Orbia Advance Corporation - Climate Change 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Orbia is a community of companies bound together by a shared purpose: to advance life around the world. Orbia's business groups have a collective focus on ensuring food security, reducing water scarcity, reinventing the future of cities and homes, connecting communities to data and information services, and expanding access to health and well-being through providing advanced materials, specialty products and innovative, human-centered solutions. Orbia's business groups span the Precision Agriculture, Building and Infrastructure (B&I), Fluorinated Solutions, Polymer Solutions and Data Communication verticals. Products and services cover the following businesses: Polymer Solutions, a PVC resins producer, caustic soda and phosphates, plastic industrial compounds; Fluorinated Solutions, suppliers of fluorine-based compounds, technologies and services; B&I, focused on providing solutions for water management, heating, cooling, and other infrastructure solutions; Data Communication, a leading manufacturer and distributor of conduits for fiber optics and gas pipes; and Netafim, leader in precision irrigation solutions. The company has commercial activities in more than 100 countries and operations in over 50, with global headquarters in Mexico City, Boston, Amsterdam and Tel Aviv and a team of over 24,000 dedicated employees working worldwide.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date
January 1 2022

End date
December 31 2022

Indicate if you are providing emissions data for past reporting years
No

Select the number of past reporting years you will be providing Scope 1 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 2 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 3 emissions data for
<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.

Argentina
Australia
Belgium
Brazil
Canada
Chile
China
Colombia
Costa Rica
Czechia
Denmark
Ecuador
Finland
France
Germany
Guatemala
Hungary
India
Ireland
Israel
Italy
Japan
Mexico
Netherlands
Norway
Oman
Peru
Poland
Russian Federation
South Africa
Spain
Sweden
Turkey
United Kingdom of Great Britain and Northern Ireland
United States of America
Venezuela (Bolivarian Republic of)

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-CH0.7

(C-CH0.7) Which part of the chemicals value chain does your organization operate in?

Row 1

Bulk organic chemicals

Polymers

Bulk inorganic chemicals

Chlorine and Sodium hydroxide

Other chemicals

Other, please specify ((PVC resins, Fluorine-based compounds and phosphates))

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	MX01OR010004

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	Orbia's Board oversees and provides guidance on Orbia's sustainability strategy previously reviewed by the Corporate Governance, Responsibility and Compensation Committee, including climate issues: - Every quarter, our VP of Sustainability and VP of Health, Safety and Environment & Engineering report progress on targets to this committee, including our climate change goals. - The Board provides guidance on strategy, for instance they oversee Orbia's commitment to achieve its emissions reduction targets (for 2030 and 2050), which have been already approved by the Science-Based Targets Initiative (only 2030 goals) - The Board is also informed of the results of our periodic TCFD-aligned climate risk and opportunity assessments In addition, Orbia's Critical Risk Committee (CRC), reports to the Audit Committee, and is responsible for identifying and assessing enterprise risks, evaluating the appropriate risk profile for the enterprise, developing risk mitigation plans. and overseeing their implementation. These risks include environmental (and climate) risks. Our Sustainability VP, VP of HSE, CFO, General Counsel and Business Group Presidents also participate in this committee and have responsibility for specific sustainability-related topics.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing and guiding strategy Overseeing the setting of corporate targets Monitoring progress towards corporate targets Reviewing and guiding the risk management process	<Not Applicable>	The Board is regularly updated with all major risks and opportunities related to social and environmental aspects, including climate change.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Juan Pablo del Valle Perochena, Orbia's Chairman has competence on climate-related issues through his active involvement in diverse environment organizations. Some of those include the Latin American Conservation Council and the Latin America Water Funds Partnership, which he has been supporting and advising for a number of years. As co-chairman of the Latin America Conservation Council, he has worked to mainstream nature-based solutions that protect, restore, and better manage biodiversity to tackle climate change while advancing the sustainable development goals (SDGs). He is also chairman of Mexico City's first water fund (Agua Capital).	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee
Other C-Suite Officer, please specify (Corporate Vice President, Sustainability)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Managing public policy engagement that may impact the climate
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
The VP of Sustainability reports to the CEO and is also part of the Executive Leadership Team (at the same level as the CFO and other key functional roles), influencing our business strategy. All aspects of sustainability, including climate-related, are reported to the VP of Sustainability by the business groups Sustainability leaders. Reports progress to the Board on a quarterly basis.
The VP and the Corporate Sustainability team work directly with the Business Group Presidents to identify climate risks and opportunities and embed climate considerations into decision-making and business strategy. Much of this work is based on our periodic TCFD-aligned risk and opportunity assessments (since 2019), as well as our Science-Based Targets progress follow-up, and our risk assessments and Sustainability Goals. All Business Groups have a Sustainability team that implements environmental strategies and reports performance on climate-related issues monthly through our reporting platform.

Position or committee
Other C-Suite Officer, please specify (Corporate Vice President, Innovation & Ventures)

Climate-related responsibilities of this position
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Managing value chain engagement on climate-related issues
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
The VP of Innovation manages Orbia Ventures, Orbia's corporate venture capital fund and supports a collaborative, human-centered approach to creating a better future. By supporting startups that share our vision and are committed to developing leading-edge innovations and smart technologies, we can address the world's biggest challenges and help global communities become future-fit. Focus areas for investments are climate tech, circular economy, sustainable energy & energy storage, agriculture, water infrastructure, building & infrastructure and communications infrastructure. During 2022, Orbia Ventures completed five transactions, four of which were environmental impact-focused investments, amounting to a total of $9.3M USD. Our innovation efforts also include capacity building, open innovation programs and intrapreneurship, which in some cases lead to the development of new offerings within our portfolio that can be classified as low carbon. In 2022, 61% of Orbia's 2022 revenues contributed directly or indirectly to SDGs, and within that proportion, 9% of that income came from Low Carbon, Alternative Energy, Energy Efficiency and Resilient Infrastructure Solutions.

Our VP of innovation is also part of the Executive Leadership Team (at the same level as the CFO and other key functional roles), influencing our business strategy.

Position or committee
Sustainability committee

Climate-related responsibilities of this position
Providing climate-related employee incentives
Monitoring progress against climate-related corporate targets

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
The Corporate Governance, Responsibility and Compensation Committee ddvises and assists the Board of Directors in overseeing governance, talent, compensation and performance matters, as well as supervising Corporate Responsibility, Sustainability, Health, Safety & Environment strategies and practices. Within compensation matters, Orbia has an ESG modifier for senior management with includes esg metrics for innovation, health &safety, environment (climate-related issues) and diversity & upskilling.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	We have incorporated an ESG modifier to senior management compensation that can impact 10% of the annual bonus (positively or negatively). The targets include making progress on our environmental and social ImpactMark metrics. 2 out of those are directly related to climate issues: 1. Reduce Greenhouse Gas emissions (Scope 1, 2 and 3) 2. Reduce waste sent to landfill

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive
Other, please specify (All senior management)

Type of incentive
Monetary reward

Incentive(s)
Other, please specify (Orbia's ESG modifier to its Short-Term Incentive plan, which funds up to +/- 10% of the annual bonus of leaders at senior manager levels and above, based upon the achievement of defined ESG metrics , including GHG emissions)

Performance indicator(s)
Progress towards a climate-related target
Achievement of a climate-related target

Incentive plan(s) this incentive is linked to
Short-Term Incentive Plan

Further details of incentive(s)
The following objectives are part of the yearly bonus ESG modifier:
1. Reduce Greenhouse Gas emissions
2. Reduce plants that send waste to landfill

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
In 2021, Orbia conducted a comprehensive review of its executive compensation structure with the assistance of a nationally known US compensation consultant. The resulting modifications to executive compensation include a redesigned short-term incentive plan that promotes a pay-for-performance culture, where employees share and take active roles in supporting Orbia's vision for success as a purpose-driven, future-fit organization; and a long-term incentive (LTI) plan to attract, incentivize, and retain qualified talent critical to the long-term success of the company. LTI awards are now issued in the form of Restricted Stock Units and Performance Share Units payable in actual shares of Orbia common stock as opposed to "phantom stock" awards, helping to promote an "ownership" mindset for our leaders and more closely align their interests with those of our shareholders.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?
Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	1	Anything that has an impact within one year
Medium-term	1	4	Depending on the issue, it can vary from 1-4 years
Long-term	5		5 years and above with no time limit

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

As part of our business processes, we continually identify climate and/or water related risks, including physical, transitional, regulatory, and other risks. The Orbia risk management teams quantify the potential financial impact and timeframe of each risk.

Risks with higher financial impact are prioritized for mitigating action.

A risk with a substantive (high) financial impact on a global Orbia corporate level is one where the potential financial impact was identified as greater than 50 Million USD . However- a risk can be considered substantive for a specific Orbia business group or site with a lower potential financial impact as well. Also- the risk impact can be considered substantive/strategic on a global Orbia level even with a lower potential impact, pending on significant potential influence in terms of safety, environmental or other forms of compliance, business continuity or reputation.

The following are the risk threshold categories as defined by Orbia. The threshold category names have been adjusted to match those used in the CDP reporting requirements.
1. High: $50MM or greater USD
2. Medium-high : $37.5MM USD – $50MM USD
3. Medium : $22.5MM - $37.5MM USD
4. Low-medium: $7.5MM - $22.5MM USD
5. Low: Less than $7.5MM USD

As part of our ongoing update to our TCFD-aligned Climate Risk Assessment, new thresholds are being discussed in alignment with updated company-wide risk management practices.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
Every three years or more

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
Climate-related risks were first identified through a specific climate-related risk management process carried out in line with the 2019 TCFD recommendations. 2020 onward, our revamped Enterprise Risk Management process integrates climate-related risks alongside other enterprise risks. We identify physical and transition risks as part of this process and quantify their potential
financial impact along with their time horizon. Those risks with higher financial impact and likelihood are prioritized for action. For example, our Vestolit site in Henry, IL (which was identified as a key site for our climate-risk assessment) was able to decommission a coal-fired boiler, supporting Orbia's overall decarbonization strategy and providing other business units an example of a cost-effective transition to lower carbon sources, which can lead to savings while contributing to climate risk mitigation.

We are currently completing and updating our physical and transition risks, covering more than 130 sites and including our value chain. As climate risk platforms that provide risk modelling services by using several scenarios continue to evolve and are able to provide more accurate output and flexibility to adjust risk levels based on mitigation actions, Orbia will be in a better position to update climate analysis with a higher frequency.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Current regulation is included in Orbia's climate-related risk assessments. Compliance to existing regulations in all the geographies where we participate or conduct commercial activities is a requirement for all our businesses. Orbia has considered an evolving environment of climate-related regulations and carbon pricing at international, national and local level that could lead to increased input/operating costs for high carbon activities. Threats to securing licenses to operate for high carbon activities are being evaluated for both current and potential upcoming regulations. For example, the Mexico State in Mexico has adopted a carbon tax effective from April 2022. Direct impact for our operations in Mexico is around 2 USD/ton CO2e . This tax is in addition to the carbon exchange market from the Federal Government that started its pilot process in 2020 for large emitters, which also impacts additional sites in Mexico. The German Fuel Emissions Trading Act has introduced a carbon pricing system for fossil fuels in the heating and transportation sectors, which currently are not covered by the European greenhouse gas emissions trading system (ETS). These 2 regulations together have an impact on 18% of our Scope 1 emissions from our Vestolit site in Germany and applicable sites in Mexico.

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, always included	Emerging regulation is included in Orbia's climate-related risk assessments. Orbia identified a risk of financial loss due to business disruption if our operations failed to prepare for emerging regulations. Orbia has considered an evolving patchwork of climate-related requirements and carbon pricing at international, national and state level that could lead to increased input/operating costs for high carbon activities. Threats to securing licenses to operate for high carbon activities are being evaluated for both current a potential upcoming regulations. For example, tightening regulations related to fugitive emissions and other environmental regulations may result in further investment requirements within our fluorinated solutions Business Group, leading to increased CAPEX and OPEX. The European Green Deal, which overarching aim is making Europe climate neutral in 2050, will have an impact on our European operations, as well as the Carbon Border Adjustment Mechanism. Also, we keep monitoring the evolution of potential regulatory bills as a result of the US returning to the Paris Agreement and President Biden's announcement of a carbon tax of around 51 USD/ton of CO2, as well as the US Securities and Exchange Commission (SEC) proposed rule that could guide the future of detailed reporting on climate-related risks, GHG emissions, and net-zero transition plans. According to projections estimated by the IEA for developed economies (IEA WEO, 2019), a carbon price would have a value of 100 USD/ton CO2e by 2030. This would affect our operations in advanced economies. Orbia is aware that several Mexican States such as Coahuila, and Jalisco have started discussing regulation to impose a tax on carbon emissions at their local congress. We are monitoring how these regulations evolve and the potential financial impact on our operations in Mexico. Also, in areas of water stress that could be impacted by more frequent droughts, our operations could be impacted by tougher regulations or limits on water supply, resulting in operational interruptions or closures and therefore, revenue loss. 42% of our operations are in areas of water stress.
Technology	Relevant, always included	We evaluate technology from a risk perspective, across our global business. Not investing in low-carbon technologies could lead to financial impact , like increased costs derived from future carbon pricing schemes and regulations, potentially reduced market share linked to failure to adapt to changing customer behaviour and investors being less interested in Orbia due to climate change concerns not being addressed effectively. Orbia is therefore defining a plan to transition to low-carbon technologies, including identifying alternatives to increasing our use of renewables and exploring hydrogen and carbon capture alternatives. Some examples include: increasing our renewable electricity consumption investing in tri-generation, and energy efficiency projects. Orbia increased renewable electricity use by 146% in 2022. Orbia is also constantly looking for climate-friendly technologies through Orbia Ventures, supporting promising startups via funding or partnerships. Details of recent innovation efforts can be found here: https://www.orbia.com/ventures/portfolio/
Legal	Not relevant, included	Regulation and legal risks are always included in Orbia's risk assessments. Orbia has never had climate-related litigation claims and there is no foreseeable risk about it. As there are no foreseeable warning signs of company-specific risk from our assessment, legal risks from climate change are not considered relevant at the moment, however, we understand this might change in the future; therefore, Orbia keeps monitoring trends on this topic.
Market	Relevant, always included	As part of our TCFD- aligned assessment, we evaluate market transition risks in our business, supply chain, and customer geographies. These include changes in markets driven by policy and technology: Reduced market demand for higher carbon products/commodities, increased demand for energy-efficient, lower carbon products and services, disruption of markets by new low-carbon technologies. For example, HFC R-134a is manufactured from hydrogen fluoride (HF) at our Koura plant in St. Gabriel (US) and also in Mihara (Japan). This gas is used as a refrigerant in food preservation, air conditioning, foaming, propellants, and other uses. Fugitive emissions from this gas from AC systems and refrigerators are minimal. Fugitive emissions of this gas, specifically from AC systems and refrigerators during their operation are low. These types of equipment have low-medium refrigerant charge capacity, long lifetime (from 8-12 and 10-15 years respectively) and low annual leakage/loss rates (15% and 10% respectively) compared to parallel equipment designed to utilize other refrigerants. However, once in the atmosphere, R-134a possesses a high Global Warming Potential and so do contribute to global warming. [1]. Under the Kigali Amendment to the Montreal Protocol, developed countries have begun to reduce their use of HFCs already, while developing countries will begin in either 2024 or 2028. The agreement is designed to reduce HFC use by 85% between now and 2047 and reduce the emissions of high-GWP (global warming potential) HFCs by more than 70 billion tons of carbon dioxide equivalent through 2050 [2]. In this context, demand for HFC-related products is expected to be impacted in the coming years due to the implementation of regulations to phase out HFCs. For instance, a new bill in the US titled the American Innovation and Manufacturing (AIM) Act will implement a gradual phase-down of high-GWP products though mechanisms similar to that already employed by the European Union f-gas regulation and pave the way for implementation and adoption of new low-GWP products including fluorinated materials such as HFO and HFO/HFC blends. [1] http://www.essentialchemicalindustry.org/chemicals/hydrogen-fluoride.html [2] https://www.achrnews.com/articles/133992-the-kigali-hfc-amendment-and-its-potential-worldwide-impact https://www.epa.gov/climate-hfcs-reduction/final-rule-phasedown-hydrofluorocarbons-establishing-allowance-allocation
Reputation	Relevant, always included	As part of our TCFD-aligned assessment, we evaluate global and business unit reputation risks stemming from growing expectations for low carbon, climate resiliency action from stakeholders, including investors, lenders, host governments and customers. This also includes evaluating implications for company reputation and overall confidence in management, social license to operate, and access to capital. Orbia has demonstrated being a transparent company by increasing data disclosed. Scores on some key ESG Indices has been improving, with a good impact on reputation. Since 2019, Orbia is a member of the DJSI MILA Pacific Alliance Index. In 2021, our total score increased by 5%, reflecting a commitment to continuously improve our ESG performance in all aspects of our business. Our CDP Score has been improving from D to B (2020), we have been awarded a Gold Medal in Ecovadis (2022), and we continuously work on actions to improve our ratings and stakeholders perception. Additionally, we are responding to the rising interest of investors and stakeholders in climate related issues, and have a dedicated section to Climate Transparency on our website: (https://www.orbia.com/sustainability/climate/), where our TCFD-aligned disclosures are also provided. Our transparency efforts are positively impacting tendering processes for some of our Business Groups.
Acute physical	Relevant, always included	As part of our comprehensive TCFD-aligned risk evaluation, we always assess physical risk to our global operations from existing and climate change-impacted stress for: - Cyclones - Extreme temperatures (hot and cold) - Flooding – including pluvial, fluvial, groundwater and coastal - Landslides (precipitation induced) - Wildfires Some Orbia plants are located in areas at risk of impacts from extreme weather events such as cyclones and flooding. This input informs our global and business unit risk mitigation strategies which are aligned with our overall business planning and risk management processes. For instance, one of our plants in Colombia was impacted a few years ago due to flood. Since then, the site has conducted adaptations to reinforce the site and improved its emergency response plan for flooding which includes an action for the shutdown of operations prior to inundation of crucial assets on site. This type of risks are constantly reviewed and measures are taken to be prepared for future events and ensure minimum impact to the operations and continued production.
Chronic physical	Relevant, always included	As part of our comprehensive TCFD-aligned risk evaluation, we always assess physical risk to our global operations from existing and climate change-impacted stress for: -Extreme temperatures (hot and cold) -Water stress and drought -Human health impacts Some Orbia plants are located in areas at risk of impacts from extreme weather events such as extreme temperatures and water stress. This input informs our global and business unit risk mitigation strategies which are aligned with our overall business planning and risk management processes. For instance, one of our sites in Mexico is in a high water stress area; shortage of process water could result in disruption to manufacturing processes on site. Consequently, this could lead to revenue loss on a short-term scale. Longer term scale events could have a more significant impact on water supply. The site is already discussing plans to guarantee water supply and use this resource more efficiently to ensure continued production and avoid disruptions in the value chain.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Risk 1

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Cyclone, hurricane, typhoon

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
2 (1 in Northern Mexico & 1 in the Golf of Mexico, US) out of 12 of our high priority evaluated sites have a medium risk of potential cyclones and floods, in their location /regions. This means the sites could be partially inundated, resulting in disruption to site operations. Higher intensity events have the potential to result in equipment and infrastructure damage, resulting in temporary shutdown of the site. Roads and other supply line infrastructure can be disrupted or closed, impacting the supply of goods to the site. None of the evaluated sites possess a high physical risk.

Time horizon
Medium-term

Likelihood
About as likely as not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
34140000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Value calculated is the average of impact on revenue (2022) in case of flood or cyclones affecting our 12 higher risk sites evaluated for this risk. The risk of significant and harmful floods/cyclones materializing is considered to have a medium impact for only 2 of these sites (low for the others).

Cost of response to risk
16100000

Description of response and explanation of cost calculation
We have invested in making our Cartagena site resilient to potential floods, representing a cost of around 6,000,000 USD in 2011. We used this case to extrapolate the costs and estimate the potential impacts of risks identified in our climate risk assessment (for the 2 medium risk sites). Increase in prices and inflation were considered. We are working with our business units globally to inform our risk mitigation strategies, in alignment with our overall business planning and risk management processes. As we complete our updated TCFD-aligned climate risk assessment more insight around necessary actions to mitigate and adapt to significant potential climate-related risks. We expect our external disclosure on risks and their associated costs will further develop as we complete the process.

Comment

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Water scarcity

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
1 (located in central Mexico) out of 12 of our high priority evaluated sites has a relevant risk due to increased water stress. A shortage of freshwater could result in disruption to the manufacturing processes on site. Consequently, this could lead to increased direct costs from securing alternative sources or to loss of revenue on a short-term scale if operation is disrupted. Longer term scale events could have a more significant impact on water supply. In addition to this, we are in the process of updating our climate risk assessment to complement the set of necessary actions to mitigate and adapt to significant potential climate-related risks.

Time horizon
Short-term

Likelihood
More likely than not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
2500000

Potential financial impact figure – maximum (currency)
4000000

Explanation of financial impact figure
Value provided is a range of values of potential impact on operational costs in case of water stress affecting our 12 priority sites evaluated, although only 1 site has a risk of this materializing.

Cost of response to risk
2400000

Description of response and explanation of cost calculation
The calculation covers the estimated extra cost of transporting additional water to supplement our operation at our site in risk of materializing impact over one year. Based on historical water shortages, we estimate a requirement of at least 1100 m3 of water per day at a an extra cost of 6 USD/m3. This is a short-term cost impact and does not consider potential complications associated with the sourcing and availability of supplementary water sources, or related community concerns.

In order to come up with a sustainable and longer-term mitigation measure, we continue to engage and work with our business units globally to inform our risk mitigation strategies. This will be aligned with our updated comprehensive physical and transition climate risk study aligned with the Taskforce on Climate-related Financial Disclosures (TCFD) framework , which will be available in our next disclosure cycle. Our external disclosure on risks and their associated costs will evolve as we complete the process and we will be integrating them into our overall business planning and risk management processes.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Current regulation	Mandates on and regulation of existing products and services

Primary potential financial impact
Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
HFC R-134a is manufactured from hydrogen fluoride (HF) at our Koura sites in St. Gabriel (US) and in Mihara (Japan). This gas is used as a refrigerant in food preservation, air conditioning, foaming, propellants, and other uses. Fugitive emissions from this gas from AC systems and refrigerators are minimal. Fugitive emissions of this gas, specifically from AC systems and refrigerators during their operation are low given that this type of equipment has low-medium refrigerant charge capacity, long lifetime (from 8-12 and 10-15 years respectively) and low annual leakage/loss rates (15% and 10% respectively). However, once in the atmosphere, R-134a possesses a high Global Warming Potential (GWP) and therefore, does contribute to global warming. Under the Kigali Amendment to the Montreal Protocol, developed countries have begun to reduce their use of HFCs already, while developing countries will begin in either 2024 or 2028. The agreement is designed to reduce HFC use by 85% between now and 2047 and reduce the emissions of high-GWP HFCs by more than 70 billion tons of carbon dioxide equivalent through 2050. In this context, demand for HFC-related products is expected to be impacted in coming years due to the implementation of regulations to phase out HFCs. For instance, a new bill in the US titled the American Innovation and Manufacturing (AIM) Act will implement a gradual phase-down of high-GWP products through mechanisms similar to those already employed by the European Union F-gas regulation and pave the way for implementation and adoption of new low-GWP, high energy efficiency products, including fluorinated materials such as HFO and HFO/HFC blends.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
4780000

Potential financial impact figure – maximum (currency)
14340000

Explanation of financial impact figure
The value represents the potential decrease of HFC sales, as a result of these regulations. The total annual refrigerant sales for Orbia's Koura business group have been 478 million USD. The exact financial impact is uncertain at this time and is dependent on the scope and timeframe of HFC phase-out regulations. For example, a possible drop of 1%-3% in Koura's total sales (due to lower HFC demand) would have the potential financial impact range mentioned above (approx. 5-14 million USD). This impact could change with the development of the above-mentioned regulations. Koura is actively acting to mitigate this risk and prevent these potential reduced sales, by making significant investments in next generation low GWP refrigerants with the potential to materially increase future revenue. See details below.

Cost of response to risk
20000000

Description of response and explanation of cost calculation
There are a number of investments our Koura business group is making to develop low-carbon and next generation refrigerants to replace HFCs, as well as phasing out high GWP products. The example cost above is attributed to the estimated cost of setting up a new facility in the UK to develop low GWP leapfrog refrigerants. The estimated range of this investment is 15-25 Million USD, we have used the average value in the field above. (Note that these figures – both income at risk and costs are per annum and do not include the future revenue growth opportunity.)

Comment

Identifier
Risk 4

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Some Mexican States such as Mexico State and Guanajuato are implementing a mandatory carbon tax that will have a direct impact on our operational costs in Mexico. As an example, the state of Mexico increased its applicability to all manufacturing facilities in which now we have 4 operations eligible for this carbon tax and 1 of our facilities will be requiring to comply with the Guanajuato Carbon Tax. These taxes are in addition to the carbon exchange market from the Federal Government. On the European Union the Carbon Border Adjustmen Mechanism initial scope would not cover our main products but we envision some impact on certain materials used on our EU operations.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
50000

Potential financial impact figure – maximum (currency)
250000

Explanation of financial impact figure
The cost per ton of CO_2e is approximately 2.5 USD on Mexico State while on Guanajuato is about 14 USD. Final guidelines for calculations are yet to be defined and officially published particularlly for Guanajuato. The financial figures above are thus an estimation and it can vary depending on the inclusion of direct and/or indirect emissions in the new tax regulation. The impact covers 4 sites in the State of Mexico and 1 site in Guanajuato, for CBAM estimations are based on the current EU Carbon Price but more information would be required to have impact for specific materials at this point it is difficult to estimate a certain potential impact until more information is made available.

Cost of response to risk
150000

Description of response and explanation of cost calculation
We plan on absorbing this cost initially, while we evaluate alternatives to decarbonize our sites.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Following the launch of the first generation of low Global Warming Potential (GWP) propellans (Zephex) and refrigerants (Klea and LFR), our Koura brand has continue to develop and consolidate the next generation. Klea 456A continues to gain momentum in the EU & UK as a “drop in” replacement for R134a in the mobile air conditioning (MAC) aftermarket sector, with only half its Global Warming Potential (GWP). Klea 473A is also growing as a non-flammable replacement in ultra-low temperature cooling applications (e.g. vaccine storage, test chambers, and transportation), offering the same performance as R-23 or R-508A/B while reducing GWP by 90%. Klea 473A won Refrigeration Innovation of the Year at the 2022 Cooling Industry Awards. In March of 2022, Koura opened the world’s first HFA 152a (Zephex 152a) production facility at its Runcorn site in the UK, marking a key milestone in delivering low GWP medical propellants. Several pharma companies are working with Koura to develop low GWP inhalers for asthma and respiratory treatments; initial commercial production is expected in 2025.
Koura also operates a refrigerant recovery service in Mihara, Japan. The plant succesfully recovered approximately 772 tons of refrigerants and avoided around 1.5 million tons of GHG emissions in 2022.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
359000000

Potential financial impact figure – maximum (currency)
508000000

Explanation of financial impact figure
The above are based on estimated revenue forecast for low GWP refrigerants and propellants, as well as refrigrant recycling services, between 2023 and 2027. Figures are driven by shifting consumer behavior and tighter environmental regulations: Electric vehicles (EV) and Hybrid Electric Vehicles (HEV) are expected to account for an estimated 30% of all vehicle sales by 2025 and will continue to grow, demanding in turn, greater volumes of low GWP refrigerants. Combined revenue from these solutions are expected to grow at least 65% by 2027 (compared to 2022 revenue). In 2022, revenue from these solutions increased by 5%, compared to 2021, and 11% compared to 2020.

Cost to realize opportunity
120000000

Strategy to realize opportunity and explanation of cost calculation
Investments cover 5 years. Koura is investing in new facilities in the UK to develop low GWP propellants and refrigerants.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of new products or services through R&D and innovation

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Orbia's Fluorinated solutions business, Koura, is focused on both improving the performance and circularity of Li-on batteries through investments and research. The Silatronix OS3® material was launched last year and used in commercial lithium-ion batteries manufactured by Amprius Technologies. OS3® enables Amprius battery cells to achieve and maintain an industry-leading energy density. Koura is also developing new battery materials under the brand name KoFlyte® electrolyte additives. Additionally, Koura is investing in the development of new electrolyte formulations and manufacture of custom electrolytes for various battery applications. Koura has invested in a leading Li-on battery recycling technology developed by Ascend Elements. Ascend is setting up commercial Li-on recycling operations in the United States where they will recover battery grade materials from spent lithium-ion batteries. Ascend already opened its new electric vehicle (EV) battery recycling plant in Covington, Georgia.
Koura and Ascend have signed an offtake agreement to secure recycled Li for Koura's production of battery materials. The two companies also have joint efforts to recycle graphite anodes and other battery materials.
In 2022, Orbia announced a joint venture framework with Solvay to build the largest polyvinylidene flouride (PVDF) facility in North America. Orbia's Fluorinated Solutions business Koura and Polymer Solutions business Vestolit will supply key materials and expertise to close a significant supply gap while promoting regional production and security of a material that optimizes battery energy storage efficiency.
Also in 2022, Koura was awarded a $100 million grant from the U.S. Department of Energy (DOE) to build the first U.S. manufacturing plant for critical lithium-ion battery material lithium hexafluorophosphate (LiPF6) on the grounds of Koura's existing production site in St. Gabriel, Louisiana. This plant will produce enough LiPF6 to support domestic production of more than one million full electric vehicles annually.
To complement the above, Orbia signed an LiPF6 technology licensing agreement with Kanto Denka Kogyo, one of the pioneers and known leader in the high quality manufacture of LiPF6. The agreement provides Koura with access to Kanto Denka Kogyo's world-class technology and industry expertise in commercial LiPF6 production.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
850000000

Potential financial impact figure – maximum (currency)
1500000000

Explanation of financial impact figure
The above are projections cover the 2023-2027 period, and are based on potential annual revenues, according to market growth and expected demand for these products and services, as Electric vehicles (EV) and Hybrid Electric Vehicles (HEV) are expected to account for an estimated 30% of all vehicle sales by 2025. In 2022, first sales of battery materials for energy storage surpassed $3 million USD.

Cost to realize opportunity
709500000

Strategy to realize opportunity and explanation of cost calculation
Building battery materials production assets and investment in R&D and production capacity as well as developing partnerships to grow offer of products and services mentioned above.

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of climate adaptation, resilience and insurance risk solutions

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Orbia's Building & Infrastructure brand, Wavin, has consolidated a robust portfolio to boost urban climate resilience. With stormwater management solutions, Wavin is helping cities to be more climate resilient and reduce the costs and damage from increased flooding, particularly in Europe. They also contribute to relieving heat stress and help alleviate groundwater depletion with infiltration/attenuation units, and to leverage the value of rainwater harvesting through blue-green roofs offerings. Wavin's Indoor Climate solutions portfolio includes smart temperature controls (Sentio) as well as other related heating and cooling solutions (underfloor heating, district heating, mechanical ventilation, ceiling cooling) that result in energy consumption reductions for users.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
134000000

Potential financial impact figure – maximum (currency)
332000000

Explanation of financial impact figure
Figures above are based on estimated revenue forecasts to 2028. Revenues from these solutions are expected to grow at least 10% by 2023.

Cost to realize opportunity
9000000

Strategy to realize opportunity and explanation of cost calculation
Estimated annual CapEx is $1.8 million USD.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

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

Publicly available climate transition plan
Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan
We have a different feedback mechanism in place

Description of feedback mechanism
We prepare calls with key stakeholders, where CFO and Sustainability Vice-president present our ESG strategy which includes our transition plan to 1.5°C. Through this channel we receive questions and input. We hope to evolve these actions into a more formal feedback mechanism in the future.

Frequency of feedback collection
Annually

Attach any relevant documents which detail your climate transition plan (optional)
https://www.orbia.com/49ac8a/siteassets/6.-sustainability/2022-impact-report/orbia_impact_report_2022.pdf - Page 32

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future
<Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy
<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios: RCP 2.6	Company-wide	<Not Applicable>	On our current update of our Climate Risk Assessment, an initial screening on all active Orbia sites took place to identify a set of priority sites where a deeper analysis would take place to determine risk and financial quantification. For our physical risk analysis we are using both SSP1 (RCP 2.6) and SSP5)RCP 8.5) Lower-emissions scenario (SSP1: Sustainability – Taking the Green Road, equivalent to RCP 2.6). This low emissions scenario is evaluated at baseline year (2022), medium-term (2030) and long-term (2050) and assumes: 1. That governments and businesses collaborate in pursuit of a stringent mitigation pathway 2. This mitigation pathway achieves net-zero emissions just after 2050 and global temperature rise stabilizes at around 1.8°C above 1850-1900 levels by 2100 3. This is achieved through a gradual shift towards low material growth and less-intense resource and energy usage It also assumes the promotion of resource efficiency and a circular economy led by innovations in technology and business models 4. It also assumes that renewable energy sources (e.g., solar, wind, hydroelectric power) become the dominant sources of energy For each scenario, a hazard assessment is conducted, including the following parameters: cyclones, extreme heat, extreme cold, flooding, landslides, water stress & drought, and wildfires. During this step, present and future climate hazard materiality is identified. Following this,, a sensitivity assessment and an assessment of the adaptive capacity of each site is undertaken to provide a determination of the vulnerability of each site. The score attributed to the vulnerability of each site is combined with the score of the concerned site's exposure assessment and the assessment of the likelihood and magnitude of the projected hazard at each location. This process provides an overall risk significance for each site.
Physical climate scenarios: RCP 8.5	Company-wide	<Not Applicable>	On our current update of our Climate Risk Assessment, an initial screening on all active Orbia sites took place to identify a set of priority sites where a deeper analysis would take place to determine risk and financial quantification. For our physical risk analysis we are using the following Scenarios: Higher emissions scenario (SSP5: Fossil-fueled Development, equivalent to RCP 8.5) This high emissions scenario assumes: 1. That the world pursues high economic growth and a fossil fuel-dependent pathway which deviates greatly from the targets outlined in the Paris Agreement. 2. That governments have very little regard for environmental protection or preservation. 3. That there is little investment in renewable energy or energy/resource efficiency. 4. That there is an increase in industrialization and urbanization brought about by pollution, deforestation and habitat destruction. As a result, average global temperature to reach about 4.4°C higher than preindustrial levels by 2100. For each scenario, a hazard assessment is conducted, including the following parameters: cyclones, extreme heat, extreme cold, flooding, landslides, water stress & drought, and wildfires. During this step, present and future climate hazard materiality is identified. Following this, a sensitivity assessment and an assessment of the adaptive capacity of each site is undertaken to provide a determination of the vulnerability of each site. The score attributed to the vulnerability of each site is combined with the score of the concerned site's exposure assessment and the assessment of the likelihood and magnitude of the projected hazard at each location. This process provides an overall risk significance for each site.
Transition scenarios: NGFS scenarios framework	Company-wide	<Not Applicable>	For our transition analysis, we are using 2 climate scenarios from the Network for Greening the Financial System (NGFS) climate scenarios, evaluated at baseline year (2022), medium-term (2030) and long-term (2050). Parameters included are law and policy change, market change and technology change, among others. Orderly Transition Scenario. This orderly scenario assumes: 1. That the world has successfully transitioned towards a low carbon economy. 2. That global surface temperature rise has been limited to below 2°C. 3. That decarbonization has been a key focus of the energy sector and renewable energy replaces the use of fossil fuels. 4. That carbon capture and storage technologies mitigate residual emissions. 5. That this brings about improved air and water quality, better health outcomes, and reduced poverty and inequality. 6. This is only possible with coordinated and decisive action from governments and international organizations. 7. This is supported by redirection of investment towards low-carbon and sustainable projects by financial institutions and investors. Hot House World Scenario. This disorderly scenario assumes: 1. That the world has failed to take sufficient action to address climate change. 2. That this has resulted in 3°C of surface temperature warming. 3. As a result, extreme weather events (e.g., heatwaves, droughts, and floods) have become more frequent and severe. 4. Food security is threatened by extreme weather events and declining agricultural productivity. 5. Whilst fossil fuel remains the primary source of energy. 6. Countries prioritize their own economic interests over global environmental concerns.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

What does most recent science data tell about the current and future exposures of Orbia's Business Groups to climate risks?
Will current exposures be material in the future?
How significant could be the impact in the worst case scenario for highly relevant sites be?
Does Orbia need to strengthen contingency plans in any of its key sites?
What should we do to mitigate our impacts, how and when?
Do risk management processes, strategy and product portfolio need to be adjusted?
Does Orbia track all the relevant variables to support decision-making?
How significant could be climate impacts affecting key players of our value chain?
Is Orbia in a good position to be compliant with potentially upcoming climate-related regulations?
What are the climate-related opportunities that arise for Orbia and it's Business Groups?
Can we contribute to mitigate and adapt to a changing climate through our solutions?

Rationale for choosing SSP1, SSP5 and NGFS Scenarios:
Orbia's intention is to understand and prepare for possible climate-related outcomes to 2030 and 2050 We are doing so by comparing outcomes from a low emission scenario (SSP1-Taking the Green Road), which relies on a high effort to cut emissions and where challenges to adaptation and mitigation are low and estimated warming by 2100 could be around 1.4°C , and a high emission scenario based on a 'business as usual' trajectory which would see temperatures increase by around 4.5°C or more by 2100, and where challenges to adaptation are high. This way the boundary cases are considered, and possible intermediate situations are discussed to identify the level of efforts necessary to mitigate and adapt to climate change.

On the transitions risks side, Orbia's intention is to understand the potential effects of current, announced and potential regulations needed to be on a well below 2°C pathway (orderly transition) and a "current policies" scenario where currently implemented policies are preserved. Again, in this way the boundary cases are considered, and possible intermediate situations are discussed to identify the level of efforts necessary to mitigate and adapt to climate change.

Results of the climate-related scenario analysis with respect to the focal questions

Our first scenario analysis allowed us to identify climate-related risks for highly relevant Orbia sites for both physical and transition risks to 2030.
For physical risks, it was concluded that Orbia's most relevant risk exposures are:
1) increased severity and frequency of cyclones and floods, leading to reduced capacity, decreased production and revenues with a medium-low magnitude of financial impact
2) increased water stress and drought leading to reduced capacity resulting in decreased revenues with a low magnitude of financial impact.
For transition risks, it was concluded that Orbia's most relevant risk exposures are:
1) carbon pricing mechanisms leading to increased direct costs, with a low magnitude of impact
2) mandates and regulations of existing products and services leading to reduced demand and decreased revenues from HFCs, with a medium- low impact to 2030.

The results of our climate risk and opportunity assessments have triggered internal initiatives to place climate change at the center of the challenges our business groups pursue as we continue to evolve into a low carbon and resilient business. Our Corporate Practices & Sustainability Committee, our thematic and multi-disciplinary working groups, and our businesses analyze how these challenges, and their potential financial implications, may affect the organization’s business and strategy. For example, carbon taxes and future increases in energy prices are now part of our financial planning. We also analyze how our solutions contribute to the mitigation and/or adaptation to climate-related challenges. The examples provided below illustrate how we respond to some of the risks and opportunities identified (described above), in line with our climate action framework and Business strategy.

1) Vestolit is developing bio-based PVC options to supply customers around the world with clean water, sanitation and other essential elements for good health. They are also deploying
renewable energy, bringing emissions from chlorine production closer to net zero.
2) Koura is expanding its portfolio of low global warming potential (GWP) next-generation refrigerants and propellants, and energy storage technologies that will drive a decarbonized future.
3) Wavin is growing its offering in segments including stormwater management, indoor climate systems, and green building solutions for urban and rural resilience.
4) Netafim has increased integrated precision irrigation offerings and moved into turnkey greenhouse solutions.
5) Duraline has has been investing in large-scale fiber optics and conduit projects to improve connectivity while minimizing environmental impacts.
6) Through Orbia Ventures Orbia is exploring new opportunities on carbon capture and hydrogen technology. Orbia has made a first investment in Verdagy, a company innovating on water electrolysis technology for large-scale production of green hydrogen.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Orbia's business groups have a collective focus on ensuring food security, reducing water scarcity, reinventing the future of cities and homes, connecting communities to data and information services, and expanding access to health and well-being through the provision of advanced materials, specialty products and innovative human-centered solutions. our products and solutions support multiple industries including construction, infrastructure, agriculture, health, transportation, data communications, energy and petrochemicals. Many of these industries are essential for daily life and one of the ways in which we demonstrate our commitment to global impact. We continuously assess our potfolio and their contribution towards 5 categories: - Climate Resilience & Decarbonization (low carbon solutions, resilient infrastructure, energy and resource efficiency): Buildings are responsible for 40% of energy use. Our Indoor Climate Solutions (ICS) enable heating and cooling of buildings at lower energy use and low carbon emissions compared to existing technologies. - Food & Water Security (access to water and sustainable agriculture): Agriculture accounts for 45% of methane emissions, which has a GWP 28 times that of CO2. An LCA of our products showed that, used in corn fields, drip irrigation has a carbon footprint at least 52% lower than flood irrigation and at least 38% lower than sprinkler irrigation. - Health and Well-being (disease treatment and healthcare): Koura supplies over 70% of the fluorine-based medical propellants used in the metered dose inhalers (MDIs) that ensure millions of asthma patients worldwide can breathe easily. - Sanitation and Water Management (sanitation infrastructure and hygiene): A byproduct of Vestolit's PVC production is caustic soda, a highly versatile substance commonly used in water treatment, to raise the pH of water by absorbing water and carbon dioxide, resulting in clean water. - Information Access (connectivity solutions): To expand broadband internet to underserved areas, Dura-Line's FuturePath 7-Way and 4-Way conduits enable a standardized connectivity infrastructure. -Energy Storage: Our Koura BG is expanding its portfolio to provide solutions to improve battery storage and a reliable supply chain. Batteries are a critical enabling technology in the world's transformation from dependence on fossil fuels.
Supply chain and/or value chain	Yes	Derived from tighter emerging regulations on fossil fuels, and taking advantage of circularity opportunities, we are constantly looking for raw materials alternatives, for instance switching from road to rail, or finding recycled or bio-based raw materials when available. Case 1: To create a future that's fit for the next generation, we need a future-fit next generation of PVC. In 2021, Vestolit marked a milestone with the incorporation of bio-based (by balance mass approach) ethylene in vinyl chloride production. The feedstocks' origin is rapeseed oil and used cooking oil. Both feedstocks integrate principles of circularity and do not compete with food production. This form of ethylene enables a 50% reduction in the carbon footprint of PVC compared to conventional fossil-fuel-based PVC. Case 2: Building & Infrastructure Business Wavin partnered with XPO Logistics to introduce road-rail freight that will significantly reduce CO2 emissions by an estimated 58% and NOx by 18.8 tons annually. Also, Connectivity Solutions Business Dura-Line completed the measurement of almost 80% of its transport-related emissions through BIGMILE software, which generates recommendations that will lead to decreased emissions >5% annually (2021 baseline), covering operations in the U.S., Canada, Poland, France and Germany. Case 3: Vinyl in Motion is a program created by our Polymer Solutions Business Group to promote the collection of discarded PVC products that can be transformed into useful products. It is allowing us to advance our post-consumer and post-industrial PVC circularity activities in Latin America by partnering with customers, final consumers, and relevant players of local PVC value chains. Some examples of the recycled materials are IV bags collected from hospitals, which are transformed by Alphagary into "Infinitude", a reborn compound which can then be used to manufacture hoses, wire jackets, car mats and shoe soles.
Investment in R&D	Yes	Our businesses are constantly investing in developing innovative low global warming potential (GWP) and low carbon products, such as our new medical grade propellant (GWP 90% lower than current propellants), new refrigerants, exploring options for fossil free resin, integrated recycled content and recyclability criteria in design, among others. We are also investing in the development of solutions, such as battery storage innovations, that enable and support the transition to a low carbon economy. Case 1: Conventional PVC production is linear, with fossil crude oil and salt as raw materials. It's also carbon-intensive, where for every kg of PVC produced, about 2.4 kg of CO2e are emitted. In line with business strategy to be future fit and sustainable, our PVC business is exploring options to produce fossil free PVC. See section 2.4 for more examples of R&D
Operations	Yes	Each Orbia business has targets to improve efficiency and transition to cleaner or renewable sources of energy and obtain or maintain an environmental management system. Among other related strategies, several plants have developed plans to adapt to potential extreme weather events. Climate-related risks have influenced our global targets to become carbon neutral by 2050 (reducing Scope 1 and 2 emissions by 47% by 2030, pending validation by the Science Based Target Initiative) and have all plants certified as ISO-14001 or equivalent by 2025. Case 1: Renewable energy consumption increased by 146% in 2022, driven by key projects across most of our Business Groups. Currently, 37% of our plant have been able to incorporate renewables into their electricity consumption. Case 2: Optimization projects: Connectivity Solutions Business Dura-Line has upgraded electrical connection conditions, resulting in both cost and GHG emissions reductions. Polymer Solutions Business Alphagary's plant in Leominster installed a new air compressor designed for superior energy efficiency. The system recovers over 90% of the heat generated by electrical energy and ducts it back into the building, providing warmth to employees during the colder New England months. Polymer Solutions Business Vestolit's La Presa plant has been working on implementing fuel energy savers to use natural gas more efficiently, while El Salto is completing the transition to a co-generation system.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Capital expenditures Capital allocation Acquisitions and divestments	Capital expenditures: Our capital expenditure and allocation process is being revised to accommodate projects that have a sustainability impact. We are working to include additional criteria that would allow us to tag a project as climate-related, where relevant. Through this method, we will ensure that projects that help us achieve our GHG emissions targets are flagged and can be escalated for approval. The revised capital allocation process will allocate considerable amounts of resources for sustainability-centered projects, allowing for a more robust pipeline of sustainability projects over the upcoming 5-10 years. The proposed initiatives will be evaluated based on their merit to move the needle towards achieving our sustainability targets, in addition to financial and technical consideration. Revenues: In 2020, we determined which of the 17 SDGs we can most effectively contribute to and aligned with eight that represent the greatest opportunities for Orbia to make an impact. These eight SDGs are aligned with the five key global challenges Orbia has identified as part of our business strategy. From 2020, at least 60% of our annual revenue contributes to the SDGs. (Page 47: https://www.orbia.com/49ac8a/siteassets/6.-sustainability/2022-impact-report/orbia_impact_report_2022.pdf) Investments: Orbia Ventures is Orbia's corporate venture capital fund and supports a collaborative, human-centered approach to creating a better future. By supporting startups that share our vision and are committed to developing leading-edge innovations and smart technologies, we can address the world's biggest challenges and help global communities become future-fit. During the year, Orbia Ventures completed five transactions, four of which were environmental impact-focused investments, amounting to a total of $9.3M, emphasizing Orbia's commitment to addressing global challenges. (Page 50: https://www.orbia.com/49ac8a/siteassets/6.-sustainability/2022-impact-report/orbia_impact_report_2022.pdf)

C3.5

(C3.5) 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	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with our climate transition plan	<Not Applicable>

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric
Revenue/Turnover

Type of alignment being reported for this financial metric
Alignment with our climate transition plan

Taxonomy under which information is being reported
<Not Applicable>

Objective under which alignment is being reported
<Not Applicable>

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)
1771000000

Percentage share of selected financial metric aligned in the reporting year (%)
13

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

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

Describe the methodology used to identify spending/revenue that is aligned
In 2022, 61% of Orbia's revenues contributed to the SDGs. Out of this 61% of our revenues, 13% came from solutions that enable climate resilience and decarbonization: from being low carbon, to providing alternative energy, increasing energy and resource efficiency and improving infraestructure's resilience. As we progress in our climate action journey, we will aim to increase the share of our revenues coming from these solutions.
Solutions are classified into these categories by linking the impact of our products to the SDGs and other methodologies. This process was. reviewed in collaboration with KPMG Mexico. See our methodology here: https://www.orbia.com/GlobalImpact/, as well as 2022 results here: https://sustainability.orbia.com/indicators/strategy/report/sustainable_solutions

---

Financial Metric
OPEX

Type of alignment being reported for this financial metric
Alignment with our climate transition plan

Taxonomy under which information is being reported
<Not Applicable>

Objective under which alignment is being reported
<Not Applicable>

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)
194277

Percentage share of selected financial metric aligned in the reporting year (%)
1

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

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

Describe the methodology used to identify spending/revenue that is aligned
Figure above represents a selected sample of the most relevant investments to improve our environmental performance and achieve our climate ambitions. We are working to strengthen our financial systems to better monitor expenditures related to our sustainability performance.

Financial Metric
CAPEX

Type of alignment being reported for this financial metric
Alignment with our climate transition plan

Taxonomy under which information is being reported
<Not Applicable>

Objective under which alignment is being reported
<Not Applicable>

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)
4079000

Percentage share of selected financial metric aligned in the reporting year (%)
12

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

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

Describe the methodology used to identify spending/revenue that is aligned
Figure above represents a selected sample of the most relevant investments to improve our environmental performance and achieve our climate ambitions. We are working to strengthen our financial systems to better monitor expenditures related to our sustainability performance.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?
Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
1.5°C aligned

Year target was set
2020

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Base year
2019

Base year Scope 1 emissions covered by target (metric tons CO2e)
651646

Base year Scope 2 emissions covered by target (metric tons CO2e)
1354235

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
2005881

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year
2030

Targeted reduction from base year (%)
47

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
1063116.93

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
581864

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
1029382

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
1611246

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]
41.8593593623058

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
Our SBT Scope 1 & 2 carbon target covers 100% of Orbia's global emission based on operational control. We have announced 47% reduction of our Scope 1 + 2 by 2030. We are proud to announce that the Science Based Targets initiative (SBTi) validated our near-term targets to reduce Scope 1 and 2 GHG emissions 47% by 2030 (from a 2019 base year) and our Scope 3 GHG emissions from use of and end of life treatment of sold products by 30% within the same timeframe.

Plan for achieving target, and progress made to the end of the reporting year
We aim to achieve meaningful Climate Action across three fronts: low impact and resilient operations, sustainable solutions for advancing a climate resilient economy, and driving new businesses for a net zero world.
Our main actions to reach our goal are condensed in 3 large fronts:

1. Optimizing processes to drive efficiencies.
2. Transitioning to renewables and lower carbon energy sources.
3. Exploring carbon capture and hydrogen investment opportunities.
Also, to accelerate progress towards our goals, Orbia has established a Decarbonization working group to identify value-adding partnerships between business groups and functions for implementation of high impact GHG reduction projects. More information in our Sustainability Report.

In 2022 we reduced our Scope 1&2 carbon footprint by 20% vs baseline year. This was achieved through process optimization projects, transitioning to renewables and lower carbon energy sources.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 2

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
Well-below 2°C aligned

Year target was set
2021

Target coverage
Company-wide

Scope(s)
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 11: Use of sold products
Category 12: End-of-life treatment of sold products

Base year
2019

Base year Scope 1 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
27908251

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
56881830

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
84790081

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
84790081

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
<Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

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

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

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)
<Not Applicable>

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)
<Not Applicable>

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)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
89.3

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
89.3

Target year
2030

Targeted reduction from base year (%)
30

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
59353056.7

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

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)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
24251366

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
52952762

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
77204128

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
77204128

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]
29.8224859579978

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
Our SBT Scope 3 carbon target covers 100% of Orbia's global emissions on use-phase and end-of-life treatment of our products (categories 11 & 12). We have announced 30% reduction of our Scope 3 Category 11 and 12 by 2030.
We are proud to announce that the Science Based Targets initiative (SBTi) validated our near-term targets to reduce Scope 1 and 2 GHG emissions 47% by 2030 (from a 2019 base year) and our Scope 3 GHG emissions from use of and end of life treatment of sold products by 30% within the same timeframe.

Plan for achieving target, and progress made to the end of the reporting year
To achieve our Scope 3 goal, we plan to replace our sales portfolio of our higher Global Warming Potential (GWP) refrigerants and propellants (mainly R-134a), with lower GWP alternatives. Many of these Leapfrog Refrigerants (LFRs) are currently on the market with others undergoing evaluation and testing by customers. We aim to increase our production capacity of the LFRs while we engage our current and potential customers. Our goal is to increase LFR market share while at the same time reducing the

amount of high GWP sold in the market. These activities will enable Orbia to achieve its Scope 3 target for reducing 30% of GHG emissions from Categories 11 & 12 by 2030.

In 2022 we reduced our Scope 3 carbon footprint by 9% vs baseline year (Categories 11 & 12). This was achieved mainly due to our strategy to transform the refrigerants portfolio of mid Global Warming Potential (GWP) refrigerants and propellants (mainly R-134a) to low GWP alternatives.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Net-zero target(s)
Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2019

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Waste management	Percentage of sites operating at zero-waste to landfill

Target denominator (intensity targets only)
<Not Applicable>

Base year
2019

Figure or percentage in base year
24

Target year
2025

Figure or percentage in target year
100

Figure or percentage in reporting year
43

% of target achieved relative to base year [auto-calculated]
25

Target status in reporting year
Underway

Is this target part of an emissions target?
As stated by the GHG Protocol, Scope 3 - Category 5 emissions are related to waste disposed. Progress to reach our Zero Waste To Landfill target will lead to a reduction in indirect GHG emissions.

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions
The target was developed internally following discussions with stakeholders in our different business groups, and it covers all of our active production facilities in the reporting year.
Regarding the exclusions, this target does not consider waste generated from special projects (Non-related to production, for example: construction, demolition, excavation. etc.).

Plan for achieving target, and progress made to the end of the reporting year
For the 2021-2022 period, we moved from 39% to 43% of Orbia sites compliant with our Zero Waste to landfill standard, meaning that maximum 10% of their total waste is being sent to landfill. Plan to achieve target includes efforts to reduce waste at the source and consolidate partnerships with waste management companies that can support the process of identifying diversion solutions. Overall, waste generated on a per ton basis has been consistently decreasing, and our absolute volume of process-related waste to landfill or incinerated without energy recovery was 12% lower in 2022 than in 2021.

List the actions which contributed most to achieving this target
<Not Applicable>

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number
NZ1

Target coverage
Company-wide

Absolute/intensity emission target(s) linked to this net-zero target
Abs1

Target year for achieving net zero
2050

Is this a science-based target?
Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

Please explain target coverage and identify any exclusions
Our Net-Zero Scope 1 & 2 carbon target covers 100% of Orbia's global emission based on operational control. We have announced 47% reduction of our Scope 1 + 2 by 2030. This is a Science Based Target aligned with the 1.5°C scenario, and approved by the SBTi committee. We consider this to be halfway milestone on the longer journey to achieve net-zero emissions by 2050. A more detailed roadmap to 2050 is available in page 32 of our 2022 Impact Report.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?
Unsure

Planned milestones and/or near-term investments for neutralization at target year
<Not Applicable>

Planned actions to mitigate emissions beyond your value chain (optional)
We are not yet at the stage where we can disclose plans to reduce emission beyond our value chain.

C4.3

(C4.3) 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.
Yes

C4.3a

(C4.3a) 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	3	
To be implemented*	6	24673
Implementation commenced*	1	1400
Implemented*	4	95418
Not to be implemented	0	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)
74941

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
651159

Payback period

No payback

Estimated lifetime of the initiative
>30 years

Comment
This reduction corresponds to all the emissions avoided by claiming certified sourcing of renewable zero emission electricity during 2022. Financial figures, payback period and lifetime of initiative are not comprehensive and were estimated based on average renewable electricity sourcing prices across our organization. Further details on our renewable electricity purchased can be seen in answer to question C8.2e.

Initiative category & Initiative type

Other, please specify	Other, please specify (Stopped consumption of high GHG fuel - Coal)

Estimated annual CO2e savings (metric tonnes CO2e)
18045

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1500000

Investment required (unit currency – as specified in C0.4)
576610

Payback period
<1 year

Estimated lifetime of the initiative
>30 years

Comment
This reduction was estimated based on the direct emissions related to the decommissioning of a coal boiler at one of our sites.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
1339

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1
Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
115524

Investment required (unit currency – as specified in C0.4)
0

Payback period
1-3 years

Estimated lifetime of the initiative
11-15 years

Comment
These figures correspond to a process optimization initiative at one of our Vestolit facilities that resulted in lower energy consumption.

Initiative category & Initiative type

Energy efficiency in buildings	Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
1093

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
77826

Investment required (unit currency – as specified in C0.4)
30000

Payback period
1-3 years

Estimated lifetime of the initiative
11-15 years

Comment
These figures correspond to an investment at one of our Duraline facilities to replace conventional lighting for LED, and replacing a HVAC unit for a more efficient one.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	Our sites in the EU either fall under the ETS or have the ISO 50001 or are subject to the Energy Efficiency directive. In these cases, the sites have the necessary action plan, budgets and responsibility to set and meet the reduction targets as prescribed by their systems. In addition, Orbia continuously reviews evolving requirements and regulations to make sure the necessary actions to be compliant are excecuted; an example of this are the prep sessions to meet CSRD and CBAM requirements in the EU. Orbia Corporate is continuously identifying how to enable de-carbonization, while also removing bottlenecks, leaving the specific projects, actions, etc. to the business unit discretion, in such a way that they chose the most cost-effective and emission reduction effective tools.
Dedicated budget for other emissions reduction activities	Every year, BGs are asked to allocated a specific budget dedicated to emission reduction initiatives and other sustainability related projects. Orbia, also reserves some budget for cross-business decarbonization initiatives. Orbia Corporate is continuously identifying how to enable de-carbonization, while also removing bottlenecks, leaving the specific projects, actions, etc. to the business unit discretion, in such a way that they chose the most cost-effective and emission reduction effective tools.
Dedicated budget for energy efficiency	We are currently working on defining a percentage of our annual capital budget to be dedicated to energy efficiency. Orbia Corporate is continuously identifying how to enable de-carbonization, while also removing bottlenecks, leaving the specific projects, actions, etc. to the business unit discretion, in such a way that they chose the most cost-effective and emission reduction effective tools.
Internal incentives/recognition programs	All Senior Manager roles and above now have an ESG modifier in their compensation. Achieving emission and waste reductions can impact +-10% of their annual bonus. Emissions reduction targets have also been added to performance goals of several relevant positions within the different Orbia business groups. In addition, HSE and energy-related positions are regularly evaluated based on their site efficiency performance and their variable compensation is impacted accordingly. Orbia Corporate is continuously identifying how to enable de-carbonization, while also removing bottlenecks, leaving the specific projects, actions, etc. to the business unit discretion, in such a way that they chose the most cost-effective and emission reduction effective tools.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation
Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon
Other, please specify (Products, services, processes, and technologies that utilize the Earth's limited resources in a sustainable manner while minimizing impacts on the environment.)

Type of product(s) or service(s)

Other	Other, please specify (Portfolio with recycled content, spaning from building and infrastructure development to precision irrigation driplines and stabilizers.)

Description of product(s) or service(s)
Our Wavin, Alphagary and Vestolit brands offer a wide range of solutions that contain recycled content. Using the Lifecycle Assessment (LCA) methodology, we can compare products made from virgin raw materials to products with recycled materials, demonstrating that the carbon footprint is lower when using recycled material.
In the case of Wavin, several of their business segments have integrated recycled content in existing or new products, particularly in urban climate resilience, cable and geosythetics solutions.
Or Netafim businesss, though a dripline removal and collection service, is developing driplines with recycled content, in line with 2030 commitment for all driplines to contain at least 45% of recyled content.
Alphagary has a 3 ranges of specialty compounds that contains from 50 to 97% of recycled content, and continues to develop the VINASTAB stabilizer series to enable customers to better process recycled feedstock.
Finally, Vestolit has developed PVC resin using fossil-free feedstock.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
No

Methodology used to calculate avoided emissions
<Not Applicable>

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
<Not Applicable>

Functional unit used
<Not Applicable>

Reference product/service or baseline scenario used
<Not Applicable>

Life cycle stage(s) covered for the reference product/service or baseline scenario
<Not Applicable>

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
<Not Applicable>

Explain your calculation of avoided emissions, including any assumptions
<Not Applicable>

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
2

Level of aggregation
Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon
Other, please specify (Products or services that result in fewer net carbon emissions than alternative products. Including processes or technologies that produce substantially lower amounts of greenhouse gas emissions and are more energy efficient than conventional methods)

Type of product(s) or service(s)

Other	Other, please specify (Climate solutions, refrigerant and resins)

Description of product(s) or service(s)
Through the Indoor Climate Solutions from our Wavin brand, users can save up to 21% energy consumption by using zone control, up to 20% by using underfloor heating instead of radiators and up to 34% in cooling vs. air conditioning.
Our Vestolit resins portfolio includes low temperature fusion resins, which allow lower processing (fusion) temperature, resulting in energy saving,
Also, our Koura brand is continuing to decarbonize regrigerants throguh KLEA products. Klea 456A continues to gain momentum in the EU & UK
as a “drop in” replacement for R134a in the mobile air conditioning (MAC) aftermarket sector, with only half itsGlobal Warming Potential (GWP). Klea 473A is also growing as a non-flammable replacement in ultra-low temperature cooling applications (e.g. vaccine storage, test chambers, and transportation), offering the same performance as R-23 or R-508A/B while reducing GWP by 90%. Klea 473A won Refrigeration Innovation of the Year at the 2022 Cooling Industry Awards.
The latest product added to the portfolio is LFR3, which is designed to achieve a lower environmental impact and better performance than CO2 across a range of ambient temperatures and it is expected to increase energy efficiency by 20%.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
No

Methodology used to calculate avoided emissions
<Not Applicable>

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
<Not Applicable>

Functional unit used
<Not Applicable>

Reference product/service or baseline scenario used
<Not Applicable>

Life cycle stage(s) covered for the reference product/service or baseline scenario
<Not Applicable>

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
<Not Applicable>

Explain your calculation of avoided emissions, including any assumptions
<Not Applicable>

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
2

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?
No

C5.1a

(C5.1a) 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?

Row 1

Has there been a structural change?
Yes, an acquisition

Name of organization(s) acquired, divested from, or merged with
During 2022, acquisitions from (Vectus and Shakun) were integrated into our reporting systems.

Details of structural change(s), including completion dates
Vectus: manufacturer of plumbing and drainage pipes and the market leader in water storage tanks in India. Consists of 14 production plants located in India.
Shakun: market leader in the production of compounds for the wire and cable markets in the Indian subcontinent, the Middle East, Southeast Asia and Africa. Consists of 4 production plants located in India. As emissions associated with these acquisitions represent less than 5% of our footprint , baseline year data was not adjusted.

C5.1b

(C5.1b) 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?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	No, because the impact does not meet our significance threshold	<Not Applicable>	GHG Protocol establishes a significance threshold for deciding on historic emissions recalculation, when variation exceeds 5% of the total baseline inventory (based on materiality definition). Orbia adopts this 5% threshold, meaning that recalculation will be triggered when any structural change(s) exceed Orbia's baseline by 5%. Vectus and Shakun acquisitions, GHGE emissions do note exceed the 5% threshold established.	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
651646

Comment
In 2022, figures for 2019 Scope 1 were updated to include leased vehicles emissions. Priorly, these emissions were before being accounted under Scope 3 Category 8 (Category 8: Upstream leased assets), but since we have operational control of the vehicles, we needed to re-allocate the emissions to Scope 1 . This represented an increase in Scope 1 of 0.9%.

Scope 2 (location-based)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
1422375

Comment
Calculated considering average national CO2 emission factors published by the International Energy Association.

Scope 2 (market-based)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
1354235

Comment
Scope 2 market-based electricity emission factors are sourced from the International Energy Agency (IEA) data 2020 version, where supplier emission factors are not available. We expect to increase the amount of direct primary data from suppliers going forward.

Scope 3 category 1: Purchased goods and services

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
5440204

Comment
All data was calculated using our internal database to assess the consumption of the different raw materials and other purchased goods and services. Emission factors were sourced from public sources and consultancy services.

Scope 3 category 2: Capital goods

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
148690

Comment
All activity data was sourced from our internal data bases. Emissions were calculated using the Quantis Evaluation Tool.

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

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
344069

Comment
All activity data was sourced from our internal data bases. Emission factors were sourced from the IEA (electricity) and DEFRA's WTT (fuels).

Scope 3 category 4: Upstream transportation and distribution

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
367180

Comment
Supplier emissions were sourced were possible (less than 1%). Freighted tons and miles were compiled from our internal data base, emissions were calculated with DEFRA emission factors. When freighted tons and miles were not available, the calculations were based on internal estimates (less than 30% of this category's emissions).

Scope 3 category 5: Waste generated in operations

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
5991

Comment
We used our internal databases for activity data (mass of waste by disposal method). Emission factors were sourced from DEFRA.

Scope 3 category 6: Business travel

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
81242

Comment
Where possible, data was collected directly from suppliers (travel agencies). Remaining information was calculated using travelled miles and DEFRA emission factors.

Scope 3 category 7: Employee commuting

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
19623

Comment
We extrapolated the findings of a survey conducted by the Institute for Transportation and Development Policy (ITDP) on GHG emissions from the commute of Orbia employees in Mexico City.

Scope 3 category 8: Upstream leased assets

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
As mentioned before, since we have operational control of the leased vehicles we use, emissions were re-allocated to Scope 1.

Scope 3 category 9: Downstream transportation and distribution

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
21180

Comment
Based on estimated average GHG emission per ton sold and transported where we hold control, we estimated the emissions for the outbound freighted tons we do not control.

Scope 3 category 10: Processing of sold products

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
3173015

Comment
Based on the sales per Business Group and the sold product categories (metric tons), GHG emission were calculated by using the Quantis Evaluation Tool.

Scope 3 category 11: Use of sold products

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
27908251

Comment
Values were calculated based on the GWP of our fluorinated products and required pumping energy for our extrusion products during the use phase. We used publicly available information and internal LCAs.

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

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
56881830

Comment
Values were calculated based on the GWP of our fluorinated products. For the rest of our products, we used the Quantis evaluation tool.

Scope 3 category 13: Downstream leased assets

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
We (as lessors) have not identified relevant lease contract with any third party (lessee).

Scope 3 category 14: Franchises

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
Orbia does not opperate franchises.

Scope 3 category 15: Investments

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
526454

Comment
GHG emissions were obtained from entering the revenue from our Ingleside Texas JV into the Quantis evaluation tool. Cost-based method.

Scope 3: Other (upstream)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
We do not include any category in our Scope 3 inventory other than the 15 established in the GHG Protocol.

Scope 3: Other (downstream)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
We do not include any category in our Scope 3 inventory other than the 15 established in the GHG Protocol.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance
The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
581864

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
2022 Scope 1 data includes process GHG emissions, in addition to fuel-combustion related emissions (including leased vehicles).

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

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

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment
Some supplier specific emissions factors (EFs) were used in our calculations. We aim and are working to increase availability of supplier-specific EFs, to continuously improve the accuracy of our GHG database.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
1154334

Scope 2, market-based (if applicable)
1029382

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
2022 Scope 2 data includes purchased electricity, heating, steam and cooling (including leased electric vehicles).

C6.4

(C6.4) 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?
Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source of excluded emissions
Fugitive HFCs releases from refrigeration systems

Scope(s) or Scope 3 category(ies)
Scope 1

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
<Not Applicable>

Relevance of market-based Scope 2 emissions from this source
<Not Applicable>

Relevance of Scope 3 emissions from this source
<Not Applicable>

Date of completion of acquisition or merger
<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents
4

Estimated percentage of total Scope 3 emissions this excluded source represents
<Not Applicable>

Explain why this source is excluded
Through our work to set our Science Based Targets, we have conducted a full screening of our GHG emissions extensive database. Refrigeration related emissions were found to be irrelevant and negligible in comparison with Orbia's total Scope 1 and Scope 2 emissions. The overall value of these excluded emissions was found to be less than 4% of the included GHG emissions. Due to high complexity of gathering this data annually, it was decided that the needed resources of data collection are not justified due to the negligibility of emissions. This conclusion could be re-evaluated in the future, upon any chance in relevant circumstances.

Explain how you estimated the percentage of emissions this excluded source represents
Where available, we collected data on refrigerant releases from refrigeration systems for most sites, where not available proxy data based on the nature of the process was used to estimate values.

Source of excluded emissions
Satellite warehouses and offices

Scope(s) or Scope 3 category(ies)
Scope 1
Scope 2 (location-based)
Scope 2 (market-based)

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of Scope 3 emissions from this source
<Not Applicable>

Date of completion of acquisition or merger
<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents
1

Estimated percentage of total Scope 3 emissions this excluded source represents
<Not Applicable>

Explain why this source is excluded
Satellite warehouses and offices are those that are not within the physical boundaries of any Orbia production plant. Through our work to set our Science Based Targets, we have conducted a full screening of our GHG emissions extensive database. These emissions were found to be irrelevant and negligible in comparison to Orbia's total scope 1 and scope 2 emissions. The overall value of these excluded emissions was found to be less than 1% of the included GHG emissions. Due to high complexity of gathering this data annually, it was decided that the needed resources of data collection are not justified- due to the negligibility of emissions. This conclusion could be re-evaluated in the future, upon any chance in relevant circumstances.

Explain how you estimated the percentage of emissions this excluded source represents
Data on electric and fuel consumption was collected from a small sample of offices and warehouses. The results were extrapolated to the rest of the sites.

C6.5

(C6.5) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
4963394

Emissions calculation methodology
Average data method
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
For raw material related-emissions, we have used cradle to gate emission factors obtained from public or private recognized databases (e.g. Ecoinvent). For all other purchased goods and services related-emissions, we have used the cost-based method proposed by the Quantis evaluation tool.

Capital goods

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
306932

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
The emissions related to capital goods purchased were estimated using the Quantis Scope 3 evaluation tool, using the value of the purchased capital goods in the reporting year. Emissions related to this category represent less than 1% of our total Scope 3 inventory, therefore are considered not relevant.

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

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
235962

Emissions calculation methodology
Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
We used our internal databases for activity data (fuel and electricity consumption). Emission factors were sourced from the IEA (electricity) and DEFRA's WTT (fuels). Emissions related to this category represent less than 1% of our total Scope 3 inventory, therefore are considered not relevant.

Upstream transportation and distribution

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
334998

Emissions calculation methodology
Supplier-specific method
Average data method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Supplier emissions were sourced were possible (less than 1%). Freighted tons and miles were compiled from our internal data base, emissions were calculated with DEFRA emission factors. When freighted tons and miles were not available, the calculations were based on internal estimates (less than 30% of this category's emissions). Emissions related to this category represent less than 1% of our total Scope 3 inventory, therefore are considered not relevant.

Waste generated in operations

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
5253

Emissions calculation methodology
Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
We used our internal databases for activity data (mass of waste by disposal method). Emission factors were sourced from DEFRA. Emissions related to this category represent less than 1% of our total Scope 3 inventory, therefore are considered not relevant.

Business travel

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
58562

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
The emissions related to business travel were estimated using the Quantis Scope 3 evaluation tool, considering the travel expenses in the reporting year. Emissions related to this category represent less than 1% of our total Scope 3 inventory, therefore are considered not relevant.

Employee commuting

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
22056

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
We extrapolated the findings of a survey conducted by the Institute for Transportation and Development Policy (ITDP) on GHG emissions from the commute of Orbia employees in Mexico City. Emissions related to this category represent less than 1% of our total Scope 3 inventory, therefore are considered not relevant.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
As mentioned before, since we have operational control of the leased vehicles we use, these emissions are currently being reported in our Scope 1 &2, according to the fuel type.

Downstream transportation and distribution

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
19324

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Based on estimated average GHG emission per ton sold and transported where we hold control, we estimated the emissions for the outbound freighted tons we do not control. Emissions related to this category represent less than 1% of our total Scope 3 inventory, therefore are considered not relevant.

Processing of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
4580392

Emissions calculation methodology
Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Based on the sales per Business Group and the sold product categories (metric tons), GHG emission were calculated by using the Quantis Evaluation Tool.

Use of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
24251366

Emissions calculation methodology
Hybrid method
Average data method
Average product method
Other, please specify (Estimated refrigerant release at use phase method)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Values were calculated based on the GWP of our fluorinated products and required pumping energy for our extrusion products during the use phase. We used publicly available information and internal LCAs.

End of life treatment of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
52952762

Emissions calculation methodology
Hybrid method
Average data method
Other, please specify (Estimated refrigerant release at end-of-life method)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Values were calculated based on the GWP of our fluorinated products. For the rest of our products, we used the Quantis evaluation tool.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We (as lessors) have not identified relevant lease contract with any third party (lessee).

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Orbia does not operate franchises.

Investments

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
654979

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
The emissions related to investments were estimated using the Quantis Scope 3 evaluation tool, considering the sales of our Ingleside site in the reporting year. Emissions related to this category represent less than 1% of our total Scope 3 inventory, therefore are considered not relevant.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We have not identified other relevant emissions in our value chain.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We have not identified other relevant emissions in our value chain.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
No

C6.10

(C6.10) 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.

Intensity figure
0.214

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
1611246

Metric denominator
metric ton of product

Metric denominator: Unit total
7522216

Scope 2 figure used
Market-based

% change from previous year
1.5

Direction of change
Increased

Reason(s) for change
Change in renewable energy consumption
Acquisitions
Change in output

Please explain
Orbia's Scope 1&2 decreased by 11% from 2021 to 2022, mainly due to increased consumption of certified renewable electricity and general transition to cleaner energy grids in the regions where we operate. On the other hand, our production also decreased 12%, mainly due to changes in the market. These factors combined have resulted in a small increase of intensity per metric ton of product (1.5%).

Intensity figure
0.167

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
1611246

Metric denominator
unit total revenue

Metric denominator: Unit total
9648000

Scope 2 figure used
Market-based

% change from previous year
19.1

Direction of change
Decreased

Reason(s) for change
Change in renewable energy consumption
Acquisitions
Change in revenue

Please explain
Orbia's revenues increased by 10% from 2021 to 2022, partly due to new acquisitions. On the other hand, our Scope 1 & 2 emissions decreased 11%, mainly due to increased consumption of certified renewable electricity and general transition to cleaner energy grids in the regions where we operate. These factors combined have resulted in a significantly lower intensity per unit of revenue (USD).

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	556900	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	259	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	362	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	24343	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
India	2628.37
United Kingdom of Great Britain and Northern Ireland	20377.25
United States of America	85252.87
Germany	58616.79
Colombia	101890.06
Mexico	283365.65
Japan	19676.57
Poland	867.08
Oman	39.14
France	528.16
Czechia	256.69
Peru	615.18
Venezuela (Bolivarian Republic of)	1.61
Argentina	98.13
Ecuador	1254.71
Brazil	2141.31
Costa Rica	155.22
Guatemala	217.89
Belgium	28.67
Denmark	450.17
Finland	176.13
Italy	331.55
Netherlands	1136.8
Norway	6.48
Sweden	206.4
Hungary	9.24
Russian Federation	41.61
Ireland	137.91
Turkey	7.03
China	6.05
Israel	29.8
Chile	30.19
Spain	1057.01
South Africa	22.37
Australia	11.38
Canada	192.45

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division
By facility
By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Fluorinated Solutions	115843
Polymer Solutions	431410
Data Communication	2368
Precision Agriculture	1644
Building & Infrastructure	24379
Orbia Corporate (leased vehicles for employee usage)	6220

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Melton Mowbray	142.32	52.752347	-0.906794
Chinley	432.38	53.336509	-1.947333
Leominster	681.09	42.533303	-71.708668
Denver	19.04	40.223576	-76.112498
Pineville	1044.06	35.102368	-80.886713
Marl	57458.08	51.681563	7.100299
Henry	24919.23	41.133953	-89.34279
Pedricktown	10754.61	10.326719	-75.506137
Cartagena Compuestos	0	10.326722	-75.503948
Cartagena Resinas	101175.85	10.326719	-75.506137
Altamira I Compuestos	36188.33	22.407533	-97.895293
Altamira I Resinas	49457.02	22.407533	-97.897466
Altamira II	26717.56	22.453146	-97.989971
La Presa	10572.85	19.524784	-99.120775
Tlaxcala Compuestos	24.99	19.168273	-98.227892
Tlaxcala Resinas	6887.47	19.168018	-98.228002
Coatzacoalcos	70207.96	18.112317	-94.401488
PMV Minera	44.31	18.00516	-94.744207
Tultitlan - Quimir	10088.55	19.614368	-99.18141
Cajica Derivados	280.38	4.965886	-74.007433
Las Cuevas	15765.64	21.941647	-100.577946
Muzquiz	94.8	27.882263	-101.512374
El Patio	1005.51	22.111257	-100.91655
Rioverde	563.45	21.966143	-100.008897
Matamoros	24804.85	25.90719	-97.55164
St. Gabriel	46046.12	30.235727	-91.099571
Rocksavage	7885.97	53.313628	-2.721378
Mihara	19676.57	34.392411	133.082727
Sochaczew	255.37	52.198125	20.192055
Goa	282.24	15.370961	73.935767
Hyderabad	38.53	17.169561	78.292594
Neemrana	31.97	27.981117	76.39402
Sohar	39.14	24.429516	56.569919
Serrieres	24.54	45.902325	5.837029
Tlumacov	127.87	49.261358	17.497471
Celta - Barranquilla	19.63	4.916205	-74.046668
Pavco Bogota - Tubosistemas	210.27	4.595469	-74.163708
Pavco Bogota - Geosistemas	51.35	4.595469	-74.163708
Guachene - Tubosistemas PVC y GRP	145.35	3.13303	-76.39174
Guachene - Geosistemas	0	3.210059	-76.420308
Lima - Tubosistemas	219.18	-12.05875	-76.948808
Arequipa - Tubosistemas	224.27	-16.41931	-71.509073
Lima - Geosistemas	148.05	-12.05875	-76.948808
Venezuela - Cua	1.61	10.167855	-66.897998
Argentina - Pablo Podesta	98.13	-34.580023	-58.610246
Ecuador - Duran	1254.71	-2.191214	-79.82391
Sao Jose dos Campos	1545.08	-27.553411	-48.619858
Suape Brasil	62.97	-8.398121	-35.060988
Sumare	304.44	-22.82007	-47.246744
Joinville Floresta	74.74	-26.337979	-48.846319
Joinville Gloria	72.72	-26.288632	-48.86484
Ribeirao das Neves	34.12	-19.787366	-44.010545
Costa Rica - Belen	155.22	9.979466	-84.165975
Guatemala - Palin	217.89	14.599499	-90.539061

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Cuautitlan - Tubosistemas	180.95	19.652829	-99.191232
Cuautitlan - Geosistemas	2.53	19.652829	-99.191232
Leon	188	21.087885	-101.681612
San Luis Potosi	33.89	22.111248	-100.916557
St. Niklaas	28.67	51.149056	4.126486
Hammel	450.17	56.25238	9.850467
Joutsa	0.97	61.759525	26.1079
Kangasala	175.16	61.476556	23.991944
Twist	995.73	52.641412	7.106509
Westeregeln	162.98	51.957013	11.376339
S.M. Maddalena	331.55	44.904102	11.600488
Hardenberg	1128.52	52.566193	6.631615
Holand	6.48	59.802048	11.444419
Eskilstuna	206.4	59.370968	16.683764
Horni Pocernice	0	50.122406	14.613469
Kostelec nad Labem	128.81	50.234759	14.584053
Zsambek	9.24	47.545381	18.731108
Buk	500.84	52.348872	16.52665
Strzelin	110.87	52.404036	16.865753
Bykovo	41.61	55.608417	38.061509
Sorgues	28.66	44.01385	4.889576
Varennes	474.96	46.291543	3.425363
Balbriggan	137.91	53.605575	-6.184051
Chippenham	1222.44	51.470218	-2.106321
Doncaster	659.27	53.488512	-1.185
Forest Works	1414.78	54.750426	-1.612809
Hazlehead	8620.08	53.538558	-1.727663
Adana W	7.03	36.979655	35.621797
Foshan	6.05	23.124325	113.006518
Magal	2.16	32.3867	35.033955
Hatzerim	15.67	31.240549	34.717515
Yiftach	11.97	33.125323	35.551687
Reynosa	33.61	26.008416	-98.268321
Fresno	149.74	36.764151	-119.718105
Santiago	30.19	-33.374309	-70.754727
Lurin	23.67	-12.290457	-76.841186
Adana Netafim	0	36.979655	35.621797
Valencia	1057.01	39.477738	-0.543038
Rucphen	8.28	51.957172	4.229192
Chennai	18.81	12.73713	80.0045
Vadodara	11.86	22.547857	73.462372
Yinchuan	0	38.463906	106.100619
Cape Town	22.37	-33.841484	18.731544
Melbourne	11.38	-37.816165	144.786698
Ribeirao Preto	47.25	-21.12044	-47.831812
Cali - Colpozos	7.22	3.490394	-76.507896
Fowler	192.98	36.762922	-119.705432
El Salto	18482.53	20.49023	-103.22593
Lecheria - Quimir	5800.88	19.613016	-99.181174
Clinton	80.64	36.10165	-84.124722
Sugar Lane	170.51	41.35954	-82.0739
Garden Street	156.63	41.359269	-82.122423
Erwin	75.25	36.130276	-82.436797
Evansville	96.83	42.85858	-106.216867
Gainesville	204.35	33.657908	-97.152932
Gravenhurst	192.45	44.995893	-79.321291
McAlester	88.66	34.925377	-95.824824
Mountain Grove	78.16	37.125345	-92.278139
North Salt Lake	233.03	40.857473	-111.909585
Sandersville	91.95	32.999553	-82.83551
Sparks	121.67	39.527895	-119.724202
Tenille	48.3	32.949928	-82.799816
Halol - 1	5.62	22.532686	73.45396
Halol - 2	3.92	22.539283	73.450446
Halol - 3	15.93	22.570554	73.488727
Daman	4.9	20.459532	72.86432
Banmore-II	98.1	26.371539	78.086547
Banmore-III	37.24	26.363889	78.088333
Dahej	105.98	21.719167	72.676111
Bhopal	535.74	23.105833	77.519167
Guwahati	28.76	26.354167	91.676389

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Haridwar-I	29.4	29.951389	78.060833
Haridwar-II	0.01	29.955556	78.07
Jaipur	447.68	26.806111	75.560833
Jammu	120.8	32.641944	74.938611
Kashipur	89.79	29.135833	78.938611
Sikandrabad	73.49	28.469444	77.663611
Raipur	201.14	21.305	81.610833
Trichy	91.32	11.002778	78.81
Tumkur	355.14	13.485556	77.037778
Orbia Corporate (leased vehicles for employee usage)	6220	19.424597	-99.174396

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Natural gas combustion for co-generation	119465
Natural gas combustion for heating	352228
Other fuels burned at sites	52393
Process	51558
Leased vehicles for employee usage	6220

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	547253	<Not Applicable>	These emissions only apply to the chemical operations: Fluorinated Solutions and Polymer Solutions.
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
India	47909.32	37291.28
United Kingdom of Great Britain and Northern Ireland	13600.76	3653.18
United States of America	105873.43	105873.43
Germany	413182.91	402164.67
Colombia	24228.18	24228.18
Mexico	422214.83	390926.15
Japan	5331.45	5331.45
Poland	29733.95	805.32
Oman	1660.14	1660.14
France	1233.73	399.19
Czechia	5654.34	2415.91
Peru	4720.04	4720.04
Venezuela (Bolivarian Republic of)	122.58	122.58
Argentina	2896.42	2896.42
Ecuador	2895.17	2895.17
Brazil	9337.71	0
Costa Rica	21.91	21.91
Guatemala	2784.44	2784.44
Belgium	38.85	0
Denmark	1693.5	1225.2
Finland	50.44	0
Italy	1696.49	0
Netherlands	6465	0
Norway	5.38	0
Sweden	112.98	0
Hungary	1082.1	1082.1
Russian Federation	231.61	231.61
Ireland	1131.12	0
Turkey	13634.06	6215.48
China	2293.46	1986.82
Israel	26735.41	25050.19
Chile	908.48	908.48
Spain	361.81	0
South Africa	1355.1	1355.1
Australia	2020.26	2020.26
Canada	1117.07	1117.07

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division
By facility
By activity

C7.6a

(C7.6a) 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)
Fluorinated Solutions	90803	81562
Polymer Solutions	796926	771581
Building & Infrastructure	139287	63772
Data Communication	68726	62268
Precision Agriculture	58444	50051
Orbia Corporate (leased vehicles for employee usage)	148	148

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Melton Mowbray	1927.02	0

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Chinley	1202.59	1202.59
Leominster	3284.64	3284.64
Denver	1294.53	1294.53
Pineville	3322.02	3322.02
Marl	404968.46	401769.7
Henry	16494.32	16494.32
Pedricktown	8909.43	8909.43
Cartagena Compuestos	954.39	954.39
Cartagena Resinas	10771.45	10771.45
Altamira I Compuestos	11513.3	11472.91
Altamira I Resinas	36848.09	36647.18
Altamira II	26691.07	25589.17
La Presa	6489.42	6104.43
Tlaxcala Compuestos	1574.88	1480.85
Tlaxcala Resinas	5656.67	5321.01
Coatzacoalcos	195112.4	182012.65
PMV Minera	1423	1423
Tultitlan - Quimir	1617.52	1607.98
Cajica Derivados	1388.32	1388.32
Las Cuevas	20540.61	19728.99
Muzquiz	115.02	115.02
El Patio	331.18	315.79
Rioverde	6894.21	126.21
Matamoros	41189.87	39543.78
St. Gabriel	13950	13950
Rocksavage	2450.59	2450.59
Mihara	5331.45	5331.45
Sochaczew	5646.35	0
Goa	6151.37	5339.55
Hyderabad	2807.98	1933.16
Neemrana	1103.17	1103.17
Sohar	1660.14	1660.14
Serrieres	399.19	399.19
Tlumacov	2415.91	2415.91
Celta - Barranquilla	1645.39	1645.39
Pavco Bogota - Tubosistemas	5598.89	5598.89
Pavco Bogota - Geosistemas	1196.76	1196.76
Guachene - Tubosistemas PVC y GRP	2282.41	2282.41
Guachene - Geosistemas	336.79	336.79
Lima - Tubosistemas	2720.04	2720.04
Arequipa - Tubosistemas	1119.43	1119.43
Lima - Geosistemas	481.37	481.37
Venezuela - Cua	122.58	122.58
Argentina - Pablo Podesta	2896.42	2896.42
Ecuador - Duran	2895.17	2895.17
Sao Jose dos Campos	1241.95	0
Suape Brasil	847.3	0
Sumare	3389.1	0
Joinville Floresta	2138.86	0
Joinville Gloria	890.52	0
Ribeirao das Neves	450.19	0
Costa Rica - Belen	21.91	21.91
Guatemala - Palin	2784.44	2784.44
Cuautitlan - Tubosistemas	4643.19	4346.72
Cuautitlan - Geosistemas	86.2	80.41
Leon	8431.45	8034.95
San Luis Potosi	613.71	613.71
St. Niklaas	38.85	0
Hammel	1693.5	1225.2
Joutsa	26.01	0
Kangasala	24.43	0
Twist	3933.05	167.14
Westeregeln	4281.4	227.84
S.M. Maddalena	1696.49	0
Hardenberg	5400.16	0
Holand	5.38	0
Eskilstuna	112.98	0
Horni Pocernice	1780.77	0
Kostelec nad Labem	1457.66	0
Zsambek	1082.1	1082.1
Buk	15453.62	805.32

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Strzelin	8633.98	0
Bykovo	231.61	231.61
Sorgues	292.44	0
Varennes	542.1	0
Balbriggan	1131.12	0
Chippenham	4530.84	0
Doncaster	1343.12	0
Forest Works	471.33	0
Hazlehead	1675.27	0
Adana W	7418.57	0
Foshan	365.62	365.62
Magal	9337.07	9337.07
Hatzerim	11480.47	10302.93
Yiftach	5917.87	5410.2
Reynosa	3944.04	983.04
Fresno	5440.49	5440.49
Santiago	908.48	908.48
Lurin	399.21	399.21
Adana Netafim	6215.48	6215.48
Valencia	361.81	0
Rucphen	1064.84	0
Chennai	1799	1799
Vadodara	3996.28	2363.25
Yinchuan	1927.84	1621.2
Cape Town	1355.1	1355.1
Melbourne	2020.26	2020.26
Ribeirao Preto	379.8	0
Cali - Colpozos	53.77	53.77
Fowler	1841.83	1841.83
El Salto	46268.97	43162.5
Lecheria - Quimir	2082.03	2067.88
Clinton	2198.64	2198.64
Sugar Lane	335.76	335.76
Garden Street	7198.48	7198.48
Erwin	3707.32	3707.32
Evansville	3822.53	3822.53
Gainesville	3661.88	3661.88
Gravenhurst	1117.07	1117.07
McAlester	6139.29	6139.29
Mountain Grove	7409.36	7409.36
North Salt Lake	4509.23	4509.23
Sandersville	7440.38	7440.38
Sparks	1725.29	1725.29
Tenille	3188.02	3188.02
Halol - 1	1832.77	0
Halol - 2	1641.73	1641.73
Halol - 3	3149.53	3149.53
Daman	508.17	508.17
Banmore-II	3599.65	3058.95
Banmore-III	4336.04	0
Dahej	405.93	405.93
Bhopal	238.34	238.34
Guwahati	272.98	272.98
Haridwar-I	2490.13	2490.13
Haridwar-II	223.87	223.87
Jaipur	1620.36	1620.36
Jammu	865.1	865.1
Kashipur	2333.47	2333.47
Sikandrabad	3148.41	2559.45
Raipur	1473.97	1473.97
Trichy	1049.55	1049.55
Tumkur	2861.64	2861.64
Orbia Corporate (leased vehicles for employee usage)	148	148

C7.6c

(C7.6c) 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)
Conventional and renewable electricity	938808	754311
Heating, Steam and Cooling	215526	275071

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Not relevant as we do not have any subsidiaries

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	887730	853142	These emissions only apply to the chemical operations: Fluorinated Solutions and Polymer Solutions.
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C-CH7.8

(C-CH7.8) Disclose the percentage of your organization's Scope 3, Category 1 emissions by purchased chemical feedstock.

Purchased feedstock	Percentage of Scope 3, Category 1 tCO2e from purchased feedstock	Explain calculation methodology
Polymers	42.05	We have used cradle to gate emission factors obtained from public or private recognized databases (Ex. Ecoinvent). We conducted a full Scope 3 inventory screening in 2019. As this ratios are intensives quantities, we assume the values are the same year over year unless a major change in our raw material mix takes place.
Soda ash	0.59	We have used cradle to gate emission factors obtained from public or private recognized databases (Ex. Ecoinvent). We conducted a full Scope 3 inventory screening in 2019. As this ratios are intensives quantities, we assume the values are the same year over year unless a major change in our raw material mix takes place.
Other (please specify) ((Mainly VCM with other chemicals))	48.11	We have used cradle to gate emission factors obtained from public or private recognized databases (Ex. Ecoinvent). We conducted a full Scope 3 inventory screening in 2019. As this ratios are intensives quantities, we assume the values are the same year over year unless a major change in our raw material mix takes place.
High Value Chemicals (Steam cracking)	3.78	We have used cradle to gate emission factors obtained from public or private recognized databases (Ex. Ecoinvent). We conducted a full Scope 3 inventory screening in 2019. As this ratios are intensives quantities, we assume the values are the same year over year unless a major change in our raw material mix takes place.

C-CH7.8a

(C-CH7.8a) Disclose sales of products that are greenhouse gases.

	Sales, metric tons	Comment
Carbon dioxide (CO2)	0	
Methane (CH4)	0	
Nitrous oxide (N2O)	0	
Hydrofluorocarbons (HFC)	49881	Refrigerants
Perfluorocarbons (PFC)	0	
Sulphur hexafluoride (SF6)	0	
Nitrogen trifluoride (NF3)	0	

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) 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 emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	83543	Decreased	5.2	+83,000 tons of CO2e were reduced as a result of several sites transitioning to use certified renewable electricity. It is worth noting that Orbia's overall renewable electricity consumption increased 146% vs 2021, mainly driven from sites in Europe and Latam. Total Scope 1+2 GHG emissions in the previous year were 1,611,246 tons of CO2e, therefore we arrived at 5.2% through (83,543/1,611,246)*100 = 5.2%. Further details about our purchased renewable electricity are provided in our responses to Section 8.2.
Other emissions reduction activities	19138	Decreased	1.2	+19,000 tons of CO2e were reduced mainly as a result of Henry's phase-out of its coal-fired boiler, and due to energy efficiency initiatives implemented in a major Duraline's plant. Total Scope 1+2 GHG emissions in the previous year were 1,611,246 tons of CO2e, therefore we arrived at 1.2% through (19,138/1,611,246)*100 = 1.2%.
Divestment	0	No change	0	Not applicable
Acquisitions	21746	Increased	1.3	+21,000 tons of CO2e were increased as a result of major acquisitions from 2021 (Vectus and Shakun) that were integrated into our reporting systems. Both acquisitions consist of 18 production plants located in India. Total Scope 1+2 GHG emissions in the previous year were 1,611,246 tons of CO2e, therefore we arrived at 1.3% through (21,746/1,611,246)*100 = 1.3%.
Mergers	0	No change	0	Not applicable
Change in output	122221	Decreased	7.6	+122,000 tons of CO2e decreased as a result of lower production output in our plants. 2021 was a record year due to the COVID pandemic recovery that resulted in many plants increasing their production. On the other hand, in 2022 our production decreased 12% vs 2021, mainly due to changes in the market. Total Scope 1+2 GHG emissions in the previous year were 1,611,246 tons of CO2e, therefore we arrived at 7.6% through (122,221/1,611,246)*100 = 7.6%.
Change in methodology	0	No change	0	Not applicable
Change in boundary	0	No change	0	Not applicable
Change in physical operating conditions	0	No change	0	Not applicable
Unidentified	4986	Decreased	0.3	Orbia's GHG inventory is vast and comprised of thousands of data inputs in 134 production sites. In our analysis efforts, we have managed to locate the reasons for increased/decrease of emissions for the grand majority of the emission trends. However, despite our efforts, for this small part of the emission reduction, we could not find the specific reason. We will continue to work on and enhance our analysis abilities. Total Scope 1+2 GHG emissions in the previous year were 1,611,246 tons of CO2e, therefore we arrived at 0.3% through (4,986/1,611,246)*100 = 0.3%.
Other	7214	Increased	0.4	* Two major plants updated its emission factors for the purchased electricity from the grid, resulting in increases of 35% and 437% vs 2021. * Mobile and/or stationary fuel consumption increased in four major plants mainly due to operative changes in the sites (higher production, new equipment, etc). Total Scope 1+2 GHG emissions in the previous year were 1,611,246 tons of CO2e, therefore we arrived at 0.4% through (7,214/1,611,246)*100 = 0.4%.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 40% but less than or equal to 45%

C8.2

(C8.2) 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)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	1852	2831317	2833169
Consumption of purchased or acquired electricity	<Not Applicable>	419144	2209058	2628202
Consumption of purchased or acquired heat	<Not Applicable>	0	67356	67356
Consumption of purchased or acquired steam	<Not Applicable>	0	697999	697999
Consumption of purchased or acquired cooling	<Not Applicable>	0	845204	845204
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	2857	<Not Applicable>	2857
Total energy consumption	<Not Applicable>	423853	6650934	7074787

C-CH8.2a

(C-CH8.2a) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.

Consumption of fuel (excluding feedstocks)

Heating value
HHV (higher heating value)

MWh consumed from renewable sources inside chemical sector boundary
185

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)
2690546

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary
0

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary
2690731

Consumption of purchased or acquired electricity

Heating value
<Not Applicable>

MWh consumed from renewable sources inside chemical sector boundary
76012

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)
1728297

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary
0

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary
1804309

Consumption of purchased or acquired heat

Heating value
<Not Applicable>

MWh consumed from renewable sources inside chemical sector boundary
0

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)
59369

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary
0

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary
59369

Consumption of purchased or acquired steam

Heating value
<Not Applicable>

MWh consumed from renewable sources inside chemical sector boundary
0

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)
697999

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary
0

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary
697999

Consumption of purchased or acquired cooling

Heating value
<Not Applicable>

MWh consumed from renewable sources inside chemical sector boundary
0

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)
845204

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary
0

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary
845204

Consumption of self-generated non-fuel renewable energy

Heating value
<Not Applicable>

MWh consumed from renewable sources inside chemical sector boundary
366

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)
0

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary
0

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary
366

Total energy consumption

Heating value
<Not Applicable>

MWh consumed from renewable sources inside chemical sector boundary
76563

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)
6021415

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary
0

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary
6097978

C8.2b

(C8.2b) 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	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value
HHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment

Other biomass

Heating value
HHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value
HHV

Total fuel MWh consumed by the organization
1852

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
1852

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
In this category we are reporting the consumption of Bio LPG and Biodiesel.

Coal

Heating value
HHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment

Oil

Heating value
HHV

Total fuel MWh consumed by the organization
99222

MWh fuel consumed for self-generation of electricity
10299

MWh fuel consumed for self-generation of heat
88923

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
This data contemplates diesel and gasoline consumptions.

Gas

Heating value
HHV

Total fuel MWh consumed by the organization
2732095

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
122306

MWh fuel consumed for self-generation of steam
1949040

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
660749

Comment
This data contemplates the consumption of natural gas, LPG gas, butane and propane.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
HHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment

Total fuel

Heating value
HHV

Total fuel MWh consumed by the organization
2833169

MWh fuel consumed for self-generation of electricity
10299

MWh fuel consumed for self-generation of heat
213081

MWh fuel consumed for self-generation of steam
1949040

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
660749

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	112416	112416	2857	2857
Heat	0	0	0	0
Steam	1677382	1677382	0	0
Cooling	0	0	0	0

C-CH8.2d

(C-CH8.2d) Provide details on electricity, heat, steam, and cooling your organization has generated and consumed for chemical production activities.

Electricity

Total gross generation inside chemicals sector boundary (MWh)
110290

Generation that is consumed inside chemicals sector boundary (MWh)
110290

Generation from renewable sources inside chemical sector boundary (MWh)
366

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)
0

Heat

Total gross generation inside chemicals sector boundary (MWh)
0

Generation that is consumed inside chemicals sector boundary (MWh)
0

Generation from renewable sources inside chemical sector boundary (MWh)
0

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)
0

Steam

Total gross generation inside chemicals sector boundary (MWh)
1677382

Generation that is consumed inside chemicals sector boundary (MWh)
1677382

Generation from renewable sources inside chemical sector boundary (MWh)
0

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)
0

Cooling

Total gross generation inside chemicals sector boundary (MWh)
0

Generation that is consumed inside chemicals sector boundary (MWh)
0

Generation from renewable sources inside chemical sector boundary (MWh)
0

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)
0

C8.2e

(C8.2e) 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 C6.3.

Country/area of low-carbon energy consumption
Belgium

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
235

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
Belgium

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at St. Niklaas (Wavin). Certificate of origin provided by ENGIE.

Country/area of low-carbon energy consumption
Brazil

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Solar and wind)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
96012

Tracking instrument used
I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute
Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2020

Comment
Renewable electricity consumed at Joinville Gloria, Joinville Floresta, Ribeirao das Neves, Suape Brasil, Sumare and Sao Jose dos Campos (Wavin). Certificate of origin provided by Instituto TOTUM.

Country/area of low-carbon energy consumption
Brazil

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Renewable mix, mostly hypropower)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
4071

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at Ribeirao Preto (Netafim). Contract with the electricity supplier CPFL Energia.

Country/area of low-carbon energy consumption
China

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Renewable mix)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
497

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
China

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at Yinchuan (Netafim). Contract with the electricity supplier.

Country/area of low-carbon energy consumption
Czechia

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Solar and wind)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
7872

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Czechia

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at the following Wavin sites: Horni Pocernice and Kostelec nad Labem. Guarantees of origin by OTE.

Country/area of low-carbon energy consumption
Denmark

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
13029

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Denmark

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at Hammel (Wavin). Guarantees of Origin by Centrica Energy Trading.

Country/area of low-carbon energy consumption
Finland

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Renewable mix, mostly hypropower and solar)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
692

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
Finland

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at the following Wavin sites: Joutsa and Kangasala. Contract with the electricity supplier Nordic Green Energy.

Country/area of low-carbon energy consumption
France

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Mainly solar and Steam Condensation Extraction Turbine/No CHP)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
16236

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
France

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1997

Comment
Renewable electricity consumed at Varennes and Sorgues (Wavin). Guarantees of Origin by EEX AG.

Country/area of low-carbon energy consumption
Germany

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Solar, wind and hypropower)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
72506

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Germany

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
* Renewable electricity consumed at Marl (Vestolit). Certificate of origin provided by MVV Energie.
* Renewable electricity consumed at Twist and Westeregeln (Wavin). Certificate of origin provided by EWE VERTRIEB GmbH.

Country/area of low-carbon energy consumption
Hungary

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Sustainable biomass

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
4896

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Denmark

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable/Solid/Biomass from agriculture.

Country/area of low-carbon energy consumption
India

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
10000

Tracking instrument used
I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute
India

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1994

Comment
Renewable electricity consumed at Halol 1 (Alphagary), Goa (Duraline), and Sikandrabad and Banmore III (Wavin). Certificate of origin provided by The Green Certificate Company.

Country/area of low-carbon energy consumption
India

Sourcing method
Purchase from an on-site installation owned by a third party (on-site PPA)

Energy carrier
Electricity

Low-carbon technology type
Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
1263

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
India

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2021

Comment
Renewable electricity generated at site by a third party in Hyderabad (Wavin). Supplier is TATA Energy.

Country/area of low-carbon energy consumption
India

Sourcing method
Direct line to an off-site generator owned by a third party with no grid transfers (direct line PPA)

Energy carrier
Electricity

Low-carbon technology type
Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
925

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
India

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity purchased at Goa (Duraline). Supplier is TATA Energy.

Country/area of low-carbon energy consumption
India

Sourcing method
Direct line to an off-site generator owned by a third party with no grid transfers (direct line PPA)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2357

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
India

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity purchased at Vadodara (Netafim). Supplier is Continuum Green Energy.

Country/area of low-carbon energy consumption
India

Sourcing method
Purchase from an on-site installation owned by a third party (on-site PPA)

Energy carrier
Electricity

Low-carbon technology type
Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
780

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
India

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity generated at site by a third party in Banmore II (Wavin).

Country/area of low-carbon energy consumption
Ireland

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Renewables mix)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
4238

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
Ireland

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at Balbriggan (Wavin). Certificate of origin provided by Naturgy.

Country/area of low-carbon energy consumption
Israel

Sourcing method
Other, please specify (Generated by community solar panels (Kibbutz) and purchased by Netafim)

Energy carrier
Electricity

Low-carbon technology type
Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
3649

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
Israel

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity purchased at the Netafim sites in Hatzerim and Yiftach, Israel, from solar panels owned by the Kibbutz.

Country/area of low-carbon energy consumption
Italy

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
6385

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Italy

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at S.M. Maddalena (Wavin). Guarantees of Origin by Gestore Servizi Energetici (GSE).

Country/area of low-carbon energy consumption
Mexico

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
23000

Tracking instrument used
I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute
Mexico

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2014

Comment
Renewable electricity consumed at Reynosa (Netafim) and Rioverde (Koura). Certificate of origin provided by Sociedad Mexicana de Normalización y Certificación, S.C.

Country/area of low-carbon energy consumption
Netherlands

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
21351

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Netherlands

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
* Renewable electricity consumed at Hardenberg (Wavin). Certificate of origin provided by ENGIE.
* Renewable electricity consumed at Rucphen (Netafim). Certificate of origin provided by AFS Energy B.V.

Country/area of low-carbon energy consumption
Norway

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
827

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at Holand (Wavin). Guarantees of Origin by Fjordkraft AS.

Country/area of low-carbon energy consumption
Poland

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
9021

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Poland

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2020

Comment
Renewable electricity consumed at Sochaczew (Duraline). Certificate of origin provided by Towarową Giełdę Energii S.A.

Country/area of low-carbon energy consumption
Poland

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Other biomass

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
13793

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Poland

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2012

Comment
Renewable electricity consumed at Strzelin (Wavin). Certificate of origin provided by Towarową Giełdę Energii S.A.

Country/area of low-carbon energy consumption
Poland

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Wind and hydropower)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
23434

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Poland

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2020

Comment
Renewable electricity consumed at Buk (Wavin). Guarantees of Origin by Towarową Giełdę Energii S.A.

Country/area of low-carbon energy consumption
Spain

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Renewables mix)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2348

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
Spain

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at Valencia (Netafim). Contract with the electricity supplier Nexus Energía.

Country/area of low-carbon energy consumption
Sweden

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
10864

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
Sweden

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at Eskilstuna (Wavin). Contract with the electricity supplier SEVAB Strängnäs Energi.

Country/area of low-carbon energy consumption
Turkey

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Hydroelectric and wind)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
17928

Tracking instrument used
I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute
Turkey

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1998

Comment
Renewable electricity consumed at Adana W (Wavin). Certificate of origin provided by ENERJISA TOROSLAR ELEKTRIK PERAKENDE SATIS AS.

Country/area of low-carbon energy consumption
United Kingdom of Great Britain and Northern Ireland

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Renewables mix)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
41068

Tracking instrument used
REGO

Country/area of origin (generation) of the low-carbon energy or energy attribute
United Kingdom of Great Britain and Northern Ireland

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at the following Wavin sites: Chippenham, Doncaster, Forest Works and Hazlehead, Certificate of origin provided by Örsted

---

Country/area of low-carbon energy consumption
United Kingdom of Great Britain and Northern Ireland

Sourcing method
Physical power purchase agreement (physical PPA) with a grid-connected generator

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
9867

Tracking instrument used
REGO

Country/area of origin (generation) of the low-carbon energy or energy attribute
United Kingdom of Great Britain and Northern Ireland

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Renewable electricity consumed at Melton Mowbray (Alphagary). Renewable Energy Guarantees of Origin (REGO) by E.ON

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
South Africa

Consumption of purchased electricity (MWh)
1459

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
1459

Country/area
Argentina

Consumption of purchased electricity (MWh)
10586

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
10586

Country/area

Brazil

Consumption of purchased electricity (MWh)
100083

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
100083

Country/area
Canada

Consumption of purchased electricity (MWh)
9301

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
9301

Country/area
Chile

Consumption of purchased electricity (MWh)
2164

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
2164

Country/area
Colombia

Consumption of purchased electricity (MWh)
105066

Consumption of self-generated electricity (MWh)
60

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
105126

Country/area
Costa Rica

Consumption of purchased electricity (MWh)
12175

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
12175

Country/area
Ecuador

Consumption of purchased electricity (MWh)
19844

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
19844

Country/area
Guatemala

Consumption of purchased electricity (MWh)
9378

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
9378

Country/area
Mexico

Consumption of purchased electricity (MWh)
997794

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
997794

Country/area
Peru

Consumption of purchased electricity (MWh)
26547

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
26547

Country/area
United States of America

Consumption of purchased electricity (MWh)
298487

Consumption of self-generated electricity (MWh)
914

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
299401

Country/area
Venezuela (Bolivarian Republic of)

Consumption of purchased electricity (MWh)
1278

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
1278

Country/area
China

Consumption of purchased electricity (MWh)
3714

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
3714

Country/area
Israel

Consumption of purchased electricity (MWh)
57894

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
57894

Country/area
India

Consumption of purchased electricity (MWh)
69143

Consumption of self-generated electricity (MWh)
305

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
69448

Country/area
Japan

Consumption of purchased electricity (MWh)
11149

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
11149

Country/area
Oman

Consumption of purchased electricity (MWh)
4238

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
4238

Country/area
Turkey

Consumption of purchased electricity (MWh)
32948

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
32948

Country/area

Belgium

Consumption of purchased electricity (MWh)
235

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
235

Country/area
Czechia

Consumption of purchased electricity (MWh)
13744

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
13744

Country/area
Germany

Consumption of purchased electricity (MWh)
642134

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
1596696

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
2238830

Country/area
Denmark

Consumption of purchased electricity (MWh)
13029

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
2042

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
15071

Country/area
Spain

Consumption of purchased electricity (MWh)
2348

Consumption of self-generated electricity (MWh)
31

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
2379

Country/area
Finland

Consumption of purchased electricity (MWh)
692

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
692

Country/area
France

Consumption of purchased electricity (MWh)
24002

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
24002

Country/area
United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)
60807

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
7620

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
68427

Country/area
Hungary

Consumption of purchased electricity (MWh)
4896

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
4896

Country/area
Ireland

Consumption of purchased electricity (MWh)
4238

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
4238

Country/area
Italy

Consumption of purchased electricity (MWh)
6385

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
6385

Country/area
Netherlands

Consumption of purchased electricity (MWh)
21351

Consumption of self-generated electricity (MWh)
1547

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
22898

Country/area
Norway

Consumption of purchased electricity (MWh)
827

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
827

Country/area
Poland

Consumption of purchased electricity (MWh)
46250

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
3474

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
49724

Country/area
Russian Federation

Consumption of purchased electricity (MWh)
186

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
727

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
913

Country/area
Sweden

Consumption of purchased electricity (MWh)
10864

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
10864

Country/area
Australia

Consumption of purchased electricity (MWh)
2966

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
2966

C-CH8.3

(C-CH8.3) Does your organization consume fuels as feedstocks for chemical production activities?
No

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Energy usage

Metric value
0.94

Metric numerator
Energy from Scope 1 and Scope 2 in MWh

Metric denominator (intensity metric only)
Total production in tons.

% change from previous year
7

Direction of change
Increased

Please explain
Orbia's gross energy consumption decreased by 6% from 2021 to 2022, and on the other hand, our production also decreased 12%. Both decreases are explained by changes in the market. These factors combined have resulted in a small increase of intensity per metric ton of product (7.0%).

Description
Waste

Metric value
2704

Metric numerator
Total waste disposed in Kg

Metric denominator (intensity metric only)
Total production in tons

% change from previous year
0.9

Direction of change
Increased

Please explain
Orbia's total waste disposed decreased by 12% from 2021 to 2022, mainly due to our focus on diverting waste from landfill and an increasing number of plants in zero waste to landfill status. On the other hand, our production also decreased 12%, mainly due to changes in the market. These factors combined have resulted in a small increase of intensity per metric ton of product (0.9%).

C-CH9.3a

(C-CH9.3a) Provide details on your organization's chemical products.

Output product
Other, please specify (Chemical products from chemical sites)

Production (metric tons)
6345173

Capacity (metric tons)
10061200

Direct emissions intensity (metric tons CO2e per metric ton of product)
0.09

Electricity intensity (MWh per metric ton of product)
0.28

Steam intensity (MWh per metric ton of product)
0.11

Steam/ heat recovered (MWh per metric ton of product)
0

Comment

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	In 2022 Orbia's R&D investment reached $72 million USD. Through Orbia Ventures we are supporting a collaborative, human-centered approach to to create a better future. By supporting startups that share our vision and are committed to developing leading-edge innovations and smart technologies, we can address the world's biggest challenges and help global communities become future-fit. In 2022, we screened over 1,000 investment opportunities and conducted due diligence on more than 25 promising startups that offer new technologies across our focus areas: climate tech, circular economy, agriculture, sustainable energy and building , water and communications infrastructure. During the year, Orbia Ventures completed five transactions, four of which were environmental impact-focused investments, amounting to a total of $9.3M USD, emphasizing Orbia's commitment to addressing global challenges.

C-CH9.6a

(C-CH9.6a) Provide details of your organization's investments in low-carbon R&D for chemical production activities over the last three years.

Technology area
Carbon capture, utilization, and storage (CCUS)

Stage of development in the reporting year
Applied research and development

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

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

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

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
Orbia Ventures and our businesses continue to evaluate technologies for hydrogen electrolyzer stacks. During 2022, Vestolit signed a collaboration agreement with Verdagy (an Orbia Ventures portfolio company) to evaluate the economics of building a hydrogen production facility in our plant in Marl, Germany. A multi-background team was formed to advance this initiative, while exploring additional alternatives to capturing carbon and using it to produce ethylene in-house.

Orbia was part of the $25 million USD investment round, alongside with other funds, to invest in Verdagy. No follow on investments planned.

Technology area
Carbon capture, utilization, and storage (CCUS)

Stage of development in the reporting year
Please select

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

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

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

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
In line with our net-zero commitment, our fund is actively involved in the climate tech space, always on the lookout for new developments. As a result, in early 2023, Orbia Ventures invested in Chloris Geospatial, which provides data for the measurement and ongoing tracking of forest carbon anywhere on Earth. Comprehensive conservation and restoration of forests is needed to prevent the loss of natural capital that underpins healthy economies and for the global economy to be on track to achieving a net-zero carbon world by 2050.
Orbia believes that measurement, and verification technologies of carbon stock, gains, and losses, such as the Chloris platform, could be the answer to the demand for generating trust and reliability within the
growing market of carbon credits.

Orbia was part of the $3.5 million USD investment round, alongside with other funds and companies, to invest in Chloris. No follow on investments planned.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
orbia-2022_independent_assurance_statement_en.pdf

Page/ section reference
All

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
99

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
orbia-2022_independent_assurance_statement_en.pdf

Page/ section reference
All

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Use of sold products
Scope 3: End-of-life treatment of sold products

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
orbia-2022_independent_assurance_statement_en.pdf

Page/section reference
All

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
97

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	ISAE3000	All our energy consumption is included in the scope of the assurance process conducted by Deloitte.
C9. Additional metrics	Waste data	ISAE3000	All our waste by type and disposal method is included in the scope of the assurance process conducted by Deloitte.

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.
EU ETS
Mexico carbon tax
Tamaulipas carbon tax
Other carbon tax, please specify (UK UMBRELLA)

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS
10

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
42547

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
57458

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment
The figures above represent the Vestolit site in Marl, Germany, which is covered by the EU-ETS and accounts for 10% of Orbia's Total Scope 1 emissions in 2022. The Verified Scope 1 figure reported here has also been extracted from our internal data collection platform and reviewed by Deloitte.

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

Mexico carbon tax

Period start date
January 1 2022

Period end date
December 31 2022

% of total Scope 1 emissions covered by tax
0.03

Total cost of tax paid
415

Comment
Carbon Tax applicable to some of our Scope 1 emissions for our sites in that jurisdiction.

Tamaulipas carbon tax

Period start date
January 1 2022

Period end date
December 31 2022

% of total Scope 1 emissions covered by tax
6.2

Total cost of tax paid
536531

Comment
Carbon Tax applicable to some of our Scope 1 emissions for our sites in that jurisdiction.

Other carbon tax, please specify

Period start date
January 1 2022

Period end date
December 31 2022

% of total Scope 1 emissions covered by tax
0.1

Total cost of tax paid
9543

Comment
The Climate Change Levy covers 4 Wavin sites in the UK, and covers Scope 1 emissions associated with natural gas consumption in 1 of those sites.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Regulatory fines that are incurred at individual sites rapidly accumulate for a company with more than 100 locations. The impacts of non-compliance can be local and direct, but the greater impact will be global.
Many companies leave it to their sites to manage HSE legal compliance locally. However, what we often see is that each site will have a completely different approach – ranging from very basic “legal registers” (no more than Excel files with titles of laws), to very comprehensive in-country solutions with on-site support. This results in not having a consistent global picture and to confidently ensure substantial compliance across all jurisdictions.
Therefore, our HSE and Sustainability structure has been strengthened over the past years to include Environmental compliance experts at Corporate and Business Group level, which among others, are responsible for monitoring carbon-pricing regulations and preparing for compliance standardising environmental compliance and management systems across the organization. Since 2021 we formally started a Global Compliance Management process using and external supplier (ENHESA) to have a better understanding of current and future applicable regulations. This platform provides us a global real-time dashboard for follow-up of compliance status of all our Business Groups. We also actively participate on several industry associations to express our opinions on reviews of upcoming regulations and to integrate repsonses as a group.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
No, but we anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement
Collect GHG emissions data at least annually from suppliers

% of suppliers by number
3

% total procurement spend (direct and indirect)
80

% of supplier-related Scope 3 emissions as reported in C6.5
83

Rationale for the coverage of your engagement
Our supplier program, enabled by EcoVadis, provides supplier environmental assessment, monitoring, and improvement. The implementation of this program adopts a risk-aligned, phased approach and currently covers Wavin, Duraline, Vestolit, and Koura UK, with the remaining business groups to adopt this program in upcoming years. As of 2022, our supplier assessment program covers 80% of our total spend across these brand operations. More than 90 additional suppliers were onboarded during 2022.

Impact of engagement, including measures of success
In 2022, 58% of the suppliers that participated in our EcoVadis assessment in 2021 have shown an improvement in their score in 2002, and 21% show a stable score. Most suppliers that have been required to present action plans have shown progress, with most improvement areas linked to having specific targets around labor & human rights, corruption risk assessment, and sustainability procurement practices. The average score is currently 53, and 83% of our re-assessed suppliers are above required performance level. Suppliers are held to a minimum performance score of 35-45, under which we will require them to present an action plan for improvement, or even consider switching to a supplier with a superior sustainability performance.

Comment
Our critical target supplier group is fixed as those that represent 80% of our spend. That explains the low % covered as Orbia has more than 29,000 suppliers across its value chains.

Type of engagement
Engagement & incentivization (changing supplier behavior)

Details of engagement
Directly work with suppliers on exploring corporate renewable energy sourcing mechanisms

% of suppliers by number
22

% total procurement spend (direct and indirect)
22

% of supplier-related Scope 3 emissions as reported in C6.5
0

Rationale for the coverage of your engagement
Orbia's Business Groups are in constant communication with key energy suppliers for jointly cooperation related to sustainability efforts, with special emphasis on renewable energy mechanisms that contribute to achieve our decarbonization targets.

Impact of engagement, including measures of success
Thanks to this engagement with key energy suppliers, we were able to increase our use of renewable energy by 146% (compared to 2021), reducing around 74,000 tons of GHG emissions, and bringing our total purchased and generated renewable electricity to 16% of total electricity consumption.

Comment
Figures provided for % of suppliers by number and % total procurement spend only consider the universe of electricity suppliers in all Orbia's Business Groups.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number
35

% of customer - related Scope 3 emissions as reported in C6.5
35

Please explain the rationale for selecting this group of customers and scope of engagement
The eco-system service benefits related to climate change is a key component of Orbia's Precision Agriculture's business group and the Netafim brand. Two examples are the environmental benefits of drip irrigated rice and effluent management through subsurface drip irrigation. Not only do we work with growers/customers to discuss the GHG and water benefits of these practices, we also work with the agricultural supply chain; educating them on these innovative solutions that equally benefit the environment and the customer.

Figure provided is an estimated percentage of customer based on the revenues from products that require customer engagement to achieve our circularity and low carbon ambitions, which represent the largest customer whitin our portfolio. Due to the number and variety of our clients, engagement levels are not standardize, so we can't provide an exact figure. However, at least a third of our clients are directly involved within this initiatives, if not more. Using the same logic, we estimate the same % of Category 11 Scope 3 emissions.

Impact of engagement, including measures of success
Netafim's subsurface drip irrigation (SDI) system provides several environmental benefits, including healthier soil and root environment, water conservation, nutrient conservation, energy conservation, GHG emissions reduction and improved crop yield. Applied in pilot projects in Italy and the U.S. over the past 3 years, this presents a major achievement for advancing circularity in the agricultural industry, reducing CO2e emissions of dairy operations by between 70 and 90% compared to traditional methods. Netafim also operates a take back program in nine countries, resulting in 18,000 tons of end-of-life driplines collected in 2022.

Type of engagement & Details of engagement

Collaboration & innovation	Collaborate with customers in creation and review of your climate transition plan

% of customers by number
35

% of customer - related Scope 3 emissions as reported in C6.5
35

Please explain the rationale for selecting this group of customers and scope of engagement
Our main strategy to decarbonize our value chain is linked to Orbia's Fluorinated Solutions Business Koura's vision to transform its portfolio of mid Global Warming Potential (GWP) refrigerants and propellants (mainly R-134a) to low GWP alternatives. Some of these next-generation refrigerants are now on the market with others undergoing evaluation and testing by customers.

Engagement with our clients is primarily based on sharing our climate transition plans and projects in order to reduce our clients' emissions by delivering sustainable feedstock for low or zero emissions solutions.

Figure provided is an estimated percentage of customer based on the revenues from products that require customer engagement to achieve our circularity and low carbon ambitions, which represent the largest customer whitin our portfolio. Due to the number and variety of our clients, engagement levels are not standardize, so we can't provide an exact figure. However, at least a third of our clients are directly involved within this initiatives, if not more. Using the same logic, we estimate the same % of Category 11 Scope 3 emissions.

Impact of engagement, including measures of success
Klea 456A and Klea 473A are supporting our customers' transition to more energy efficient and lower carbon applications. Both products have significantly lower GWP than incumbent refrigerants: Klea 456A has a 46% lower GWP when compared to R134A, while Klea 473A's GWP is 90% lower when compared to R-23 or R-508A/B. This refrigerant won Refrigeration Innovation of the Year at the 2022 Cooling Industry Awards.

Koura is developing refrigerant replacements for a range of applications with a focus on LFR3, an exciting new product. LFR3 is designed as a more energy-efficient alternative to CO2 in applications such as heat pumps, commercial refrigeration, and mobile air conditioning.

Type of engagement & Details of engagement

Collaboration & innovation	Other, please specify (R&D for circular and low carbon products)

% of customers by number
35

% of customer - related Scope 3 emissions as reported in C6.5
35

Please explain the rationale for selecting this group of customers and scope of engagement
Engaging with our customers is key given the enabling role our businesses play in helping our customers achieve their climate and environmental strategies. We can help reduce their footprint through innovation of our solutions portfolio. By engaging regularly with our clients, we are actively listening to their concerns and trying to provide solutions to their environmental and climate-related issues. Some examples include:

- The development of low GWP propellants and refrigerants by Koura, which require testing quality and product characteristics to meet client expectations.
- Development of PVC resin from non-fossil resources, recycled feedstocks and renewable energy, which significantly reduces emissions along the value chain of our Vestolit customers.
- Our Building & Infrastructure business group, Wavin, offers Indoor Climate solutions to monitor and optimize temperature throughout a building, ensures ventilation and comfort, and also significantly minimizes energy consumption. This supports the transition to zero emission buildings.
- Netafim's, our precision agriculture business group, implemented its drip irrigation system in a plantation growing carbon-storing trees in Suffolk, England, to increase yield and carbon-storing capabilities.
- As part of the larger Vinyl in Motion project pioneered by Orbia's Polymer Solutions business, Vestolit, the Infinitude vinyl compound series formulated and manufactured by Alphagary offers a second life for plastics that have been discarded. This new series of PVC compounds are formulated with up to 70% recycled content and are available in natural base or pre-colored, are designed for both molding and extrusion applications.
- Dura-Line is continuously running tests to drive circularity within its portfolio, to incorporate recycled content when possible.

Figure provided is an estimated percentage of customer based on the revenues from products that require customer engagement to achieve our circularity and low carbon ambitions, which represent the largest customer whitin our portfolio. Due to the number and variety of our clients, engagement levels are not standardize, so we can't provide an exact figure. However, at least a third of our clients are directly involved within this initiatives, if not more. Using the same logic, we estimate the same % of Category 11 Scope 3 emissions.

Impact of engagement, including measures of success
By supporting our customers' environmental and climate strategies, we have broadened the scope of some of our solutions to work alongside them. Some examples include:

- On the refrigerant gas landscape, Koura's new generation of low GWP refrigerant lower global-warming-potential (GWP) some products reach a GWP 90% lower when compared to traditional options.
- Vestolit and Alphagary have collaborated with Baxter to collect and recycle IV bags in Colombia as part of their PVC in Motion recycling program. In 2023, we plan to replicate the program in Mexico and Brazil. The goal is to recover more than 20,000 tons/year by 2025 in Mexico.
- Netafim's initiative in Suffolk, is a part of the UK government's goal of achieving net-zero emissions. The trees will be thinned out after seven years, their timber sold for light construction. Carbon credits will either be claimed or auctioned for corporate carbon offsetting. The project is expected to absorb 165,346 tons of CO2 over the first 10 years of its lifetime. Netafim also operates a take back program that operated in 9 countries in 2022, resulting in 18,000 tons of end-of-life driplines collected.
- Dura-Line has introduced MicroDucts ECO using up to 100% reground Dura-Line scrap HDPE from Dura-Line's internal manufacturing process. MicroDucts ECO are bundled to create FuturePath ECO, which may only use virgin materials in their colored identification stripes and protective jackets – though 100% reground jackets are also available. All standard MicroDuct sizes and bundle combinations are available, and all products meet stipulated parameters for virgin-based products.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Orbia Ventures is Orbia's corporate venture capital fund and supports a collaborative, human-centered approach to creating a better future. By supporting startups that share our vision and are committed to developing leading-edge innovations and smart technologies, we can address the world's biggest challenges and help global communities become future-fit. In 2022, we screened over 1,000 investment opportunities and conducted due diligence on more than 25 promising startups that offer new technologies across our focus areas.

During the year, Orbia Ventures completed five transactions, four of which were environmental impact-focused investments, amounting to a total of $9.3M USD, emphasizing Orbia's commitment to addressing global challenges. These include:

* Greeneye Technology - Develops AI and deep learning technology for the precise application of chemicals in agriculture.

* FortePhest - Develops innovative products to control both regular and herbicide-resistant weeds.

* Ascend Elements - Manufactures advanced battery materials using valuable elements reclaimed from recycled lithium-ion batteries. (Follow-on investment)

* Verdagy - Develops water electrolysis technology for very largescale production of green hydrogen.

In line with our net-zero commitment, our fund is actively involved in the climate tech space, always on the lookout for new developments. As a result, in early 2023, Orbia Ventures invested in Chloris Geospatial, which provides data for the measurement and ongoing tracking of forest carbon anywhere on Earth. Comprehensive conservation and restoration of forests is needed to prevent the loss of natural capital that underpins healthy economies and for the global economy to be on track to achieving a net-zero carbon world by 2050. Orbia believes that measurement, and verification technologies of carbon stock, gains, and losses, such as the Chloris platform, could be the answer to the demand for generating trust and reliability within the growing market of carbon credits.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?
Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement
Climate-related disclosure through a non-public platform

Description of this climate related requirement
4 of our Business Groups request climate-related information to suppliers representing 80% of spent through an Ecovadis questionnaire. Suppliers are held to a minimum performance score of 35-45, under which we will require them to present an action plan for improvement, or even consider switching to a supplier with a superior sustainability performance. The average score is currently 53 and 83% of our re-assessed suppliers are above the required performance level.

% suppliers by procurement spend that have to comply with this climate-related requirement
71

% suppliers by procurement spend in compliance with this climate-related requirement
80

Mechanisms for monitoring compliance with this climate-related requirement
Supplier self-assessment
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement
Other, please specify (Suppliers are held to a minimum performance score of 35-45, under which we will require them to present an action plan for improvement, or even consider switching to a supplier with a superior sustainability performance.)

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate
Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate
Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?
Yes

Attach commitment or position statement(s)
In 2019, Orbia pledged to an effort to limit the worst impacts of climete change in accordance with the Business Ambition for 1.5 °C. In 2022, we continued to advance in line with our commitment to mitigate climate change. We are proud to announce that the Science Based Targets initiative (SBTi) validated our near-term targets to reduce Scope 1 and 2 GHG emissions 47% by 2030 (from a 2019 base year) and our Scope 3 GHG emissions from use of and end of life treatment of sold products by 30% within the same timeframe. https://www.orbia.com/498f01/siteassets/6.-sustainability/policies--guidelines/certifications/orbi-mex-001-off-certificate.pdf
orbi-mex-001-off-certificate.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan
Given the diversity or our operations, we encourage engagement at business group level, when relevant, to advance our net-zero and related commitments. Some examples from our businesses include:
- Koura is an active member of the Global FACT (Forum for Advanced Climate Technologies), promoting the development of low GWP propellants and refrigerants alongside other key players in the fluorinated gas market
such as Arkema, Chemours and Honeywell. They are also members of the Alliance for Responsible Atmospheric Policy.
- Our Wavin Sustainability leaders are very active with the TEPPFA regarding circular economy initiatives and influencing policy around this topic in Europe. Wavin was also active in the 2023 UN Water Conference.
- Vestolit and Alphagary are members of Asociación Colombiana de Plásticos (ACOPLASTICOS), a Colombian association that promotes sustainable development in the sector while serving as a spoke person before the government and society to comply with best-in-class standards.

More of our collective action, here: https://sustainability.orbia.com/indicators/data_and_performance/report/governance_finance_and_compliance_performance

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate
<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate
<Not Applicable>

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association
Other, please specify (Global Forum for Advanced Climate Technologies (FACT))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
Global FACT (Forum for Advanced Climate Technologies) is a US-based non-profit membership organization comprised of the world's leaders in advanced climate technologies. This organization promotes education, awareness and policies that support the important role of new-generation low-and reduced-global warming potential

(GWP) climate technologies in protecting the environment, while meeting the rapidly increasing demand for sale alternatives. Koura is an active member of FACT to promote the development of low GWP propellants and refrigerants alongside other key players in the fluorinated gas market such as Arkema, Chemours and Honeywell.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (The European Plastic Pipes and Fittings Association (TEPPFA))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
The TEPPFA is committed to sustainability. Plastic pipes have an expected lifetime of more than 100 years (below ground) and save energy during more than 50 years in buildings. At the end of life, they are recyclable. In addition, as part of their sustainability approach, it implements an Environmental Product Declaration (EPD) that offers a standard way of communicating the output from a life cycle assessment, which evaluates global warming potential (CO_2 equivalent) among other characteristics. Our Wavin sustainability leaders are very active within the TEPPFA efforts to influence policies about circular economy in Europe.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (VinylPlus - European Council of Vinyl Manufacturers (ECVM))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
VinylPlus is the Voluntary Commitment to sustainable development by the European PVC industry. The program establishes a long-term framework for the sustainable development of the PVC industry by tackling several critical challenges in the EU-27, UK, Norway and Switzerland. The VinylPlus strategy addresses five key challenges identified for PVC, together with a set of working principles. The first four challenges are technical in nature whilst the fifth challenge addresses raising awareness and understanding of the importance of sustainable development.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (Asociacion Nacional de la Industria Química AC (ANIQ))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
ANIQ is the National Chemical Industry Association in Mexico and it represents 95% of the private production of chemicals in the country, with its +300 members. It has a strong Climate Change working group which participated in the development of the national climate change agenda and goals, including the design of the Mexican CarbonMarket. Its mission is to promote the sustainable development and global competitiveness of the chemical industry in Mexico, in harmony with the community and the environment. Through our brands, Alpahagary, Vestolit and Koura, we participate in the Climate Change Committee to influence public policy in favor of solutions to reducing the industry's impact on climate change in Mexico.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual
Non-Governmental Organization (NGO) or charitable organization

State the organization or individual to which you provided funding
United Nations Global Compact

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)
20000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate
The UN Global Compact aims to mobilize a global movement of companies and stakeholders to create a sustainable world. To make this happen, the UN Global Compact supports companies to: - Do business responsibly by aligning their strategies and operations with Ten Principles on human rights, labour, environment and anti-corruption. - Take strategic actions to advance broader societal goals, such as the UN Sustainable Development Goals, with an emphasis on collaboration and innovation. Orbia became a signatory to the UNGC at the participant tier level in 2018, committing to uphold and promote UNGC principles within our spheres of influence. We have endorsed the Ten Principles and develop policies that materialize our commitment, and in 2020, we did our first assessment of contribution to the SDGs.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In voluntary sustainability report

Status
Complete

Attach the document
orbia_impact_report_2022.pdf

Page/Section reference
Pages 26, 29 - 37, 83, 87, 89, 91, 93, 96

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment
https://sustainability.orbia.com/indicators/environment/report/climate_action

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Task Force on Climate-related Financial Disclosures (TCFD) UN Global Compact Other, please specify (CEO Water Mandate)	* UN Global compact: Orbia endorses the Universal Declaration of Human Rights adopted by the United Nations and condemns all forms of human rights abuse, as stated in our Human Rights Policy. Orbia became a signatory to the UNGC at the participant tier level in 2018, committing to uphold and promote UNGC principles within our spheres of influence. This is our fifth Communication on Progress and we will report annually. * CEO Water Mandate: Orbia became a signatory to the CEO Water Mandate in 2018, confirming our commitment to sustainable water management and practices. This is our fourth progress report to the CEO Water Mandate, as part of our GRI-based sustainability disclosure. * TCFD: In 2020, we became official supporters of TCFD recommendations to continue our journey on climate-related risks and opportunities disclosure.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, executive management-level responsibility	Orbia's VP of Sustainability and Corporate Affairs oversees all environment-related matters, including biodiversity. The relevance of the topic varies across our business groups and might not be material for all of them, so objective related to this topic are specific to each of our businesses and sites.	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species	SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment
Yes

Value chain stage(s) covered
Direct operations

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
IBAT – Integrated Biodiversity Assessment Tool
TNFD – Taskforce on Nature-related Financial Disclosures
Other, please specify (World Wildlife Fund (WWF) Biodiversity Risk Filter)

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
In order to factor nature into our business performance, Orbia is taking the first step towards aligning to the Taskforce on Nature-related Financial Disclosures (TNFD) framework by adopting the LEAP approach. All Orbia sites have been assessed on their sensitivity towards nature using two international reference tools: the Integrated Biodiversity Assessment Tool (IBAT) and the World Wildlife Fund (WWF) Biodiversity Risk Filter. These trusted frameworks enhance the comprehensiveness and accuracy of our preliminary assessment to locate priority sites and ensuring reliable and actionable insights into nature-related risks.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment
No, but we plan to within the next two years

Value chain stage(s) covered
<Not Applicable>

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?
Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area

Australia

Name of the biodiversity-sensitive area
Cheetham and Altona

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Netafim business, to produce our precision agriculture portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Belgium

Name of the biodiversity-sensitive area
Durme en Middenloop van de Schelde
Schorren en Polders van de Beneden-Schelde

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Brazil

Name of the biodiversity-sensitive area
Baia da Babitonga
Salto do Pirao
Parque Estadual da Serra do Tabuleiro
Guadalupe

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
Four locations from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Canada

Name of the biodiversity-sensitive area
Couvade
Lac Saint-Louis et de la Paix

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Chile

Name of the biodiversity-sensitive area
Humedal de Batuco

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Netafim business to produce our precision agriculture portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
China

Name of the biodiversity-sensitive area
Yinchuan Plain

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Netafim business, to produce our precision agriculture portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Colombia

Name of the biodiversity-sensitive area
Región Ecodelta Fluvio-Estuarina del Canal del Dique
Parque Nacional Natural Farallones de Cali
Bosque de San Antonio/Km 18
Gravilleras del Valle del Río Siecha
Cerros Occidentales de Tabio y Tenjo
Guerrero, Guargua y Laguna Verde
Humedales de la Sabana de Bogotá
Bosques de la Falla del Tequendama
Fusagasuga
Granjas del Padre Luna

Proximity

Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
Three locations from our Vesolit and Alphagary businesses, to produce our polymer solutions portfolio.
Three locations from our Wavin business to produce our building & infrastructure portfolio.
One location from our Netafim business, to produce our precision agriculture portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Costa Rica

Name of the biodiversity-sensitive area
Cordillera Volcánica Central
El Rodeo, Cerros de Escazá y La Carpintera
Rio Ciruelas

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Ecuador

Name of the biodiversity-sensitive area
Manglares del Golfo de Guayaquil
Ciénegas de Guayaquil
Isla Santay

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Finland

Name of the biodiversity-sensitive area
Kangasalan Lintujarvet

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)

One location from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
France

Name of the biodiversity-sensitive area
Lac et marais du Bourget
Val d'Allier Bourbonnais

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Wavin business to produce our building & infrastructure portfolio.
One location from our Dura-Line business to produce our connectivity solutions portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Germany

Name of the biodiversity-sensitive area
Heubachniederung, Schwarzes Venn, Borkenberge und Halterner Stausee
Eschebragger Wapsten
Klein-und Groayringer Wapsten
Groay Fullener Moor
Wesuwer Brook
Georgsdorfer und Dalum-Wietmarscher Moor und Alte Piccardie
Hakel

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
Three locations from our Wavin business to produce our building & infrastructure portfolio.
One location from our Vestolit business to produce our polymer solutions portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Guatemala

Name of the biodiversity-sensitive area
Antigua Guatemala

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Hungary

Name of the biodiversity-sensitive area
Gerecse

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
India

Name of the biodiversity-sensitive area
Carambolim Wetlands
Ghatigaon Bustard Sanctuary
Ratapani Wildlife Sanctuary
Jengdia Beel and Satgaon
Rajaji National Park
Ramnagar Wildlife Sanctuary
Dhanauri wetland

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
Eight locations from our Wavin business to produce our building & infrastructure portfolio.
One location from our Dura-Line business to produce our connectivity solutions portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Ireland

Name of the biodiversity-sensitive area
Skerries Islands
Malahide/ Broadmeadow Estuary
Rockabill
Rogerstown Estuary
Boyne eEtuary
Nanny estuary and shoreline

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Proximity is up to 15 km (option not available in dropdown menu)
One location from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Israel

Name of the biodiversity-sensitive area
Western Negev
Hefer Valley
Hula Valley

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
Three locations from our Netafim business, to produce our precision agriculture portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Mexico

Name of the biodiversity-sensitive area
Humedales del Sur de Tamaulipas y Norte de Veracruz
La Malinche
Delta del Río Bravo
Nacimiento Río Sabinas-Sureste de la Sierra de Santa Rosa
Media Luna
Lago de Texcoco
Cascada de la Hermita
Presa Lago de Guadalupe
La Malinche
Presa Laguna de Zumpango

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
Three locations from our Koura business, to produce our flurinated solutions portfolio.
Six locations from our Vestolit and Alphagary businesses, to produce our polymer solutions portfolio.
Two locations from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Morocco

Name of the biodiversity-sensitive area
Maamora

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Netafim business, to produce our precision agriculture portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Netherlands

Name of the biodiversity-sensitive area
Voordelta
Voornes Duin
Hollandse Kust
Oostvoornse Meer
Midden Delfland & Oude Leede
Zoetwatergetijderivieren
Hollandse Kust
Meijendel & Berkheide
Midden Delfland & Oude Leede
Engbertsdijksvenen
Slagharen - de Krim
Reestdal
Bargerveen

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
Two locations from our Netafim business, to produce our precision agriculture portfolio.
Two locations from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Oman

Name of the biodiversity-sensitive area
Khawr Shinas and Khawr Liwa
Al Batinah coast

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Dura-Line business, to produce our connectivity solutions portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area

State of Palestine

Name of the biodiversity-sensitive area
Um Al-Rihan

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Netafim business, to produce our precision agriculture portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Poland

Name of the biodiversity-sensitive area
Puszcza Kampinoska
Ostoja Rogalinska

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Dura-Line business, to produce our connectivity solutions portfolio.
Two locations from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Peru

Name of the biodiversity-sensitive area
Isla Pachacámac
Lomas de Atocongo
Reserva Nacional Salinas y Aguada Blanca
Chiguata
Rimac Valley

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Netafim business, to produce our precision agriculture portfolio.
Two locations from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Sweden

Name of the biodiversity-sensitive area
Vaestra Maelaren

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity is up to 15 km (option not available in dropdown menu)
One location from our Wavin business to produce our building & infrastructure portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Syrian Arab Republic

Name of the biodiversity-sensitive area
Hadhbat al-Jawlan

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
One location from our Netafim business, to produce our precision agriculture portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Turkey

Name of the biodiversity-sensitive area
Yalanlakale Tepeleri

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity up to 15 km (option not available in drop menu)
One location from our Netafim business, to produce our precision agriculture portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
United Kingdom of Great Britain and Northern Ireland

Name of the biodiversity-sensitive area
Thorne and Hatfield Moors
North Pennine Moors
South Pennine and Peak District Moors
Mersey Estuary

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity up to 15 km (option not available in drop menu)

Three locations from our Wavin business, to produce our precision agriculture portfolio.
One location from our Koura business, to produce our fluorinated solutions portfolio.
One location from our Alphagary business, to produce our polymer solutions portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
United States of America

Name of the biodiversity-sensitive area
Middle Creek Wildlife Management Area
Southern Blue Ridge
Gilbert Bay/South Arm UT05
Farmington Bay UT04
Carson Range
Delaware Coastal Zone

Proximity
Up to 25 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area
Proximity up to 15 km (option not available in drop menu)
Four locations from our Dura-Line business, to produce our connectivity solutions portfolio.
Two locations from our Vestolit and Alphagary businesses, to produce our polymer solutions portfolio.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Not assessed

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

Classification of biodiversity -sensitive area
Please select

Country/area
Please select

Name of the biodiversity-sensitive area

Proximity
Please select

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Please select

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Other, please specify (16% (22 sites) of Orbia's locations have been identified as having an overall high-risk score, combining results from IBAT and WWF's Biodiversity Risk Filter. These locations will be prioritized for future action in alignment with the TNFD framework.)

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	Other, please specify (Information disclosed is part of a first high-level nature risk assessment. We'll continue to use IBAT and WWF's Bidiversity Risk Filter indicators to further comprehend our interactions with nature. Said frameworks comprise options mentioned above.)

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Biodiversity strategy Other, please specify (Initiatives related to preservation and conservation in key sites)	https://sustainability.orbia.com/indicators/environment/report/biodiversity orbia_impact_report_2022.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

Additional information on our climate strategy can be found in our Impact Report 2022: https://www.orbia.com/4962f7/siteassets/6.-sustainability/2022-impact-report/orbia_impact_report_2022.pdf

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Corporate Vice President Sustainability and Corporate Affairs	Chief Sustainability Officer (CSO)
