

(5.12.6) Expected benefits

Select all that apply

☑ Improved resource use and efficiency

☑ Reduction of own operational emissions (own scope 1 & 2)

(5.12.7) Estimated timeframe for realization of benefits

Select from:

☑ 0-1 year

(5.12.8) Are you able to estimate the lifetime CO2e and/or water savings of this initiative?

Select from:

☑ Yes, lifetime CO2e savings only

(5.12.9) Estimated lifetime CO2e savings

200

(5.12.11) Please explain

Based on an assumption of a 2% reduction in the total CO2 footprint of the product over the lifetime of production (7 years)

Row 3

(5.12.1) Requesting member

Select from:

(5.12.2) Environmental issues the initiative relates to

Select all that apply

☑ Climate change

(5.12.4) Initiative category and type

Innovation

☑ New product or service that reduces customers' products/services operational emissions

(5.12.5) Details of initiative

Increasing recycled content

(5.12.6) Expected benefits

Select all that apply

☑ Improved resource use and efficiency

☑ Reduction of own operational emissions (own scope 1 & 2)

(5.12.7) Estimated timeframe for realization of benefits

Select from:

☑ 1-3 years

(5.12.8) Are you able to estimate the lifetime CO2e and/or water savings of this initiative?

Select from:

☑ No

(5.12.11) Please explain

Study under development. Savings realised will depend on the availability of recycled materials

Row 4

(5.12.1) Requesting member

Select from:

(5.12.2) Environmental issues the initiative relates to

Select all that apply

☑ Climate change

(5.12.4) Initiative category and type

Innovation

☑ New product or service that reduces customers' products/services operational emissions

(5.12.5) Details of initiative

Increasing recycled content

(5.12.6) Expected benefits

Select all that apply

☑ Improved resource use and efficiency

☑ Reduction of own operational emissions (own scope 1 & 2)

(5.12.7) Estimated timeframe for realization of benefits

Select from:

☑ 0-1 year

(5.12.8) Are you able to estimate the lifetime CO2e and/or water savings of this initiative?

Select from:

☑ No

(5.12.11) Please explain

Study not yet developed. Savings realised will depend on the availability of recycled materials

[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:

☑ Lack of internal resources, capabilities, or expertise (e.g., due to organization size)

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

We are working with various organisations to identify opportunities on a case by case basis. So far, the risk associated with these types of activities, e.g. increasing recycled content has been a barrier. Technology is advancing to allow increased recovery of recycled materials particularly at the end of life of products. With this technology development we expect to realise more benefits of such projects in the future as highlighted. Other energy efficiency and water efficiency initiatives are discussed with customers and ideas/opportunities exchanged. However, the majority of these initiatives are already being implemented across our own operations.
[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

NSG Group has operational control over all of its subsidiaries and has the full authority to introduce and implement its operating policies at all reported sites. This same approach is used in SBTi target setting and all other public disclosures.

Water

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

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

NSG Group has operational control over all of its subsidiaries and has the full authority to introduce and implement its operating policies at all reported sites. This same approach is used in SBTi target setting and all other public disclosures.

Plastics

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

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

NSG Group has operational control over all of its subsidiaries and has the full authority to introduce and implement its operating policies at all reported sites. This same approach is used in SBTi target setting and all other public disclosures.

Biodiversity

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

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

NSG Group has operational control over all of its subsidiaries and has the full authority to introduce and implement its operating policies at all reported sites. This same approach is used in SBTi target setting and all other public disclosures.
[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

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

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

	Scope 2, location-based	Scope 2, market-based	Comment
	Select from: ☑ We are reporting a Scope 2, location-based figure	*Select from:* ☑ We are reporting a Scope 2, market-based figure	*In 2023 we continued to use Sphera Cloud data collection software that calculates both location and market based emissions.*

[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

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

3102857

(7.5.3) Methodological details

All global sites reported fuels and carbonate consumption in Sphera software. Greenhouse Gas Protocol methodology was followed to apply IPPC scope 1 factors to fuels and ETS analytical factors to carbonates.

Scope 2 (location-based)

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

1050040

(7.5.3) Methodological details

All global sites reported electricity consumption in Sphera software. Greenhouse Gas Protocol methodology was followed and IEA country level scope 2 emission factors were applied.

Scope 2 (market-based)

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

890736

(7.5.3) Methodological details

All global sites reported electricity consumption in Sphera software. Greenhouse Gas Protocol methodology was followed and IEA country level scope 2 emission factors were applied. Sites that purchased energy attribute certificates were assigned a zero CO2 emission factor.

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

1054822

(7.5.3) Methodological details

All global sites reported key raw material data in Sphera software. Gabi database CO2e emission factors were assigned within the software to calculate scope 3 emissions Many goods and services were not reported in 2018 and therefore the figure is lower than CY23 data.

Scope 3 category 2: Capital goods

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

4174

(7.5.3) Methodological details

Key capital goods were assigned a sectoral CO2 emission factor. Many capital goods were not reported in 2018 and therefore the figure is lower than CY23 data.

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

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

356271

(7.5.3) Methodological details

All global sites reported energy consumption in Sphera software. UK Government Corporate Reporting GHG emission factors were applied to each fuel to calculate scope 3 emissions.

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

6120

(7.5.3) Methodological details

External consultants carried out a life cycle analysis study on a flat glass for Glass For Europe. Upstream transportation data for the locally sourced materials was obtained but finally considered insignificant for inclusion in the report when compared to the emissions from the glass melting process

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

11508

(7.5.3) Methodological details

All global sites reported waste generation in Sphera software. UK Government Corporate Reporting GHG emission factors were applied to each waste type to calculate scope 3 emissions.

Scope 3 category 6: Business travel

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

5566

(7.5.3) Methodological details

Data based on information provided from travel agency in 2018

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

9955

(7.5.3) Methodological details

Assumed 27000 employees commuting a round trip. Used UK Governemnt CO2 emission factors for an average vehicle of unknown fuel type

Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Category not applicable

Scope 3 category 9: Downstream transportation and distribution

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

172200

(7.5.3) Methodological details

Distance based methodology used by major US, Japanese and European suppliers

Scope 3 category 10: Processing of sold products

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

735000

(7.5.3) Methodological details

Applied typical NSG Glass processing figures to an estimated percentage of flat glass produced, that might go on for further customer processing

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Glass products do not consume energy or contribute to CO2 emissions when in use. In fact, they can save or generate energy. This is reported as avoided emissions.

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

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

35141

(7.5.3) Methodological details

Calculation based on the impact of recycling of glass product returned to NSG operations at a 10% rate and recycling of glass to aggregate use at 90%. Also includes impact associated with recycling of packaging material

Scope 3 category 13: Downstream leased assets

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Category not applicable

Scope 3 category 14: Franchises

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Category not applicable

Scope 3 category 15: Investments

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

200000

(7.5.3) Methodological details

Estimated float furnace emissions of 100,000t CO2e /year. NSG has 50 % share of four float furnaces but no operational control.

Scope 3: Other (upstream)

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Category not applicable

Scope 3: Other (downstream)

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Category not applicable

[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)

2922201

(7.6.3) Methodological details

All sites use global 3rd party software to report monthly fossil fuel and carbonate usage. IEA CO2e emission factors and analysed CO2 content in carbonates used to calculate CO2e emissions. Verified externally according to ISO14064.

[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)

714899

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

500692

(7.7.4) Methodological details

In 2023 we continued to use 3rd party Cloud data collection software tool that calculates both location and market based emissions.

This software allows us to report purchased electricity and self generated emission according to type of electricity generation. Market based reporting is based on specific supplier provided emission factors for the mix of electricity generation contracted to us. For renewable electricity reporting we calculate emissions based on the contract arrangement which can include, PPA (direct and virtual) and/or guarantee of origin certificates (GO's). Renewable electricity GO's are retired on our behalf by suppliers in the majority of cases with full traceability of this retirement. Self generation is reported depending on whether the asset is owned by NSG or 3rd party operated with associated GO''s.
[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)

1535306

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

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

15

(7.8.5) Please explain

In 2023 we utilised primary emission factors from two high impact Scope 3 materials (soda ash and PVB).

Together these material supplier factors contributed 15% of the total category #1 Scope 3 emissions.

Calculation 225,000t /1,535,306t 15%

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

59480

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Spend-based method

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

0

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)

500958

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Fuel-based method

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

0

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

55640

(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

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

1217

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Spend-based method

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

0

Business travel

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

4062

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Spend-based method

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

0

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

10973

(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

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

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

0

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

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

0

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

260408

(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

30

(7.8.5) Please explain

Supplier specific emissions data contributed 30% of the total emissions in this category.

Primary data provided by logistics solution providers.

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

553138

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

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

0

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

0

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

0

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)

11070

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

0

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

Investments

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

243000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Investment-specific method

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

100

(7.8.5) Please explain

Emission data sourced directly from investment partners published data and directly communicated information.

[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:* ☑ Third-party verification or assurance process in place

[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:

☑ Limited assurance

(7.9.1.4) Attach the statement

UK.VS.0014.2023 NSG 21062024.doc

(7.9.1.5) Page/section reference

All data is on page 3

(7.9.1.6) Relevant standard

Select from:

☑ ISO14064-3

(7.9.1.7) Proportion of reported emissions verified (%)

100

[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:

☑ Limited assurance

(7.9.2.5) Attach the statement

UK.VS.0014.2023 NSG 21062024.pdf

(7.9.2.6) Page/ section reference

All data is on page 3

(7.9.2.7) Relevant standard

Select from:

☑ ISO14064-3

(7.9.2.8) Proportion of reported emissions verified (%)

100

Row 2

(7.9.2.1) Scope 2 approach

Select from:

☑ Scope 2 market-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:

☑ Limited assurance

(7.9.2.5) Attach the statement

UK.VS.0014.2023 NSG 21062024.pdf

(7.9.2.6) Page/ section reference

All data is on page 3

(7.9.2.7) Relevant standard

Select from:

☑ ISO14064-3

(7.9.2.8) Proportion of reported emissions verified (%)

100

[Add row]

(7.9.3) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Row 1

(7.9.3.1) Scope 3 category

Select all that apply

- ☑ Scope 3: Franchises
- ☑ Scope 3: Use of sold products
- ☑ Scope 3: Investments
- ☑ Scope 3: Upstream leased assets
- ☑ Scope 3: Capital goods
- ☑ Scope 3: Downstream leased assets
- ☑ Scope 3: Business travel
- ☑ Scope 3: Processing of sold products
- ☑ Scope 3: Employee commuting
- ☑ Scope 3: Purchased goods and services
- ☑ Scope 3: Waste generated in operations
- ☑ Scope 3: End-of-life treatment of sold products
- ☑ Scope 3: Upstream transportation and distribution
- ☑ Scope 3: Downstream transportation and distribution
- ☑ Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

(7.9.3.2) Verification or assurance cycle in place

Select from:

- ☑ Annual process

(7.9.3.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.3.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.3.5) Attach the statement

UK.VS.0014.2023 NSG 21062024.pdf

(7.9.3.6) Page/section reference

Page 3

(7.9.3.7) Relevant standard

Select from:

☑ ISO14064-3

(7.9.3.8) Proportion of reported emissions verified (%)

100

[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)

42000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

21.4

(7.10.1.4) Please explain calculation

Total Scope 1 2(mkt) emissions; 2022 3,452,914 tonnes. In 2023 3,422893. Total difference -30,021 tonnes. Based on analysis of Scope 2 market CO2 emissions utilising our 3rd party software and the various emissions factors within the software. Factors for electricity are provided by IEA. Calculated impact of CO2 emission reduction is 42,000 tonnes from increased renewable electricity emission. In terms of % emission value impact. Total reduction in CO2 (decreased) of 42,000 71,000 113,000 tonnes. Total increase (from production output change) is 83,000. Calculation of emissions value using the formula CO2 impact (per measure) / total impact on emissions.

42,000 / 196,000 21.4%

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

71000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

36.2

(7.10.1.4) Please explain calculation

Achieved by the implementation of various CO2 reduction activities across the operations including operational efficiency measures within furnaces, implementation of infrastructure investments (motors & drives, HVAC, LED lighting), utilisation of low carbon fuels, increased recycled content in manufacturing processes, etc.

Calculation of emissions value % according to formula:

71,000 / 196,000 36.2%

Divestment

(7.10.1.1) Change in emissions (metric tons CO2e)

0

Acquisitions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

Mergers

(7.10.1.1) Change in emissions (metric tons CO2e)

0

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

83000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Increased

(7.10.1.3) Emissions value (percentage)

42.4

(7.10.1.4) Please explain calculation

Production output in the reporting year increased by @100k tonnes across all operations. In addition to this change in output, the product mix of production also continued to change resulting in a general increase in the CO2 intensity to manufacture products (in real terms of actual product - note efficiency KPI is on an equivalent product basis). Consequently, we see an increase in absolute CO2 emissions of 83kt. Calculation of % impact 83,000 / 196,000 42.3 %.

Change in methodology

(7.10.1.1) Change in emissions (metric tons CO2e)

0

Change in boundary

(7.10.1.1) Change in emissions (metric tons CO2e)

0

Change in physical operating conditions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

Unidentified

(7.10.1.1) Change in emissions (metric tons CO2e)

0

Other

(7.10.1.1) Change in emissions (metric tons CO2e)

0

[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:

☑ Market-based

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

Select from:

☑ Yes

(7.12.1) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

(7.12.1.1) CO2 emissions from biogenic carbon (metric tons CO2)

1314

(7.12.1.2) Comment

Emission factors taken from IPPC 2006 Guidelines. Wood 112tCO2 / TJ (ncv), Biodiesel 70.8 t CO2 / TJ (ncv), Other Liquid biofuels 79.6 tCO2 / TJ (Ncv)

[Fixed row]

(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)

2922201

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Second Assessment Report (SAR - 100 year)

[Add row]

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

Argentina

(7.16.1) Scope 1 emissions (metric tons CO2e)

248591

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

26937

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

5624

Austria

(7.16.1) Scope 1 emissions (metric tons CO2e)

72

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

1157

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

40

Belgium

(7.16.1) Scope 1 emissions (metric tons CO2e)

64

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

27

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

26

Brazil

(7.16.1) Scope 1 emissions (metric tons CO2e)

142619

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

18081

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

49

Canada

(7.16.1) Scope 1 emissions (metric tons CO2e)

5769

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

4299

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

4299

Chile

(7.16.1) Scope 1 emissions (metric tons CO2e)

79972

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

8678

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

0

China

(7.16.1) Scope 1 emissions (metric tons CO2e)

2167

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

2198

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

2198

Czechia

(7.16.1) Scope 1 emissions (metric tons CO2e)

32

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

11

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

17

Denmark

(7.16.1) Scope 1 emissions (metric tons CO2e)

129

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

10

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

56

Finland

(7.16.1) Scope 1 emissions (metric tons CO2e)

547

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

4045

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

19906

France

(7.16.1) Scope 1 emissions (metric tons CO2e)

102

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

17

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

21

Germany

(7.16.1) Scope 1 emissions (metric tons CO2e)

485326

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

68316

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

482

Hungary

(7.16.1) Scope 1 emissions (metric tons CO2e)

218

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

29

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

47

India

(7.16.1) Scope 1 emissions (metric tons CO2e)

17

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

6863

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

0

Ireland

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

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

0

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

0

Italy

(7.16.1) Scope 1 emissions (metric tons CO2e)

316774

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

56138

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

73610

Japan

(7.16.1) Scope 1 emissions (metric tons CO2e)

349481

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

130374

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

98996

Malaysia

(7.16.1) Scope 1 emissions (metric tons CO2e)

69221

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

47337

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

47337

Mexico

(7.16.1) Scope 1 emissions (metric tons CO2e)

7241

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

17403

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

17403

Netherlands

(7.16.1) Scope 1 emissions (metric tons CO2e)

127

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

283

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

28

Norway

(7.16.1) Scope 1 emissions (metric tons CO2e)

6

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

19

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

35

Poland

(7.16.1) Scope 1 emissions (metric tons CO2e)

102098

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

96136

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

21226

Romania

(7.16.1) Scope 1 emissions (metric tons CO2e)

752

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

77

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

78

Spain

(7.16.1) Scope 1 emissions (metric tons CO2e)

4590

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

1473

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

1804

Sweden

(7.16.1) Scope 1 emissions (metric tons CO2e)

282

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

17

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

50

United Kingdom of Great Britain and Northern Ireland

(7.16.1) Scope 1 emissions (metric tons CO2e)

167938

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

14722

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

2855

United States of America

(7.16.1) Scope 1 emissions (metric tons CO2e)

600158

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

167427

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

161680

Viet Nam

(7.16.1) Scope 1 emissions (metric tons CO2e)

337908

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

42826

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

42826

[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 activity

(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	*Architectural*	*2598565*
Row 2	*Automotive*	*199882*
Row 3	*Automotive Glass Replacement*	*12356*
Row 4	*Creative Technology*	*108439*
Row 5	*Central Functions and Global R&D*	*2958*

[Add row]

(7.17.3) Break down your total gross global Scope 1 emissions by business activity.

	Activity	Scope 1 emissions (metric tons CO2e)
Row 1	*Glass melting*	*2778235*
Row 2	*Glass processing*	*143966*

[Add row]

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

Select all that apply

☑ By business division

☑ By activity

(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	*Architectural*	*350078*	*258772*
Row 2	*Central functions and Global R&D*	*5025*	*4013*
Row 3	*Automotive*	*321837*	*206070*
Row 4	*Creative Technology*	*35434*	*29341*
Row 5	*Automotive Glass Replacement*	*2525*	*2496*

[Add row]

(7.20.3) Break down your total gross global Scope 2 emissions by business activity.

	Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Row 1	*Glass melting*	*348011*	*270305*
Row 2	*Glass Processing*	*366888*	*230387*

[Add 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)

2922201

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

714899

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

500692

(7.22.4) Please explain

The data reported in the CDP response relates to the subsidiaries where NSG has operational control and all sites are included in the Nippon Sheet Glass (NSG Group) Financial Reports. Nippon Sheet Glass Ltd's (NSG Group) annual financial reporting comprises the parent organization (NSG Group) and its consolidated subsidiaries.

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

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

0

(7.22.4) Please explain

This CDP response does not include other entities.

[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:

☑ Yes

(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Row 1

(7.23.1.1) Subsidiary name

NSG UK Enterprises Limited

(7.23.1.2) Primary activity

Select from:

☑ Glass products

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ LEI number

☑ Other unique identifier, please specify :UK Companies House Registration Number 05584873.   Incorporated 6 Oct 2005

(7.23.1.9) LEI number

213800WWVCAPAMOZ1M98

(7.23.1.11) Other unique identifier

UK Companies House Registration Number 05584873.

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

1883587

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

453768

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

300512

(7.23.1.15) Comment

100% verified according to ISO14064-3 with limited assurance

[Add 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:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

13415297618

(7.26.9) Emissions in metric tonnes of CO2e

47088

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans *(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites*

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

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:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

22587643052

(7.26.9) Emissions in metric tonnes of CO2e

79283

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the

world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

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:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

1383208327

(7.26.9) Emissions in metric tonnes of CO2e

4855

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the

world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

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:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

11649850061

(7.26.9) Emissions in metric tonnes of CO2e

40890

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the

world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

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:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

1494407132

(7.26.9) Emissions in metric tonnes of CO2e

5245

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the

world. Sites are certified ISO 14001 and this includes energy management. All sites report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 6

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

146439000

(7.26.9) Emissions in metric tonnes of CO2e

513

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the

world. Sites are certified ISO 14001 and this includes energy management. All sites report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 7

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

6643266174

(7.26.9) Emissions in metric tonnes of CO2e

23317

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the

world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 8

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

30000000.41

(7.26.9) Emissions in metric tonnes of CO2e

105

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the

world. Sites are certified ISO 14001 and this includes energy management. All sites report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified data certificate is included in CDP response

Row 9

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services

supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

1853766600

(7.26.9) Emissions in metric tonnes of CO2e

6507

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 10

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

8548661720

(7.26.9) Emissions in metric tonnes of CO2e

30006

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the

float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 11

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

4546569002

(7.26.9) Emissions in metric tonnes of CO2e

15957

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the

float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 12

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

61951952148

(7.26.9) Emissions in metric tonnes of CO2e

217451

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the

float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 13

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

18117375232

(7.26.9) Emissions in metric tonnes of CO2e

63592

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the

float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 14

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

7708754932

(7.26.9) Emissions in metric tonnes of CO2e

27058

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the

float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 15

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

218934646

(7.26.9) Emissions in metric tonnes of CO2e

768

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the

float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 16

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

114818147

(7.26.9) Emissions in metric tonnes of CO2e

403

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the

float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 17

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

3866309805

(7.26.9) Emissions in metric tonnes of CO2e

13571

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the

float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 18

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

98846930

(7.26.9) Emissions in metric tonnes of CO2e

347

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Glass manufacturing float furnaces are major emitters of carbon dioxide from combustion fuel and from carbonate raw materials. Bending and toughening furnaces are

carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the

float glass process.

Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions

have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 19

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

13415297618

(7.26.9) Emissions in metric tonnes of CO2e

8068

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the *manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and*

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 20

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

22587643052

(7.26.9) Emissions in metric tonnes of CO2e

13584

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and *therefore contain large assumptions.*

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 21

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

1383208327

(7.26.9) Emissions in metric tonnes of CO_2e

832

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 22

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

11649850061

(7.26.9) Emissions in metric tonnes of CO2e

7006

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 23

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

1494407132

(7.26.9) Emissions in metric tonnes of CO2e

899

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans (externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 24

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

146439000

(7.26.9) Emissions in metric tonnes of CO2e

87

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 25

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

6643266174

(7.26.9) Emissions in metric tonnes of CO2e

3995

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source,

including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 26

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

30000000

(7.26.9) Emissions in metric tonnes of CO2e

18

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials.

Float and rolled glass furnaces are subject to monitoring and reporting plans (externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 27

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

1853766600

(7.26.9) Emissions in metric tonnes of CO2e

1115

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the

world. Sites are certified ISO 14001 and this includes energy management. All sites report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 28

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services

supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

8548661720

(7.26.9) Emissions in metric tonnes of CO2e

5141

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the

float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 29

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

4546569002

(7.26.9) Emissions in metric tonnes of CO2e

2734

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material.

Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 30

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the

requesting member

61951952148

(7.26.9) Emissions in metric tonnes of CO2e

37258

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 31

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

18117375232

(7.26.9) Emissions in metric tonnes of CO2e

10896

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 32

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

7708754932

(7.26.9) Emissions in metric tonnes of CO2e

4636

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 33

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

218934646

(7.26.9) Emissions in metric tonnes of CO2e

132

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans (externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 34

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

114818147

(7.26.9) Emissions in metric tonnes of CO2e

69

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 35

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

3866309805

(7.26.9) Emissions in metric tonnes of CO2e

2325

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source,

including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials. Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.

Row 36

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

98846930

(7.26.9) Emissions in metric tonnes of CO2e

59

(7.26.10) Uncertainty (±%)

15

(7.26.11) Major sources of emissions

Bending and toughening furnaces are carbon dioxide sources from both combustion and electricity consumption.

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Plants have been extensively surveyed for energy usage and for process raw materials.

Float and rolled glass furnaces are subject to monitoring and reporting plans

(externally verified in the EU) and lessons from these are implemented elsewhere in the world. Sites are certified ISO 14001 and this includes energy management. All sites

report annually on a global intranet database. Life Cycle Analysis has been applied to the float glass process. Carbon dioxide is the only significant GHG released in the

manufacturing process. Its source is limited to fuel use and a single process raw material. Customer emissions have been assigned as a percentage of Group revenue and

therefore contain large assumptions.

(7.26.14) Where published information has been used, please provide a reference

Verified scope 1 and 2 data has been provided in questions 7.9.1 and 7.9.2 of this public CDP response.
[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:

☑ Managing the different emission factors of diverse and numerous geographies makes calculating total footprint difficult

(7.27.2) Please explain what would help you overcome these challenges

Continued utilization of 3rd party software to support calculation of emissions comes with *significant cost. Identifying a single source of calculation methodology to report NSG impact of activities including supply chain and customer data would streamline the process*

Row 2

(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

Introducing more sub-metering and increasing resources to analyse the meter information.

Row 3

(7.27.1) Allocation challenges

Select from:

☑ Customer base is too large and diverse to accurately track emissions to the customer level

(7.27.2) Please explain what would help you overcome these challenges

NSG Group does not only manufacture a wide range of products for the automotive industry. Flat glass is also used to manufacture a wide range of building products. Introducing more sub-metering and increasing resources to analyse the information.
[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

We already have the capability to calculate carbon emissions to product level according to specific customer requests. Our internal calculation methodologies follow the principles of ISO14067 for operational specific measures (all scope 1, scope 2 and certain categories of Scope 3, e.g. category #1 products) and ISO14064 for Scope 3 reporting at corporate level aspects (e.g. employee commuting). We can allocate the corporate Scope 3 emissions to individual customer or product level. Moving forwards, we are looking to customers to standardise their calculation systems to allow a common approach across the industry. This will reduce the calculation time burden reporting into bespoke systems case by case. There is work progressing on these systems, for example within CLEPA for automotive supply chain. We will continue to invest in solutions for more granular data with increased accuracy to allow direct measurement of the necessary information and reduce the amount of data based on an allocation approach

[Fixed row]

(7.29) What percentage of your total operational spend in the reporting year was on energy?

Select from:

☑ More than 15% but less than or equal to 20%

(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:* ☑ Yes
Consumption of purchased or acquired steam	*Select from:* ☑ Yes
Consumption of purchased or acquired cooling	*Select from:* ☑ No
Generation of electricity, heat, steam, or cooling	*Select from:* ☑ Yes

[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

4397.8

(7.30.1.3) MWh from non-renewable sources

10688566

(7.30.1.4) Total (renewable and non-renewable) MWh

10962964

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

649240

(7.30.1.3) MWh from non-renewable sources

1187784

(7.30.1.4) Total (renewable and non-renewable) MWh

1837024

Consumption of purchased or acquired heat

(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

37327

(7.30.1.4) Total (renewable and non-renewable) MWh

37327

Consumption of purchased or acquired steam

(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

20562

(7.30.1.4) Total (renewable and non-renewable) MWh

20562

Consumption of self-generated non-fuel renewable energy

(7.30.1.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

873

(7.30.1.4) Total (renewable and non-renewable) MWh

873

Total energy consumption

(7.30.1.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

654510.8

(7.30.1.3) MWh from non-renewable sources

11934239

(7.30.1.4) Total (renewable and non-renewable) MWh

12858750

[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:* ☑ Yes

[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

2284

(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

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Biodiesel.

Other biomass

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

2114.3

(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

1083

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Bioethanol, wood pallets

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

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Not used as fuel

Coal

(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

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Not used as fuel

Oil

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

1117289

(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

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Diesel, heating oils

Gas

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

9539245

(7.30.7.3) MWh fuel consumed for self-generation of electricity

8027.49

(7.30.7.4) MWh fuel consumed for self-generation of heat

16079.08

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Natural gas, LPG and LNG

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

32031

(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

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Gasoline

Total fuel

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

10692963.3

(7.30.7.3) MWh fuel consumed for self-generation of electricity

8027.49

(7.30.7.4) MWh fuel consumed for self-generation of heat

17162.08

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Sum of above

[Fixed row]

(7.30.9) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

Electricity

(7.30.9.1) Total Gross generation (MWh)

10138

(7.30.9.2) Generation that is consumed by the organization (MWh)

10138

(7.30.9.3) Gross generation from renewable sources (MWh)

873

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

873

Heat

(7.30.9.1) Total Gross generation (MWh)

10938

(7.30.9.2) Generation that is consumed by the organization (MWh)

10938

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Steam

(7.30.9.1) Total Gross generation (MWh)

32116

(7.30.9.2) Generation that is consumed by the organization (MWh)

32116

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Cooling

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

[Fixed row]

(7.30.14) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in 7.7.

Row 1

(7.30.14.1) Country/area

Select from:

☑ Italy

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

172

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ France

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1968

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 2

(7.30.14.1) Country/area

Select from:

☑ Italy

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1000

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Sweden

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1965

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 3

(7.30.14.1) Country/area

Select from:

☑ Italy

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

13979

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2016

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 4

(7.30.14.1) Country/area

Select from:

☑ Italy

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

2328

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ France

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 5

(7.30.14.1) Country/area

Select from:

☑ Italy

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

7120

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Spain

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2019

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 6

(7.30.14.1) Country/area

Select from:

☑ Italy

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

4034

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Spain

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2021

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 7

(7.30.14.1) Country/area

Select from:

☑ Italy

(7.30.14.2) Sourcing method

Select from:

☑ Heat/steam/cooling supply agreement

(7.30.14.3) Energy carrier

Select from:

☑ Heat

(7.30.14.4) Low-carbon technology type

Select from:

☑ Other biomass

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

4036

(7.30.14.6) Tracking instrument used

Select from:

☑ Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Italy

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 8

(7.30.14.1) Country/area

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

31925

(7.30.14.6) Tracking instrument used

Select from:

☑ REGO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2019

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 9

(7.30.14.1) Country/area

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

33128

(7.30.14.6) Tracking instrument used

Select from:

☑ REGO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2017

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 10

(7.30.14.1) Country/area

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

417

(7.30.14.6) Tracking instrument used

Select from:

☑ REGO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2015

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 11

(7.30.14.1) Country/area

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1302

(7.30.14.6) Tracking instrument used

Select from:

☑ REGO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2023

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 12

(7.30.14.1) Country/area

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.2) Sourcing method

Select from:

☑ Direct line to an off-site generator owned by a third party with no grid transfers

(direct line PPA)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

4064

(7.30.14.6) Tracking instrument used

Select from:

☑ Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2019

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 13

(7.30.14.1) Country/area

Select from:

☑ United States of America

(7.30.14.2) Sourcing method

Select from:

☑ Direct line to an off-site generator owned by a third party with no grid transfers (direct line PPA)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

420

(7.30.14.6) Tracking instrument used

Select from:

☑ US-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon

energy or energy attribute

Select from:

☑ United States of America

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2022

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 14

(7.30.14.1) Country/area

Select from:

☑ Chile

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1954

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Chile

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2022

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 15

(7.30.14.1) Country/area

Select from:

☑ Chile

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

7243

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Chile

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2009

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 16

(7.30.14.1) Country/area

Select from:

☑ Chile

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

10844

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Chile

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2018

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 17

(7.30.14.1) Country/area

Select from:

☑ Brazil

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

4000

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Brazil

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2006

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 18

(7.30.14.1) Country/area

Select from:

☑ Brazil

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

7976

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Brazil

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2011

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 19

(7.30.14.1) Country/area

Select from:

☑ Brazil

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

64852

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Brazil

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2016

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 20

(7.30.14.1) Country/area

Select from:

☑ Brazil

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

56595

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Brazil

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 21

(7.30.14.1) Country/area

Select from:

☑ India

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

7200

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ India

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2008

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 22

(7.30.14.1) Country/area

Select from:

☑ India

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

2377

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ India

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2010

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 23

(7.30.14.1) Country/area

Select from:

☑ Argentina

(7.30.14.2) Sourcing method

Select from:

☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

9375

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Argentina

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

2017

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 24

(7.30.14.1) Country/area

Select from:

☑ Argentina

(7.30.14.2) Sourcing method

Select from:

☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

13521

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Argentina

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2023

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 25

(7.30.14.1) Country/area

Select from:

☑ Argentina

(7.30.14.2) Sourcing method

Select from:

☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

37709

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Argentina

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2018

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 26

(7.30.14.1) Country/area

Select from:

☑ Argentina

(7.30.14.2) Sourcing method

Select from:

☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

2556

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Argentina

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2023

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 27

(7.30.14.1) Country/area

Select from:

☑ Argentina

(7.30.14.2) Sourcing method

Select from:

☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

3490

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Argentina

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2021

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 28

(7.30.14.1) Country/area

Select from:

☑ Austria

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

5807

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Austria

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 29

(7.30.14.1) Country/area

Select from:

☑ Netherlands

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

890

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Netherlands

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 30

(7.30.14.1) Country/area

Select from:

☑ France

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ France

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 31

(7.30.14.1) Country/area

Select from:

☑ Poland

(7.30.14.2) Sourcing method

Select from:

☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

89243

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Poland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2011

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 32

(7.30.14.1) Country/area

Select from:

☑ Poland

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

3371

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Poland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2011

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 33

(7.30.14.1) Country/area

Select from:

☑ Poland

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1674

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Poland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2012

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 34

(7.30.14.1) Country/area

Select from:

☑ Poland

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

7348

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Poland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2013

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 35

(7.30.14.1) Country/area

Select from:

☑ Poland

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1199

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Poland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2014

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 36

(7.30.14.1) Country/area

Select from:

☑ Poland

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

7844

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Poland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2015

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 37

(7.30.14.1) Country/area

Select from:

☑ Poland

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

6195

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Poland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

2016

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 38

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

10

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1915

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 39

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

200

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1920

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 40

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

177

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1936

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 41

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

23

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1939

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 42

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

130

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

1942

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 43

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

237

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1950

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 44

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

28

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1957

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 45

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

519

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1967

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 46

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

402

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1969

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 47

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

447

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

1972

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 48

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

23

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1980

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 49

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

122

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1984

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 50

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

233

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1986

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 51

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

3.54

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1987

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 52

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

9

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

1992

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 53

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

12

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1996

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 54

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

327

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1998

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 55

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

113

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2004

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 56

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

2

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2009

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 57

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Other biomass

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

9.85

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Finland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

1977

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 58

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Other biomass

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

9.1

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Finland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1982

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 59

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Other biomass

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

30.15

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Finland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2020

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 60

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1757

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1956

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 61

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

4173

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1960

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 62

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

4289

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

1961

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 63

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

4990

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1967

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 64

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

7512

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1969

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 65

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

9577

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1974

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 66

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1960

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1979

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 67

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

26356

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

1980

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 68

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

19722

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1989

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 69

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

13110

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2003

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 70

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

743

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Germany

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1995

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 71

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

4053

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Germany

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1997

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 72

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

6462

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Germany

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

1999

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 73

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

2229

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Germany

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2000

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 74

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

15084

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Germany

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2001

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 75

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

14358

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Germany

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2002

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 76

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

6

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1985

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 77

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

22

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

1987

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 78

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

37

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1988

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 79

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

79

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1989

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 80

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

107

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1990

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 81

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

165

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1991

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 82

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

80

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

1993

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 83

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

564

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1995

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 84

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1329

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1996

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 85

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1223

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1997

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 86

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1512

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1998

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

Row 87

(7.30.14.1) Country/area

Select from:

☑ Germany

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1926

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Denmark

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility

(e.g. date of first commercial operation or repowering)

1999

(7.30.14.10) Comment

Suppliers provided the requested data to our Procurement team. The data was available for the scope 2 verification process.

[Add row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

Argentina

(7.30.16.1) Consumption of purchased electricity (MWh)

87117

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

87117.00

Austria

(7.30.16.1) Consumption of purchased electricity (MWh)

5878

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

553

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

6431.00

Belgium

(7.30.16.1) Consumption of purchased electricity (MWh)

182

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

182.00

Brazil

(7.30.16.1) Consumption of purchased electricity (MWh)

134735

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

134735.00

Canada

(7.30.16.1) Consumption of purchased electricity (MWh)

34870

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

34870.00

Chile

(7.30.16.1) Consumption of purchased electricity (MWh)

19862

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

19862.00

China

(7.30.16.1) Consumption of purchased electricity (MWh)

3587

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

3587.00

Czechia

(7.30.16.1) Consumption of purchased electricity (MWh)

25

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

25.00

Denmark

(7.30.16.1) Consumption of purchased electricity (MWh)

100

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

100.00

Finland

(7.30.16.1) Consumption of purchased electricity (MWh)

42219

(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)

1083

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

43302.00

France

(7.30.16.1) Consumption of purchased electricity (MWh)

301

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

301.00

Germany

(7.30.16.1) Consumption of purchased electricity (MWh)

204968

(7.30.16.2) Consumption of self-generated electricity (MWh)

9958

(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)

9855

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

224781.00

Hungary

(7.30.16.1) Consumption of purchased electricity (MWh)

147

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

147.00

India

(7.30.16.1) Consumption of purchased electricity (MWh)

9577

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

9577.00

Ireland

(7.30.16.1) Consumption of purchased electricity (MWh)

0

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Italy

(7.30.16.1) Consumption of purchased electricity (MWh)

218520

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

56405

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

32116

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

307041.00

Japan

(7.30.16.1) Consumption of purchased electricity (MWh)

280375

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

280375.00

Malaysia

(7.30.16.1) Consumption of purchased electricity (MWh)

76288

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

76288.00

Mexico

(7.30.16.1) Consumption of purchased electricity (MWh)

42695

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

42695.00

Netherlands

(7.30.16.1) Consumption of purchased electricity (MWh)

954

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

954.00

Norway

(7.30.16.1) Consumption of purchased electricity (MWh)

1830

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

291

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

2121.00

Poland

(7.30.16.1) Consumption of purchased electricity (MWh)

155233

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

155233.00

Romania

(7.30.16.1) Consumption of purchased electricity (MWh)

283

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

283.00

Spain

(7.30.16.1) Consumption of purchased electricity (MWh)

10076

(7.30.16.2) Consumption of self-generated electricity (MWh)

180

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

10256.00

Sweden

(7.30.16.1) Consumption of purchased electricity (MWh)

1283

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

640

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

1923.00

United Kingdom of Great Britain and Northern Ireland

(7.30.16.1) Consumption of purchased electricity (MWh)

74053

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

74053.00

United States of America

(7.30.16.1) Consumption of purchased electricity (MWh)

356042

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

356042.00

Viet Nam

(7.30.16.1) Consumption of purchased electricity (MWh)

75824

(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)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

75824.00

[Fixed 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

0.0000041

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

3422893

(7.45.3) Metric denominator

Select from:

☑ unit total revenue

(7.45.4) Metric denominator: Unit total

832537000000

(7.45.5) Scope 2 figure used

Select from:

☑ Market-based

(7.45.6) % change from previous year

8.6

(7.45.7) Direction of change

Select from:

☑ Decreased

(7.45.8) Reasons for change

Select all that apply

☑ Change in renewable energy consumption

☑ Change in revenue

(7.45.9) Please explain

Scope 2 market emissions have reduced by 7.6% and revenue has increased by 9%

[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

35

(7.52.3) Metric numerator

Quantity of renewable electricity consumption

(7.52.4) Metric denominator (intensity metric only)

Total electricity consumption

(7.52.5) % change from previous year

3

(7.52.6) Direction of change

Select from:

☑ Increased

(7.52.7) Please explain

Ongoing implementation of NSG Group Renewable Electricity Strategy. Specifically the increased purchases of Renewable guarantee of origin certificates (REGO) in

Europe, South America and North America. In addition, the introduction of new onsite generation (PV) projects in North America, Asia and Europe. Finally the introduction of

Power Purchase Agreements for electricity supply (vPPA) in Europe and South America.

No capital cost associated with these projects in the reporting year as they were all manage as 3rd party investment activities via long term vPPA contractural

arrangements. Anticipate that in some cases in the future NAG may invest directly in on-site power generation (solar, wind) but given capex constraints upon NSG and the

general acceptance of the 3rd party investment model such NSG owned facility investment will be limited.

Row 2

(7.52.1) Description

Select from:

☑ Waste

(7.52.2) Metric value

21887

(7.52.3) Metric numerator

Quantity of waste sent to landfill

(7.52.4) Metric denominator (intensity metric only)

none

(7.52.5) % change from previous year

4

(7.52.6) Direction of change

Select from:

☑ Increased

(7.52.7) Please explain

The target covers 100% of NSG Group operations. It is aimed at reducing waste to landfill from NSG operational activities. It is closely aligned with the UN SDG #12 Responsible consumption and production and UN SDG #13 climate action. Reduction in the generation of waste and the redirection of waste previously destined for landfill are two of the key activities within this target scope. As a result of this activity, 40% of the waste previously destined for landfill (12k tonnes) was avoided in 2019. The target was revised in 2021 to achieve a further 20% reduction in waste destined to landfill by 2024 vs 2020 baseline year. The benefit of this initiative is two fold; 1. It encourages improved segregation of waste generated at NSG manufacturing sites and specifically the improved segregation of waste glass that may have previously been destined for landfill. This glass cullet can then be re-melted at the glass operations contributing to reductions in CO2 emissions across all 3 scopes. 2. It reduces the quantity of waste destined for landfill which may lead to CH4 emissions from degradation of the material.

[Add row]

(7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply

☑ Absolute target

☑ Intensity 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:

☑ Yes, and this target has been approved by the Science Based Targets initiative

(7.53.1.3) Science Based Targets initiative official validation letter

SBTi target approval 2022.pdf

(7.53.1.4) Target ambition

Select from:

☑ Well-below 2°C aligned

(7.53.1.5) Date target was set

05/01/2022

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4) ☑ Sulphur hexafluoride (SF6)

☑ Nitrous oxide (N2O) ☑ Nitrogen trifluoride (NF3)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 3

(7.53.1.10) Scope 3 categories

Select all that apply

☑ Scope 3, Category 14 – Franchises ☑ Scope 3, Category 11 – Use of sold products

☑ Scope 3, Category 15 – Investments ☑ Scope 3, Category 8 - Upstream leased assets

☑ Scope 3, Category 2 – Capital goods ☑ Scope 3, Category 13 – Downstream leased assets

☑ Scope 3, Category 6 – Business travel ☑ Scope 3, Category 1 – Purchased goods and services

☑ Scope 3, Category 7 – Employee commuting ☑ Scope 3, Category 10 – Processing of sold products

☑ Scope 3, Category 5 – Waste generated in operations

☑ Scope 3, Category 12 – End-of-life treatment of sold products

☑ Scope 3, Category 4 – Upstream transportation and distribution

☑ Scope 3, Category 9 – Downstream transportation and distribution

☑ Scope 3, Category 3 – Fuel- and energy- related activities (not included in Scope 1 or 2)

(7.53.1.11) End date of base year

12/31/2018

(7.53.1.14) Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

1054822

(7.53.1.15) Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

4174

(7.53.1.16) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

356271

(7.53.1.17) Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

6120

(7.53.1.18) Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

11509

(7.53.1.19) Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

5566

(7.53.1.20) Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

9955

(7.53.1.21) Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

0

(7.53.1.22) Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

172200

(7.53.1.23) Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

735000

(7.53.1.24) Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

0

(7.53.1.25) Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

35141

(7.53.1.26) Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

0

(7.53.1.27) Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

0

(7.53.1.28) Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

200000

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

2590758.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

2590758.000

(7.53.1.35) Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

(7.53.1.36) Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

50

(7.53.1.37) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

30

(7.53.1.38) Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation

and distribution (metric tons CO2e)

50

(7.53.1.39) Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

100

(7.53.1.40) Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

50

(7.53.1.41) Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

50

(7.53.1.42) Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

100

(7.53.1.43) Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

80

(7.53.1.44) Base year Scope 3, Category 10: Processing of sold

products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

100

(7.53.1.45) Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

(7.53.1.46) Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

100

(7.53.1.47) Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

100

(7.53.1.48) Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

100

(7.53.1.49) Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

30

(7.53.1.52) Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

83

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

93.3

(7.53.1.54) End date of target

12/31/2030

(7.53.1.55) Targeted reduction from base year (%)

30

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

1813530.600

(7.53.1.59) Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

1535306

(7.53.1.60) Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

59480

(7.53.1.61) Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered

by target (metric tons CO2e)

500966

(7.53.1.62) Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

55640

(7.53.1.63) Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

1217

(7.53.1.64) Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

4062

(7.53.1.65) Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

10973

(7.53.1.66) Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

0

(7.53.1.67) Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

260408

(7.53.1.68) Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

553138

(7.53.1.69) Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

0

(7.53.1.70) Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

11070

(7.53.1.71) Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

0

(7.53.1.72) Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

0

(7.53.1.73) Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

243000

(7.53.1.76) Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

3235260.000

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

3235260.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ Yes, it covers land-related and non-land related emissions (e.g. SBT approved before the release of FLAG target-setting guidance)

(7.53.1.79) % of target achieved relative to base year

-82.92

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

The Science Based Target revision was submitted to the SBTi in March 2022 and confirmed as verified in May 2022. The revised target replaced the previous SBTi approved target that only covered scope 1 and 2 emissions with a 21% absolute reduction target for 2030 vs 2018 baseline year. This increased level of ambition in terms of both absolute reduction quantities and inclusion of scope 3 categories is further enhanced by the publicly announced commitment of NSG to achieve carbon neutrality by 2050. The target coverage is across all activities of the Group, with zero exclusions.

(7.53.1.83) Target objective

The Science Based Target revision was submitted to the SBTi in March 2022 and confirmed as verified in May 2022. Nippon Sheet Glass Co., Ltd.'s target for scope 1, 2 and 3 emissions is a reduction of absolute emissions 30% by 2030 from a 2018 base year, which aligns with the well below 2C pathway defined by the absolute contraction approach and is therefore considered ambitious. NSG Group submitted this more ambitious SBTi target to demonstrate commitment to minimise the impact of operational GHG emissions across the full value chain. The revised target replaced the previous SBTi approved target that only covered scope 1 and 2 emissions with a 21% absolute reduction target for 2030 vs 2018 baseline year. This increased level of ambition in terms of both absolute reduction quantities and inclusion of scope 3 categories is further enhanced by the publicly *announced commitment of NSG to achieve carbon neutrality by 2050.*

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

The NSG Group continued to implement a global energy & carbon efficiency program across all operations during the year. Our Scope 3 reporting procedures for purchased goods and services have dramatically improved since the target was set and has therefore led to a significant increase in Category 1 scope 3 reported emissions in 2022 / 23 compared to the target year. We have recently launched a scope 3 supply chain focused project, the first phase of which is progressing but has been one of the reasons for the improved data collection and numbers reported for 2022 and subsequently same approach for reporting in 2023. Moving into the mid-long term project actions. A top down and bottom up approach was taken to develop a detailed action plan for implementation to achieve both the 2030 and 2050 targets for the Group. This action plan is a combination of project categories and includes some transformative technology changes. The project plan includes initiatives developed via R&D programs as well as more localised initiatives from continuous improvement and investment in new equipment, etc. In general terms, the roadmap covers 5 key initiatives of which value chain engagement to support Scope 3 reduction is one activity. Specific actions within Scope 3 management included the increased use of primary emission factors provided by supply chain partners within the emission calculations of category #1. Moving forwards, the general strategy is to work with these partners across the value chain to support their decarbonization roadmaps and therefore support the delivery of the NSG targets. Within other areas of Scope 3 such as travel, commuting, etc. various initiatives continue to encourage reductions, including roll-out of EV's, encouraging reductions in travel (using remote conferencing services) and home working. For transportation activities include switching to more sustainable transport modes, such as intermodal train/road. For investments, we are collaborating with our partners to integrate emission reduction activities across all Scopes.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

Row 2

(7.53.1.1) Target reference number

Select from:

☑ Abs 2

(7.53.1.2) Is this a science-based target?

Select from:

☑ Yes, and this target has been approved by the Science Based Targets initiative

(7.53.1.3) Science Based Targets initiative official validation letter

SBTi target approval 2022.pdf

(7.53.1.4) Target ambition

Select from:

☑ Well-below 2°C aligned

(7.53.1.5) Date target was set

05/01/2022

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH_4)

☑ Sulphur hexafluoride (SF_6)

☑ Nitrous oxide (N_2O)

☑ Nitrogen trifluoride (NF_3)

☑ Carbon dioxide (CO_2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:

☑ Market-based

(7.53.1.11) End date of base year

12/31/2018

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

3102857

(7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

890736

(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)

3993593.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

(7.53.1.54) End date of target

12/31/2030

(7.53.1.55) Targeted reduction from base year (%)

30

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

2795515.100

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

2922201

(7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

500692

(7.53.1.77) Total emissions in reporting year covered by target in

all selected scopes (metric tons CO2e)

3422893.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ Yes, it covers land-related and non-land related emissions (e.g. SBT approved before the release of FLAG target-setting guidance)

(7.53.1.79) % of target achieved relative to base year

47.63

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

The Science Based Target revision was submitted to the SBTi in March 2022 and confirmed as verified in May 2022. The revised target replaced the previous SBTi approved target that only covered scope 1 and 2 emissions with a 21% absolute reduction target for 2030 vs 2018 baseline year. This increased level of ambition in terms of both absolute reduction quantities and inclusion of scope 3 categories is further enhanced by the publicly announced commitment of NSG to achieve carbon neutrality by 2050. The target coverage is across all activities of the Group, with zero exclusions.

(7.53.1.83) Target objective

The Science Based Target revision was submitted to the SBTi in March 2022 and confirmed as verified in May 2022. Nippon Sheet Glass Co., Ltd.'s target for scope 1, 2 and 3 emissions is a reduction of absolute emissions 30% by 2030 from a 2018 base year, which aligns with the well below 2C pathway defined by the absolute contraction approach and is therefore considered ambitious. NSG Group submitted this more ambitious SBTi target to demonstrate commitment to minimise the impact of operational GHG emissions *across the full value chain. The revised target replaced the previous SBTi approved target that only covered scope 1 and 2 emissions with a 21% absolute reduction target for 2030 vs 2018 baseline year. This increased level of ambition in terms of both absolute reduction quantities and inclusion of scope 3 categories is further enhanced by the publicly announced commitment of NSG to achieve carbon neutrality by 2050.*

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

The NSG Group continued to implement a global energy & carbon efficiency program across all operations during the year. This included the continuation of over 250 energy & carbon efficiency projects. These projects align with the Groups transformation approach utilising a so called 3K project management categorisation Kaizen, Kaikaku, Kakushin. All operating sites across the Group are encouraged to implement at least one project from one of these categories. Moving into the mid-long term project actions. A top down and bottom up approach was taken to develop a detailed action plan for implementation to achieve both the 2030 and 2050 targets for the Group. This action plan is a combination of project categories and includes some transformative technology changes. The project plan includes initiatives developed via R&D programs as well as more localised initiatives from continuous improvement and investment in new equipment, etc. In general terms, the roadmap covers 5 key initiatives; Investment in energy efficiency, investment in renewable energy, technology changes (e.g. alternative fuel, alternative materials, increased rates of recycling, carbon capture & sequestration), supply and customer engagement and finally, to support carbon neutrality, carbon offsets. As one example, in the reporting year NSG Group carried out the first use of Hydrogen to manufacture float glass. The trial successfully demonstrated the capability of Hydrogen usage as a substitute to fossil fuel (in this case natural gas). The result was a @80% reduction in the scope 1 emissions associated with the manufacture of float glass. The use of low / CDP Page of 89 19zero carbon fuels is one of the main project strands within the decarbonisation roadmap. This project and many others like it have contributed to the good progress made towards the 2030 SBTi target.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

[Add row]

(7.53.2) Provide details of your emissions intensity targets and progress made against those targets.

Row 1

(7.53.2.1) Target reference number

Select from:

☑ Int 1

(7.53.2.2) Is this a science-based target?

Select from:

☑ No, but we are reporting another target that is science-based

(7.53.2.5) Date target was set

03/31/2016

(7.53.2.6) Target coverage

Select from:

☑ Business division

(7.53.2.7) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO_2)

(7.53.2.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.2.9) Scope 2 accounting method

Select from:

☑ Market-based

(7.53.2.11) Intensity metric

Select from:

☑ Metric tons CO2e per metric ton of product

(7.53.2.12) End date of base year

12/31/2015

(7.53.2.13) Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

0.67

(7.53.2.14) Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.12

(7.53.2.33) Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.7900000000

(7.53.2.34) % of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

70

(7.53.2.35) % of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

70

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

70

(7.53.2.55) End date of target

03/30/2027

(7.53.2.56) Targeted reduction from base year (%)

20

(7.53.2.57) Intensity figure at end date of target for all selected Scopes (metric tons CO2e per unit of activity)

0.6320000000

(7.53.2.58) % change anticipated in absolute Scope 1+2 emissions

-5

(7.53.2.60) Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

0.62

(7.53.2.61) Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.07

(7.53.2.80) Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.6900000000

(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)

(7.53.2.82) % of target achieved relative to base year

63.29

(7.53.2.83) Target status in reporting year

Select from:

☑ Underway

(7.53.2.85) Explain target coverage and identify any exclusions

In 2015 NSG Group established a CO2 emission KPI that measured the efficiency of CO2 emissions (Scope 1 Scope 2 mkt) per unit of equivalent production output across the primary manufacturing operations (float glass production). This KPI was developed to complement the absolute emission reduction targets. The equivalent output is calculated according to the relative energy/CO2 intensity of producing products compared to a standard product. the standard product has an idexation of 1, all other products are normalised to this equivalent index.

(7.53.2.86) Target objective

This KPI is useful to track as it gives a measure of efficiency which can compensate for changes in the product profile of the Group. For example, moving to more energy intensive products to manufacture can have a detrimental impact on absolute emissions. With this KPI we can measure the relative performance to produce the actual product mix on a line independent to product mix change impacts.

(7.53.2.87) Plan for achieving target, and progress made to the end of the reporting year

Positive progress to the end of reporting year, with a YoY improvement of @5% in the KPI, achieved through a combination of the various carbon reduction measures implemented across the primary glass (float) production facilities. The target will be achieved by implementing the 5 stage decarbonization roadmap plan, with particular focus on the *technology change aspects e.g. alternative fuels, increased recycling levels, alternative materials.*

(7.53.2.88) Target derived using a sectoral decarbonization approach

Select from:

☑ No

[Add row]

(7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply

☑ Targets to increase or maintain low-carbon energy consumption or production

(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

03/31/2024

(7.54.1.3) Target coverage

Select from:

☑ Organization-wide

(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

12/31/2018

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

2076948

(7.54.1.9) % share of low-carbon or renewable energy in base year

18

(7.54.1.10) End date of target

12/31/2030

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

85

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

35

(7.54.1.13) % of target achieved relative to base year

25.37

(7.54.1.14) Target status in reporting year

Select from:

☑ Underway

(7.54.1.16) Is this target part of an emissions target?

This target is part of the verified SBTi and will support the absolute reduction in scope 2 CO2 emissions. The target has been integrated into the new medium term revival plan (RP24) of NSG Group strategic activity to support the development of renewable electrical generation capacity and responsible sourcing and consumption of energy aligned with SDG #12 and #13

(7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

☑ No, it’s not part of an overarching initiative

(7.54.1.19) Explain target coverage and identify any exclusions

The target will cover all NSG Group activities Scope 2 market based purchases of electrical energy. The target is aligned with the NSG Group SBT originally verified in October 2019 and revised in March 2022

(7.54.1.20) Target objective

The target covers all NSG Group activities Scope 2 market based purchases of electrical energy. The target is aligned with the NSG Group SBT originally verified in October 2019 and revised in March 2022. NSG Group is working towards a 85% (by volume) share of electricity from renewable sources by end of CY2030.

(7.54.1.21) Plan for achieving target, and progress made to the end of the reporting year

During 2023 this figure reached 35%, up 3% YoY. Progress towards this target is being achieved through a combination of unbundled Energy Attribute Certificates (EACs), bundled EACs, onsite solar generation and offsite Power Purchase Agreements (PPA). During 2021 and starting contract supply in January 2022, NSG Group signed its first offsite virtual PPA for 100 GWh's per year of renewable electricity from EDP Renewables Korsze wind farm in Poland. This project will reduce the Group's scope 2 carbon emissions by approximately 80,000 tonnes per year. In addition to this virtual PPA, a number of direct PPA's have also been signed in other regions including South America and Europe. Further direct and virtual PPA's are currently under evaluation as part of the broader strategy of NSG Group to move towards increasing proportion of PPA based contracting away from the use of EAC's. The procurement of EACs has been a long-standing tactic for NSG Group. New contracts have been put in place in various locations across the Group during 2023. Additional on-site electricity generation via PV solar applications has continued in 2023, with additional installations in Europe, North America, South America and South East Asia. Transitioning towards renewable electricity will remain a key tactic in the decarbonization of NSG activities.

[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	*22*	*`Numeric input*
To be implemented	*65*	*32500*
Implementation commenced	*145*	*67500*
Implemented	*90*	*110000*
Not to be implemented	*14*	*`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

Waste reduction and material circularity

☑ Product/component/material recycling

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

8500

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 1

☑ Scope 3 category 1: Purchased goods & services

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

30000000

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

80000000

(7.55.2.7) Payback period

Select from:

☑ 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 16-20 years

(7.55.2.9) Comment

Aligned with SDG #12 responsible consumption and production and SDG #13 climate action, 30M Yen savings delivered by more than 20 glass recycling projects across all regions of NSG float glass operations. Specifically, these projects included the recovery of waste glass from secondary processes adjacent / close to primary glass operations. This waste glass is a combination of process off-cuts (cutting shapes from rectangular plates) and process yield losses. Glass cullet recovered in these cases is classified as pre-consumer cullet. In addition, projects focused on increasing quantities cullet from later stages of the processing chain, including small quantities of end of life cullet in both the automotive and architectural SBU's

Row 2

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy consumption

☑ Low-carbon electricity mix

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

42000

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

0

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 11-15 years

(7.55.2.9) Comment

Ongoing implementation of NSG Group Renewable Electricity Strategy. Specifically the increased purchases of Renewable guarantee of origin certificates (REGO) in Europe, South America and North America (in total more than 30 individual projects). In addition, the introduction of new onsite generation (PV) projects in North America, Asia and Europe. Finally the introduction of Power Purchase Agreements for electricity supply (vPPA) in Europe and South America. No capital cost associated with these projects in the reporting year as they were all manage as 3rd party investment activities via long term vPPA contractural arrangements. 1 on site PV generation installed utilising NSG capex also took place in Europe during 2023. Anticipate that in some cases in the future NSG may invest further directly in on-site power generation (solar, wind) but given capex constraints upon NSG and the general acceptance of the 3rd party investment model such NSG owned facility investment will be limited.

Row 3

(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)

61000

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 1

☑ Scope 2 (location-based)

☑ Scope 3 category 1: Purchased goods & services

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

1400000000

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

1450000000

(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

Aligned with SDG #12 responsible consumption and production and SDG #13 climate action, 1.4Bn Yen savings delivered by 120 furnace and other process operational efficiency projects. Specific project activities included improved efficiency of furnace design, implementation of productivity and process utilisation projects, including optimising energy consumption to the minimum level during periods of production downtime, compressed air management campaigns (leakage awareness & repair and setpoint level reduction).

Row 4

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

☑ Lighting

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

1500

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

100000000

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

150000000

(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

Aligned with SDG #12 responsible consumption and production and SDG #13 climate action, 100M Yen savings delivered by the ongoing program of LED lighting implementation across NSG Group operations. Other minor efficiency improvement projects include;

inverters, high efficiency fan systems, and other solutions. In total, more than 60 projects implemented across NSG Group

[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:

☑ Dedicated budget for energy efficiency

(7.55.3.2) Comment

Pilot projects to demonstrate what is possible following capital expenditure. Dissemination of these key projects widely across the Group site as capex / payback criteria are met.

Row 3

(7.55.3.1) Method

Select from:

☑ Dedicated budget for low-carbon product R&D

(7.55.3.2) Comment

The Group new Medium Term Plan (MTP) includes a focus on value added products including energy saving glass. Development of these products continues to be a fundamental focus of R&D activities across all SBU's of NSG Group. A number of R&D projects were launched as individual activities with dedicated management resources to identify low carbon furnace technology options during the reporting year in support of delivery of longer terms SBT objectives. Investment decisions continued to be supported by dedicated ICP of 100/tonne CO2 to be applied to all capital projects 100000000 investment. This ICP is reviewed on a minimum 6 monthly basis to ensure it reflects the anticipated *mid-long term (5 years) view of CO2 price (ETS allowance costs, offset costs)*

Row 4

(7.55.3.1) Method

Select from:

☑ Compliance with regulatory requirements/standards

(7.55.3.2) Comment

Additional sites completed the ISO50001 certification process in Europe and South America. Continued implementation of ISO50001 in several European sites to minimise energy taxes. Need to reduce EUETS Carbon allowance purchases aligned with overall decarbonization strategy of the Group

Row 5

(7.55.3.1) Method

Select from:

☑ Dedicated budget for other emissions reduction activities

(7.55.3.2) Comment

Funding to support the continued development and implementation of low carbon solutions that can be applied to the glass manufacturing process. Technology typically proven via energy pilot program or from experience of implementing similar technologies in other energy intensive industries. Often can involve collaboration with ESCO partners, but not in all cases.

Row 6

(7.55.3.1) Method

Select from:

☑ Employee engagement

(7.55.3.2) Comment

Employee energy awareness training has taken place each year from 2016. In 2023 this included several remotely delivered training courses and a face to face training course in South America involving more than 40 delegates from across the regions manufacturing and central function operations. To date, more than 150 delegates have received this training. In addition, the continued development of existing energy champions across other Group operations progressed. Training and awareness also delivered to numerous representatives of key central functions such as engineering, R&D, procurement, IR, HR, etc.

Row 7

(7.55.3.1) Method

Select from:

☑ Partnering with governments on technology development

(7.55.3.2) Comment

Continued contribution to British Glass and Glass Alliance Europe Decarbonisation Roadmaps, working with UK and other EU governments in developing a route to low carbon glass making by 2050.The BG roadmap was published at the end of 2018 and has continued to be developed during the reporting year, with NSG employees chairing the working Group for decarbonisation. Glass for Europe published the initial draft for the EU flat glass industry decarbonisation pathway in 2019, which has been actively discussed during the reporting year and revised with a new net zero ambition pathway (published in July 2021)- NSG also actively participating with national and local government authorities in several countries to support the development of national deployment of low carbon technologies. This includes participation as the industrial partner for application of several low carbon technologies in the glass industry, e.g. Hydrogen as an alternative fuel (Hynet project)

[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:

☑ No taxonomy used to classify product(s) or service(s) as low carbon

(7.74.1.3) Type of product(s) or service(s)

Buildings construction and renovation

☑ Building orientation: Thermal performance

(7.74.1.4) Description of product(s) or service(s)

NSG Group manufactures both solar control and low emissivity architectural glazing. In hotter climates, solar control coated glass minimises the amount of air-conditioning required in a building. In colder climates, a low E glass coating reflects heat back into the *building, thereby reducing the heat loss through the window. These products are classified as low carbon products because the operational building energy savings grow exponentially for the long life of the window and installation of this glass far outweighs the energy consumed in manufacturing the glass. With the adequate type of glazing energy savings are maximised in all building types and under all climatic conditions. Between 2020 and 2030, a doubling of window renovation rates would avoid the release of above 240 million tonnes of CO2 over 10 years. https://glassforeurope.com/wp-content/uploads/2019/05/Glazing_potential_brochure_2019.pdf This Glass For Europe commissioned study by an independent Dutch research institute TNO, detailed below allows the quantification of CO2 avoided thanks to high performance glazing. In 2030, the use of advanced glazing could save annually almost a third of the EU CO2 emissions in buildings. The study shows an energy saving potential in 2030 equivalent to a reduction of 30% in the energy consumption of buildings. due to the fact that today's buildings in Europe are mostly equipped with dated inefficient glazing*

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

☑ Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

☑ Other, please specify **:**

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:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

Water withdrawal volumes are included on monthly supplier invoices or are obtained from on site flow meters.

(9.2.4) Please explain

Water withdrawal volumes are included on monthly supplier invoices or are obtained from on site flow meters. Allsites m ust report on a monthly basis in the Sphera Cloud global database.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

Withdrawal volumes are included on monthly invoices and reported to Group level. Sites are aware if this is obtained from a third party supplier, ground water or surface water and testing is not required

(9.2.4) Please explain

Monthly water withdrawal volumes are reported by each NSG site in a global database. Treated water from a mains supply is reported separately from surface water, groundwater and seawater. Withdrawal volumes are included on monthly invoices and reported to Group level. Sites are aware if this is obtained from a third party supplier, ground water or surface water and testing is not required

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Unknown

(9.2.3) Method of measurement

This is monitored at site level rather than central level

(9.2.4) Please explain

This is monitored at site level rather than central level. Group Engineering can advise on *water quality and suggest the necessary equipment required to manage the situation*

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

For the majority of sites that do not consume water, this figure is the same as the water withdrawal volume

(9.2.4) Please explain

Reported in the Group environmental reporting software on a monthly basis

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

☑ 26-50

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

his information is available at site level but is not yet amalgamated at central level for all sites.

(9.2.4) Please explain

ata has been reported for the sites with the highest withdrawal volumes.

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:

☑ Not monitored

(9.2.4) Please explain

This information is available at site level but is not yet amalgamated at central level for all sites

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

☑ 26-50

(9.2.2) Frequency of measurement

Select from:

☑ Unknown

(9.2.3) Method of measurement

This information is available at site level for sites with discharge permits but is not yet amalgamated at central level for all sites

(9.2.4) Please explain

The frequency of testing and method of measurement is determined by each site with their local regulator. Testing may be carried out by an authorised contractor or the monitoring body.

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

None of these substances are discharged

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

☑ 26-50

(9.2.2) Frequency of measurement

Select from:

☑ Unknown

(9.2.3) Method of measurement

This is monitored at site level in order to comply with permit compliance but this would not be monitored globally unless there are compliance concerns

(9.2.4) Please explain

The frequency of testing and method of measurement is determined by each site with their local regulator. Testing may be carried out by an authorised contractor or the monitoring body

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Unknown

(9.2.3) Method of measurement

ater is only consumed by evaporation from furnace cooling and wash water heating on a minimal number of sites

(9.2.4) Please explain

he majority of sites do not consume water so regular monitoring or measurement is not required

Water recycled/reused

(9.2.1) % of sites/facilities/operations

Select from:

☑ 26-50

(9.2.2) Frequency of measurement

Select from:

☑ Unknown

(9.2.3) Method of measurement

Water is recycled and reused on many sites but the volumes are not monitored at corporate level.

(9.2.4) Please explain

Water is recycled and reused on many sites but the volumes are not monitored at corporate level.

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

Clean water for drinking and cooking and cleaning purposes is supplied on all NSG sites. Good sanitation and sewerage provision is also provided

(9.2.4) Please explain

This is not tested or regularly monitored since it is standard Group practice to ensure that clean water and good hygiene provision is in place on all NSG sites.
[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)

14829

(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:

☑ Increase/decrease in business activity

(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

14785ML reported in CY22. This volume has not changed in CY23 because improvements on some plants have been offset by increased production output on other plants We expect this to decrease in future years as more closed loop cooling and water recirculation plant is installed at key sites.

Total discharges

(9.2.2.1) Volume (megaliters/year)

14829

(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:

☑ Increase/decrease in business activity

(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

14785ML reported in CY22. This figure has changed the same because water efficiency improvements on some plants have been offset by increased production on other sites. We expect this to decrease in future years as more water cooling and water recirculation plant is installed at key sites.

Total consumption

(9.2.2.1) Volume (megaliters/year)

0

(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:

☑ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

Installation of closed loop water cooling systems minimises water consumption on glass

melting sites.
[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)

2465

(9.2.4.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.4.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in efficiency

(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

16.62

(9.2.4.8) Identification tool

Select all that apply

☑ WRI Aqueduct

(9.2.4.9) Please explain

Sites must report if they are located in any area that has high risk to Extremely

[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)

4298

(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:

☑ Increase/decrease in efficiency

(9.2.7.5) Please explain

14% increase. Despite previous savings, San Salvo water consumption increased. Awaiting repairs on equipment.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

Not used by NSG sites.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

2634

(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:

☑ Increase/decrease in efficiency

(9.2.7.5) Please explain

6% Decrease in withdrawal. Sites using ground water have reduced consumption due to efficiency activites.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

All groundwater is renewable

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

Not used by NSG sites.

Third party sources

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

7896

(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:

☑ Increase/decrease in efficiency

(9.2.7.5) Please explain

4% Decrease in municipal supplier purchases. due to improved water efficiency by sites.

[Fixed row]

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:

☑ Relevant but volume unknown

(9.2.8.5) Please explain

Sphera environmental reporting software has the capability to capture this information but an insufficient number of sites have reported to this level of detail in CY23. We hope to improve in CY24

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☑ Relevant but volume unknown

(9.2.8.5) Please explain

Sphera environmental reporting software has the capability to capture this information but an *insufficient number of sites have reported to this level of detail in CY23. We hope to improve in CY24*

Groundwater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

NSG sites do not discharge to groundwater

Third-party destinations

(9.2.8.1) Relevance

Select from:

☑ Relevant but volume unknown

(9.2.8.5) Please explain

Sphera environmental reporting software has the capability to capture this information but an insufficient number of sites have reported to this level of detail in CY23. We hope to improve in CY24
[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?

	Identification of facilities in the value chain stage	Please explain
Direct operations	*Select from:* ☑ No, we have assessed this value chain stage but did not identify any facilities with water-related dependencies, impacts, risks, and opportunities	*Glass making is dependent on water however, the risk has not been assessed as substantive.*
Upstream value chain	*Select from:* ☑ No, we have assessed this value chain stage but did not identify any facilities with water-related dependencies, impacts, risks, and opportunities	*820 suppliers have been assessed as water dependent however, the risk has not been assessed as financially substantive.*

[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:

☑ No facilities were reported in 9.3.1

(9.5) Provide a figure for your organization's total water withdrawal efficiency.

(9.5.1) Revenue (currency)

832537000000

(9.5.2) Total water withdrawal efficiency

56142491.06

(9.5.3) Anticipated forward trend

It is anticipated that water withdrawal will reduce in the next 5 years and revenue will increase so the withdrawal efficiency is projected to increase withdrawal efficiency.
[Fixed 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:

☑ Less than 10%

(9.13.1.3) Please explain

Some automotive glazing products contain subcomponents with SVHCs. eg lead in solder of

electrical connectors. These components contriubute to less than 10% of the Group Revenue.
[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

Water required for operational use is considered. A low water impact product requires minimal water in operational use.

(9.14.4) Please explain

NSG products do not require water when in operational use. Pilkington Activ is a self cleaning glass that eliminates the need to use water for window washing.NSG Group produces products that facilitate the generation of solar energy and reduce the need for customers' building heating and cooling energy. These high performance glazing solutions for worldwide customers will contribute to the prevention of global climate change and indirectly reduce the risk of sea level rise and drought. They could therefore be considered to be water-saving products.
[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.

	Target set in this category	Please explain
Water pollution	*Select from:* ☑ No, but we plan to within the next two years	*R&D are seeking biodegradable alternative to microplastic interleavants*
Water withdrawals	*Select from:* ☑ Yes	*Rich text input [must be under 1000 characters]*
Water, Sanitation, and Hygiene (WASH) services	*Select from:* ☑ No, and we do not plan to within the next two years	*NSG already has adequate WASH services.*
Other	*Select from:* ☑ No, and we do not plan to within the next two years	*No other targets to list*

[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:

☑ Country/area/region

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

☑ Reduction in total water withdrawals

(9.15.2.4) Date target was set

08/31/2023

(9.15.2.5) End date of base year

12/31/2019

(9.15.2.6) Base year figure

3500

(9.15.2.7) End date of target year

03/30/2027

(9.15.2.8) Target year figure

1750

(9.15.2.9) Reporting year figure

2465

(9.15.2.10) Target status in reporting year

Select from:

☑ Underway

(9.15.2.11) % of target achieved relative to base year

59

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ None, no alignment after assessment

(9.15.2.13) Explain target coverage and identify any exclusions

The WRI Aqueduct Tool was used to identify the sites in water stressed areas. The withdrawal reduction targets are applied to these sites. All sites were assessed and none were excluded.

(9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

Investing in water saving technologies on sites in water stressed areas. A significant improvement at our San Salvo plant has contributed to our savings to date.

(9.15.2.16) Further details of target

50% reduction in water withdrawal volumes on sites in water stressed areas.

[Add 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:

☑ Not an immediate strategic priority

(13.1.3) Explain why other environmental information included in your CDP response is not verified and/or assured by a third party

NSG Group are currently carrying out internal verification of non GHG data. This will change in future as legal external reporting will require external verification of other data.
[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.

(13.2.1) Additional information

Question 4.11 We would also like to add our Environmental and Sustainability Policies. We could not add them in 4.11 and I cannot add two policies here since I can only upload one file *and I cannot create another row. We have combined 2 policies into 1 document and attached it here.*

(13.2.2) Attachment (optional)

Sustainability and Environmental policies combined.pdf
[Fixed row]

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

(13.3.1) Job title

Chief Executive Officer

(13.3.2) Corresponding job category

Select from:

☑ Chief Executive Officer (CEO)
[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:

☑ No