Koninklijke DSM - Climate Change 2023



C0. Introduction

C0.1

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

DSM is a wholly-owned entity of dsm-firmenich, which formerly reported to CDP as Royal DSM . In early 2023, DSM merged with Firmenich to form dsm-firmenich. This assessment over 2022 relates to the DSM entity, which will be reporting in the future as dsm-firmenich

As innovators in nutrition, health, and beauty, dsm-firmenich reinvents, manufactures, and combines vital nutrients, flavors, and fragrances for the world's growing population to thrive. With our comprehensive range of solutions, with natural and renewable ingredients and renowned science and technology capabilities, we work to create what is essential for life, desirable for consumers, and more sustainable for the planet. We touch the lives of people throughout the day: From your personalized morning supplements with vitamins, omegas, and probiotics to support your health at every stage of life, to a juicy tasty burger made with plant-based proteins for lunch, or a revitalizing mid-afternoon drink from healthy cows that burp less methane, to the fine fragrance that creates positive emotions, makes you feel better, and enhances your well-being at every hour. dsm-firmenich is a Swiss-Dutch company, listed on the Euronext Amsterdam, with operations in almost 60 countries and revenues of more than €12 billion. With a diverse, worldwide team of nearly 30,000 employees, we bring progress to life™ every day, everywhere, for billions of people.

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 Austria Belgium Brazil Canada Chile China Colombia Costa Rica Denmark Ecuador France Germany Greece Guatemala Hungary India Indonesia Italy Japan Malaysia Mexico Netherlands New Zealand Peru Philippines Poland Republic of Korea Romania Russian Federation Singapore South Africa Spain Switzerland Taiwan, China Thailand Turkey United Kingdom of Great Britain and Northern Ireland United States of America Uruguay Viet Nam

C0.4

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

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. Financial control

C-CH0.7

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

Row 1

Bulk organic chemicals Please select

Bulk inorganic chemicals Please select

Other chemicals Specialty organic chemicals

C0.8

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

Yes, a Ticker symbol DSFIR	Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
	Yes, a Ticker symbol	DSFIR

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	Responsibilities for climate-related issues
of individual	
or committee	
Chief Executive Officer (CEO)	Sustainability falls under the responsibility of the Managing Board. Specific actions in our climate action agenda are owned by members of the Managing Board and Executive Committee. In 2022, our Co-CEOs oversaw Sustainability as a key responsibility and company value as well as a driver of business growth. They Co-Chair our Inclusion & Diversity Council, and jointly oversee our strategic partnership with the World Economic Forum. Both our Co-CEOs are engaged in our climate advocacy efforts. In their joint responsibility for our strategy and key targets, again in mid-2022, our Co-CEOs approved the increase of DSM's Science Based Targets.
Chief Financial Officer (CFO)	In 2022, DSM's Co-CEO / CFO was responsible for integrating Sustainability into financial decision-making. She also oversaw our efforts and commitment toward the Taskforce on Climate-related Financial Disclosures (TCFD) recommendations. Within the climate action agenda, she was responsible for integrating climate risks into our risk management process, TCFD, carbon pricing and developing our engagement with climate-focused investors. For example, in 2022, she approved the extension of the physical risk approach to include the supply chain.
Chief Operating Officer (COO)	In 2022, DSM's Co-CEO / COO was responsible for Safety, Health and Environment (SHE) and supervised our Sustainable Procurement Program and the sourcing of electricity from renewable sources in his responsibility for the Sourcing function. He managed our engagement with organizations with a primary focus relating to climate. Within the climate agenda, he was responsible for the upgrading of our methodology for measuring the impact of our product portfolio, for our climate advocacy efforts, and for reviewing our emissions reduction targets. For example, in 2022, he approved the new Sustainable Portfolio Steering mechanism which measures the sustainability impact, including on greenhouse gas emissions and climate impact, of our product portfolio.

C1.1b

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

Frequency with	Governance	Scope of	Please explain
which climate-related	mechanisms into	board-	
issues are a	which climate-related	level	
scheduled agenda	issues are integrated	oversight	
item	_		
Scheduled – all	Reviewing and guiding	<not< td=""><td>DSM has developed climate agenda which is actively reviewed by the wider Executive Committee several times a year. In 2022, The Executive</td></not<>	DSM has developed climate agenda which is actively reviewed by the wider Executive Committee several times a year. In 2022, The Executive
meetings	annual budgets	Applicabl	Committee consisted of the two Managing Board members as outlined above, and eight additional executives.
	Overseeing major	e>	
	capital expenditures		The topics cover the three domains of (1) reducing and reporting our GHG emissions and climate-related risks, supported by TCFD implementation and
	Overseeing		advancing our internal carbon price, as key parts of our climate transition plan (2) enabling a low-carbon economy by seizing climate-related business
	acquisitions, mergers,		opportunities, which is reflected in our policies and activities in the areas of M&A, portfolio steering and investor relations and (3) internal and external
	and divestitures		engagement and targeted, constructive climate advocacy.
	Overseeing and		
	guiding employee		Concrete actions within the agenda are owned by individual Executive Committee members including the development of our internal carbon price,
	incentives		advancing our low-carbon portfolio, oversight of our climate advocacy, and engagements with climate-focused investors. Through the agenda, we ensure
	Reviewing and guiding		that the business opportunities related to mitigation and adaptation, and the identified transition and physical risks of climate change, are addressed.
	strategy		
	Monitoring the		
	implementation of a		
	transition plan		
	Overseeing the setting		
	of corporate targets		
	Monitoring progress		
	towards corporate		
	targets		
	Reviewing and guiding		
	the risk management		
	process		

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	Our Supervisory Board has its own Sustainability Committee to oversee progress against targets and to report on the embedding of sustainability, including climate, across the organization. The Sustainability Committee is comprised of four Sustainability Board members - the Chair, with sustainability and innovation experience, and three members, with experience in DSM's business areas, emerging economies and environment - and has the responsibility to prepare the Supervisory Board's discussions on sustainability topics. Competences are assessed on the basis of previous professional and personal experience and any additional trainings undertaken by the board members. Furthermore, DSM collaborates with Chapter Zero, a community of non-executive directors helping to build capacity to lead boardroom discussions on the impacts of climate change (www.chapterzero.org.uk) since 2020. Our Supervisory Board members are provided with the resources from Chapter Zero to support their learning and development related to climate-related issues.	<not Applicable></not 	<not applicable=""></not>

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

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Providing climate-related employee incentives Implementing a climate transition plan Integrating climate-related issues into the strategy Setting climate-related corporate targets Monitoring progress against climate-related corporate targets Assessing climate-related risks and opportunities 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 More frequently than guarterly

Please explain

DSM sees sustainability, including climate, as not only our core value and a key responsibility, it is increasingly an important business growth driver at DSM that is fully engrained in our strategy. For this reason, it is directly overseen by our Managing Board, our highest executive body. They are supported in this through the supervision of the

Supervisory Board and its Sustainability Committee, and advised by the Sustainability Advisory Board. Sustainability, including climate topics, falls under the responsibility of the Managing Board. While DSM's Co-CEOs are the primary point of contact, other members also chair sustainability topics and initiatives. The Co-CEOs oversee climate topics and strategy as a key responsibility and company value as well as a driver of business growth. They jointly were responsible for the climate transition plan, and the corporate climate-related targets. The corporate climate-related targets are reflected in the remuneration policy of the Managing Board as well as senior executives, and has been embedded in the target scheme of the company employees.

DSM's Co-CEO/CFO (and member of the Managing Board) is responsible for integrating sustainability into financial decision making and represents DSM in the relevant external networks, including the Accounting for Sustainability (A4S) CFO Leadership Network. The CFO also oversees our efforts and commitment toward the Taskforce for Climate-related Financial Disclosures recommendations, as well as the implementation of an internal carbon price across the company. In her capacity as CFO, she has responsibility for Risk management and, in relation to climate, (the application of scenario analysis in) the physical and transition climate risk assessments.

DSM's Co-CEO/COO (and member of the Managing Board) is responsible for Safety, Health and Environment (SHE) and also oversaw our Sustainable Procurement Program and the sourcing of electricity from renewable sources in his responsibility for the Sourcing function. He is also responsible for overall supervision of the full climate action agenda.

Position or committee

Chief Procurement Officer (CPO)

Climate-related responsibilities of this position

Monitoring progress against climate-related corporate targets Managing value chain engagement on climate-related issues

Coverage of responsibilities

<Not Applicable>

Reporting line

Operations - COO reporting line

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

Please explain

The CPO is responsible for value chain (scope 3) engagement and emissions reductions. Scope 3 emissions are managed through the CO2REDUCE program which aims to generate deeper insights into the emission performance of our supplier base, identify the GHG reduction options at key suppliers, and support the collaboration needed to enable these initiatives. The CO2REDUCE program directly contributes to the realization of our scope 3 Science Based Target, an intensity reduction target of 28% per unit of product in 2030 versus the base year of 2016. The categories in scope for this Target are Purchased goods and services, Upstream transportation and distribution and Waste generated in operations.

More general engagement in the value chain is through the Sustainable Procurement Program which screens for potential risks in this area through assessments and audits, and value-chain mapping. Since 2015, DSM is a member of Together for Sustainability (TfS), which allows us to screen and address sustainability performance and risks for a high number of our suppliers.

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	

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

Board/Executive board

Type of incentive Monetary reward

Incentive(s)

Shares

Performance indicator(s)

Achievement of a climate-related target Reduction in absolute emissions Energy efficiency improvement

Incentive plan(s) this incentive is linked to

Long-Term Incentive Plan

Further details of incentive(s)

The following goals were set for the LTI grants:

Total Shareholder Return - TSR (weighting 25%): sum of capital gain and dividends paid, representing the total return to shareholders; the relative ranking (within the peer group) reflects the overall performance relative to our peers

Return on Capital Employed - ROCE (25%): operating profit as percentage of weighted average capital employed

Energy Efficiency Improvement – EEI (25%, as of the 2022 grant 15%): the reduction of the amount of energy used per unit product (known as energy efficiency) on a three-year rolling average basis

Greenhouse Gas Emissions - GHGE (25%, as of the 2022 grant 35%): absolute structural reduction of greenhouse gas emissions in kilotons.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The CEO/Managing Board/Executive Committee have long term GHG emission reduction targets and energy efficiency improvement (EEI) targets, which keeps a focus on long-term value creation. The incentivized performance indicators for climate change issues are published in the Remuneration Report in the Integrated Annual Report 2022 (https://annualreport.dsm.com/ar2022/report-by-the-supervisory-board/remuneration-report-2022/remuneration-of-the-managing-board/total-remuneration-2022.html). This is designed to ensure that decisions made are in the long-term interests of all stakeholders and to ensure that interests of the Managing Board and the company stakeholders are aligned.

Entitled to incentive

Corporate executive team

Type of incentive Monetary reward

Incentive(s)

Shares

Performance indicator(s)

Reduction in absolute emissions

Energy efficiency improvement

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

Further details of incentive(s)

All DSM executives have a climate change target (i.e. GHG emission reduction targets and energy efficiency improvement (EEI) targets) as part of their annual bonus scheme. This includes the members of the Executive Committee, as well as the heads of all DSM businesses and functions.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

All DSM executives have long term GHG emission reduction targets and energy efficiency improvement (EEI) targets, which aligns executive targets with those of the Managing Board and of the company. This is designed to ensure that decisions made are in the long-term interests of all stakeholders and to ensure that interests of the executives aligns with the Managing Board and the company stakeholders.

Entitled to incentive

Environment/Sustainability manager

Type of incentive

Monetary reward

Incentive(s) Bonus - % of salary

Performance indicator(s)

Reduction in absolute emissions Energy efficiency improvement Increased share of renewable energy in total energy consumption Reduction in total energy consumption

Incentive plan(s) this incentive is linked to

This position does not have an incentive plan

Further details of incentive(s)

Environment and Sustainability manager have personal objectives (which determine bonus and/or merit increase) linked to achieving company climate change targets, depending on the specific role and scope of the postion.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

DSM aligns its incentive schemes with the company targets. By cascading targets into personal incentives, the company aligns the priorities and efforts of employees with

Entitled to incentive Please select

Type of incentive Non-monetary reward

Incentive(s)

Internal company award Performance indicator(s)

Implementation of an emissions reduction initiative Reduction in absolute emissions Energy efficiency improvement Increased share of low-carbon energy in total energy consumption Increased share of renewable energy in total energy consumption Reduction in total energy consumption Increased engagement with customers on climate-related issues Implementation of employee awareness campaign or training program on climate-related issues

Incentive plan(s) this incentive is linked to

This position does not have an incentive plan

Further details of incentive(s)

DSM yearly recognizes excellent SHE performance within our company through the DSM SHE Award (1 winner and 1 runner-up) and SHE Recognition Awards (max 4 winners). The coverage of these awards is 100% of the employees as every location (regardless of the size or its nature) could win one of the awards. The DSM SHE Award is the highest achievable trophy for SHE excellence in DSM. The statue symbolizes DSM, its values, its transparency and its continuous change and improvement spirit.

Selection criteria for SHE awards are based on

- 1. Management of SHE
- 2. Safety
- 3. Health
- 4. Environmental
- 5. Sustainability performance

Please find below a summary of the relevant criteria:

Environment:

· Improvements on Environmental performance and their trends.

- · Initiatives (being in execution) to improve environmental performance such as:
- 1. Energy saving
- 2. Greenhouse gas reduction (such as N2O or CO2 reduction)
- 3. Waste reduction
- 4. Use of renewable sources
- 5. Reduction of Priority Substances
- 6.Use of water (Reduction of quantity or emissions to water)
- 7. Biodiversity
- 8. (personal) eco footprint,

Sustainability

- Diversity / Inclusion in the management team/workforce.
- Deployment of DSM Code of Business Conduct, including corruption and bribery policies.
- · Product stewardship initiatives such as customer relation management on SHE issues, etc.
- · Quality and effectiveness of stakeholders' management e.g. initiatives to improve corporate citizenship

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The DSM SHE Award encourages all employees to work on SHE topics and supports the realization of the company targets. It does this in two ways:

- 1. Incentivizes employees to work on initiatives that contribute to the company's SHE targets, including climate
- 2. Enables best practices (in climate) to be shared across the organization, thus enabling scalability of the most impactful projects

Entitled to incentive Procurement manager

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Reduction in emissions intensity Increased engagement with suppliers on climate-related issues Increased supplier compliance with a climate-related requirement Increased value chain visibility (traceability, mapping, transparency)

Incentive plan(s) this incentive is linked to

This position does not have an incentive plan

Further details of incentive(s)

The program and procurement managers responsible for managing DSM's scope 3 emissions and CO2REDUCE program have personal targets relating to the execution and progress of the program. This program aims to generate deeper insights into the emission performance of our supplier base, identify the GHG reduction options at key suppliers, and support the collaboration needed to enable these initiatives. On an individual basis, other procurement managers may, where relevant, also have targets relating to scope 3 emissions.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The procurement managers responsible for DSM's scope 3 emissions and CO2REDUCE program are directly responsible for delivering and measuring scope 3 emissions

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	То	Comment
	(years)	(years)	
Short-term	0	3	Climate related risks related to Climate incidents happening in the world currently
Medium-	3	10	Climate related risks which currently have no direct impact, but probably developing fast (emerging risks). This aligns to the 2030 horizon considered in our scenario
term			analysis.
Long-term	10	30	Climate risks based on scenario assessments. This aligns to the 2050 horizon considered in our scenario analysis.

C2.1b

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

At DSM, substantive financial impact is defined for Top risks as the exposure on DSM's EBITDA, being an indicative €30 million or more. Strategic impact is defined for Top risks where they have a major non-financial impact such as sustained, global reputational impact. Risks are classified as strategic, operational, financial, compliance, and reputational related. Identification of climate-related risks is subject to the same impact thresholds as for all other risks.

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 More than once a year

Time horizon(s) covered

Short-term Medium-term Long-term

Description of process

iii) DSM has explicitly integrated climate change risks and business growth opportunities arising from climate change in its long-term Corporate Strategies. The Managing Board is accountable for the management of all risks (including climate-related risks) associated with our company's strategy and activities. To this end, appropriate risk management and internal control systems are in place. The responsibility for identifying and managing risks lies with DSM's individual units.

Risk management at DSM is based upon the COSO-ERM framework. Risk assessments and mitigation plans are carried out at various levels in the organization throughout the year, and potential risks are assessed across the full value chain, i.e. including direct operations as well as upstream (suppliers) and downstream (customers, end users). The outcome from the various Risk Assessments at the different levels in the organization serves as input to the Letter of Representation (LoR) process. The frequency of assessment is twice per year, whereby DSM's units provide a comprehensive overview of material incidents and material risks to the Managing Board.

Both short-term risks (up to and including three years) and emerging (medium- and long-term) risks (3–30 years) in the risk categories strategic, operational, financial, compliance, and reputational are the focus of our risk assessments. A Risk Assessment Manual and training is available to give guidance and continuously improve the effectiveness of our risk assessment process.

The units are supported by the Group Risk Management (GRM) department and are regularly assessed by the Corporate Operational Audit (COA) department. Both GRM and COA report directly to the CFO/Co-CEO, and COA has direct access to both Co-CEO's as well as to the Audit Committee of the Supervisory Board.

We take a standard but flexible approach to risk assessments: a) Risk assessment planning; b) preparation; c) Risk identification and clustering; d) Risk rating; e) Evaluation and risk response.

For the risk identification individual input is requested from relevant stakeholders/ knowledge holders. The total input received serves as input to the next step in which all risks are rated along 2 axes: Likelihood and Impact. The combination of these two dimensions results in the Risk Exposure. The Risk Exposure informs us of which of the identified risks are substantive/strategic. The rating is initially done individually, followed by a group discussion in which the final rating takes place and mitigating measures/risk response are defined, if any. The potential costs of additional mitigations are balanced versus the reduction in risk exposure that will be achieved.

Corporate Risk Assessment: We periodically conduct a company-wide Corporate Risk Assessment (CRA), which is the responsibility of the Managing Board. As part of this assessment, the Executive Committee (EC) reviews and agrees on the short-term top risks as well as emerging risks. The EC also agrees on how to mitigate and monitor these. The outcome of the CRA is reported to, and discussed with, the Audit Committee of the Supervisory Board

-Unit Risk Assessments; Across the company, the DSM units (the business groups, support functions, functional excellence departments and regions) also conduct various types of risk assessments. Most risk assessments are carried out by cross-functional, multi-disciplinary teams. These teams include experienced facilitators as well as experts who can challenge assumptions in order to help improve the quality of these risk assessments.

Examples of other risk assessments - in aggregate several times a year:

- Business Risk Assessments: focus on risks that could jeopardize the attainment of our strategic goals and business objectives.

- Process Risk Assessments: focus on making our (company-wide or unit-specific) processes more robust and fraud-proof.

- Project Risk Assessments focus on specific projects and are updated throughout project execution to secure successful delivery of project objectives and value creation for the company.

In addition to the above, specific risk assessments may be performed for areas such as Safety, Health, Environment, Climate and (Cyber)security.

Response process; The outcome from the various Risk Assessments at the different levels in the organization serves as input to the Letter of Representation (LoR) process, the units report their identified material short-term and emerging risks to the Managing Board. The LoR also documents the risk response defined in respect of these risks. A formal sign-off by each unit director is required. The output of the LoR process is discussed in the Executive Committee as well as the Audit Committee of the Supervisory Board.

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

	Relevance	Please explain
	inclusion	
Current	Relevant,	Compliance with current regulations is always included in DSM's climate related risk assessments, as it could affect both the operating costs and our license to operate.
regulation	always included	(i)Example of the risk type relevant to DSM: One example of a considered potential risk from current regulation specific to DSM is through our sites that are subject to Carbon Pricing schemes. The risk assessment related to this is executed by the Global Operations team, in close collaboration with the impacted sites. Example of such a site is our site in Delft, Netherlands which is subject to the EU ETS. Monitoring is conducted on a frequent basis of the actual and planned emissions, free allowances, purchased allowances, forecasting of external developments and the total cost resulted. Through this approach, the impact of taken and upcoming emissions reduction activities is closely integrated to the regulatory compliance plan.
Emerging	Relevant,	Governments around the world are focusing increasingly on the environmental footprint of their domestic industries. DSM operations cover some 100+ sites and offices in 41 countries.
regulation	included	(i)Example of the risk type relevant to DSM: One example of a considered potential risk from emerging regulation specific to DSM is through our sites expected to be subjected to emerging Carbon Pricing schemes. Example of such sites are selected sites in China. DSM has currently 20 manufacturing sites in China. While the impact to our sites may vary regionally, the sites together with our Global Operations team are already preparing the needed documentation and assessment of the financial impacts to business. These assessments take into consideration how the emerging schemes will impact direct costs, and compliance costs from monitoring, reporting and verification.
		Furthermore, by means of mitigating risks of emerging carbon pricing schemes, within DSM's business units, all investment proposals need to be carbon neutral. When investments would "over achieve" and have a negative CO2 emission, extra revenues of €100 per ton CO2e saved can be added in the business case proposal. The internal carbon price increases the visibility of, and encourages accountability for the impact of (future) carbon on the business.
Technology	Relevant, always	The continuous assessment of technology developments is key for considering maintaining our competitiveness in our markets, costs of operations, and meeting our GHG reduction
	included	i)Example of the risk type relevant to DSM: A potential risk from technology specific to DSM is the development of alternative protein production technologies substituting animal proteins from livestock or new competing alternative proteins technologies, which could potentially reduce market demand for some of our current animal feed or plant-based solutions. DSM is mitigating the risk by diversifying our solutions portfolio in this area using our unique competences in biotechnology, for example through the following innovations and continuously monitoring the technology developments: 1. Plant-based proteins, e.g. from rapeseed (CanolaPRO®) or peas/beans (Vestkorn Milling) 2. Fermentation-based proteins e.g., for dairy proteins and egg white replacement 3. Cellular agriculture, where DSM is an investor in and development partner of Meatable
Legal	Relevant, always included	DSM is risk averse when it comes to legal and compliance risks, and the risks coming from litigation cases (existing ones and potential new ones) is always included in risk assessments. In addition to the standard reporting process for risks via the LoR process, we also maintain a separate reporting process on existing, open litigation cases, which have an uncertain outcome.
		(i) An example risk that we monitor in this space externally relates to legal action against companies regarding their (inadequate) GHG emission reductions targets and ambitions. This could pose a risk for our target setting and consequently, for our manufacturing sites globally. However, we do not expect this to represent a material risk to DSM.
Market	Relevant,	DSM identified market risk as an emerging risk, when our end-markets may be disrupted by longer-term changes related to the transition to a net-zero world faster than our ability to adapt.
	always included	(i) Example of the risk type relevant to DSM: Due to changes in consumer preferences, the dairy market is moving into plant-based alternatives like soy milk. This could impact the demand for our dairy enzymes and cultures. DSM is mitigating the risk by diversifying our portfolio towards plant-based dairy alternatives, offering solutions to tailor the taste and texture of these products, e.g. with our Delvo®Plant portfolio of enzymes
Reputation	Relevant, always	Although considered unlikely, DSM considers the risk of reputation loss due to the potential gap between our communication and commitments made externally, compared to the actual or perceived ESG performance.
	Included	(i)Example of the risk type relevant to DSM: DSM is a globally active, purpose-led company that is very vocal on climate change related issues and as such exposed to risks if DSM fails (or is perceived to fail) to deliver sufficiently on its climate change expectations, such as our proportional contribution to meet the Paris Agreement goals (our Science Based emissions reduction Targets).
		We are taking several steps to mitigate this risk. 1. it is crucial to deliver against any targets and commitments we make. For this purpose, we have several dedicated programs in place to address both operational emissions and value chain emissions, ensuring annual emissions reductions are in line with our science-based targets 2. We monitor the level of our targets to ensure they are considered ambitious enough and regularly update them (in 2021 and 2022) 3. We perform risk assessments on physical and transition climate risks and act upon them 4. DSM has an Issue Management System in place that helps it track, monitor and engage on any perception that could negatively influence the company's reputation
Acute physical	Relevant, always	As an essential complement to our efforts to cut emissions, we also apply an integrated strategy of climate adaptation measures. For example, we conducted a risk assessment of our top 30 sites. Three acute risks were included (flooding, wildfire, cyclones), three time horizons (present, 2030 and 2050) and 3 scenarios (1.5°C, 2°C, and 3.4°C).
	Included	(i)Example of the risk type relevant to DSM: The results of the physical risks assessment indicates that of the assessed acute physical hazards, flooding could potentially cause major business disruption, due to damage to equipment, interruptions in feedstock or utility supply, and limitations in site accessibility. Different mitigation measures (e.g. flood barriers) have already been put in place, either by DSM or municipality/governments.
Chronic physical	Relevant, always included	As an essential complement to our efforts to cut emissions, we also apply an integrated strategy of climate adaptation measures. For example, to improve the resilience of our assets and supply chains against potential physical impacts of climate change, we apply scenario analysis to assess our physical risks for our top 30 sites. Two chronic risks were included (extreme heat, water scarcity), three time horizons (present, 2030 and 2050) and 3 scenarios (1.5°C, 2°C, and 3-4°C).
		(i) Example of the risk type relevant to DSM is water scarcity (the ratio of total water withdrawals to total water renewable supply in a given area as DSM's sites require fresh water for manufacturing, and use water for cooling). Increased temperatures could reduce cooling capacity in summer by limitations on water intake (physically or by authorities) leading to reduced production capacity. The short-term/medium-term risk is managed via the Water Risk Assessments that have been ongoing for a few years now and have resulted in water reduction measures in several sites. The long-term focus was added for the 30 material sites via the scenario analysis that was completed.

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

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Emerging regulation
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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

Governments around the world continue to increasingly focus on the environmental footprint of their industries. While we strongly support the development of carbon pricing schemes, the risks deriving from uncertainty from developments in existing carbon pricing schemes (e.g.EU ETS) and emerging new cap & trade or carbon tax systems in other jurisdictions are closely monitored as these could result in increased operating costs.

i)DSM operations cover 100+ sites and offices in more than 40 countries. Emerging and developing carbon pricing (either cap&trade or carbon tax) mechanisms are likely to affect DSM's cost base directly (eg. in EU, Switzerland, UK, and China) as a result of having to purchase emissions allowances at higher price or indirectly through costs passed through from energy providers (DSM is fairly energy intensive), or from raw material suppliers (some feedstocks used have high upstream carbon footprint). DSM operating sites subjected to current carbon price schemes are in Europe (Netherlands, UK, France, Germany, Switzerland). In the EU there is a certain level of uncertainty of the future design of EU ETS (with uncertainty itself considered a risk), but main impacts for DSM sites likely to be affected, Dalry (UK ETS), Village Neuf, Delft, Grenzach, Lalden, Emmen, Geleen (EU ETS) and Sisseln (Swiss/EU ETS) are expected in the form of increased price of allowances, and/or lower the amount of free allowances granted or country specific carbon pricing schemes on top of the ETS systems. For example, DSM's site in Dalry, Scotland is the only western production site for Vitamin C. Major changes to production cost resulting from carbon pricing could play also a role for the competitiveness of the production against other regions, although DSM view still is that carbon price is only one of many competitiveness factors.

In the other parts of the world, new carbon pricing policies also covering DSM industry sector are planned or under implementation, such as in China (DSM has currently 20 manufacturing sites in China). Direct impacts are likely to result in increased operating costs and compliance costs from monitoring, reporting and verification (to a limited extend). Other regions in the globe are also working on carbon pricing mechanisms, such as North America and South America (i.e. Brazil), where DSM also has operations

Time horizon

Medium-term

Likelihood Likely

Magnitude of impact Medium

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) 20000000

Potential financial impact figure – maximum (currency) 105000000

Explanation of financial impact figure

ii) The potential annual financial impact can range from €20 million - €105 million annually depending on the magnitude of changes/increase of carbon prices across jurisdictions and complementary policy measures. In 2022 the price per ton of CO2 remained high in EU Switzerland and UK. However, it remained low in other jurisdictions. Although free allowances continued to be significantly reduced in in EU, Switzerland and UK, the ETS design in other regions seem to contemplate a significant portion of free allowances. As part of our regular monitoring, short-medium and longer-term pricing scenarios are drawn. For example, for 2025 we would expect carbon liability of €20-25 million but in 2050-2030 timeframe the range estimate spreads broadly due to uncertainties in revisions of carbon pricing schemes.

The lower end for the potential financial impact is based on the following internal assumptions:

- 1) sites expected to be subject to an ETS
- 2) a carbon price of around €110/tCO2e in 2025 in Europe/UK

3) reduced quantities of free allowances,

4) Estimated emissions for sites in scope, covering business growth and further accelerated reduction in our GHG emissions

On top of above, the potential financial impact figure foresees a possibly accelerated reduction of free allowances in EU, Switzerland and UK (zero free allowances by 2030), which could result from measures derived by current EU proposal of EU CBAM.

The higher end for the potential financial impact figure has been calculated for illustrative purposes. For the example, with a price of $\leq 100/tCO2e$, the level of our Internal shadow Carbon Price, we would be liable for our current Scope 1 emissions approximately ≤ 57 million (570 kt CO2e * $\leq 100/tCO2e$), assuming no free allowances are available, and all our global operations are subject to some form of ETS. In addition, we could reasonably expect costs to be passed onto us related to our scope 2 market based emissions This would amount to an additional approximately ≤ 48 million (480 kt CO2e * $\leq 100/tCO2e$), subject to the same assumptions as above. This brings the total to approximately ≤ 105 million. Due to the uncertainty around scope 3 emissions, these have not been accounted for in this calculation.

The risk level is also naturally depending on the speed by which DSM is able to reduce the actual emissions; our current GHG target is to reduce Scope 1 and 2 emissions in absolute terms with 59% by 2030 which will impact on the above calculations

Cost of response to risk

21500000

Description of response and explanation of cost calculation

iii) Firstly, DSM's total exposure will be reduced through the implementation of our GHG reduction targets (for direct operations 59% reduction in absolute terms by 2030 from 2016), and our net-zero roadmap. Since 2019, business growth projects must either be GHG-neutral or else be compensated for within the same business. GHG reductions are supported by Corporate targets for Energy Efficiency and efforts to reach 100% purchased renewable electricity by 2030. These targets are part of the Long-Term Incentives of the Managing Board and are included in the personal targets of all executives in the company.

Secondly, changes to carbon pricing systems worldwide are closely monitored. Site managers, with Global Sourcing monitor on frequent basis the resulted emissions, free allowances, purchased allowances, forecasting of developments and the total cost resulted. DSM also uses Internal Carbon Pricing (globally) to already stress test and ensure any new investments are viable event with developing regulatory environment. Internal carbon price of €100/t CO2e is always applied in large investments.

A case study where DSM's internal carbon pricing scheme has been a supporting driver for an emissions reduction investment is the biomass project in Switzerland, which was an opportunity to renew an old installation with limited investments in a cost neutral way. While the Swiss ETS prices at the time were not sufficiently high to fully support the business case, we applied our internal carbon price (€ 50/mt CO2e at time of investment) to prepare for future carbon prices. Timescale: Project reached full year capacity in 2020 and has been successfully running for over 3 years now, realizing a total of 46kt CO2e annual reduction of emissions for DSM.

iv) Explanation of cost: The estimated costs are $\sim \in 21.5$ million/year, comprising from GHG reduction investment budget (20 000 000), and the FTEs (1 500 000) required to manage the GHG program and to monitor longer-term developments. An annual investment budget of $\notin 20.25$ million is available for the GHG reduction program's 30-40 projects annually depending on the availability and feasibility of projects with low-end figure $\notin 20$ million used for illustrative purposes. The FTE costs are estimated at an annual $\notin 1$ million for FTEs from 18 sites where significant time is dedicated to the program , and $\notin 0.5$ million from other functions, such as sourcing and sustainability, supporting the delivery and monitoring.

Comment

DSM is also in favor of the expansion and linking of carbon pricing systems as a way to improve the long-term certainty of the policy environment, and visibly advocating for the topic using various platforms to engage with key stakeholders and policymakers.

Identifier Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Precipitation and/or hydrological variability

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

i) DSM applies a methodology to assess long-term physical risks in a systematic way using scenario analysis, with an initial focus on the top 30 main operating sites. The hazard assessment was undertaken considering the extent of (1) the existing hazard at the sites and (2) the future hazard at the 2030 and 2050 timeframes. The assessment was conducted for three future scenarios, the IPCC 'RCP 2.6' comparable to a "global 1.5 degrees warming by 2100" scenario; the IPCC 'RCP 4.5' comparable to a "global 2 degrees warming by 2100" scenario and to WRI Optimistic Scenario; and the IPCC 'RCP 8.5' comparable to a "global 4 degrees warming by 2100" scenario and to WRI Optimistic Scenario; and the IPCC 'RCP 8.5' comparable to a "global 4 degrees warming by 2100" scenario and WRI Pessimistic Scenario. The site locations assessed span across Europe (14 sites), China (4 sites), North America (9 sites) and South America (3 sites). One of the chronic hazards assessed was water scarcity (the ratio of total water withdrawals to total water renewable supply in a given areas). DSM's sites require fresh water for manufacturing, and use water for cooling, with limitations on water intake (physically or by authorities) could lead to reduced production capacity. The results of the assessment indicates that from the assessed chronic hazards water scarcity could have significant potential financial impact within the medium-term, i.e. 2030 time-frame.

Three of the DSM high-impact sites are identified as being in already in a water scarce/stressed areas. These include our sites in Belgium, France and Peru. In these sites, the risk of water scarcity in all 3 assessed scenarios (RCP 2.6, RCP 4.5 and RCP 8.5) in the 2030 time-frame is stable with measures already taken to mitigate the risk. Three additional key sites (one in Netherlands, two in China) show significantly increased risk of water scarcity in both RCP 4.5 and RCP 8.5 scenarios by 2030.

Time horizon Lona-term

Likelihood

Likely

Magnitude of impact Medium-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) 40000000

Potential financial impact figure – maximum (currency) 100000000

Explanation of financial impact figure

ii) The financial impact are indicative numbers based on the first high-level assessments. Potential financial loss due to water scarcity are based on the three additional key sites showing significantly increased risk of water scarcity in both RCP 4.5 and RCP 8.5 scenarios. The losses are calculated based on a potential production capacity reduction of between 10 and 25 percent due to the non-availability of water (either water is not available, or use is restricted by governments), resulting in an impact on contribution margin of between €40 and 100 million.

Cost of response to risk

30000000

Description of response and explanation of cost calculation

iii) Water management is integral to our risk mitigation and environmental impact reduction strategies. We believe that water risks are local by nature. As such, we focus on local water risk assessments and thorough follow-up. Water risk assessments have been completed at 100% of our material water sites. For the major sites, in-depth water audits are conducted to tailor local management methods. These include improvements to reduce water consumption (such as cooling equipment to reduce water use), diversify sources of water, and close monitoring of the evolution of the local regulation and other users.

Case study: The water risk assessment performed for site in Pune (India) indicated that the site could experience water shortages due to external infrastructure limitations and regulatory requirements, which would be further exacerbated by drought. A water stream mapping identified several responses that would lead to improvements: (1) the installation of an Effluent Treatment Plant, Effluent Storage tank and a new Process Vacuum Pump on-site enabled the treatment and storage of effluent for reuse (2) a new cooling tower fan automation was installed to reduce evaporation losses

(3) extensive education campaigns to instill a Zero Leakage culture

Timescale: Water consumption was reduced in 10 years (2009-2019), from above 5 m3/ton to significantly below 1 m3/ton, reducing potential long-term risks relating to water and climate change. We estimate the total cost of these measures at €5-10 million. The cost of the measures were economically feasible with a short pay back time and spanned across several years.

iv) Cost to respond is site specific and the cost calculations are indicative only. Of the 6 at-risk major sites (3 current and risk of increase, 3 potential), all have taken significant steps to reduce water consumption with further assessment ongoing. Based on the case study in Pune (with similar measures taken at other sites) we know that water consumption reduction measures can be done cost effectively, and often with reduced energy costs and CO2 emissions. For illustrative purposes, the cost of response is calculated by multiplying the high-end cost of management measures (of the example actions 1-3 listed above in the Pune case study at \in 10 million) for 3 DSM sites with emerging potential water scarcity risks (\in 10m x 3 = \in 30 million).

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? Direct operations

Opportunity type Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Primary potential financial impact Beduced direct costs

Reduced direct costs

Company-specific description

i) DSM's total energy consumption in 2022 was 5,228,900 MWh. DSM has a dedicated Energy Efficiency program to help reduce emissions and energy costs within DMS's GHG reduction program umbrella ("Target 30"), which is ensuring the delivery against our Science Based Targets (-59% Scope 1 and 2 emissions by 2030 in absolute terms). This results in cost savings as it reduces our energy consumption. In addition, it will reduce (existing or future) liabilities for sites subjected to carbon pricing schemes, further reducing our operating costs.

In this program, emissions reduction roadmaps for short, medium and long-term, are developed for our (20+) major sites globally, with recent years increased focus in China. In the program we use both a vertical (bottom-up) approach as well as a horizontal approach to map new process innovations and which sites would most benefit from these (e.g. best available and replicable technologies on MRV, heat pumps, membranes and biogas). A large part of the initiatives proposed annually in the roadmaps are energy-efficiency related. Projects under this DSM program include improving energy efficiency in steam generation and distribution, cooling and compressed air utilities, installing solar panels, minimizing heat losses through heat integration and heat pumps or, for instance, reducing energy required for water separation by using membranes. These projects often also deliver additional benefits such as cost and/or water savings in addition to GHG reductions.

The program has a dedicated annual investment budget of €20 - 25 million. In 2022, there were around 50 initiatives under the program either implemented or ongoing resulting in CO2 savings

Time horizon Short-term

Likelihood Virtually certain

Magnitude of impact Medium

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

Potential financial impact figure (currency) 26000000

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

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

Explanation of financial impact figure

ii) The financial impact figure represents approximate annual saving of approximately 26 million EUR with ~46 million EUR investment over the course of 2-3 years (2020-

The financial impact estimate represents those DSM projects that are centrally funded under the Energy Efficiency Program running until 2030. In 2020-22, there were 110+ either implemented or ongoing projects resulting at CO2 savings through increase efficiency under the Program. The current improvement projects have high overall Internal Rate of Return, for most estimated at approximately 30%, with an average payback time of less than 3 years.

Detailed statements on the exact financial implications cannot be made for business sensitive reasons but breakdown of the financial implications for largest spend project types as follows (=total expected costs savings/year) with number of projects indicated as (#), totaling to ~26MEUR over 2020-2022; Air compressor (7projects) 1,118,000; cooling (13) 1,429,000; heat pump (2) 171000; heating (26) 5,118,000; Smart control system (9) 2,738,000; Process optimization (14) 2,504,000; Machine/equipment replacement (3) 305000; Waste heat recovery (7) 3,662,000; Cooling technology (4) 1,253,000; Electrification (3) 2,477,000; Other (e.g. biogas, insulation, membrane monitoring 25 projects) ~6,500,000. Further details of the latest 2022 projects in C 4.3

Cost to realize opportunity 46500000

Strategy to realize opportunity and explanation of cost calculation

iv)Explanation of cost calculation: The 40-45 million EUR is the overall CAPEX budget allocated to DSM's GHG/Energy Efficiency program over the period 2020-2022 to help reduce emissions and energy costs (low-end figure used here for illustration). The Energy Efficiency Investment project funds approximately 30-50 projects annually with investment costs varying significantly from under a hundred thousand to few million euros per project. Indicative breakdown of the largest CAPEX/project types as follows (=46,5MEUR over 2020-2022): Air compressors 3.8MEUR; cooling 4,8MEUR; heat pump 1,2MEUR; heating 8,4MEUR; Smart control system 4.7MEUR; Process optimization 2MEUR; Machine/equipment replacement 3.1MEUR; Waste heat recovery 1.7MEUR; Cooling technology 6.7MEUR; Electrification 6.3MEUR; Other (e.g. biogas, insulation, membrane monitoring) 3.8MEUR. Further details of the 2022 projects in C 4.3

Timescale: 2020-2022. For illustrative purposes, the overall program budget allocation over the period 2020-2022 is matched with the financial impact explanation above for the selected years of projects implemented between 2020-2022. The GHG program is ongoing (supporting the realization of DSM's Science Based Targets -59% Scope 1 and 2 emissions by 2030 in absolute terms.)

iii) Case study: project from 2021 (i.e. within the timescale 2010-2022) Situation: Jiangshan, China is one of our higher emitting sites. Task: process optimization opportunity reducing GHG identified. Action: a pre-concentration step, using a nano-filtration membrane, was installed upstream of an evaporative water removal step from an intermediate product. Result: The newly added membrane unit reduces the amount of energy used for the water evaporation considerably, hence reducing the GHG emission by approximately 3,800 tons CO2e per year, and resulting in associated annual savings of approximately €260,000.

Another example is utility improvement in Xinghuo, China, where a state-of-the art cooling system, using low global warming potential (GWP) refrigerants – well ahead of local regulation - was installed. This cooling equipment investment reduces GHG impact from refrigerant leakages and bring significant energy efficiency improvement leading to 4,100 tons CO2e savings per year. Next to that by transitioning cooling production from heat to electricity, this project helps the site to further reduce GHG emissions in upcoming years when transitioning to renewable electricity.

Comment

Identifier

Opp2

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

i)DSM's Brighter Living Solutions Plus (BLS+) program drives products and innovations that deliver a sustainability benefit while doing no significant harm to people or planet. These products pass our internal minimum performance requirements, deliver a recognized benefit to one or more of the 11 impact drivers, and have no recognized, urgent negative impacts across the other impact drivers. Some of the drivers include for example evidence of reduced or avoided GHG emissions within the product or within the value chain, Reduced food loss and waste, improve process yield, efficient use of natural resources and use of renewable feedstock, clean label ingredients, and safer material content.

DSM had an ambition of >65% of our sales in 2022 coming BLS+. In 2022, BLS+ sales exceeded this comprising of 67% of total sales.

DSM BLS+ solutions with a positive climate impact include for example nutritional solutions from our ANH business unit that target livestock emissions, such as ProAct (improves protein feed utilization in poultry and reduces nitrogen emissions to the environment) and Bovaer® (supplement reducing methane emissions from ruminants). DSM solution Bovaer® is a feed additive for cows researched and developed over 10 years by DSM. Just a quarter teaspoon of Bovaer® per cow/day consistently reduces enteric methane emission by approximately 30% for dairy cows and ~45% in beef cattle. Bovaer® contributes to a significant and immediate reduction of the environmental footprint of meat, milk and dairy products. It is the most extensively studied and scientifically proven solution to the challenge of burped methane to date and is the first EU feed additive with environmental impact approved in this category. Bovaer® is currently available for sales in over 40 countries, incl. the EU for dairy and reproductive cows and for all ruminants in e.g. Brazil, Argentina &Australia. Registration in all other countries underway. Bovaer® is currently sold to dairy brands, beef processors, retailers and food service companies committed to reducing their CO2e emissions over time to Net Zero. Reducing methane emissions was identified at COP26 as one of the most significant short-term means of tackling climate change, with 150+ governments since pledged to cut methane emissions by 30% by 2030, as part of the Global Methane Pledge. These efforts are expected to increase the demand for market-ready, well tested and safe solution like Bovaer® over the next years.

Time horizon

Short-term

Likelihood Very likely

Magnitude of impact Medium-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) 218140000

Potential financial impact figure – maximum (currency) 561291000

Explanation of financial impact figure

ii) While our internal target level for DSM BLS+ was 65%, in 2022 DSM BLS+ sales exceeded that with 67% of net sales (net sales of continued business being €8,39 billion in 2022). The hypothetical potential financial impact figure has been calculated based on an expected increase in BLS sales in line with the average historic organic growth of the company (between 4-7%).

Minimum financial impact = 2022 net sales of the continuing operations X 104% (low end of target organic growth 8 390 000 000 x 1,04 = 8 725 600 000) X 65% (2021 BLS realization 8 725 600 000 x 0,65) 5 671 640 000 - 2022 net sales of the continuing operations x 65% (2021 BLS realization 8 390 000 000 x 0,65) 5 453 500 000 = 218.140.000

 $Maximum financial impact = 2022 \text{ net sales of the continuing operations x 107\% (top end of target organic growth 8 390 000 000 x 1,07= 8 977 300 000) X 67\% (current BLS+ level=) 6.014.791.000 - 2022 \text{ net sales of the continuing operations x 65\% (min. BLS+ target: 8 390 000 000 x 0,65) 5.453.500.000 = 561.291.000$

As an example of BLS+ solution, Bovaer®, is an integral part of ANH's growth strategy, particularly with respect need for greater sustainability in the animal protein food chain and global initiatives increasing the demand over the next years. The dairy and beef industry has an important role to play as enteric methane from cows/cattle is responsible for up to 60% of the global greenhouse gas emissions from milk and beef production. Reducing methane emissions was identified at COP26 as one of the most significant short-term means of tackling climate change. More than 100 governments pledged to cut methane emissions by 30% by 2030, as part of the Global Methane Pledge, launched by the EU and the US. Bovaer® is currently sold to dairy brands, beef processors, retailers and food service companies who have committed to reducing their CO2e emissions over time to Net Zero.

Cost to realize opportunity

461000000

Strategy to realize opportunity and explanation of cost calculation

We continuously invest in innovation in view of the overall balance of our product portfolio and product life cycles, and the BLS+ methodology provides a framework to steer and ensure the sustainability of our performance of our products and innovations.

iii) Case study:

Situation: Reducing methane(CH4) emissions was identified at COP26 as one of the most significant short-term means of tackling climate change.

Task: Over 100 governments pledged to cut CH4 by 30% by 2030, as part of the Global Methane Pledge, launched by the EU &US. Several dairy brands, beef processors, retailers and food service companies have committed to reducing their emissions to Net Zero by 2050.

Action: DSM's BLS+ solution Bovaer® is the result of a decade of scientific research, including more than 50 peer-reviewed studies published in independent scientific journals and 50+ on-farm trials in 15 countries across 4 continents. Just a quarter teaspoon of Bovaer® per cow/day consistently reduces enteric methane emission by approximately 30% for dairy cows and ~45% in beef cattle. Bovaer® contributes to a significant and immediate reduction of the environmental footprint of meat, milk and dairy products. Bovaer® is currently produced in Germany with new dedicated large scale production facility currently build in DSM Dalry, Scotland. Construction started in 2022 and expected to be operational in 2025 (investment case described below as part of the illustrative cost explanation).

Result: Bovaer® has already reduced approximately 51828 CO2e reduction since trials began (as of 06/2023). DSM continues to expand partnerships with several major dairy and beef companies to prepare for the implementation of Bovaer® at large scale. These preparations will contribute to Bovaer® 's smooth incorporation into existing farming practices and ensure its impact can be felt as soon as possible.

Timescale: 2022-2023

iv) Explanation of cost calculation: cost breakdown created here for illustrative purposes and public data sources only, and consists here mainly on (1) as a proxy, DSM R&D expenditure in 2022 (\leq 345 million) with all new innovations steered through the BLS+ methodology (2) as in illustrative example of the case study, new dedicated large scale production facility for Bovaer® in our DSM Dalry, Scotland site to meet increasing demand. Construction began in 11/2022 and the site is expected to be be operational in 2025. The investment is published to be £100 million (~ \leq 116 million)

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 $^{\circ}\text{C}$ 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

In DSM's annual public disclosures, such as IAR, DSM transparently shares its strategic plans, key indicators and actions taken to align DSM's operations and business model with the transition to global net-zero economy by 2050.

DSM presents our business strategy during Investor Days and at the AGM, which includes our emissions reduction targets and our roadmaps, as well as our remuneration policy, which has a clear link to emissions reduction (greenhouse gas reduction, energy efficiency and renewable electricity).

DSM does not intend to present a separate low-carbon transition plan as a separate resolution item to the AGM as we have an integral approach toward Triple P, as for us these go hand in hand - Our People and Planet goals are an integral part of our business strategy, contributing to the Profit dimension. We don't believe it would be fitting for DSM to single out climate for the AGM. Sustainability is part of our strategy, it contributes to the success of that strategy and is at the core of how we've executed that strategy, and as such, it is fully reflected in the annual results that shareholders get to vote on.

Furthermore, DSM regularly discusses our transition plan bilaterally with investors and NGO's. As an example, recently DSM engaged with Friends of the Earth Netherlands (FEN) and NewClimateInstitute to present elements of our transition plan

Frequency of feedback collection

More frequently than annually

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

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
F	Row	Yes, qualitative and quantitative	<not applicable=""></not>	<not applicable=""></not>
ŀ	1			

C3.2a

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

	Climate-related scenario	ated Scenario Temperat analysis alignment coverage scenario	Scenario Temperature Parameters, assumptions, analytical choices analysis alignment of coverage scenario
Physical climate scenarios RCP 2.6 Company- wide <not Applicable> Scenario analysis is an iterative process at DSM. The approach and starting point to assess physical risks impact is based upon considering company wide with a cross functional team from Risk Management, Corporate Sustainability and Operations. While assessing controls in place and mitigation measures done on site level as these are very location specific, best practice are also broadened to other sites at company level where applicable and fitting. The systematic process to assess physical risks using scenarios was started in 2020, when we performed a desk study on physical risks for our key sites lead to material financial impact in case of a prolonged shutdown. We mapped five emerging hazards (flooding, cyclones, wildfire, extreme heat, and wate against three IPCC climate temperature scenarios (RCP 2.6, RCP 4.5, and RCP 8.5), using three different time horizons (present, 2030, and 2040/2050). These scenarios were supplemented with additional data from example from Aqueduct (from WRI) and Climate Knowledge Portal (from the World Bank). In 2021, the results from that study were validated with these sites in order to understand our risk exposure and resilience taking into account local circum existing mitigations. The validations demonstrated that we already have mitigations in place for several of the risks identified through the desk study. We r concluded that water scarcity is the most material risk and needs to be actively monitored and managed. All sites with an increased water risk profile were scope of our water stewardship program. We are currently in the process of reviewing and determining updates for sources, assumptions and variables and expanding the scope. <td>Physical RCF climate 2.6 scenarios</td><td>RCP 2.6 wide Applicable</td><td>P Company- <not< td=""> Applicable> Scenario analysis is an iterative process at DSM. The approach and starting point to assess physical risks impact is based upon considering company wide impact with a cross functional team from Risk Management, Corporate Sustainability and Operations. While assessing controls in place and mitigation measures are often first done on site level as these are very location specific, best practice are also broadened to other sites at company level where applicable and fitting. The systematic process to assess physical risks using scenarios was started in 2020, when we performed a desk study on physical risks for our key sites that could lead to material financial impact in case of a prolonged shutdown. We mapped five emerging hazards (flooding, cyclones, wildfire, extreme heat, and water scarcity) against three IPCC climate temperature scenarios (RCP 2.6, RCP 4.5, and RCP 8.5), using three different time horizons (present, 2030, and 2040/2050). These scenarios were supplemented with additional data from example from Aqueduct (from WRI) and Climate Knowledge Portal (from the World Bank). In 2021, the results from that study were validated with these sites in order to understand our risk exposure and resilience taking into account local circumstances and existing mitigations. The validations demonstrated that we already have mitigations in place for several of the risks identified through the desk study. We have concluded that water scarcity is the most material risk and needs to be actively monitored and managed. All sites with an increased water risk profile were already in scope of our water stewardship program. We are currently in the process of reviewing and determining updates for sources, assumptions and variables and expanding the scope.</not<></td></not 	Physical RCF climate 2.6 scenarios	RCP 2.6 wide Applicable	P Company- <not< td=""> Applicable> Scenario analysis is an iterative process at DSM. The approach and starting point to assess physical risks impact is based upon considering company wide impact with a cross functional team from Risk Management, Corporate Sustainability and Operations. While assessing controls in place and mitigation measures are often first done on site level as these are very location specific, best practice are also broadened to other sites at company level where applicable and fitting. The systematic process to assess physical risks using scenarios was started in 2020, when we performed a desk study on physical risks for our key sites that could lead to material financial impact in case of a prolonged shutdown. We mapped five emerging hazards (flooding, cyclones, wildfire, extreme heat, and water scarcity) against three IPCC climate temperature scenarios (RCP 2.6, RCP 4.5, and RCP 8.5), using three different time horizons (present, 2030, and 2040/2050). These scenarios were supplemented with additional data from example from Aqueduct (from WRI) and Climate Knowledge Portal (from the World Bank). In 2021, the results from that study were validated with these sites in order to understand our risk exposure and resilience taking into account local circumstances and existing mitigations. The validations demonstrated that we already have mitigations in place for several of the risks identified through the desk study. We have concluded that water scarcity is the most material risk and needs to be actively monitored and managed. All sites with an increased water risk profile were already in scope of our water stewardship program. We are currently in the process of reviewing and determining updates for sources, assumptions and variables and expanding the scope.</not<>

Climate-related	Scenario	Temperature	Parameters, assumptions, analytical choices
scenario	analysis coverage	alignment of scenario	
Physical RCP climate 4.5 scenarios	Company- wide	<not Applicable></not 	Scenario analysis is an iterative process at DSM. The approach and starting point to assess physical risks impact is based upon considering company wide impact with a cross functional team from Risk Management, Corporate Sustainability and Operations. While assessing controls in place and mitigation measures are often first done on site level as these are very location specific, best practice are also broadened to other sites at company level where applicable and fitting.
			The systematic process to assess physical risks using scenarios was started in 2020, when we performed a desk study on physical risks for our key sites that could lead to material financial impact in case of a prolonged shutdown. We mapped five emerging hazards (flooding, cyclones, wildfire, extreme heat, and water scarcity) against three IPCC climate temperature scenarios (RCP 2.6, RCP 4.5, and RCP 8.5), using three different time horizons (present, 2030, and 2040/2050). These scenarios were supplemented with additional data from example from Aqueduct (from WRI) and Climate Knowledge Portal (from the World Bank).
			In 2021, the results from that study were validated with these sites in order to understand our risk exposure and resilience taking into account local circumstances and existing mitigations. The validations demonstrated that we already have mitigations in place for several of the risks identified through the desk study. We have concluded that water scarcity is the most material risk and needs to be actively monitored and managed. All sites with an increased water risk profile were already in scope of our water stewardship program.
			We are currently in the process of reviewing and determining updates for sources, assumptions and variables and expanding the scope.
Physical RCP climate 8.5 scenarios	Company- wide	<not Applicable></not 	Scenario analysis is an iterative process at DSM. The approach and starting point to assess physical risks impact is based upon considering company wide impact with a cross functional team from Risk Management, Corporate Sustainability and Operations. While assessing controls in place and mitigation measures are often first done on site level as these are very location specific, best practice are also broadened to other sites at company level where applicable and fitting.
			The systematic process to assess physical risks using scenarios was started in 2020, when we performed a desk study on physical risks for our key sites that could lead to material financial impact in case of a prolonged shutdown. We mapped five emerging hazards (flooding, cyclones, wildfire, extreme heat, and water scarcity) against three IPCC climate temperature scenarios (RCP 2.6, RCP 4.5, and RCP 8.5), using three different time horizons (present, 2030, and 2040/2050). These scenarios were supplemented with additional data from example from Aqueduct (from WRI) and Climate Knowledge Portal (from the World Bank).
			In 2021, the results from that study were validated with these sites in order to understand our risk exposure and resilience taking into account local circumstances and existing mitigations. The validations demonstrated that we already have mitigations in place for several of the risks identified through the desk study. We have concluded that water scarcity is the most material risk and needs to be actively monitored and managed. All sites with an increased water risk profile were already in scope of our water stewardship program
			We are currently in the process of reviewing and determining updates for sources, assumptions and variables and expanding the scope.
Transition IEA scenarios NZE 2050	Company- wide	<not Applicable></not 	Scenario analysis is an iterative process at DSM. In 2022, we performed transition risk assessments for all three Business Groups. Both risks and opportunities were captured through the assessments. The scope was not limited to our own operations but included the full value chain impact on our business. The identified risks & opportunities were further consolidated at company level with a team from Risk Management, Corporate Sustainability and Operations. The material risks identified through the climate transition risk assessments are integrated and are managed as part of our regular risk management processes.
			The process: Using external data sources, such as International Energy Agency – World Energy Outlook (NZE2050 and 2DS), World Bank, and sector-specific sources such as the FAIRR initiative, we built forward-looking scenarios aligned with the IPCC temperature models and time horizons used for the physical risk assessments (RCP 2.6, RCP 4.5, and RCP 8.5 and using three different time horizons (present, 2030, and 2040/2050). Key assumptions included in the analysis were for example, population/GDP growth, GHG pricing, certain commodity prices, consumption and dietary shifts and innovation/technology developments. In the scenarios, Shared Socioeconomic Pathways (SSP) 1, 2 and 3 were used. Scenarios are evolving depending on external data availability and by adding parameters relevant for the businesses under review. In 2022, the scenarios were further updated based on some new insights from the above mentioned sources and a WBCSD climate transition scenario tool for companies in the Food, Agriculture and Forest Products sectors. The scenarios developed in this project use Model of Agricultural Production and its Impact on the Environment (MAgPIE). DSM was one of the companies piloting the tool
Transition IEA scenarios 2DS	Company- wide	<not Applicable></not 	Scenario analysis is an iterative process at DSM. In 2022, we performed transition risk assessments for all three Business Groups. Both risks and opportunities were captured through the assessments. The scope was not limited to our own operations but included the full value chain impact on our business. The identified risks & opportunities were further consolidated at company level with a team from Risk Management, Corporate Sustainability and Operations. The material risks identified through the climate transition risk assessments are integrated and are managed as part of our regular risk management processes.
			The process: Using external data sources, such as International Energy Agency – World Energy Outlook (NZE2050 and 2DS), World Bank, and sector-specific sources such as the FAIRR initiative, we built forward-looking scenarios aligned with the IPCC temperature models and time horizons used for the physical risk assessments (RCP 2.6, RCP 4.5, and RCP 8.5 and using three different time horizons (present, 2030, and 2040/2050). Key assumptions included in the analysis were for example, population/GDP growth, GHG pricing, certain commodity prices, consumption and dietary shifts and innovation/technology developments. In the scenarios, Shared Socioeconomic Pathways (SSP) 1, 2 and 3 were used. Scenarios are evolving depending on external data availability and by adding parameters relevant for the businesses under review. In 2022, the scenarios were further updated based on some new insights from the above mentioned sources and a WBCSD climate transition scenario tool for companies in the Food, Agriculture and Forest Products sectors. The scenarios developed in this project use Model of Agricultural Production and its Impact on the Environment (MAgPIE). DSM was one of the companies piloting the tool
Transition Bespoke transition scenario	Company- wide	3.1ºC - 4ºC	Scenario analysis is an iterative process at DSM. In 2022, we performed transition risk assessments for all three Business Groups. Both risks and opportunities were captured through the assessments. The scope was not limited to our own operations but included the full value chain impact on our business. The identified risks & opportunities were further consolidated at company level with a team from Risk Management, Corporate Sustainability and Operations. The material risks identified through the climate transition risk assessments are integrated and are managed as part of our regular risk management processes.
			The process: Using external data sources, such as International Energy Agency – World Energy Outlook (NZE2050 and 2DS), World Bank, and sector-specific sources such as the FAIRR initiative, we built forward-looking scenarios aligned with the IPCC temperature models and time horizons used for the physical risk assessments (RCP 2.6, RCP 4.5, and RCP 8.5 and using three different time horizons (present, 2030, and 2040/2050). Key assumptions included in the analysis were for example, population/GDP growth, GHG pricing, certain commodity prices, consumption and dietary shifts and innovation/technology developments. In the scenarios, Shared Socioeconomic Pathways (SSP) 1, 2 and 3 were used. Scenarios are evolving depending on external data availability and by adding parameters relevant for the businesses under review. In 2022, the scenarios were further updated based on some new insights from the above mentioned sources and a WBCSD climate transition scenario tool for companies in the Food, Agriculture and Forest Products sectors. The scenarios developed in this project use Model of Agricultural Production and its Impact on the Environment (MAgPIE). DSM was one of the companies piloting the tool

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

The starting point for scenario analysis for DSM was to gain deeper understanding on the impacts of climate change on DSM. For this purpose set of exploratory scenarios used to explore a range of different possible futures were considered best fitting. The purpose is to understand (i.e. the focal questions the process aims to answer): i) how the future could look like following a certain (temperature) pathway(s) and reaching a certain end-state(s) ii) what would be the implications for DSM business operations, supply chain and end-markets, in which regions in particular

The process also helps to formulate and respond to more detailed questions such as iii) when mitigating measures might be (most cost-effectively) taken iv) what variables are needed to support decision-making

The chosen exploratory scenarios, described in 2.3a were designed to provide us an overview of the plausible but sufficiently different pathways to capture implications of varying speeds of transformation. The hypothesis was that faster transition to net-zero economy (e.g. following IEA NZE 2050) would prompt greater changes to business models and slow transition leading to more prominent physical impacts (and also resulting local regulations).

Refining the scenarios, including sources, assumptions and variables continues to be an iterative process. In 2022 DSM was also part of a coalition within WBCSD working to develop a set of robust, consistent and regionally granular climate transition scenarios for land use in the food, agriculture and forest products sectors, which further helped us to validate our current assumptions and approach.

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

With respect to the focal questions used as the starting point for the analysis, the preparation process and mapping out potential scenarios is one of the tools supporting DSM key decision makers to gain deeper understanding of concrete and detrimental impacts of climate change under various temperature pathways, and in particular the complexity and interlinkages between physical and transition risks in the context of food systems (focal question i).

Results of the analysis: At this moment, no material short-term climate risks have been identified through specific climate risk assessments or regular risk assessments. Physical and transition risks are largely seen as emerging risks under our group-wide risk classification, with some transition risks still expected to materialize this decade. For example, we have concluded that water scarcity is the most material physical risk and needs to be actively monitored and managed, but all regional sites with an increased water risk profile were already in scope of our water stewardship program. Various climate-related opportunities are foreseen to have a meaningful contribution as well, such as methane reducing ruminant solution Bovaer® and SustellTM, an intelligent sustainability service to drive improvements in the environmental footprint & profitability of animal protein production (focal question ii). The few risks identified through the climate risk assessments were integrated and are managed as part of our regular risk management processes (focal question iii) meaning that the climate transition risks are monitored as Emerging risks in the Letter of Representation process, with annual follow up of mitigating actions.

Example of business decision taken as a result of the analysis: (from HNC business unit): under two of the climate transition scenarios, increased market demand for products with traceability and carbon impact data identified already in the near-term (present-2030). Action: accelerated schedule and resourcing and extend usage of Imp'Act Card to areas outside Personal Care (Imp'Act CardTM provide specific, tangible information at the product level re. env. and social impacts, traceability and identity, incl. the carbon and water footprint values, the health benefits and all certifications related to that product) Current status: New Imp'Act cards are available for new product lines, such as several Vitamins used in food supplements with new product continued to be added monthly.

We will continue to expand and update our physical risk assessments for our own operations as well as the rest of our value chains. With the help of external parties, we are also exploring different approaches to assess vulnerabilities caused by climate change and increase our resilience. This will address both our own sites and our end-markets. Furthermore, we will further refine the transition risk assessments and continue update our scenarios to reflect latest external insights (focal question iv).

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

	Have climate-	Description of influence
	related risks	
	and	
	influenced	
	your strategy	
	in this area?	
Products	Yes	i) Sustainability is DSM's core value as well as a business driver and enables the company to provide higher-margin products and solutions. We enable our customers in their
and		sustainability endeavors with our innovative solutions, and also see continued growth or demand for solutions that address sustainability endeavors with our innovative solutions, and also see continued growth or demand for solutions that address sustainability (include) are British about the program which are produced by the solutions that address sustainability (include) are British about the program which are produced by the solutions that address sustainability (include) are British about the program which are produced by the solutions that address sustainability (include) are British about the program which are produced by the solutions that address sustainability (include) and the solutions are provided by the s
30111003		solutions. These solutions now make up 67% of DSM's total sales with of the products in DSM's innovation pipeline need to be screened against BLS+ indicators.
		Our innovation pipeline is focused on three strategic domains to transform food systems, including Nutrition & Health, Climate and Nature, and includes for example our Bovaer®,
		Veramaris®. These solutions are either already in the markets, or expected to be introduced to the market in the timeframe toward 2025. These enable customers to reduce their GHG
		emissions, are bio-based or in some cases circular and/or recycled-based/products. The climate related benefits of USM products are either in the form of lower carbon tootprint, or supporting our customers directly in climate mitigation or adjusticing activities within their operations or further in the value in use phase (Avvide amissions')
		ii) Case study of a major, sustainability-driven, innovation project is Bovaer® - a feed additive for cows (and other ruminants, such as sheep, goats, and deer). It is the most extensively
		studied and scientifically proven solution to the challenge of burped methane from ruminants to date. This long-term opportunity was identified over 10 years ago, and since then, 50+
		on namber and any main may been consistently and make constrained on the context of various recently displayed in several manners such as brazil and Europe received in 2021-2022 and expected in further markets going forward. The trials show that a reduction in enterior methane of approximately 30% can be consistently achieved for
		dairy cows and even higher percentages (up to 90%) for beef cows. Methane is extremely potent GHG responsible of a significant proportion of emissions from agriculture.
Supply	Yes	Supply-chain-related climate risks influence both availability of raw materials (due to flooding, extreme temperatures) and logistics routes. For example, DSM currently uses limited
chain		amounts of at-risk bio-based feedstocks. With future efforts to substantially increase the proportion of bio-based products in the portfolio, the sustainability of value chains and
value		availability of raw materials is under review.
chain		DSM's Sustainable Procurement Program screens for potential risks in this area through assessments and audits, and value-chain mapping. Since 2015, DSM is a member of Together
		for Sustainability (TfS), which allows us to screen and address sustainability performance and risks for a high number of our suppliers. Assessments are conducted at supplier level
		Introdupt Ecovadis. Using experiments to have a minimum score (Engaged score), in they receive a lower score they will require to go through a re-assessment or audit, in 2021 DSM assessed 1468 subpliers to which 40ho- were re-assessments. Of the re-assessment subpliers, 61% received an improved sustainability score.
		In addition, DSM engages with its strategic suppliers through the CO2REDUCE program which aims to generate deeper insights into emissions profile and associated risk and
		opportunities of our supplier base.
		ii) Value-chain mapping is conducted based on our current and potential exposure to at-risk supply chains and feedstocks (as a contributor to/or impacted by climate change). For our
		bio-based feedstocks, DSM applies value chain screening of raw materials to palm oil and soy derivatives, sugar, fish oils and other at-risk primary raw materials. This includes
		mapping back to the country of origin of the primary feedstock to understand potential masks. The initial screening was completed in 2022 and is further relined. With USM's circular economy ambitions, including an increase in bio-based raw materials, our exoosure to bio-based supply chains may increase in the coming verse. While current exosures is limited.
		DSM is also working to ensure deforestation-free primary supply chains by 2030 at the latest via high-quality certification schemes. This target covers the Tier 1 supply chain for any of
		used deforestation-risk crops: palm-derivative products, sugarcane, and direct soy and corn products
Investment	Yes	i) We leverage our unique scientific technology capabilities to drive transition through R&D from two aspects:
in R&D		 developing innovative sustainable solutions. The client-related benefits of our solutions take the form of lower carbon footprint, supporting our customers with climate mitigation or adaptation activities or use-nbase relations is a client of the solution of the solution of the solution of the solutions of the solutions of the solutions of the solution of the solutio
		We continuously invest in innovation in view of the overall balance of our product portfolio and potation drouble (v.4.3% in 2021) of sales in R&D to develop
		differentiating science and technology .Further, a strong and refocused innovation pipeline was created to enhance long-term growth including, for example, Bovaer®, Veramaris®
		2) our R&D is an integrated part of our GHG reduction roadmap process, both to meet our near-term Science Based Targets, as well as meeting NetZero emissions by 2050. In
		particular, the long-term recting will also need significant investment and collaboration.
		ii) An example of a major collaborative R&D investment is the 'Collaborative Innovation for Low-Carbon Emitting Technologies' (LCET) initiative. It is the first CEO-led chemical industry
		coalition for the transformation toward a net-zero and circular future. LCET aims to accelerate the development and upscaling of low-carbon emitting technologies for chemical
		production and related value chains, with support from policy and innancing enablers. We contribute man hours and funding (approx. 55k p. a. and separate for pilot facilities/projects.) to the LCET initiative in two key activities:
		Vie commune main nous and raining (approx.com p.a. and separate to prot national projects) to the CCL initiative in two key activities.
		onwards)
		2) Executing a study within the LCET biomass cluster on two flagship biomass processes on low-emissions alcohols and proteins, via ethanol to ethylene and derivatives, and via syngas to methanol and derivatives combined with CCLI
Operations	Ves	i) As described in question 2.22 DSM has identified risks that could have an impact on our direct operations, such as increased pricing of GHG emissions and other increased operations
Operations	103	i) As described in decision i.e. a bow has been menores that could have an impact on our direct operations, such as increased promy or or a emission and other increased operating costs due to changes in local legislation.
		Most visible strategic response is DSM's commitment and early overperformance towards delivering our Science Based Targets, part of DSM's core strategy. Our SBT comprise a reachapter gas (CHG) scrong 1, 2 semission absolute reduction of 59% and a GHG scrong 3 intensity reduction of 59% and baseline and reaching net scrong 50% and 50% of the scrong 50% of the scrong 50% and 50% of the scrong 50% of the scrong 50% and 50% of the scrong 50% of the scrong 50% of the screng 50% of the scrong 50% of the screng 50% of the scrong 50% of the screng 50\% o
		growing as gravitational and the state of th
		Each year, usin implements and commits to various investments projects with major positive impacts on USM's GHG emissions in the short term and in the long term. Many of which are related to renewable energy and energy efficiency, but also to innovation and new business ventures. GHG emissions are addressed in all new business cases, and the use of
		Internal Carbon Pricing was instrumental to integrate GHG emissions into long-term investment decisions. DSM's Internal Carbon Price (ICP) of €100/ton CO2e saving is included in the
		NPV of several projects.
		ii) Case study example: Replacing fossil-fuel-based energy production on site with purchased renewable energy results in significant emissions reductions. The biomase project in
		Switzerland completed its first full year of operations in 2020. This plant was needed to replace the site's former natural gas-fired cogeneration plant. The business case for a new co-
		gen plant was presented including and excluding the internal carbon price. The application of the internal carbon price in the business case for this was instrumental in the decision to
		choose for a biomass heat and power plant. The plant delivered approximately 50 kt p.a. CO2eq reduction as of 2020.

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	Capital expenditures Access to	Capital expenditures: Since 2017, we have installed a dedicated, earmarked annual investment budget from capital investments to support those emissions reduction projects that have a longer payback period than typical business projects, currently at approximately €20-25m p.a.
	oupitui	DSM's Science Based GHG target for Scope 1 and 2 emission is an absolute reduction of 59% of GHG emissions in 2030. To deliver on this target a program is put in place to identify, prioritize and manage GHG reduction projects. A long-term forecast is made of the total investment amount needed to realize the GHG reduction projects. This forecast is continuously being updated using new information becoming available and this forecast is included in the multi-year cash flow planning of the company.
		Furthermore, we require all business growth projects to be carbon neutral, or else compensated (i.e. with other internal GHG reduction projects) for in the same business. In 2016 DSM also introduced an internal carbon price (ICP) on all large investments. It serves as a useful model for redirecting and scaling up investments towards low-carbon technologies and driving operational efficiencies. At DSM, using an internal carbon price incorporates the cost of GHG emissions decision-making processes requiring significant capital expenditure; in the business case of the project this carbon penalty has to be included as a cash outflow. In 2021, €100 per ton CO2 equivalents was applied (increased to €100 from €50 in 2021). The effectiveness of application and price level will be periodically reviewed and updated. We apply the ICP in all key investments, acquisitions and in our internal management reporting.
		In 2022, there were approx. 25 energy efficiency projects under the capital expenditures program. An example of where the internal carbon price has had an effect include the priority setting of energy efficiency improvement projects vs other projects. In the selection and priority setting of projects to be funded out of this special budget business cases are used, which include positive cash flows from internal carbon pricing of avoided emissions.
		Access to capital: At the end of 2022, DSM had a committed to a new credit facility amounting to €1.0 billion, maturing on 28 May 2025. The committed credit facility links the interest rate to DSM's greenhouse gas (GHG) emission reduction Similar past deals were concluded with a syndicate of 15 banks and replaces two existing Revolving Credit Facilities of in total €1 billion, maturing in 2018 and 2020. The €1 billion Revolving Credit Facility underpins DSM's strong liquidity profile, and is intended for general business purposes.

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	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance
	transition	taxonomy
F	Row Yes, we identify alignment with our climate transition plan	<not applicable=""></not>
1	1	

C3.5a

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

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) 696000000

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

4

4

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

Percentage share of selected financial metric planned to align in 2030 (%) 5

Describe the methodology used to identify spending/revenue that is aligned

Since 2017, a dedicated, earmarked annual investment budget for capital investments has been installed in DSMs GHG reduction program to support those emissions reduction projects that have a longer payback period than typical business projects, currently at approximately €20-25m p.a. In addition, there are several other emissions reduction projects funded from the CAPEX budget of DSM Business Units. Please note the % are highly indicative and conservative from total DSM investments with only the specific GHG reduction program investments included. The estimated investment budgets are expected to remain fairly constant, although an average has been used to estimate the budget for 3+ years budget as the investment plans are refined at annually.

C4. Targets and performance

C4.1

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

Target coverage Company-wide

Scope(s) Scope 1 Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Base year 2016

Base year Scope 1 emissions covered by target (metric tons CO2e) 1030000

Base year Scope 2 emissions covered by target (metric tons CO2e) 590000

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) 1620000

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) </br>

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) </br>

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) </br><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) </br><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 (%) 59

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] 664200

Scope 1 emissions in reporting year covered by target (metric tons CO2e) 573000

Scope 2 emissions in reporting year covered by target (metric tons CO2e) 482000

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) 1050000

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] 59.6359070935342

Target status in reporting year Revised

Please explain target coverage and identify any exclusions

DSM's Scope 1 + 2 target is a 59% absolute reduction by 2030 versus 2016.

In 2022, DSM increased its GHG emissions reductions target for scope 1 + 2 for 2030, moving from a target level of 50% to 59% absolute reduction by 2030 (versus 2016 baseline). The update brings DSM in line with the 1.5°C trajectory, building on the good reduction progress so far. In 2022, baseline GHG emissions figure of 2016 (1.50 million tons CO2eq) was decreased to 1.62 million tons CO2eq, due to the inclusion of 22 acquired sites in our reporting scope in the period 2017–2022, the divestment in 2021 of Resins and Functional Materials and associated businesses, the divestment of DSM Protective Materials in 2022 (pro-rata), and the impact of methodology

changes. Five newly built sites were also added to the reporting scope; however, as they were constructed after 2016, they have no impact on the baseline

Plan for achieving target, and progress made to the end of the reporting year

The absolute reduction in scope 1 + 2 GHG emissions was 35% compared to the corrected baseline of 2016. We estimate that of the 35% absolute reduction in scope 1 + 2 GHG emissions compared to baseline 2016, ~26% is due to structural improvements. This is due to projects in our greenhouse gas reduction program, ranging from relatively easy-to-implement modifications in operations, such as improving the insulation around hot parts, to installing advanced energy metering systems, up to the installation of best available technologies (for example, heating and cooling equipment). Significant year-on-year GHG reduction at our existing sites compensated for the expected GHG increase from inorganic growth

Among the more than 40 projects executed in 2021 to save energy, significant improvements were realized in Jiangshan (Jiangsu province, China) with the implementation of new technology for product concentration, the internal recycling of solvent, investments in chiller improvements and many other operational improvements leading to more than 10 kt CO2eq savings. On top of the projects in 2021, we also saw operational improvements leading to greenhouse gas emissions reduction, especially at one of our recently acquired sites. In 2022, we also saw the benefits of our first efforts in 2021 to bring two digital solutions helping our sites better optimize equipment energy use and reduce energy losses: Energywise, our energy dashboard (applying, for example, model predictive analysis) allowing sites to steer the energy consumption of key assets, and steam trap monitoring technology, which allows us to identify in real time leaking or malfunctioning steam traps, thus enabling faster repair and maintenance.

In 2022, we again strengthened our efforts with even more energy-saving projects compared to 2021. Among the most noticeable projects were a new membrane project in Jiangshan (Jiangsu province, China) saving more than 10 kt CO2eq; the implementation of a high efficiency, state-of-the art cooling system in Xinhuo (Shanghai province, China), applying – head of local legislation – low global warming potential (GWP) refrigerants; and the further deployment of the above-mentioned digital technologies in Seclin (France), Village-Neuf (France) and Belvidere (New Jersey, USA) for Energywise, and Sisseln (Switzerland), Dalry (UK), Village-Neuf (France) and Kingstree (South Carolina, USA) for steam trap monitoring.

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, 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

Target ambition 1.5°C aligned

Year target was set 2022

Target coverage Company-wide

Scope(s) Scope 1

Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies)
<Not Applicable>

Base year 2016

Base year Scope 1 emissions covered by target (metric tons CO2e) 1030000

Base year Scope 2 emissions covered by target (metric tons CO2e) 590000

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) 1620000

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) </br>

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) </br><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) </br>
<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) </br>

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) </br><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) </br>
<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

Target year 2050

100

Torracted reduction from

Targeted reduction from base year (%) 90

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] 162000

Scope 1 emissions in reporting year covered by target (metric tons CO2e) 573000

Scope 2 emissions in reporting year covered by target (metric tons CO2e) 482000

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) 1050000

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]

39.0946502057613

Target status in reporting year Underway

Please explain target coverage and identify any exclusions

Our long-term target comprises a 90% reduction in absolute terms of scope 1 + 2 emissions by 2050 versus 2016, to support our ambition to reach net-zero across value chains by 2050 if not scoper.

Plan for achieving target, and progress made to the end of the reporting year

The absolute reduction in scope 1 + 2 GHG emissions was 35% compared to the corrected baseline of 2016. We estimate that of the 35% absolute reduction in scope 1 + 2 GHG emissions compared to baseline 2016, ~26% is due to structural improvements. This is due to projects in our greenhouse gas reduction program, ranging from relatively easy-to-implement modifications in operations, such as improving the insulation around hot parts, to installing advanced energy metering systems, up to the installation of best available technologies (for example, heating and cooling equipment). Significant year-on-year GHG reduction at our existing sites compensated for the expected GHG increase from inorganic growth.

Among the more than 40 projects executed in 2021 to save energy, significant improvements were realized in Jiangshan (Jiangsu province, China) with the implementation of new technology for product concentration, the internal recycling of solvent, investments in chiller improvements and many other operational improvements leading to more than 10 kt CO2eq savings. On top of the projects in 2021, we also saw operational improvements leading to greenhouse gas emissions reduction, especially at one of our recently acquired sites. In 2022, we also saw the benefits of our first efforts in 2021 to bring two digital solutions helping our sites better optimize equipment energy use and reduce energy losses: Energywise, our energy dashboard (applying, for example, model predictive analysis) allowing sites to steer the energy consumption of key assets, and steam trap monitoring technology, which allows us to identify in real time leaking or malfunctioning steam traps, thus enabling faster repair and maintenance.

In 2022, we again strengthened our efforts with even more energy-saving projects compared to 2021. Among the most noticeable projects were a new membrane project in Jiangshan (Jiangsu province, China) saving more than 10 kt CO2eq; the implementation of a high efficiency, state-of-the art cooling system in Xinhuo (Shanghai province, China), applying – head of local legislation – low global warming potential (GWP) refrigerants; and the further deployment of the above-mentioned digital technologies in Seclin (France), Village-Neuf (France) and Belvidere (New Jersey, USA) for Energywise, and Sisseln (Switzerland), Dalry (UK), Village-Neuf (France) and Kingstree (South Carolina, USA) for steam trap monitoring.

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number Int 1

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition 2°C aligned

Year target was set 2019

Target coverage Company-wide

Scope(s) Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 4: Upstream transportation and distribution Category 5: Waste generated in operations

Intensity metric Metric tons CO2e per metric ton of product

Base year 2016

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity) 3.38

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity) 3.38

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure <Not Applicable>

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure <Not Applicable>

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure <Not Applicable>

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure <Not Applicable>

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure <Not Applicable>

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure <Not Applicable>

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure <Not Applicable>

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure <Not Applicable>

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure <Not Applicable>

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure <Not Applicable>

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure <Not Applicable>

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure <Not Applicable>

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure <Not Applicable>

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure 72

% of total base year emissions in all selected Scopes covered by this intensity figure

72

Target year 2030

Targeted reduction from base year (%) 28

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated] 2.4336

% change anticipated in absolute Scope 1+2 emissions

0

% change anticipated in absolute Scope 3 emissions

7

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity) <Not Applicable>

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity) 2.8

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity) 2.8

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]

Target status in reporting year

Underway

61.2848689771767

Please explain target coverage and identify any exclusions

DSM set our scope 3 Science Based Target in 2019, which is an intensity reduction target of 28% per unit of product in 2030 versus the base year of 2016. The categories in scope for this Target are Purchased goods and services, Upstream transportation and distribution and Waste generated in operations.

A yearly recalculation of our 2016 scope 3 emissions was performed to increase accuracy based on the latest insights from suppliers and updates of the most relevant emission factors according to our defined standard. In addition, baseline adjustments have taken place due to acquisitions and divestments within DSM according to the baseline policy. This recalculation covers the categories in scope for the Target and will be used solely for reporting performance against the Science Based Target. In future years, further recalculations and adjustments of the baseline are expected and will be performed on a similar basis.

Plan for achieving target, and progress made to the end of the reporting year

The decrease is primarily driven by lower sourced volumes compared to 2021 and an improved carbon footprint for Niacin in Animal Nutrition & Health. In the Materials cluster, we saw main contributions from DSM Engineering Materials, benefiting from higher volumes of caprolactam from our supplier Fibrant/HighSun, which offers a greatly improved carbon footprint.

In 2022, the supplier engagement program CO2REDUCE continued to build on supplier emissions reduction action plans and progressed as planned, with a key focus on the main contributors to the emissions related to our Nutrition products. Company-wide scope 3 emissions reduction roadmaps are being develope through our cross-functional teams, and in 2022 we identified the first wave of our products where additional reduction initiatives may be possible by applying a value chain approach. These will be further validated in 2023. Collaboration with key suppliers for key contributing raw materials continues and reduction action plans are being further developed. We continued to explore new opportunities for scope 3 emissions reductions through multiple supplier emissions plans.

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?

Target(s) to increase low-carbon energy consumption or production Net-zero target(s)

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number Low 1

Year target was set

Target coverage Company-wide

Target type: energy carrier Electricity

Target type: activity Consumption

Target type: energy source Renewable energy source(s) only

Base year 2015

Consumption or production of selected energy carrier in base year (MWh) 3540

% share of low-carbon or renewable energy in base year

0

Target year

2030

% share of low-carbon or renewable energy in target year 100

% share of low-carbon or renewable energy in reporting year 78

10

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

Target status in reporting year

Underway

Is this target part of an emissions target?

yes, 4.1a. One of the ways we reduce our own greenhouse-gas emissions is by sourcing more electricity from renewable resources

Is this target part of an overarching initiative? RE100

Please explain target coverage and identify any exclusions

Our renewable electricity target - 100% of purchased electricity to be sourced from renewables by 2030 - supports the scope 1 + 2 component of our Science Based Targets. This target is an update of our previous renewable electricity target of 75% by 2025 set in 2020.

Plan for achieving target, and progress made to the end of the reporting year

In our renewable electricity strategy we prioritize pursuing available (e.g. on-site solar/wind, retail offers, hydro power) and emerging options (pilots) supporting DSM's additionality principle, meaning that the assets commence production of electricity after the applicable agreement with DSM is signed and may include assets that are newly constructed, refurbished or otherwise new on the market.

Progress in 2022:

For 2022, we concluded several renewable electricity contracts in China, increasing the share of electricity from renewable sources to 32% from 16% in 2021. This includes the sites Jiangyin, Jiangshan, Yantai, Yimante and Wuxi. In addition, we concluded purchasing agreements to provide renewable electricity for 2023 that will further increase the share of electricity from renewable sources.

For our operations in Europe, we maintained 100% renewable electricity through existing agreements combined with pre-production guarantees of origin (GOs) and production of electricity from a Power Purchase Agreement (PPA) in Spain. The wind park of the latter PPA commenced operations in late 2021, while the solar assets are currently under construction. Furthermore, a new hydro agreement for 2022 was concluded in Switzerland to replace a contract that terminated at the end of 2021.

In the US, we have three PPAs in place. The first is already operational and produces electricity from wind, while the assets for the other two are yet to be built and will provide solar-powered electricity. The production from the first agreement combined with pre-production renewable energy certificates (RECs) from the two other agreements means we had 100% of purchased electricity from renewable sources in the US and Canada in 2022.

Besides Europe, North America and China, almost 90% of our purchased electricity in Brazil is from renewable sources, and we have several local renewable electricity contracts at smaller sites around the world. The amount of purchased non-renewable electricity in the rest of the world represents less than 5% of our total purchased electricity.

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

Company-wide

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

Abs1 Int1

Target year for achieving net zero

2050

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Please explain target coverage and identify any exclusions

We were one of the first companies to align our efforts with the latest science as presented in the IPCC Special Report 'Global Warming of 1.5°C' by setting a long-term pathway to reach net-zero GHG emissions across our operations and value chains (scope 1, 2 and 3) by 2050 at latest. Our Science Based Targets are our foundation to achieve this goal, supported by our ambitions on renewable electricity and energy efficiency, and working intensively with our key suppliers through our CO2REDUCE program. We have been working with long-term innovation roadmaps to map pathways toward net-zero emissions in the coming decades since 2020. For DSM, net-zero means deep decarbonization of our assets and portfolio, at least 90% absolute GHG reduction from the base year across our value chain with any remaining residue emissions neutralized via permanent carbon removals.

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

Planned milestones and/or near-term investments for neutralization at target year

DSM intends to neutralize any residual emissions (max 10%) via permanent carbon removals latest on the net-zero target year (at the moment 2050 at latest). These removals are like to be technical, with DSM continuously monitoring the development and investment needs for novel technologies.

Planned actions to mitigate emissions beyond your value chain (optional)

As a complementary and additional effort to our holistic strategy to reduce our own climate impact, DSM is also exploring the options for highest impact contributions outside our value chain, as a means to accelerate the global net-zero transition. These contributions can include, but are not limited to, purchasing of high-quality carbon credits. This complementary mitigation portfolio extending beyond our own value chain, will include a mix of GHG reduction/avoidance/carbon storage projects critical in the short term to scale up innovations, and selected nature-based projects to simultaneously complement our nature stewardship agenda and help to close the finance gap for nature.

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	19	57900
To be implemented*	14	8300
Implementation commenced*	26	29100
Implemented*	48	37000
Not to be implemented	3	

C4.3b

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

Initiative category & Initiative type

Energy efficiency in buildings

Estimated annual CO2e savings (metric tonnes CO2e) 140

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

Scope 2 (market-based)

Voluntary/Mandatory Voluntary Insulation

Annual monetary savings (unit currency – as specified in C0.4) 37000

Investment required (unit currency – as specified in C0.4) 84000

Payback period

1-3 years

Estimated lifetime of the initiative 6-10 years

Comment

This relates to a single insulation project with a total investment of 84 thousand euros. Payback period of approximately two years.

Initiative category & Initiative type

Energy efficiency in production processes

Smart control system

Estimated annual CO2e savings (metric tonnes CO2e)

5500

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

Scope 1 Scope 2 (market-based)

Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 2738000

Investment required (unit currency – as specified in C0.4) 4650000

Payback period

1-3 years

Estimated lifetime of the initiative 6-10 years

Comment

This is a group of 9 smart control system projects that were carried out, with a total investment of over 4.5 million euros. The payback period of the projects is less than 2 years.

Initiative category & Initiative type

Energy efficiency in production processes

Estimated annual CO2e savings (metric tonnes CO2e) 5900

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

Scope 2 (market-based)

Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 2500000

Investment required (unit currency – as specified in C0.4) 2050000

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

This is a group of 14 other process optimization projects that have a payback period of less than one year to more than 10 years. Total investment of approximately 2 million euros.

Initiative category & Initiative type Energy efficiency in production processes Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)

1300

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

Process optimization

Scope 1 Scope 2 (market-based)		
Voluntary/Mandatory Voluntary		
Annual monetary savings (unit currency – as specified in C0.4) 305000		
Investment required (unit currency – as specified in C0.4) 3163000		
Payback period 11-15 years		
Estimated lifetime of the initiative 11-15 years		
Comment This is a group of 4 machine upgrade improvement projects that were carried out, with a total investment of 3.2 million euros. Payback period varies from less than one year to more than 20 years.		
Initiative category & Initiative type		
Energy efficiency in production processes Was	te heat recovery	
Estimated annual CO2e savings (metric tonnes CO2e) 4300		
Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 1 Scope 2 (market-based)		
Voluntary/Mandatory Voluntary		
Annual monetary savings (unit currency – as specified in C0.4) 3660000		
Investment required (unit currency – as specified in C0.4) 1750000		
Payback period <1 year		
Estimated lifetime of the initiative 11-15 years		
Comment This is a group of 7 Waste heat recovery projects that were carried out, with a total investment of over 3.5 million euros. The payback period of the projects is less than a year.		
Initiative category & Initiative type		
Energy efficiency in production processes	Compressed air	
Estimated annual CO2e savings (metric tonnes CO2e) 800		
Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 1 Scope 2 (market-based)		
Voluntary/Mandatory Voluntary		
Annual monetary savings (unit currency – as specified in C0.4) 130000		
Investment required (unit currency – as specified in C0.4) 400000		

Payback period 1-3 years

Estimated lifetime of the initiative 3-5 years

Comment

this is a group of 4 compressed air projects with a total investment of 400,000 euros. Payback period of around 3 years.

Initiative category & Initiative type

Energy efficiency in production processes

Cooling technology

Estimated annual CO2e savings (metric tonnes CO2e) 4400

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

Scope 2 (market-based)

Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency - as specified in C0.4) 1250000

Investment required (unit currency - as specified in C0.4) 6710000

Payback period

4-10 years

Estimated lifetime of the initiative 11-15 years

Comment

This is a group of 7 cooling technology projects that were carried out, with a total investment of over 6.5 million euros. The payback period of the projects is around 5 years.

Initiative category & Initiative type

Energy efficiency in production processes	Electrification

Estimated annual CO2e savings (metric tonnes CO2e)

11700

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

Scope 1 Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency - as specified in C0.4) 2480000

Investment required (unit currency - as specified in C0.4) 6290000

Payback period

1-3 years

Estimated lifetime of the initiative 6-10 years

Initiative category & Initiative type

Comment

This is a group of 3 electrification projects that were carried out, with a total investment of over 6 million euros. The payback period of the projects is around 2.5 years.

Low-carbon energy consumption	Biogas
Estimated annual CO2e savings (metric tonnes CO2e) 2000	
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) 276000	
Investment required (unit currency – as specified in C0.4) 0	
Payback period <1 year	
Estimated lifetime of the initiative 3-5 years	
Comment	

This is project which required limited investment to increase biogas usage.

Initiative category & Initiative type

Energy efficiency in buildings

Building Energy Management Systems (BEMS)

Estimated annual CO2e savings (metric tonnes CO2e) 800

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) 140000

Investment required (unit currency – as specified in C0.4) 245000

Payback period

1-3 years

Estimated lifetime of the initiative 6-10 years

Comment

This is an energy management project on heating control, with an investment of 245k euro. Payback period of less than 2 years.

C4.3c

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

Method	Comment
Dedicated budget for energy efficiency	DSM has allocated dedicated investment budget for energy savings and GHG reduction projects.
Internal price on carbon	DSM has introduced a mandatory internal carbon price of €100 /t (increased from €50 in 2021) that is applied in the financial evaluation of large investments and energy improvement projects and is internally reported in the P&L of our businesses. Starting in 2019, business growth projects must either be GHG-neutral, or else be compensated for.
Internal incentives/recognition programs	Throughout the DSM organisation incentives are given when targets on DSM's climate change strategy are met. The CEO/Managing Board/Executive Committee have long term GHG emission reduction targets and energy efficiency improvement (EEI) targets. The incentivized performance indicators for climate change issues are published in the Integrated Annual Report 2022 (https://annualreport.dsm.com/ar2022/report-by-the-supervisory-board/remuneration-report- 2022/remuneration-of-the-managing-board/total-remuneration-2022.html) All DSM executives have a climate change target (i.e. Energy & GHG efficiency improvement) as part of their annual bonus scheme. Personal objectives (which determine bonus and/or merit increase) linked to achieving company climate change targets. DSM has an 2 internal awards were emission reduction is part of the selection criteria: DSM SHE Award and DSM SHE Recognition Award. Those awards can be won by all employees of DSM (production sites as well as offices and labs).
Dedicated budget for other emissions reduction activities	DSM has allocated dedicated investment budget for other environmental projects like VOC reduction. Dedicated resources (significant OPEX) for GHG reduction program.
Employee engagement	Throughout DSM employee engagement is stimulated to contribute to DSM's climate change objectives. For many years in a row DSM has organized Earth Day at over 100 locations worldwide to engage the workforce further. In many continuous improvement events, driven by blue collar workers, energy reduction is addressed and improved.

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 (Our low carbon products are determined by their Life Cycle Assessment (LCA).)

Type of product(s) or service(s)

Other Other, please specify (Various)

Description of product(s) or service(s)

DSM develops and produces a wide range of low-carbon and avoided emissions products, which areamong the drivers for our BLS+ program. Our low carbon products are determined by their Life Cycle Assessment (LCA). Those products where the environmental benefit is realized during their production phase are classified as low carbon products, and our low carbon products are those with lower carbon footprints in their cradle-to-gate life-cycle than the mainstream competing solution. For example almost all our Vitamins are produced using processes that have a higher yield and lower energy consumption than the competition (based on LCAs). Note: some products are both low-carbon and avoided emissions products. Avoided emissions products are solutions that offer superior performance with a lower carbon-footprint, as assessed with LCA, compared to competing mainstream solutions that fulfill the same function.

DSM has numerous products across all business that help avoid emissions. In total, BLS+ accounted for 67% of total sales in 2022. For example, our innovative solution Bovaer® is a feed additive that reduces enteric methane emissions, by suppressing the enzyme that combines the metabolic hydrogen and carbon dioxide generated by cows from digesting tough, fibrous food.

According to studies, Bovaer® can save about one ton CO2eq per dairy cow every year. On-farm trials and up-scaling pilots in 2022 in more than 15 countries have already saved more than 20 kt CO2eq.

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 67

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 Yes, a divestment

Name of organization(s) acquired, divested from, or merged with

Acquisitions – Prodap (Brazil). Divestment - DSM Protective Materials

Details of structural change(s), including completion dates

In 2022, Prodap (completed in September 2022) was added to the reporting scope

In 2022, the divestment of DSM Protective Materials was completed in September. The emissions from this divestment were removed from the baseline on a pro-rata basis.

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=""></not>	

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	Scope(s)	Base year emissions recalculation policy, including significance threshold P	
	recalculation	recalculated		recalculation
Row	Yes	Scope 1	DSM's non-financial reporting policy on acquisitions and divestments is that Environment data for companies acquired in the first half of a given year ('year x') are	No
1		Scope 2,	included in the reporting scope of the year after acquisition ('year x+1'), and companies acquired in the second half of a given year ('year y') are included in the	
		market-	reporting scope of the year following the first full year after acquisition ('year y + 2'). Environment data are reported until the moment control of the company is	
		based	transferred.	

C5.2

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

Scope 1

Base year start January 1 2016

Base year end

December 31 2016

Base year emissions (metric tons CO2e)

1030000

Comment

In 2022, the 2016 baseline GHG emissions figure was recalculated to 1.62 million tons of CO2eq. This adjustment is due to the inclusion of 22 acquired sites in our reporting scope in the period 2017–2022, the divestment in 2021 of Resins and Functional Materials and associated businesses, the divestment of DSM Protective Materials in 2022 (pro-rata), and the impact of methodology changes. Five newly built sites were also added to the reporting scope; however, as they were constructed after 2016, they have no impact on the baseline.

Scope 2 (location-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Our Science-Based Targets are based on our market-based Scope 2 baseline. No location-based baseline is provided.

In 2022, the 2016 baseline GHG emissions figure was recalculated to 1.62 million tons of CO2eq. This adjustment is due to the inclusion of 22 acquired sites in our reporting scope in the period 2017–2022, the divestment in 2021 of Resins and Functional Materials and associated businesses, the divestment of DSM Protective Materials in 2022 (pro-rata), and the impact of methodology changes. Five newly built sites were also added to the reporting scope; however, as they were constructed after 2016, they have no impact on the baseline.

Scope 2 (market-based)

Base year start

January 1 2016

Base year end December 31 2016

Base year emissions (metric tons CO2e) 590000

Comment

In 2022, the 2016 baseline GHG emissions figure was recalculated to 1.62 million tons of CO2eq. This adjustment is due to the inclusion of 22 acquired sites in our reporting scope in the period 2017–2022, the divestment in 2021 of Resins and Functional Materials and associated businesses, the divestment of DSM Protective Materials in 2022 (pro-rata), and the impact of methodology changes. Five newly built sites were also added to the reporting scope; however, as they were constructed after 2016, they have no impact on the baseline.

Scope 3 category 1: Purchased goods and services

Base year start January 1 2016

Base year end December 31 2016

Base year emissions (metric tons CO2e) 8450000

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start January 1 2016

Base year end December 31 2016

Base year emissions (metric tons CO2e) 112000

Comment

Scope 3 category 5: Waste generated in operations

Base year start January 1 2016

Base year end December 31 2016

Base year emissions (metric tons CO2e) 121000

Comment

Scope 3 category 6: Business travel

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 8: Upstream leased assets Base year start Base year end Base year emissions (metric tons CO2e) Comment Scope 3 category 9: Downstream transportation and distribution Base year start Base year end Base year emissions (metric tons CO2e) Comment Scope 3 category 10: Processing of sold products Base year start Base year end Base year emissions (metric tons CO2e) Comment Scope 3 category 11: Use of sold products Base year start Base year end Base year emissions (metric tons CO2e) Comment Scope 3 category 12: End of life treatment of sold products Base year start Base year end Base year emissions (metric tons CO2e) Comment Scope 3 category 13: Downstream leased assets Base year start Base year end Base year emissions (metric tons CO2e) Comment Scope 3 category 14: Franchises Base year start Base year end Base year emissions (metric tons CO2e) Comment Scope 3 category 15: Investments Base year start Base year end Base year emissions (metric tons CO2e) Comment Scope 3: Other (upstream) Base year start Base year end Base year emissions (metric tons CO2e) Comment Scope 3: Other (downstream) Base year start Base year end Base year emissions (metric tons CO2e)

Comment

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)

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) 572800

Start date

<Not Applicable>

End date <Not Applicable>

Comment

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

DSM has reported Scope 2 market-based emissions since 2016. Our Science-Based Targets are calculated against our market-based scope 1 + 2 emissions.

C6.3

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

Reporting year

Scope 2, location-based 732600

Scope 2, market-based (if applicable) 481700

Start date <Not Applicable>

End date <Not Applicable>

Comment

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

CO2 Emissions related to recent acquisitions

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

Scope 2 (market-based)

Relevance of Scope 1 emissions from this source Emissions excluded due to a recent acquisition or merger

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

Relevance of market-based Scope 2 emissions from this source Emissions excluded due to a recent acquisition or merger

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

Date of completion of acquisition or merger

Estimated percentage of total Scope 1+2 emissions this excluded source represents <Not Applicable>

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

Explain why this source is excluded

Newly acquired companies acquired in the first half of a given year ('year x') are included in the reporting scope of the year after acquisition ('year x+1'). Acquisitions in the second half of a given year ('year y') are included in the reporting scope of the year following the first full year after acquisition ('year y + 2'). This period is used to align to and implement DSM's reporting procedures. This is part of the non-financial reporting policy of DSM as disclosed in the Integrated Annual Report.

This includes the previously announced acquisitions of Midori (July 2021), First Choice Ingredients (October 2021) and Vestkorn (December 2021), expected to be in the reporting scope as of 2023 and of Prodap (September 2022), expected to be in the reporting scope as of 2024

Explain how you estimated the percentage of emissions this excluded source represents

<Not Applicable>

Source of excluded emissions CO2 emissions from R&D and administrative buildings

Scope(s) or Scope 3 category(ies)

Scope 1 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 <Not Applicable>

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

Estimated percentage of total Scope 3 emissions this excluded source represents

<Not Applicable>

1

Explain why this source is excluded

DSM stand-alone offices and R&D units are excluded from the reporting scope as their emissions are not relevant. If DSM offices or R&D units are part of the reporting unit, where commercial production occurs, then they are included.

Explain how you estimated the percentage of emissions this excluded source represents

The majority of DSM's stand-alone offices and R&D locations run on 100% renewable electricity and are small in size, so have scope 1 & 2 emissions close to zero. The emissions of the largest location still on grey electricity represents significantly less than 1% of total scope 1 & 2 emissions, with the emissions of other grey-electricity locations contributing even less. The estimated total contribution is below two percent.

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) 7581870

Emissions calculation methodology

Hybrid method

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

29

Please explain

DSM's scope 3 emissions are calculated according to the Greenhouse Gas Protocol Corporate Value Chain (scope 3) standard and the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (further referred to as the WBCSD Chemical Guidelines).

Spend and purchased volumes were obtained from DSM's ERP systems. Direct spend emission factors are based on industry average databases such as Ecolnvent or PlasticsEurope. When available, emission factors are based on supplier specific data based on information obtained from suppliers. For Indirect spend, emission factors are derived from the American, European, DEFRA input output tables.

Emissions are calculated by (for Direct spend) by multiplying the volume of purchased items standardized quantity of item (in kgs) with the emission factor per kg of the item. and (for Indirect spend) multiplying the spend of the item with the emission factor per currency of the item.

Confirmed supplier specific emission factors are validated by an external auditor based on materiality meeting our reasonable assurance quality requirements for reporting. Emission factors were developed in close collaboration with our key supply partners

Capital goods

Evaluation status Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

135336

Emissions calculation methodology

Average product method

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

0

Please explain

DSM's scope 3 emissions are calculated according to the Greenhouse Gas Protocol Corporate Value Chain (scope 3) standard and the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (further referred to as the WBCSD Chemical Guidelines).

Spend and purchased volumes were obtained from DSM's ERP systems for the items relevant to this category. Emission factors are derived from the American, European, DEFRA input output tables. Where no emission factor is available, it is assumed the capital good is made from 25% concrete and 75% steel (in line with the WBCSD Chemical Guidelines). Emissions are calculated by multiplying the spend of the item with the emission factor per currency of the item.

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

Evaluation status Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

175309

0

Emissions calculation methodology

Average data method

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

Please explain

DSM's scope 3 emissions are calculated according to the Greenhouse Gas Protocol Corporate Value Chain (scope 3) standard and the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (further referred to as the WBCSD Chemical Guidelines).

3 components are calculated - Upstream emissions of purchased fuels, Upstream emissions of purchased electricity, and Transport and distribution losses. The energy data is obtained from DSM's environmental monitoring system. Emission factors are derived from EcoInvent and IEA 2016. The world average transmission and distribution loss rate of electricity is estimated to be 7% and the world average transmission and distribution loss rate of heat estimated to be 10%. Emissions are calculated by multiplying the energy consumed per component with the emission factor per component.

Upstream transportation and distribution

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e) 152000

Emissions calculation methodology

Spend-based method

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

0

Please explain

DSM's scope 3 emissions are calculated according to the Greenhouse Gas Protocol Corporate Value Chain (scope 3) standard and the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (further referred to as the WBCSD Chemical Guidelines). Road transportation, Air freight, Marine transportation and Rail/warehouses emissions factors are obtained from validated databases such as Ecolnvent. Emissions are calculated by multiplying shipment spend data with the appropriate factors An 80% share of the outgoing transportation and distribution is taken as reference for the incoming transport and distribution from suppliers.

Waste generated in operations

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e) 153000

Emissions calculation methodology

Waste-type-specific method

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

Please explain

0

DSM's scope 3 emissions are calculated according to the Greenhouse Gas Protocol Corporate Value Chain (scope 3) standard and the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (further referred to as the WBCSD Chemical Guidelines).

Each type of waste has four different treatment methods: (1) landfill, (2) off-site incineration with heat recovery, (3) off-site incineration without heat recovery and (4) off-site recovery. Process related non-hazardous waste and non-process related waste have an extra disposal method (land) farming. The amount of waste per treatment method is derived from DSM's environmental monitoring system. Emission factors are derived from IPCC. Carbon content is estimated based on expert judgement. Inorganic waste is considered 0% carbon. Emissions are calculated by multiplying per method, the sum of waste by method with the carbon content and the emission factor per kg.

Business travel

Evaluation status Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

Emissions calculation methodology

Distance-based method

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

70

17000

Please explain

DSM's scope 3 emissions are calculated according to the Greenhouse Gas Protocol Corporate Value Chain (scope 3) standard and the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (further referred to as the WBCSD Chemical Guidelines).

Business travel is the sum of the emission from Business travel by air, Business travel by rail, Business travel by car and Hotels. Emissions were provided by major service providers for air and rail and extrapolated to 100% of DSM's usage. Emission factors for car and hotels are derived from United States Environmental Protection Agency (EPA), UK Department of Environment, Food, and Rural Affairs (DEFRA) and from the latest American input output table. Distance by car is the sum of taxi, rental and own car/public transport, derived from DSM's Travel and Expense system. Hotel nights are derived from DSM's Travel and Expense system. Emissions by car and hotel are calculated based on distance and nights respectively multiplied by emission factor.

Employee commuting

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e) 31000

01000

0

Emissions calculation methodology

Distance-based method

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

Please explain

DSM's scope 3 emissions are calculated according to the Greenhouse Gas Protocol Corporate Value Chain (scope 3) standard and the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (further referred to as the WBCSD Chemical Guidelines).

Distance travelled is calculated using averages and assumptions aligned with the WBCSD Chemical Guidelines and based on total employees, working days and distance travelled. Emission factors are derived from DEFRA. Emissions are the multiple of #employees, distance, #working days, #trips per day and emission factor. An adjustment was made based on an estimate of operations vs office personnel to reflect the impact of people working from home .

Upstream leased assets

Evaluation status Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

15000

Emissions calculation methodology

Average data method Asset-specific method

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

0

Please explain

DSM's scope 3 emissions are calculated according to the Greenhouse Gas Protocol Corporate Value Chain (scope 3) standard and the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (further referred to as the WBCSD Chemical Guidelines).

This category comprises 2 components - leased buildings and leased cars. Emission factor for leased buildings is based on the WBCSD Chemical Guidance. Emissions are calculated based on the number of employees multiplied with the average office space per employee and the emission factor for leased buildings. Emissions for leased cars are provided by the suppliers based on primary data and estimates.

Downstream transportation and distribution

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

221000

Emissions calculation methodology

Spend-based method

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

0

Please explain

DSM's scope 3 emissions are calculated according to the Greenhouse Gas Protocol Corporate Value Chain (scope 3) standard and the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (further referred to as the WBCSD Chemical Guidelines).

Road transportation, Air freight, Marine transportation and Rail/warehouses emissions factors are obtained from validated databases such as EcoInvent. Emissions are calculated by multiplying shipment spend data with the appropriate emission factors.

DSM is actively promoting and stimulating sustainable transportation and continues to engage in joint initiatives with suppliers that lead to environmental benefits in the value chain. Several additional initiatives have been successfully deployed such use of alternative fuels, reducing transportation movements and asset utilization optimization and rigorous challenging of modality choices.

Transportation details further downstream in the value chain beyond our customers are not known to DSM and figures are unreliable to obtain due to the diverse application range, global customer base and very broad customer structure in various steps in the value chain.

Processing of sold products

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

Reason of exclusion: This category has been excluded from the scope 3 inventory. This is based on the reasoning provided in the Calculation Guidance of the WBCSD Chemical Guidance that "Chemical companies are not required to report scope 3, category 10 emissions, since reliable figures are difficult to obtain due to the diverse application and customer structure".

Use of sold products

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

Reason of exclusion: This category has been excluded from the scope 3 inventory. This is based on the reasoning provided in the Description of Category and Calculation Guidance of the WBCSD Chemical Guidelines. The Description of Category includes direct use-phase emissions from Combusted fuels and products that contain or form greenhouse gases, neither of which are applicable to DSM. The Calculation Guidance states that "Chemical companies should not include indirect use-phase emissions in the inventory, unless the end use of chemical products is known", which is the case for DSM.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1120000

Emissions calculation methodology

Waste-type-specific method

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

0

Please explain

DSM's scope 3 emissions are calculated according to the Greenhouse Gas Protocol Corporate Value Chain (scope 3) standard and the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (further referred to as the WBCSD Chemical Guidelines). Emissions are calculated by multiplying the mass of finished goods with the product (group)-specific carbon content and the treatment-specific emission factors. Carbon content is derived from the product specifications of the main products sold in each business and end-of-life emission factors are derived from the WBCSD Chemical Guidance. IPCC and DSM expert guidance. Mass of finished goods is derived from DSM's ERP system.

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

DSM applies the WBCSD 'Guidance for Accounting & Reporting Corporate GHG emissions in the Chemical Sector Value Chain' for Scope 3 GHG reporting. This guidance states that category Downstream leased assets is not relevant for the chemical sector. DSM does not have Downstream leased assets.

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

DSM applies the WBCSD 'Guidance for Accounting & Reporting Corporate GHG emissions in the Chemical Sector Value Chain' for Scope 3 GHG reporting. This guidance states that category Franchises is not relevant for the chemical sector. DSM does not engage in Franchising activities.

Investments

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e) 208000

Emissions calculation methodology

Average data method

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

0

Please explain

DSM's scope 3 emissions are calculated according to the Greenhouse Gas Protocol1 Corporate Value Chain (scope 3) standard and the WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (further referred to as the WBCSD Chemical Guidelines).

Emission factor for an investment is derived from European and DEFRA input output tables based on the sector for each investment. Emissions per investment are calculated by multiplying investment revenue by DSM's share and the emission factor.

Other (upstream)

Evaluation status Please select

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

Emissions calculation methodology

<Not Applicable>

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

Please explain

Other (downstream)

Evaluation status Please select

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

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable> Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization? $\ensuremath{\mathsf{Yes}}$

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	31000	Reported emissions are for total biogenic CO2 emissions from combustion of biofuels and exclude biogenic emissions related to scope 3.

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 0.000101

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e) 1054500

Metric denominator unit total revenue

Metric denominator: Unit total 10480000000

Scope 2 figure used Market-based

% change from previous year 22.9

Direction of change Decreased

Reason(s) for change

Change in renewable energy consumption Other emissions reduction activities Change in revenue

Please explain

Our GHG emissions intensity versus total revenue decreased by 22.9%. This was due to a significant year-on-year GHG reduction at our existing sites, combined with solid sales-volume growth and favourable price/mix effects. Our scope 1 + 2 absolute reduction versus the baseline 2016 (corrected) improved to 35%, with the portion attributable to structural improvement increasing from 23% to ~26%.

The DSM GHG reduction program ensures our year-on-year delivery against our Science Based Emissions reduction targets with a key focus on structural emissions reductions, i.e. projects that will deliver emissions reductions regardless of production volumes, product mixes etc. in 2021, GHG reduction projects that contributed to this improvement include improving energy efficiency in steam generation and distribution, cooling and compressed air utilities, installing solar panels, minimizing heat losses through heat integration and heat pumps or, for instance, reducing energy required for water separation by using membranes. These projects often also deliver additional benefits such as cost and/or water savings.

Intensity figure

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e) 1054500

Metric denominator metric ton of product

Metric denominator: Unit total 2110000

Scope 2 figure used Market-based

% change from previous year 1.3

Direction of change Decreased

Reason(s) for change

Change in renewable energy consumption Other emissions reduction activities Change in output

Please explain

Our GHG emissions intensity per ton of product decreased by 1.3%. This was due to a significant year-on-year GHG reduction at our existing sites, which outpaced slowed production volume toward the end of the year. In 2021, 8 acquired sites were included in our reporting scope, Resins and Functional Materials and associated businesses was fully removed from the reporting scope, dsm protective Materials was removed (pro-rata) from the reporting scope, and one newly built site was added to the reporting scope. For continuing operations, our GHG efficiency (year-on-year) improved by 5.1% in 2021.

The DSM GHG reduction program ensures our year-on-year delivery against our Science Based Emissions reduction targets with a key focus on structural emissions reductions, i.e. projects that will deliver emissions reductions regardless of production volumes, product mixes etc. in 2021, GHG reduction projects that contributed to this improvement include improving energy efficiency in steam generation and distribution, cooling and compressed air utilities, installing solar panels, minimizing heat losses through heat integration and heat pumps or, for instance, reducing energy required for water separation by using membranes. These projects often also deliver additional benefits such as cost and/or water savings.

C7. Emissions breakdowns

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	554700	IPCC Fifth Assessment Report (AR5 – 100 year)	
CH4	6700	IPCC Fifth Assessment Report (AR5 - 100 year)	
N2O	2000	IPCC Fifth Assessment Report (AR5 – 100 year)	
HFCs	4800	IPCC Fifth Assessment Report (AR5 - 100 year)	
Other, please specify (CFCs and HCFCs)	4600	IPCC Fifth Assessment Report (AR5 - 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)
China	48600
United States of America	109300
Netherlands	71300
Switzerland	63200
Germany	111700
Other, please specify (Rest of world)	169700

C7.3

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

By business division

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Nutrition	538700
Materials	34000

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-EU7.4/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>	<not applicable=""></not>	<not applicable=""></not>
Chemicals production activities	572800	<not applicable=""></not>	
Coal production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Electric utility activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Metals and mining production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (upstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (midstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (downstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Steel production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Transport OEM activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Transport services activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>

(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)	
China	451300	385400	
United States of America	117300	3900	
Netherlands	52600	16900	
Switzerland	57500	53100	
Germany	3600	0	
Other, please specify (Rest of world)	50200	22300	

C7.6

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

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)
Nutrition	610800	430600
Materials	121800	51100

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response? No

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>	<not applicable=""></not>	<not applicable=""></not>
Chemicals production activities	732600	481700	
Coal production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Metals and mining production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (upstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (midstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (downstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Steel production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Transport OEM activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Transport services activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>

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
Caprolactam	12	Emission factor for Caprolactam is derived from SimaPro databases (in CO2eq), or where available, emission factor is obtained directly from supplier (in CO2eq). Purchased from DSM's ERP system. Scope 3 emissions as reported elsewhere.
Adipic acid	1	Emission factor for Adipic acid is obtained directly from supplier (in CO2eq). Purchased volumes are obtained from DSM's ERP system. Scope 3 emissions as reported elsewhere.

(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)	0	
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	37500	Decreased	3.6	In 2022, we once again made significant steps toward achieving our purchased renewable electricity target. The percentage of purchased electricity from renewable sources increased globally from 72% in 2021 to 78% in 2022, achieving our previous target eight years ahead of schedule and putting us firmly on track toward our new target level. The progress in renewable electricity is mainly due to a step-up in China. This improvement equals a GHG emission reduction year-on-year in purchased non-renewable electricity (corrected for production volume and acquisitions) of 30 kt CO2eq. In addition to renewable electricity, we also look into opportunities for the broader use in renewable energy sources. In 2021, our vitamin E production site Yimante (Hubei province, China) has significantly reduced its consumption of coal-based steam by purchasing by-product heat from a neighboring company. This contributed an additional 7.5 kt CO2eq.
				The 37.5 kt decrease is divided by our total 1.05 million tons scope 1 + 2 emissions, resulting in a 3.6% decrease
Other emissions reduction activities	22000	Decreased	2.1	The execution of the 2021 program will have an impact of approximately 22 kt CO2eq on our GHG reductions (corrected for production volume and acquisitions). The projects range from relatively easy-to-implement modifications in operations, such as improving the insulation around hot parts, to installing advanced energy metering systems, up to the installation of best available technologies (for example, heating and cooling equipment). We executed a variety of GHG reduction projects in 2022, which will have impact in 2023.
				The 22kt decrease is divided by our total 1.05 million tons scope 1 + 2 emissions, resulting in a 2.1% decrease
Divestment	16000	Decreased	1.5	The divestment of Resins and Functional Materials and associated businesses was finalized in 2021, and the divestment of DSM Protective Materials was finalized in 2022. The full divestment of the former and the pro-rata divestment of the latter resulted in a decrease in emissions of approximately 16 kt. The 16 kt decrease is divided by our total 1.05 million tons scope 1 + 2 emissions, resulting in a 1.5% decrease.
Acquisitions	6000	Increased	0.6	2022 was the first year of reporting for companies acquired in 2021. The total contribution of these new acquisitions had a material impact on our emissions of 6 kiloton, which when compared to our total 1.05 million tons scope 1 + 2 (market-based) emissions resulted in a 0.6% increase.
Mergers	0	No change		
Change in output	84500	Decreased	8	Production volumes decreased year on year, as well as business variations and product mix changes resulted in an estimated decrease in emissions of approximately 84.5 kt. The 84.5 kt decrease is divided by our total 1.05 million tons scope 1 + 2 emissions, resulting in a 8.0% increase.
Change in methodology	0	No change		
Change in boundary	0	No change		
Change in physical operating conditions	0	No change		
Unidentified	0	No change		
Other	0	No change		

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

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy? More than 0% but less than or equal to 5%

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	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
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)	LHV (lower heating value)	58600	2575400	2633900
Consumption of purchased or acquired electricity	<not applicable=""></not>	993100	275600	1268700
Consumption of purchased or acquired heat	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of purchased or acquired steam	<not applicable=""></not>	207400	1114000	1321400
Consumption of purchased or acquired cooling	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of self-generated non-fuel renewable energy	<not applicable=""></not>	4800	<not applicable=""></not>	4800
Total energy consumption	<not applicable=""></not>	1263800	3965000	5228900

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

LHV (lower heating value)

MWh consumed from renewable sources inside chemical sector boundary

58600

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases) 2575400

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 2633900

Consumption of purchased or acquired electricity

Heating value

<Not Applicable>

MWh consumed from renewable sources inside chemical sector boundary 993100

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases) 275600

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 1268700

Consumption of purchased or acquired steam

Heating value <Not Applicable>

MWh consumed from renewable sources inside chemical sector boundary 207400

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases) 1114000

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 1321400

Consumption of self-generated non-fuel renewable energy

Heating value <Not Applicable>

MWh consumed from renewable sources inside chemical sector boundary 4800

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 4800

Total energy consumption

Heating value

<Not Applicable>

MWh consumed from renewable sources inside chemical sector boundary

1263800

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases) 3965000

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 5228900

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	No
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	No

C8.2c

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

Sustainable biomass

Heating value

LHV

- Total fuel MWh consumed by the organization 33400
- 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 33400
- MWh fuel consumed for self-generation of cooling <Not Applicable>
- MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

Comment Biogas

Other biomass

Heating value LHV

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 <Not Applicable>

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

25200

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 25200

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

MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

Comment

Coal

Heating value

LHV

Total fuel MWh consumed by the organization

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 <Not Applicable>

Comment

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

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 <Not Applicable>

Comment

Gas

Heating value

....

LHV

Total fuel MWh consumed by the organization 2210100

MWh fuel consumed for self-generation of electricity 0

MWh fuel consumed for self-generation of heat

_ _ _ _ _ _

MWh fuel consumed for self-generation of steam 2210100

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

MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

Comment

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

Heating value

LHV

Total fuel MWh consumed by the organization 365300

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 365300

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

MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

Comment

Total fuel

Heating value LHV

Total fuel MWh consumed by the organization 2633900

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 2633900

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

MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

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	391600	215100	4800	4700
Heat	0	0	0	0
Steam	1564600	1473800	49700	46300
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) 391600

Generation that is consumed inside chemicals sector boundary (MWh) 215100

Generation from renewable sources inside chemical sector boundary (MWh) 4800

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh) 4700

Heat

Total gross generation inside chemicals sector boundary (MWh)

0

Generation that is consumed inside chemicals sector boundary (MWh)

```
0
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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) 1564600

Generation that is consumed inside chemicals sector boundary (MWh) 1473800

Generation from renewable sources inside chemical sector boundary (MWh) 49700

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh) 46300

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

C8.2g

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

Consumption of purchased electricity (MWh) 336600 Consumption of self-generated electricity (MWh) 1900 Is this electricity consumption excluded from your RE100 commitment? No Consumption of purchased heat, steam, and cooling (MWh) 823500 Consumption of self-generated heat, steam, and cooling (MWh) 0 Total non-fuel energy consumption (MWh) [Auto-calculated] 1162000

Country/area

United States of America

Consumption of purchased electricity (MWh) 395500

Consumption of self-generated electricity (MWh) 0

Is this electricity consumption excluded from your RE100 commitment? No

Consumption of purchased heat, steam, and cooling (MWh) 16300

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

Total non-fuel energy consumption (MWh) [Auto-calculated] 411800

Country/area Netherlands

Consumption of purchased electricity (MWh) 130200

Consumption of self-generated electricity (MWh) 100

Is this electricity consumption excluded from your RE100 commitment? No

Consumption of purchased heat, steam, and cooling (MWh) 89200

Consumption of self-generated heat, steam, and cooling (MWh) $\ensuremath{\mathbf{0}}$

Total non-fuel energy consumption (MWh) [Auto-calculated] 219500

Country/area Germany

Consumption of purchased electricity (MWh) 101800

Consumption of self-generated electricity (MWh) 0

Is this electricity consumption excluded from your RE100 commitment? No

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] 101800

Country/area Other, please specify (rest of world)

Consumption of purchased electricity (MWh) 338100

Consumption of self-generated electricity (MWh) 2900

Is this electricity consumption excluded from your RE100 commitment? No

Consumption of purchased heat, steam, and cooling (MWh) 27600

Consumption of self-generated heat, steam, and cooling (MWh) $\ensuremath{\textbf{0}}$

Total non-fuel energy consumption (MWh) [Auto-calculated] 368600

C8.2h

(C8.2h) Provide details of your organization's renewable electricity purchases in the reporting year by country/area.

Country/area of consumption of purchased renewable electricity United States of America

Sourcing method

Financial (virtual) power purchase agreement (VPPA)

Renewable electricity technology type Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 340000

Tracking instrument used US-REC

Country/area of origin (generation) of purchased renewable electricity United States of America

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) 2018

Vintage of the renewable energy/attribute (i.e. year of generation) Please select

Supply arrangement start year 2017

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity United States of America

Sourcing method Financial (virtual) power purchase agreement (VPPA)

Renewable electricity technology type Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 2000

Tracking instrument used US-REC

Country/area of origin (generation) of purchased renewable electricity United States of America

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) 2018

Vintage of the renewable energy/attribute (i.e. year of generation) 2023

Supply arrangement start year 2017

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

RECs used from January 2023 production.

Country/area of consumption of purchased renewable electricity United States of America

Sourcing method

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

Renewable electricity technology type

Renewable electricity mix, please specify (Mix from supplier's portfolio.)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 4800

Tracking instrument used Contract

Contract

Country/area of origin (generation) of purchased renewable electricity United States of America

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

No

CDP

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

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2020

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment RECs are retired by supplier as per contract.

Country/area of consumption of purchased renewable electricity Canada

Sourcing method Financial (virtual) power purchase agreement (VPPA)

Renewable electricity technology type Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 11200

Tracking instrument used US-REC

Country/area of origin (generation) of purchased renewable electricity United States of America

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) 2018

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2017

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity Switzerland

Sourcing method

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

Renewable electricity technology type Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 85800

Tracking instrument used Contract

Country/area of origin (generation) of purchased renewable electricity Switzerland

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>

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2019

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

GOs retired by supplier.

Country/area of consumption of purchased renewable electricity Switzerland

Sourcing method

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

Renewable electricity technology type Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

Tracking instrument used

Contract

5200

Country/area of origin (generation) of purchased renewable electricity Switzerland

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>

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2021

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

GOs retired by supplier.

Country/area of consumption of purchased renewable electricity Switzerland

Sourcing method

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

Renewable electricity technology type Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 70000

Tracking instrument used GO

Country/area of origin (generation) of purchased renewable electricity Spain

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) 2022

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2020

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity Switzerland

Sourcing method

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

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 16300

Tracking instrument used GO

Country/area of origin (generation) of purchased renewable electricity Netherlands

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) 2018

Vintage of the renewable energy/attribute (i.e. year of generation) 2022 Supply arrangement start year 2016 Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label Comment Country/area of consumption of purchased renewable electricity Netherlands Sourcing method Physical power purchase agreement (physical PPA) with a grid-connected generator Renewable electricity technology type Wind Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 39400 Tracking instrument used GO Country/area of origin (generation) of purchased renewable electricity Netherlands 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) 2018 Vintage of the renewable energy/attribute (i.e. year of generation) 2021 Supply arrangement start year 2016 Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label Comment Carry over late 2021 Country/area of consumption of purchased renewable electricity Netherlands Sourcing method Physical power purchase agreement (physical PPA) with a grid-connected generator Renewable electricity technology type Wind Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 7100 Tracking instrument used GO Country/area of origin (generation) of purchased renewable electricity Netherlands 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) 2018 Vintage of the renewable energy/attribute (i.e. year of generation) 2022 Supply arrangement start year 2016 Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label Comment As per contract, a specific wind park from supplier's portfolio provided GOs , which were cancelled by supplier. Country/area of consumption of purchased renewable electricity Netherlands Sourcing method

Project-specific contract with an electricity supplier

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 71300

Tracking instrument used Contract

Country/area of origin (generation) of purchased renewable electricity

Netherlands

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

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2019

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

As per contract, a specific wind park from supplier's portfolio provided GOs , which were cancelled by supplier.

Country/area of consumption of purchased renewable electricity Belgium

Sourcing method

Project-specific contract with an electricity supplier

Renewable electricity technology type Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 28200

Tracking instrument used Contract

Country/area of origin (generation) of purchased renewable electricity Belgium

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) 2019

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2019

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

As per contract, a specific wind park from supplier's portfolio provided GOs , which were cancelled by supplier.

Country/area of consumption of purchased renewable electricity Belaium

Sourcing method

Project-specific contract with an electricity supplier

Renewable electricity technology type Wind

vvina

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 1000

Tracking instrument used Contract

Country/area of origin (generation) of purchased renewable electricity Belgium

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) 2019

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2020

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

As per contract, a specific wind park from supplier's portfolio provided GOs , which were cancelled by supplier.

Country/area of consumption of purchased renewable electricity France

Sourcing method Financial (virtual) power purchase agreement (VPPA)

Renewable electricity technology type Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 85400

Tracking instrument used GO

Country/area of origin (generation) of purchased renewable electricity Spain

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) 2022

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2020

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity Germany

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

Renewable electricity technology type Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 11400

Tracking instrument used Contract

Country/area of origin (generation) of purchased renewable electricity 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>

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2020

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity Spain

Sourcing method Financial (virtual) power purchase agreement (VPPA)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 11100

Tracking instrument used GO Country/area of origin (generation) of purchased renewable electricity Spain 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) 2022 Vintage of the renewable energy/attribute (i.e. year of generation) 2022 Supply arrangement start year 2020 Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label Comment Country/area of consumption of purchased renewable electricity Italy Sourcing method Financial (virtual) power purchase agreement (VPPA) Renewable electricity technology type Wind Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 1000 Tracking instrument used GO Country/area of origin (generation) of purchased renewable electricity Netherlands 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) 2018 Vintage of the renewable energy/attribute (i.e. year of generation) 2022 Supply arrangement start year 2016 Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label Comment Country/area of consumption of purchased renewable electricity Hungary Sourcing method Financial (virtual) power purchase agreement (VPPA) Renewable electricity technology type Wind Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 500 Tracking instrument used GO Country/area of origin (generation) of purchased renewable electricity Netherlands 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) 2018 Vintage of the renewable energy/attribute (i.e. year of generation) 2022 Supply arrangement start year 2016 Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Country/area of consumption of purchased renewable electricity Romania

Sourcing method

Financial (virtual) power purchase agreement (VPPA)

Renewable electricity technology type Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 400

Tracking instrument used GO

Country/area of origin (generation) of purchased renewable electricity Netherlands

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) 2018

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2016

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity Greece

Sourcing method Financial (virtual) power purchase agreement (VPPA)

Renewable electricity technology type Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 100

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity Netherlands

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) 2018

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2016

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity Denmark

Sourcing method Financial (virtual) power purchase agreement (VPPA)

Renewable electricity technology type Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 13700

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity Netherlands

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) 2018 Vintage of the renewable energy/attribute (i.e. year of generation) 2022 Supply arrangement start year 2016 Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label Comment Country/area of consumption of purchased renewable electricity United Kingdom of Great Britain and Northern Ireland Sourcing method Financial (virtual) power purchase agreement (VPPA) Renewable electricity technology type Wind Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 5200 Tracking instrument used GO Country/area of origin (generation) of purchased renewable electricity Netherlands 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) 2018 Vintage of the renewable energy/attribute (i.e. year of generation) 2022 Supply arrangement start year 2016 Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label Comment Country/area of consumption of purchased renewable electricity United Kingdom of Great Britain and Northern Ireland Sourcing method Retail supply contract with an electricity supplier (retail green electricity) Renewable electricity technology type Wind Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 2500 Tracking instrument used Contract Country/area of origin (generation) of purchased renewable electricity 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> Vintage of the renewable energy/attribute (i.e. year of generation) 2022 Supply arrangement start year 2022 Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label Comment Supplier cancelled REGOs as per contract

Country/area of consumption of purchased renewable electricity Poland

Sourcing method Financial (virtual) power purchase agreement (VPPA) Renewable electricity technology type Wind Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 6300 Tracking instrument used GO Country/area of origin (generation) of purchased renewable electricity Netherlands 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) 2018 Vintage of the renewable energy/attribute (i.e. year of generation) 2022 Supply arrangement start year 2016 Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label Comment Country/area of consumption of purchased renewable electricity Austria Sourcing method Retail supply contract with an electricity supplier (retail green electricity) Renewable electricity technology type Hydropower (capacity unknown) Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 5400 Tracking instrument used Contract Country/area of origin (generation) of purchased renewable electricity Austria 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> Vintage of the renewable energy/attribute (i.e. year of generation) 2022 Supply arrangement start year 2022 Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label Comment Aggregation of several small-scale contracts with same characteristics Country/area of consumption of purchased renewable electricity China Sourcing method Financial (virtual) power purchase agreement (VPPA) Renewable electricity technology type Solar Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 78400 Tracking instrument used Contract Country/area of origin (generation) of purchased renewable electricity 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>

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity China

Sourcing method Financial (virtual) power purchase agreement (VPPA)

Renewable electricity technology type Renewable electricity mix, please specify (Mix from supplier's portfolio.)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 28200

Tracking instrument used Contract

Country/area of origin (generation) of purchased renewable electricity 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>

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2022

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment Mix from supplier's portfolio.

Country/area of consumption of purchased renewable electricity Brazil

Sourcing method

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

Renewable electricity technology type Sustainable Biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 14200

Tracking instrument used Contract

Country/area of origin (generation) of purchased renewable electricity 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) 2012

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2012

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity Brazil

Sourcing method

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

Renewable electricity technology type

Renewable electricity mix, please specify (Mix portfolio from grid supply with proof of cancellation of I-RECs.)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 41900

Tracking instrument used Contract

Country/area of origin (generation) of purchased renewable electricity 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>

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2022

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity Brazil

Sourcing method

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

Renewable electricity technology type Renewable electricity mix, please specify (Mix portfolio from grid supply with proof of cancellation of I-RECs.)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 2900

Tracking instrument used Contract

Country/area of origin (generation) of purchased renewable electricity 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>

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2016

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

300

Country/area of consumption of purchased renewable electricity Brazil

Sourcing method Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

Tracking instrument used I-REC

Country/area of origin (generation) of purchased renewable electricity 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) 2003

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2022

Additional, voluntary label associated with purchased renewable electricity Green-e

Comment

Country/area of consumption of purchased renewable electricity New Zealand

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

Renewable electricity technology type Renewable electricity mix, please specify (Mix from supplier's portfolio.)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 800

Tracking instrument used NZREC

Country/area of origin (generation) of purchased renewable electricity New Zealand

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>

Vintage of the renewable energy/attribute (i.e. year of generation) 2020

Supply arrangement start year 2022

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity Japan

Sourcing method

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

Renewable electricity technology type Sustainable Biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh) 500

Tracking instrument used

Contract

Country/area of origin (generation) of purchased renewable electricity Japan

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) 2015

Vintage of the renewable energy/attribute (i.e. year of generation) 2021

Supply arrangement start year 2014

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment NFC Non-fossil certification

Country/area of consumption of purchased renewable electricity

Sourcing method

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

Renewable electricity technology type

Renewable electricity mix, please specify (Renewable electricity mix: hydropower (capacity unknown) and wind)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

200

Tracking instrument used

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Contract
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Country/area of origin (generation) of purchased renewable electricity Costa Rica

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>

Vintage of the renewable energy/attribute (i.e. year of generation) 2022

Supply arrangement start year 2022

Additional, voluntary label associated with purchased renewable electricity No additional, voluntary label

Comment

C8.2i

(C8.2i) Provide details of your organization's low-carbon heat, steam, and cooling purchases in the reporting year by country/area.

Sourcing method

Heat/steam/cooling supply agreement

Country/area of consumption of low-carbon heat, steam or cooling Switzerland

Energy carrier Heat

Low-carbon technology type Sustainable biomass

Low-carbon heat, steam, or cooling consumed (MWh) 123900

Comment Waste/residues from local forestry management

Sourcing method Heat/steam/cooling supply agreement

Country/area of consumption of low-carbon heat, steam or cooling China

Energy carrier Heat

Low-carbon technology type Sustainable biomass

Low-carbon heat, steam, or cooling consumed (MWh) 57600

Comment Waste/residues from local agriculuture

Sourcing method Heat/steam/cooling supply agreement

Country/area of consumption of low-carbon heat, steam or cooling Brazil

Energy carrier Heat

Low-carbon technology type Sustainable biomass

Low-carbon heat, steam, or cooling consumed (MWh) 25600

Comment

Bagasse

C8.2j
(C8.2j) Provide details of your organization's renewable electricity generation by country/area in the reporting year. Country/area of generation India Renewable electricity technology type Solar Facility capacity (MW) 1 Total renewable electricity generated by this facility in the reporting year (MWh) 1680 Renewable electricity consumed by your organization from this facility in the reporting year (MWh) 1560 Energy attribute certificates issued for this generation No Type of energy attribute certificate <Not Applicable> Comment Country/area of generation China, Macao Special Administrative Region Renewable electricity technology type Solar Facility capacity (MW) 2 Total renewable electricity generated by this facility in the reporting year (MWh) 1890 Renewable electricity consumed by your organization from this facility in the reporting year (MWh) 1890 Energy attribute certificates issued for this generation No Type of energy attribute certificate <Not Applicable>

Comment

C8.2k

(C8.2k) Describe how your organization's renewable electricity sourcing strategy directly or indirectly contributes to bringing new capacity into the grid in the countries/areas in which you operate.

In our renewable electricity strategy we prioritize pursuing available (e.g. on-site solar/wind, retail offers, hydro power) and emerging options (pilots) supporting DSM's additionality principle, meaning that the assets commence production of electricity after the applicable agreement with DSM is signed and may include assets that are newly constructed, refurbished or otherwise new on the market.

C8.2I

(C8.2I) In the reporting year, has your organization faced any challenges to sourcing renewable electricity?

	Challenges to sourcing renewable electricity	Challenges faced by your organization which were not country/area-specific
Row 1	No	<not applicable=""></not>

C-CH8.3

(C-CH8.3) Does your organization consume fuels as feeds tocks for chemical production activities? No

C9. Additional metrics

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-CH9.3a

(C-CH9.3a) Provide details on your organization's chemical products. **Output product** Specialty chemicals Production (metric tons) 2110000 Capacity (metric tons) 2110000 Direct emissions intensity (metric tons CO2e per metric ton of product) 0.5 Electricity intensity (MWh per metric ton of product) 0.6 Steam intensity (MWh per metric ton of product) 0.62 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-CN9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/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 Iow-carbon R&D	Comment
Row 1	Yes	

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 Process step integration

Stage of development in the reporting year

Large scale commercial deployment

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

5

5

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

DICI (DSM Integral Continuous Improvement journey) guides DSM Operations on a "Culture of Continuous Improvement". Through DICI plant and equipment opportunities for improvements are identified and executed. This program is material in identifying and initiating low-carbon investments on our production sites through for instance value chain optimization and energy reduction by optimizing production processes. The investment figure given above only reflects the external costs. There are significant internal costs related to dedicated roles within the DICI organization. DICI offers an integrated approach to continuous improvement that provides: * Insights by assessing best practice status against world class standards, establishing in- and external bench-marking and measuring progress * Shaping by developing a step-by-step integrative improvement plan supported with a proven integrated implementation methodology * Connecting by building capabilities at all levels in Operations and creating the platform and networks to leverage the knowledge pool in DSM. DSM creates a common Continuous Improvement Culture in Operations by: * Harmonizing all improvement initiatives within DSM Operations and generating maximized value by having one approach which is leveraged by all BGs * Creating maximum learning in our organization through this shared approach and the use of the same practices * Unleashing the collective power of the Operations community by shared skill and capability building, and leveraging this power through active sharing of DSM best practices and digitalization in Operations * Delivering an annual value contribution of approximately 2% CoGS (Cost of Goods Sold) which would translate into ca. €70 million YoY (year-on-year) for DSM.

Technology area

Process step integration

Stage of development in the reporting year

Large scale commercial deployment

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

7

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

Our Energy Efficiency Improvement program consists of a range of reduction proposals from the business groups, encompassing projects for saving heat, fuel and electricity with an expected total of GHG improvement potential of approximately 20 kt in GHG reductions and 2% of energy efficiency savings annually. Most projects also deliver additional benefits such as cost savings or water savings. This program is centrally funded.

Projects finalized in 2021 began delivering full benefits in 2022, further reducing 2022 emissions by approximately 20 kt CO2eq. These projects are of various natures: improving energy efficiency in steam generation and distribution, cooling and compressed air utilities, installing solar panels, minimizing heat losses through heat integration and heat pumps or, for instance, reducing energy required for water separation by using membranes. These projects often also deliver additional benefits such as cost and/or water savings.

In 2022, we again strengthened our efforts with even more energy-saving projects compared to 2021. Among the most noticeable projects were a new membrane project in Jiangshan (Jiangsu province, China) saving more than 10 kt CO2eq; the implementation of a high efficiency, state-of-the art cooling system in Xinhuo (Shanghai province, China), applying – head of local legislation – low global warming potential (GWP) refrigerants; and the further deployment of the above-mentioned digital technologies in Seclin (France), Village-Neuf (France) and Belvidere (New Jersey, USA) for Energywise, and Sisseln (Switzerland), Dalry (UK), Village-Neuf (France) and Kingstree (South Carolina, USA) for steam trap monitoring.

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 Reasonable assurance

Attach the statement

2022-DSM-Annual-Report.pdf

Page/ section reference

1. p290 - 295 Assurance report of the independent auditor

- 2. p69 Planet, Climate change mitigation in our IAR, scope 1 + 2 emissions are reported in aggregate.
- 3. p118 Non-financial reporting policy the period covered

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

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 Reasonable assurance

Attach the statement 2022-DSM-Annual-Report.pdf

Page/ section reference

1. p290 - 295 Assurance report of the independent auditor

2. p69 Planet, Climate change mitigation - in our IAR, scope 1 + 2 emissions (market-based) are reported in aggregate.

3. p118 Non-financial reporting policy - the period covered

4. p302 Location- based figures are provided in the 5-year summary for reference purposes

Relevant standard ISAE3000

ISAE3000

Proportion of reported emissions verified (%) 100

Scope 2 approach Scope 2 location-based

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Type of verification or assurance Reasonable assurance

Attach the statement

2022-DSM-Annual-Report.pdf

Page/ section reference

- 1. p290 295 Assurance report of the independent auditor
- 2. p69 Planet, Climate change mitigation in our IAR, scope 1 + 2 emissions (market-based) are reported in aggregate.
- 3. p118 Non-financial reporting policy the period covered
- 4. p302 Location- based figures are provided in the 5-year summary for reference purposes

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: Purchased goods and services
- Scope 3: Capital goods
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations
- Scope 3: Business travel

Scope 3: Employee commuting

- Scope 3: Upstream leased assets
- Scope 3: Investments
- Scope 3: Downstream transportation and distribution
- Scope 3: End-of-life treatment of sold products Scope 3: Downstream leased assets
- Scope 3: Downstream leased ass

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement 2022-DSM-Annual-Report.pdf

Page/section reference

- 1. p290 295 Assurance report of the independent auditor
- 2. p69 Planet, Climate change mitigation in our Greenhouse gas scope 3.
- 3. p74 75 Planet, Scope 3 GHG emissions reported in aggregate in chart on page 75
- a. Total (all Cats)
- b. Purchased Goods & services (Cat 1)
- c. Other upstream categories (Cat 2, 3, 4, 5, 6, 7, 8)
- d. End-of-life treatment (Cat 12)
- e. Investments (cat 15)
- f. Other downstream categories (cat 9)
- 4. p118 Non-financial reporting policy the period covered

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

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	Data verified	Verification standard	Please explain
module			
verification			
relates to			
C4. Targets	Other, please specify	Dutch Standard 3810N 'Assurance-opdrachten inzake maatschappelijke verslagen' (Assurance engagements	All information relating to our targets and performance as
and	(all emissions data	relating to sustainability reports), which is a specified Dutch standard that is based on the International	detailed in our Integrated Annual Report, as well as the data
performance	points and target	Standard on Assurance Engagements (ISAE) 3000 'Assurance Engagements Other than Audits or Reviews of	points that are used to calculate the targets and performance
	information)	Historical Financial Information'.	are subject to audit.

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 Switzerland ETS UK ETS

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 24

% of Scope 2 emissions covered by the ETS $_8$

Period start date January 1 2022

Period end date December 31 2022

Allowances allocated 78402

Allowances purchased 130357

Verified Scope 1 emissions in metric tons CO2e 136634

Verified Scope 2 emissions in metric tons CO2e 61549

Details of ownership Facilities we own and operate

Comment

Switzerland ETS

% of Scope 1 emissions covered by the ETS

0

% of Scope 2 emissions covered by the ETS

12

Period start date January 1 2022

Period end date December 31 2022

Allowances allocated 85032

Allowances purchased 25110

Verified Scope 1 emissions in metric tons CO2e 0

Verified Scope 2 emissions in metric tons CO2e 91426

Details of ownership Facilities we own but do not operate

Comment

UK ETS

% of Scope 1 emissions covered by the ETS 18

% of Scope 2 emissions covered by the ETS

Period start date January 1 2022

Period end date December 31 2022

Allowances allocated 42585

Allowances purchased

Verified Scope 1 emissions in metric tons CO2e 101061

Verified Scope 2 emissions in metric tons CO2e

Details of ownership Facilities we own and operate

Comment

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

DSM's strategy to comply with the schemes comprises of:

1) Reducing emissions and (future) compliance costs by working with our Science Based Targets, i.e., reducing our total Scope 1 & 2 GHG emissions by 59% in absolute terms by 2030 (compared to 2016). We have developed detailed roadmaps for the most relevant sites, which cover potential initiatives to reduce emissions, expected business growth and ETS exposure projections. We are working to reduce emissions for example by improving energy efficiency and implementing specific process emission reduction programs in line with our targets, as well as moving to renewable Electricity (100% by 2030). In addition, all new investments need to be also effectively carbon neutral within business groups.

The strategy has been very successfully applied since the start of the program in 2016, with DSM Scope 1&2 emissions having reduced by 35% in absolute terms so far (within the timescale 2016-2022, with the current program running until 2030), which also effectively reduces DSM exposure and direct compliance costs for the ETS systems. In parallel, DSM also works with long-term targets to reach Net-Zero emissions by 2050 at latest

2) Long-term decarbonization of assets: To encourage investments in low-carbon and carbon-free technologies, we use an internal carbon price in the valuations of key investment projects Since 2019, business growth projects must either be GHG-neutral or else be compensated for within the same business with other GHG reduction projects withing that business. This increases the visibility of, and encourages accountability for, the impact of carbon on the business. In 2021, we increased the internal carbon price from to \in 100/mt CO2 e to better reflect the updated insights on the expected carbon price scheme developments and will beperiodically review and update the price level to allow us to prepare also expected changes in compliance markets. This price is also within the ranges of the scenarios we use for assessing climate transition risks (in the time scale until 2030).

3) Monitoring: Internally monitoring external carbon pricing schemes & developments on a quarterly basis based on scenarios, alongside to monitoring the need for balancing purchased and allocated allowances on quarterly basis. This includes assessing impacts and preparing documentation well in advance even on locations with emerging liabilities, such as China (details and communication with authorities yet to be finalized), up until 2030

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? Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Shadow price

How the price is determined

Other, please specify (The price level is periodically reviewed, determined through a combination of factors from 1)Transition scenarios on expected compliance market price levels 2)Needed price levels for 1.5C 3)exceeding current compliance market prices to future-proof)

Objective(s) for implementing this internal carbon price

Change internal behavior Drive low-carbon investment Navigate GHG regulations Stress test investments

Scope(s) covered

Scope 1 Scope 2

Pricing approach used – spatial variance

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

The price level is periodically reviewed (every 2-3 years) and best suited price level is determined through a combination of factors based on latest science and external analysis on 1)Transition scenarios on expected compliance market price levels 2)Needed price levels for 1.5C 3)exceeding current compliance market prices to future-proof. As of March 2021, DSM internal carbon price increased to € 100/mt CO2 eq from the previously used €50/mt CO2 eq (in use since 2016)

Actual price(s) used - minimum (currency as specified in C0.4 per metric ton CO2e)

100

Actual price(s) used - maximum (currency as specified in C0.4 per metric ton CO2e)

100

Business decision-making processes this internal carbon price is applied to

Capital expenditure Risk management Opportunity management Public policy engagement

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for some decision-making processes, please specify (Mandatory for any investment proposal for large capital expenditure projects;)

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

Since 2016 DSM has included a carbon price for each ton of GHG additionally generated as a result of an investment project (capital expenditure). In the business case of the project this carbon penalty has to be included as a cash outflow. In practice, for each large investment two business cases have to be presented. One with an internal carbon price of €100 /mt CO2e, and one with the real carbon price (which tends to be much lower or even zero depending on the region). The above is not only valid for capital investment projects but also to acquisition projects. We review the internal carbon prices levels periodically, with latest update to €100/mt CO2 in March 2021, from the original ICP of € 50/mt CO2.

As an example where Internal Carbon Price has been a supporting driver for a emissions reduction investment is a biomass project in Switzerland, which was an opportunity to renew an old installation with limited investments in a cost neutral way. While the Swiss ETS prices at the time were not sufficiently high to fully support the business case, we applied our internal carbon price (\notin 50/mt CO2e at time of investment) to prepare for future carbon prices. The project reached full year capacity in 2020, with a total of 46kt CO2e annual reduction of emissions for DSM.

Recent internal analysis confirms that Internal Carbon Pricing (ICP) has been instrumental tool to integrate GHG emissions into long-term investment decisions, encouraging low-carbon solutions. The Internal Carbon Price also serves to minimize risks and realize opportunities from GHG reduction projects to better prepare DSM for the financial impact (i.e. financial liabilities) of an external carbon price, as we are anticipating further regulation to emerge and develop in the regions we operate. On the other hand, we also strongly support carbon prices scheme developments; from this perspective the ICP is also a public policy engagement tool, particularly in regions where there is no compliance carbon pricing scheme yet in place, as we are able to demonstrate that we are already prepared for a high explicit carbon price

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues? Yes, our suppliers

Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Facilitate adoption of a unified climate transition approach with suppliers

% of suppliers by number

10

% total procurement spend (direct and indirect)

60

% of supplier-related Scope 3 emissions as reported in C6.5

55

Rationale for the coverage of your engagement

i) Our broader Sustainable Procurement Program (SSP) ensures that we deliver together with all our suppliers on our promise to reduce our environmental footprint through our activities, products and innovations. Through multiple ways outlined below, the SSP particularly focuses on sharing our expectations to our suppliers, collecting information of our suppliers climate transition roadmaps and engaging with key suppliers on best practices and supporting them on their transition journey. This detailed engagement approach, covers a majority of suppliers (~60%) by spend and Scope 3 cat 1 emissions, but a smaller proportion of suppliers by number (less than 10%);

-'CO2REDUCE' is DSM's dedicated supplier engagement program focusing on reducing GHG emissions throughout our value chain. This program initially had around 500+ suppliers from material categories in scope, whereby we currently focus on the highest upstream carbon emission and purchase volume suppliers across DSM, covering more than two thirds of the emissions in purchased goods and services (~69%). The program has evolved from reduction seeking initiatives and actions to business integration where we now have 80+ suppliers engaged in delivering targeted reduction roadmaps and aligning on our transition plans. We engage suppliers on GHG emissions reduction, by collecting supplier and product specific emissions data at the raw materials level procured by DSM. & collaborate with suppliers by developing roadmaps consisting of specific emissions reduction projects. The stated % coverage refers to the scope of activities to collect primary information on reduction activities and GHG emissions under DSM's 'CO2REDUCE' supplier engagement program.

-Additional supplier development & evaluation: We also assess, audit & improve our suppliers' sustainability performance through Together for Sustainability (TfS) & EcoVadis initiatives by actively developing and following-up on corrective actions from audits. In 2022, we have overall assessed 1463 suppliers through TfS (covering just less than 10% of suppliers by number)

Impact of engagement, including measures of success

ii) The primary measure of success is to connect, engage and collaborate with all high-impact suppliers to obtain specific product carbon footprint primary data, insights and reduction options (=roadmaps) from suppliers covering at approximately 60% of our spend, and effectively to define pathway together to meet DSM's science-based scope 3 target: -28% per ton of product produced by 2030 vs 2016. Supplier action and innovation is one of the key levers for DSM to deliver on our Scope 3 target.

iii) Impact of the engagement is positive; DSM's Scope 3 target is an intensity target, expressed in kg CO2eq/kg produced, has now decreased by 17% in total against the baseyear 2016. Example: Some of the decrease is driven by lower sourced volumes from 2021 but also an improved carbon footprint for few major products, such as Niacin as a result of the roadmap developed in the program.

Another successful impact in 2022 is the increased number of multi-year supplier emissions reduction action plans, with a key focus on the main contributors to the emissions related to our Nutrition products. As an example, collaboration with a supplier, Arxada(Lonza) on accelerating their decarbonization initiatives have been anchored in multi-year contracting with them. Company-wide scope 3 emissions reduction roadmaps have been developed through cross-functional teams, and in 2022 we identified the first wave of our products (value chains) where additional reduction initiatives may be possible. In terms of supplier engagement, this covers the active work with 80+ key suppliers that represent approximately ~60% of spend. This serves as an essential input into the further development of our business strategy. The roadmaps will be further improved and extended in 2023 and beyond.

Finally, as a result of the engagement, the calculations and tracking of our scope 3 emissions also further developed in 2022. Digitalization of the reporting and improved insight into the value chain emission factors enable further transparency and better program steering. The reported emissions reflect the latest insights and are based on an increased share of supplier-specific emissions, instead of using industry average figures. In 2022 we also developed emissions dashboard connected to our ERP. Through that approach we now have 80+ suppliers identified and GHG impact made clearer for our own products

Comment

Drop-down option "facilitating adoption of a unified climate transition plan" chosen as this encompasses best the broad suite of activities DSM engages with our suppliers on, from information collection to sharing best practices and tools, for the purpose of supporting suppliers to develop and share with us their roadmap and actions to align with the latest and most ambitious climate science recommendations (=part of their transition plans), connecting directly to our products and long-term contracting.

Further details on Together for Sustainability (TfS) We also collect climate information from suppliers through TfS, a joint initiative of 31 chemical companies which DSM joined in 2015. Founded in 2011, TfS has developed and implemented a global assessment & audit program to improve sustainability practices within the chemical industry's supply chain. Members can share all assessments and audit reports, which allows DSM to screen and address sustainability performance and risks for a high number of suppliers. The EcoVadis assessment focuses on 21 criteria in four themes: Environment, Labor & Human Rights, Ethics and Sustainable Procurement. DSM expects suppliers to have a minimum "Engaged" score on their EcoVadis assessment; a lower received score will be required to go through a re-assessment or audit. In 2022 61% of our re-assessed suppliers have shown improvement in their reassessments indicates successful engagement.

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

100

% of customer - related Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

i)Sustainability, including climate related information and performance, is included in all standard business communications and marketing in our various Business Groups. DSM is active in a wide variety of markets and is dedicated to reducing GHG emissions across the various value chains in which it is active.

In addition to standard, integrated communications on our performance and strategy, we are also running several engagement campaigns with selected clients to share our approach to meet our Science Based Emissions reduction targets and NetZero emissions, focusing on those clients that are also working with their SBTs and &/or NetZero emission targets across their value chains. We also have a number of LCA data based information sharing campaigns, e.g. on the lower carbon footprint of our products (our client's Scope 3 emissions) or properties of our products helping our customers to reduce their Scope 1 and 2 footprint. Furthermore, customer engagement also includes responding to specific customer information requests, including, but not limited to the CDP Supply Chain Program.

One case study example of a specific engagement campaign towards our clients is for from DSM Health, Nutrition & Care business Ingredients business: in 2019 the PCA team launched Sustainability Imp'Act CardTM for a first wave of +10 key products (with a second wave of +10 products in in consecutive half years to 2022). The Sustainability Imp'Act CardTM provide specific, tangible information at the product level around 4 pillars: environmental and social impacts, traceability and identity. Through this card, we offer our customers for example the access to carbon and water footprint values, the health benefits and all certifications related to that product.

Please note on the % coverage of Scope 3 emissions for C 6.5: We have excluded the category "Processing and Use of Sold Products" from our Scope 3 inventory in Question C6.5 (based on the reasoning provided in the WBCSD/GHG protocol Chemical Guidelines for intermediate producers since reliable figures are difficult to obtain due to the diverse application and customer structure),

Impact of engagement, including measures of success

ii) An overall threshold for success is to achieve 65% if our sales from the BLS Plus solutions portfolio, i.e. measuring the success of our customer engagement through the overall demand for our Brighter Living Solutions Plus (BLS+) portfolio. These Solutions are measurably at par or outperforming with the mainstream solution on the market in terms of their environmental (e.g. CO2 emissions, resource extraction, waste etc.) and social impact (e.g.. criteria such as health), while doing no significant harm to people or planet. The sustainability assessments to support the qualification for Brighter Living SolutionsPlus are required to be made by internal Life Cycle Assessment (LCA) and full comparative LCA if benefit is expected to outperform the market.

A complementary way to measure success is retaining our clients, increasing sales/ gaining market share, and in some cases also contributing to encouraging our clients to be more ambitious in their emissions reductions journey by not just being considered as a supportive partner but even as an advisor to guide their starting path. One concrete example of successful impact is newly agreed strategic partnership with one key client for our Health & Nutrition business.

iii) the impact of engagement: The threshold for success is to achieve 65% if our sales from the BLS Plus solutions portfolio. We see continued demand for solutions that address sustainability challenges. In 2022, 67% of our sales came from BLS products (compared to 64% in 2021)

Furthermore, while we recognize some of the positive impacts of these engagements will take a longer time to materialize, we have seen significant positive impact also on short term from some of the campaigns. For example, the Sustainability Imp'Act Card[™] tool deployed in the Health and Nutrition business was an important step in our engagement with customers on Sustainability and after launch translated in a couple of months into various qualitative and quantitative successes on the market. For example, eing acknowledged a sustainable leader or the number 1 in sustainability in the annual suppliers assessment and consequently increased market share or retained market share despite a more competitive price, by demonstrating that we had the lowest carbon footprint in the industry and contribute to scope 3 reductions of our customers

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process? Yes, climate-related requirements are 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

Implementation of emissions reduction initiatives

Description of this climate related requirement

The business principles most relevant for the supply chain are brought together in the Supplier Code of Conduct (SCoC) and structured along the three sustainability dimensions of People, Planet and Profit – including DSM ambitions on climate action and how we can only work with partners supporting and also acting with us on this journey. The Supplier Code of Conduct forms the basis on how we choose to do business and interact with our suppliers. In 2022, we met our target level of 100% of our supplier spend covered by the SCoC

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

Other, please specify (The renewed Supplier Code of Conduct forms the basis on how we choose to do business and interact with our suppliers. It is a prerequisite for business and covers fully transactions done for goods and services)

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Setting a science-based emissions reduction target

Description of this climate related requirement

While our main approach in supplier engagement is to see absolute emissions reductions, setting targets and adopting science based-approach to this and governing a GHG reduction program can be extremely valuable. Therefore, through our CO2REDUCE program, DSM regularly engages with with our highest upstream carbon emission and purchase volume suppliers to develop roadmaps consisting of specific emissions reduction projects and improving their maturity to manage their climate impacts. This also involves sharing our journey and benefits of setting science-based emissions reduction targets, helping them to adopt the approach. Currently approximately 20% of our suppliers by spend have either set an SBTi target validated by SBTi or have confirmed their science-based emissions reduction targets are under development.

% suppliers by procurement spend that have to comply with this climate-related requirement $\mathbf{0}$

% suppliers by procurement spend in compliance with this climate-related requirement

20

Mechanisms for monitoring compliance with this climate-related requirement

Supplier scorecard or rating Other, please specify (validate through SBTi database and supplier meetings)

Response to supplier non-compliance with this climate-related requirement

Retain and engage

(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

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)

DSM Information request for trade associations.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

Our climate change strategy is fully integrated into our business strategy, and as such regularly reviewed and discussed via business line management which ensures full awareness and commitment. Climate advocacy activities globally are regularly discussed among the Executive Committee. Additionally, the DSM Sustainability Leadership Team, bringing the different functional areas together, supports the development and deployment of the Corporate Sustainability Strategy which includes climate change advocacy. Within each functional area additional global teams, we have regular engagement and explicit discussions on the climate positions of the key associations that are most influential and where we are active members (e.g. on the board).

Specifically, DSM continues to work to define best fitting processes to assess and engage with the trade associations and advocacy groups which we are supporting through membership contributions and who might advocate on our behalf on (business) relevant topics, including climate related topics. The work continues and was started in 2019.

The aim is to increase climate ambition by informing and influencing high-impact business organizations with our expectations – also by making the link with "mainstream" trade and climate policies more visible. A cross functional team, led by Global Public Affairs and Sustainably was set up, to execute pilot screening and define long term approach in close collaboration with regional offices and Business groups, as both constituents have traditionally independently liaised with local trade associations.

In the pilot phase, an initial screening of the climate positions of selected key associations (40 globally) was conducted to 1) test the availability of data, 2) suitability of the pre-defined climate positions criteria and 3) develop a process manual (including training) to support regions and business groups in future assessment and engagement. The process was followed up with detailed engagements with broader set of the associations to further share DSM ambitions, and where differences arise, seek opportunities to influence from within or collectively with other companies, and ultimately bring persistent differences back to the review team for assessment of next steps. The work is still ongoing but the first screening revealed that the assed organizations were able to provide sufficient information on their Paris alignment or took the steps to develop positions

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

European Chemical Industry Council (CEFIC)

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, and they have changed their 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 Cefic supports the European ambition to become climate neutral by 2050. They raise awareness for the specific ways in which the chemical industry can support GHG emissions reduction for mitigation of and adaptation to climate change and to advocate for realization of a business environment in which the chemical industry can realize this potential best.

DSM participates in internal working groups by providing challenge and solution focused improvement proposals. DSM advocates for increased sustainability ambitions particularly on topics related to climate change, and challenges decisions when not aligned with a progressive sustainability agenda. From October 2018 until October 2022, DSM was represented through one of its Co-CEO's in Cefic's Executive Committee and Board and chaired Cefic's Sustainability Forum

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 (VNCI)

Is your organization's position on climate change policy consistent with theirs? Mixed

Has your organization attempted to influence their position in the reporting year? Yes, and they have changed their 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 VNCI advocates for a European level playing field. VNCI published a Roadmap (2021) aiming at a climate-neutral & circular chemical industry by 2050. DSM advocates for increased sustainability ambitions particularly on topics related to climate change, and challenges decisions when not aligned with a progressive sustainability agenda. The president of DSM Netherlands sits in the VNCI board

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 (EuropaBio)

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 DSM is chair of the board and we engage via board, working groups and active engagement in the drafting of positions. Europa Bio Promotes Climate Change solutions and Bioeconomy.

Overview of factsheets:

http://www.europabio.org/filter/industrial/type/fact

Example on climate: http://www.europabio.org/sites/default/files/reducing_greenhouse_gas_emissions_with_the_bioeconomy.pdf Example on how biotechnology contributes towards achieving the UN Sustainable Development Goals:

http://www.europabio.org/sites/default/files/Digital%20version%20-%20IB%20and%20SDGs_0.pdf

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 (Holland Bio)

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 Advocate; Biotechnology for better health, greater sustainability and economic growth. DSM is chair on the board of Holland Bio

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 (FoodDrinkEurope)

Is your organization's position on climate change policy consistent with theirs?

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 DSM holds the position of Board observer and sits in various working groups. FoodFrinkEurope is Committed to the EU's target for a carbon-neutral Europe by 2050 and advances the development of e.g. sustainability, transparency and labelling of food and transparency in food value chain.

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

C12.4

(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 mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

2022-DSM-Annual-Report.pdf

Page/Section reference

Governance - Sustainability Governance Framework (p128 - 130), Sustainability Committee (p159-160) Strategy - Strategy (p20-27), Planet (p67 - 83) Risks and Opportunities - Risk Management (p136 - 143), Opportunities (Review of Business p92 - 115) Emissions figures and emissions targets - Planet (p67 - 83) Other metrics - Our emissions targets are supported by other ambitions, including the purchase of electricity from renewable sources and our energy efficiency improvement - Planet (p67-83)

Content elements

Governance Strategy Risks & opportunities Emissions figures Emission targets Other metrics

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental	Describe your organization's role within each framework, initiative and/or commitment
	collaborative framework,	
	initiative and/or	
	commitment	
Row	Business Ambition for 1.5C	The key coalition membership and involvement is listed in below. There are several other initiatives or campaigns DSM has been active over the years, but which are not anymore
1	European Climate Pact	active campaigns (Such as: We are Still In, European Climate Pact)
	Japan Climate Leaders'	
	Partnership (JCLP)	-WBCSD: We are a member of WBCSD and participate in various working groups and coalitions (such as Food & Agriculture Pathway and Redefining Value) and climate
	Mission Possible	advocacy efforts. DSM co-CEO Geraldine Matchett is a member of WBCSD's Executive Committee and is a Commissioner in WBCSD's Business Commission to Tackle
	Partnership	Inequality (BCTI).
	RE100	
	Race to Zero Campaign	- We are a strategic partner of World Economic Forum (WEF). We actively contributed to several climate related initiatives in 2022, including the Alliance of CEO Climate
	Science Based Targets	Leaders, the CEO Action Group for the European Green Deal, the Food innovation Hub Europe, and we participated in a number of meetings with public tigures organized by
	Network (SBTN)	WEF.
	related Financial	-Race to Zero: In partnership with the Race to Zero. Business Ambition for 1.5°C campaion was an uncent call to action from a global coalition of LIN agencies, business and
	Disclosures (TNFD)	industry leaders. DSM joined among 1000 other companies to showcase our commitment to reduce emissions aligned with what is necessary to stay within 1.5 degree ambition.
	UN Global Compact	
	We Are Still In	-DSM is a long-term member of RE100. Our engagement with RE100, the world's leading campaign to scale up the corporate sourcing of renewable power, continued throughout
	We Mean Business	2022. In addition to peer exchange to advance the uptake of renewable electricity in China, we participated in several learning events, conferences and advocacy opportunities in
	World Business Council for	Europe, the US and China.
	Sustainable Development	
	(WBCSD)	-We Mean Business Coalition activates hundreds of companies and investors to commit to low-carbon initiatives. In 2022, we worked on several advocacy and communications
	Other, please specify	activities in the road to and in the context of COP27 that reiterated the private sector's determination for concrete steps and called on governments to urgently match their
	(Several others, most	ambition and policies to limit global temperature rise to 1.5°C above pre-industrial levels, and demonstrate the private sector's support for these efforts, along with the enabling politiking duralized to the logic paragraphic temperature in the WMPC Private Sector Policy Advisory Course
	Leader's alliance. CLG	solutions developed to date. Downs also represented in the www.bornivate Sector Policy Advisory Gloup.
	Europe)	-We joined the Science Based Targets Network's Corporate Engagement program in 2020. SBTN builds on the momentum of the Science-Based Targets initiative to develop
		methods for companies to set science-based targets for nature, addressing all of Earth's systems, including biodiversity, ocean, land, and freshwater. In 2022, we provided input
		to their draft guidance for setting science-based targets for water, which is expected to be launched in early 2023.
		-The TNFD aims to develop and deliver a risk management and disclosure framework for organizations to report and act on evolving nature-related risks with the aim of
		supporting a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes. As a TNFD Forum member, we joined over 750
		organizations to support the mission of the TNFD and to consult on the development of the framework.
		DOM is a long town member of the UN Clobal Compact and has joined econological consistence programs
		-osm is a long-term member of the on Global compact and has joined occasional acceleration programs.
		- DSM is a member of several regional positive climate/Sustainability advocacy networks, such as JCLP, CLG Europe, and CEBDS
		-Mission possible partnership: DSM is one of the founding members of the chemical sector initiative "The Collaborative Innovation for Low-Carbon Emitting
		Technologies (LCET) coalition", hosted by the World
		Economic Forum and part of the Mission Possible
		Partnership, is the first CEO-led coalition in the chemical
1		Industry locused on transformation towards a net-zero
		and circular future

C15. Biodiversity

(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	Yes, executive management-level	DSM's EVP Operations, who is also a member of DSM's Executive Committee and reports to one of our co-CEOs has responsibility for biodiversity-	<not< td=""></not<>
1	responsibility	related issues within DSM. Our EVP Operations is the owner of DSM's Responsible Care Plan (DRCP) 2022-24, whereby DSM's objectives for this time period relating to the environment (including on Nature & Biodiversity) are outlined.	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	Other, please specify (Deforestation-free in our primary supply chains by 2030 at the latest. This target covers the Tier 1 supply chain for our deforestation-risk crops: palm-derivative products, sugarcane, and direct soy and corn products.)	CBD – Global Biodiversity Framework SDG Other, please specify (- Business for Nature - One Planet Business for Biodiversity - Science-Based Targets Network – Taskforce for Nature Related Financial Disclosures)

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 Upstream Downstream

Portfolio activity <Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity

Biodiversity indicators for site-based impacts ENCORE tool IBAT – Integrated Biodiversity Assessment Tool ReCiPe SBTN materiality tool STAR – Species Threat Abatement and Restoration metric TNFD – Taskforce on Nature-related Financial Disclosures Other, please specify (WWF Biodiversity Filter)

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

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) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

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	Please select

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor	Indicators used to monitor biodiversity performance
	biodiversity performance?	
Row 1	Yes, we use indicators	Response indicators Other, please specify (Protected areas (sites in or adjacent to protected areas) Protected areas (Sites in registered protected areas) Deforestation: Proportion of deforestation-risk raw materials from certified sources)

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 mainstream financial reports	Content of biodiversity-related policies or commitments	Nature & biodiversity p79-80
	Details on biodiversity indicators	2022-DSM-Annual-Report.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.

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	Co-CEO and COO	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

DSM is a wholly-owned entity of dsm-firmenich, which formerly reported to CDP as Royal DSM. In early 2023, DSM merged with Firmenich to form dsm-firmenich. This assessment over 2022 relates to the DSM entity, which will be reporting in the future as dsm-firmenich

As innovators in nutrition, health, and beauty, dsm-firmenich reinvents, manufactures, and combines vital nutrients, flavors, and fragrances for the world's growing population to thrive. With our comprehensive range of solutions, with natural and renewable ingredients and renowned science and technology capabilities, we work to create what is essential for life, desirable for consumers, and more sustainable for the planet. We touch the lives of people throughout the day: From your personalized morning supplements with vitamins, omegas, and probiotics to support your health at every stage of life, to a juicy tasty burger made with plant-based proteins for lunch, or a revitalizing mid-afternoon drink from healthy cows that burp less methane, to the fine fragrance that creates positive emotions, makes you feel better, and enhances your well-being at every hour. dsm-firmenich is a Swiss-Dutch company, listed on the Euronext Amsterdam, with operations in almost 60 countries and revenues of more than €12 billion. With a diverse, worldwide team of nearly 30,000 employees, we bring progress to life™ every day, everywhere, for billions of people.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	1048000000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member Ansell

Scope of emissions Please select

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions

Verified Please select

Allocation method Please select

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

Unit for market value or quantity of goods/services supplied Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made DSM has no sales from continuing operations to Ansell. Sales come from divested units, which cannot be allocated

Requesting member Bayer AG

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 4018

Uncertainty (±%) 50

Major sources of emissions

Process steam boilers Verified

Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 73507000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Bayer AG

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 3379

Uncertainty (±%) 50

Major sources of emissions Electricity purchases

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 73507000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Bayer AG

Scope of emissions Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products

Category 15: Investments

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e 69439

Uncertainty (±%) 75

Major sources of emissions Purchased goods

Furchased goods

Verified Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 73507000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Beiersdorf AG

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 1587

Uncertainty (±%) 50

Major sources of emissions Process steam boilers

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 29030000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Beiersdorf AG

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 1334

Uncertainty (±%) 50

Major sources of emissions Electricity purchase

Verified

Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 29030000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member

Beiersdorf AG

Scope of emissions Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

27423

Uncertainty (±%) 75

Major sources of emissions

purchased goods

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 29030000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Bristol-Myers Squibb

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 51

Uncertainty (±%) 50

Major sources of emissions

process steam boilers

Verified Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 938000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Bristol-Myers Squibb

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 43

Uncertainty (±%) 50

Major sources of emissions electricity purchases

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 938000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Bristol-Myers Squibb

Scope of emissions Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level

Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 886

Uncertainty (±%) 75

Major sources of emissions purchased goods

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 938000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Church & Dwight Co., Inc

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 315

Uncertainty (±%) 50

Major sources of emissions process steam boilers

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 5759000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Church & Dwight Co., Inc

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 265

Uncertainty (±%) 50

Major sources of emissions electricity purchases

Verified

Yes

Allocation method

Allocation based on the market value of products purchased

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

5759000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member

Church & Dwight Co., Inc

Scope of emissions

Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level

Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 5440

Uncertainty (±%)

, 0

Major sources of emissions purchased goods

Verified

Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 5759000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Colgate Palmolive Company

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 41

Uncertainty (±%) 50

Major sources of emissions process steam boilers

Verified

Yes

Allocation method

Allocation based on the market value of products purchased

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

751000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Colgate Palmolive Company

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 35

Uncertainty (±%) 50

Major sources of emissions electricity purchases

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 751000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Colgate Palmolive Company

Scope of emissions Scope 3

Scope 2 accounting method

<Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution

Category 12: End-of-life treatment of sold products

Category 15: Investments

Allocation level

Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

709

Uncertainty (±%) 75

Major sources of emissions purchased goods

Verified

Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 751000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Corning Incorporated

Scope of emissions Please select

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Please select

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

Uncertainty (±%) Major sources of emissions

Verified Please select

Allocation method Please select

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

Unit for market value or quantity of goods/services supplied

Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made DSM has no sales from continuing operations to Corning. Sales come from divested units, which cannot be allocated

Requesting member Estee Lauder Companies Inc.

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail </br><Not Applicable>

Emissions in metric tonnes of CO2e 397

Uncertainty (±%) 50

Major sources of emissions process steam boilers

Verified

Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 7262000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Estee Lauder Companies Inc.

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 334

Uncertainty (±%) 50

Major sources of emissions electricity purchases

Verified Yes

Allocation method Allocation based on the market value of products purchased

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

7262000

Unit for market value or quantity of goods/services supplied

Currency

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

Requesting member Estee Lauder Companies Inc.

Scope of emissions Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level

Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 6860

Uncertainty (±%) 75

Major sources of emissions Purchased goods

Verified Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 7262000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Givaudan SA

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 3265

Uncertainty (±%) 50

Major sources of emissions process steam boilers

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 59728000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Givaudan SA

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 2745

Uncertainty (±%) 50

Major sources of emissions electricity purchases

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 59728000

Unit for market value or quantity of goods/services supplied Currency

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

Givaudan SA

Scope of emissions Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e 56422

Uncertainty (±%) 75

Major sources of emissions

purchased goods

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 59728000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Grupo Boticário

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 174

Uncertainty (±%) 50

Major sources of emissions process steam boilers

Verified

Yes

Allocation method Allocation based on the market value of products purchased

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

3183000 Unit for market value or quantity of goods/services supplied

Currency

Requesting member Grupo Boticário

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

146

Uncertainty (±%) 50

Major sources of emissions electricity purchases

Verified

Yes

Allocation method Allocation based on the market value of products purchased

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

3183000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Grupo Boticário

Scope of emissions Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e 3007

Uncertainty (±%)

75

Major sources of emissions purchased goods

Verified

Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 3183000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Husqvarna Group

Scope of emissions Please select

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Please select

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions

Verified Please select

Allocation method Please select

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

Unit for market value or quantity of goods/services supplied Please select

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

DSM has no sales from continuing operations to Husqvarna. Sales come from divested units, which cannot be allocated

Requesting member International Flavors & Fragrances Inc.

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 2577

Uncertainty (±%) 50

Major sources of emissions process steam boilers

Verified Yes

Allocation method Allocation based on the market value of products purchased

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

47142900

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member International Flavors & Fragrances Inc.

Scope of emissions Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e 2167

Uncertainty (±%) 50

Major sources of emissions

electricity purchases

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 47142900

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member International Flavors & Fragrances Inc.

Scope of emissions Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level

Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 44534

Uncertainty (±%) 75

Major sources of emissions purchased goods

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 47142900

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Industrias Bachoco SA

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

273

Uncertainty (±%) 50

Major sources of emissions

Process steam boilers Verified

Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 5000000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Industrias Bachoco SA

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 230

Uncertainty (±%) 50

Major sources of emissions electricity purchases

Verified Yes

Allocation method Allocation based on the market value of products purchased

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

5000000 Unit for market value or quantity of goods/services supplied

Currency

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

Requesting member

Scope of emissions

Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level

Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 4723

Uncertainty (±%) 75

Major sources of emissions Purchased goods

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 5000000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Johnson & Johnson

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 1857

Uncertainty (±%) 50

Major sources of emissions Process steam boilers

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 33984000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Johnson & Johnson

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 1562

Uncertainty (±%) 50

50

Major sources of emissions

electricity purchases

Verified Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 33984000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member

Johnson & Johnson

Scope of emissions Scope 3

Scope 2 accounting method

<Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e 32103

Uncertainty (±%) 75

Major sources of emissions purchased goods

Verified

Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 33984000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member KAUTEX TEXTRON GMBH & CO. KG

Scope of emissions
Please select

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Please select

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions

Verified Please select

Allocation method Please select

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

Unit for market value or quantity of goods/services supplied Please select

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

DSM has no sales from continuing operations to Kautex Textron GMBH & CO. KG. Sales come from divested units, which cannot be allocated

Requesting member L'Oréal

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 1738

Uncertainty (±%) 50

Major sources of emissions process steam boilers

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 31790000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member L'Oréal

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 1461

Uncertainty (±%) 50

Major sources of emissions

electricity purchases

Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 31790000

Unit for market value or quantity of goods/services supplied

Currency

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

Requesting member L'Oréal

Scope of emissions

Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products

Category 15: Investments

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e 30031

Uncertainty (±%)

75

Major sources of emissions

purchased goods

Verified Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 31790000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Medtronic PLC

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>
Emissions in metric tonnes of CO2e

Uncertainty (±%) 50

Major sources of emissions Process steam boilers

Verified

Yes

Allocation method

Allocation based on the market value of products purchased

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

4710000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Medtronic PLC

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 216

Uncertainty (±%) 50

Major sources of emissions electricity purchases

Verified Yes

Allocation method Allocation based on the market value of products purchased

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

4710000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member

Medtronic PLC

Scope of emissions

Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services

Category 2: Capital goods

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

Category 4: Upstream transportation and distribution

Category 5: Waste generated in operations

Category 6: Business travel

Category 7: Employee commuting

Category 8: Upstream leased assets

Category 9: Downstream transportation and distribution

Category 12: End-of-life treatment of sold products

Category 15: Investments

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e 4449

Uncertainty (±%)

75

Major sources of emissions purchased goods

Verified

Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 4710000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Prysmian SpA

Scope of emissions Please select

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Please select

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions

Verified Please select

Allocation method Please select

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

Unit for market value or quantity of goods/services supplied

Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made DSM has no sales from continuing operations to Prysmian. Sales come from divested units, which cannot be allocated

Requesting member Puig, S.L.

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 343

Uncertainty (±%) 50

Major sources of emissions process steam boilers

Verified

Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 6280000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Puig, S.L.

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 289

Uncertainty (±%) 50

Major sources of emissions electricity purchases

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 6280000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Puig, S.L.

Scope of emissions Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

 Scope 3 category(tes)

 Category 1: Purchased goods and services

 Category 2: Capital goods

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

 Category 4: Upstream transportation and distribution

 Category 5: Waste generated in operations

 Category 6: Business travel

 Category 7: Employee commuting

 Category 8: Upstream leased assets

Category 9: Downstream transportation and distribution

Category 12: End-of-life treatment of sold products

Category 15: Investments

Allocation level Company wide

company mac

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 5932

Uncertainty (±%) 75

Major sources of emissions Purchased goods

Verified

Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 6280000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Robert Bosch GmbH

Scope of emissions Please select

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Please select

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

Uncertainty (±%) Major sources of emissions

Verified Please select

Allocation method Please select

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

Unit for market value or quantity of goods/services supplied

Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made DSM has no sales from continuing operations to Robert Bosch GmBH. Sales come from divested units, which cannot be allocated

Requesting member Schaeffler

Scope of emissions Please select

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Please select

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions

Verified Please select

Allocation method Please select

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

Unit for market value or quantity of goods/services supplied

Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made DSM has no sales from continuing operations to Schaeffler. Sales come from divested units, which cannot be allocated

Requesting member Schneider Electric

Scope of emissions

Please select

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Please select

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions

Verified Please select

Allocation method Please select

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

Unit for market value or quantity of goods/services supplied Please select

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

DSM has no sales from continuing operations to Schneider Electric. Sales come from divested units, which cannot be allocated

Requesting member Smith & Nephew

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 252

Uncertainty (±%) 50

Major sources of emissions process steam boilers

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 4615000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Smith & Nephew

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 212

Uncertainty (±%)

50

Major sources of emissions

electricity purchases

Verified Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 4615000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member

Smith & Nephew

Scope of emissions Scope 3

Scope 2 accounting method

<Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e 4360

Uncertainty (±%) 75

Major sources of emissions purchased goods

Verified

Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 4615000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Symrise AG

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail </br>
Not Applicable>

Emissions in metric tonnes of CO2e 970

Uncertainty (±%) 50

Major sources of emissions process steam boilers

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 17755000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Symrise AG

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 816

Uncertainty (±%) 50

Major sources of emissions electrcity purchases

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 17755000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Symrise AG

Scope of emissions Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e 16772

Uncertainty (±%) 75

Major sources of emissions purchased goods

Verified

Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 17755000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Trelleborg AB

Scope of emissions Please select

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Please select

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions

Verified Please select

Allocation method Please select

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

Unit for market value or quantity of goods/services supplied

Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made DSM has no sales from continuing operations to Trelleborg. Sales come from divested units, which cannot be allocated

Requesting member Unilever plc

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) </br><Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e

1463

Uncertainty (±%)

50

Major sources of emissions

process steam boilers

Verified

Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 26763000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Unilever plc

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 1230

Uncertainty (±%) 50

Major sources of emissions electricity purchases

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 26763000

Unit for market value or quantity of goods/services supplied

Currency

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

Requesting member

Unilever plc

Scope of emissions

Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e 26282

Uncertainty (±%)

75

Major sources of emissions purchased goods

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 26763000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Zimmer Biomet Holdings, Inc.

Scope of emissions Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 58

Uncertainty (±%) 50

Major sources of emissions process steam boilers

Verified Yes

Allocation method Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 1062000

Unit for market value or quantity of goods/services supplied Currency

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

Requesting member Zimmer Biomet Holdings, Inc.

Scope of emissions Scope 2

Scope 2 accounting method Market-based

Scope 3 category(ies) <Not Applicable>

Allocation level Company wide

Allocation level detail <Not Applicable>

Emissions in metric tonnes of CO2e 49

Uncertainty (±%) 50

Major sources of emissions electricity purchases

Verified

Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 1062000

Unit for market value or quantity of goods/services supplied

Currency

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

Requesting member

Zimmer Biomet Holdings, Inc.

Scope of emissions

Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 8: Upstream leased assets Category 9: Downstream transportation and distribution Category 12: End-of-life treatment of sold products Category 15: Investments

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

1003

Uncertainty (±%) 75

Major sources of emissions purchased goods

Verified

Yes

Allocation method

Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member 1062000

Unit for market value or quantity of goods/services supplied Currency

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

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
We face no challenges	

SC1.4

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

We currently do not face challenges with allocating emissions to our customers.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives? No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services? No, I am not providing data

Submit your response

In which language are you submitting your response? English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms