Welcome to your CDP Climate Change Questionnaire 2022

C0. Introduction

C0.1

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

Our Mission: We are globally recognized as a leading provider of fragrances, flavors, active ingredients and aroma chemicals as well as sensorial and nutritional solutions for the perfume, cosmetic, pharmaceutical, food, beverage and pet food and baby food industries. We combine our knowledge about consumers' ever-changing needs with creativity and ground-breaking technologies. In doing so, we concentrate on the development of solutions that provide our customers with added value. We ensure sustained value creation by allowing our employees and shareholders to participate in our company's success.
Our Vision: We possess a unique value-adding portfolio and are the most successful company in the industry. We challenge the status quo and constantly explore new ideas.
This enables us to perform at our highest levels and set new standards.
We provide our customers with innovations and inspirations that fulfil our promise of always inspiring more...

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1, 2021	December 31, 2021	Yes	1 year

C0.3

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

Argentina
Australia
Brazil
Canada
Chile
China

Colombia
Costa Rica
Ecuador
Egypt
France
Germany
Hungary
India
Japan
Madagascar
Mexico
Netherlands
Russian Federation
Singapore
South Africa
Spain
Thailand
United Kingdom of Great Britain and Northern Ireland
United States of America
Venezuela (Bolivarian Republic of)

C0.4

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

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.

Operational control

C-CH0.7

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

Row 1

Bulk organic chemicals

Bulk inorganic chemicals

Other chemicals

Specialty chemicals

C0.8

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

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	DE000SYM9999

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	The direct responsibility for climate-related aspects regarding our strategy and governance lies with the Chief Executive Officer (CEO) . He receives regular reports on the progress of all sustainability activities including those with climate specific relevance. The CEO continuously promotes our approach to sustainability in all areas of the company by defining specific sustainability objectives for all managers which are integrated into individual performance goals. An example of a climate-related decision made by the CEO is the investment decision for a waste incineration facility at Holzminden whereby we save fossil based fuels and realize emission reductions.
Other, please specify Supervisory Board	The supervisory board of Symrise verifies all non-financial data according to the CSR Richtlinie Umsetzungsgesetz, the §289 of the German commercial code, the GRI standards as well as other key figures and information presented in sustainability publications like our Corporate Reports and Sustainability Records (https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports).

C1.1b

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

Frequency with which climate-	Governance mechanisms into which climate-	Please explain

related issues are a scheduled agenda item	related issues are integrated	
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding business plans Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The CSO as head of the Sustainability Board sets sustainability objectives, provides further details on the board's oversight of climate-related issues which are then directly implemented in the respective divisions. The CSO regularly reports to the CEO who is responsible for the all-over strategy of Symrise AG.
Scheduled – some meetings	Reviewing and guiding risk management policies Reviewing and guiding annual budgets Setting performance objectives	All KPI's and programs related to climate change were achieved in 2019 and results have been verified by an external audit company. Consequently all decisions of the CEO related to climate change were correct. For more details see Symrise Corporate Report 2021, page 101. https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports

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
Row 1	Yes	Educational and professional background and proven work experience (documented in the CV)

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The Executive Board and the Sustainability Board have appointed sustainability officers for the Flavor, Nutrition and Scent & Care business segments as well as one representative for each of the staff departments of Human Resources, Finance/Investor Relations and Corporate Communications. However, the direct responsibility for strategy lies with the **Chief Executive Officer (CEO),** who receives regular reports on the progress of all sustainability activities including climate related issues. The CEO continuously promotes our approach to sustainability in all areas of the company by agreeing on specific sustainability objectives for all managers which are integrated into individual performance goals. He manages sustainability in corporate processes using our Integrated Management System, based on the international standards on quality (ISO 9001), environmental protection (ISO 14001), work safety (OHAS 18001), sustainability (ISO 26000), energy (ISO 50001), social responsibility (SA 8000), the audit standards of the Global Food Safety Initiative (GFSI) among other recognized local standards. The **Chief sustainability Officer (CSO) has the responsibility to** regularly send reports to the CEO**.** Under his chairmanship the Symrise Sustainability Board regularly convenes. It is the global and cross-business committee that has the responsibility to integrate climate and sustainability principles more strongly in our core processes. Together with representatives from management the CSO ensures in this framework that climate related topics and the concerns of our important stakeholder groups are considered along our entire value chain. The Sustainability Board sets sustainability and climate objectives, which are then directly implemented in the respective divisions.

For more information on the organizational structure see Corporate Report 2021, p. 105. https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports

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	Type of incentive	Activity incentivized	Comment
Board/Executive board	Monetary reward	Efficiency target	Please find attached an overview of our objectives in our 2021 Corporate Report on page 33: https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports
Chief Executive Officer (CEO)	Monetary reward	Efficiency target	Please find attached an overview of our objectives in our 2021 Corporate Report on page 33: https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports
Chief Sustainability Officer (CSO)	Monetary reward	Efficiency target	Please find attached an overview of our objectives in our 2021 Corporate Report on page 33: https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports
Energy manager	Monetary reward	Energy reduction project	Please find attached an overview of our objectives in our 2021 Corporate Report on page 33: https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports

Environmental, health, and safety manager	Monetary reward	Emissions reduction project	Please find attached an overview of our objectives in our 2021 Corporate Report on page 33: https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports
Environment/Sustainability manager	Monetary reward	Emissions reduction project	Please find attached an overview of our objectives in our 2021 Corporate Report on page 33: https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports
Buyers/purchasers	Monetary reward	Supply chain engagement	Please find attached an overview of our objectives in our 2021 Corporate Report on page 33: https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports
Chief Financial Officer (CFO)	Monetary reward	Efficiency target	Please find attached an overview of our objectives in our 2021 Corporate Report on page 33: https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports
Corporate executive team	Monetary reward	Efficiency target	Please find attached an overview of our objectives in our 2021 Corporate Report on page 33: https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports

C2. Risks and opportunities

C2.1

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

Yes

C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	1	
Medium-term	1	2	
Long-term	2	10	

C2.1b

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

Risks are assessed on a gross and a net risk basis. **Gross risk** is defined as risks without taking into account mitigating measures/controls. Basically gross risks are only to be reported from a value of 500 T€. A **net risk** is defined as risks that remain after mitigating measures/controls.

For Symrise, the term „substantive financial or strategic impact“ (as asked for in question C2.3a) is defined as a gross risk that has a higher EBIT impact than the threshold level of 500 T€. Risks are generally assessed on a gross and a net risk basis. **Gross risk** is defined as risks without taking into account mitigating measures/controls. Generally gross risks are only to be reported from a value of 500 T€. A **net risk** is defined as risks that remain after mitigating measures/controls. For opportunities the same definitions and thresholds apply.

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

Our Risk Management Procedure is integrated into our multi-disciplinary company-wide risk management process. It defines the risk self-assessment (RSA) process as part of the risk management system. The objective of this procedure is to identify and control

essential risks to ensure the positive business development of the Symrise group and an effective risk reporting in compliance with laws and regulations.
Risk is defined as the potential negative deviation from financial objectives. The process used to determine which climate related risks and opportunities could have a substantive financial or strategic impact applies to all value chain stages and consists of the following three parts:
1. IDENTIFICATION:
We use a two-step process to identify climate related risks and opportunities (R/Os). All R/Os, including climate related ones, are identified and assessed on a regional level using regional expertise.
They cover the whole range of climate related issues (transition related and physical ones). For instance, Regulatory changes are permanently monitored by Regulatory Affairs.

R/O Owners are also nominated on asset level (process oriented and legal entity related). All R/Os with a considerable impact on net sales or costs and with a considerable likelihood of occurrence have to be reported to the group-wide Risk Manager.
This represents an asset level identification process leading to a group-wide R/O identification in a bottom-up approach.

Furthermore, on group level we apply a top-down approach by making use of a comprehensive list of potential climate related risks and opportunities derived from the CDP questionnaire and guidance.
Based on this, a team (consisting) of internal and external experts analyse the various aspects of our business model in order to identify potential climate related R/Os. In course of this, several of the already identified R&Os have been attributed to climate change.

2. ASSESSMENT:
As described in C2.1b the term „substantive financial or strategic impact“ means that a gross R/O has a higher EBIT impact than our defined threshold level of 500 T€.
EBIT impact defines the effects by an R/O that materializes. The effect of revenue related R/Os on EBIT are estimated against our last year´s EBIT margin. Cost related effects on EBIT are typically calculated by multiplying specific effects (e.g. cost increase per MWh or per ton of CO2 or raw material) by the affected volume. In order to be conservative, potential price increases on our sales side which possibly balance out cost effects are neglected when the impact on EBIT is calculated.
All inherent R/Os above a financial impact of 500 T€ or higher are to be reported.

3. RESPONDING
After climate related R/Os have been identified and assessed, they are prioritized according to impact, likelihood and potential influence on net sales. There are different ways to treat risks:
1. Avoid risk with a high likelihood and high impact by stop specific activities.
2. Reduce risk with a high likelihood, but low impact by mitigation measures.
3. Transfer risk with low likelihood, but high impact by insurance, outsourcing, etc.

4. Accept risk with low likelihood and low impact, if the cost to mitigate risk is higher than cost to bear the risk.
Decisions need to be made which way of treatment should be applied. Basically, we mitigate risks if the respective measures lead to a strengthening outcome for our core business, e.g. through energy savings or diversification of sourced materials and suppliers. If mitigation measures are not possible for substantive risks but an insurance is available – e.g., for acute climate risks – we make use of this and transfer respective risks. If both options are not possible to realize we accept and control the risks. Our typical management method in regards to transitional risks is to reduce their impact by reduction of our energy consumption and carbon footprint in a systematic way. Climate-related opportunities typically require investments in plants, R&D or M&A.
CASE STUDIES:

PHYSICAL RISK:
Situation: Our supply managers have experienced increased prices of vanilla bean pods, where prices have reached a record high of more than 600€/kg This was when the tropical cyclone Enawo hit Madagascar in 2017 and damaged thousands of vanilla plants, creating a worldwide surge in prices. This was reported to the group-wide Risk Manager. Furthermore, as the likelihood and severity of water scarcities is closely correlated to climate change. Our internal and external experts analysed the various aspects of our business model and this physical risk has been attributed to climate change in a top-down process.
Task: to determine if the risk has a financial impact of 500 T€ or higher and subsequently to select a response action.
Action: To do so we follow the assessment process described in the text above including the comparison against the outlined threshold. The impact of this risk has been estimated to 60 € EBIT per year, well above the defined threshold. Hence, this risk has a substantive impact. Our experts arrived at the conclusion that we can't avoid the risk completely, but we try to reduce the impact. To reduce the effect of one local extreme weather event we also have suppliers in USA and India, to compensate a shortfall in Madagascar.
Result: the risk was considered as substantial and it was decided that the response action was to reduce the risk, since it cannot be completely avoided. These decisions made reduce the financial impact on operating costs due to higher market prices and allow us to have a secured financial and operational planning.

TRANSITIONAL OPPORTUNITY:
Situation: Our sales force has identified an increased demand of the synthetic menthol which causes 90% less CO2 per produced volume than that of natural peppermint. This was notified the group-wide Risk Manager. As climate change related issues form a major part of the related sustainability criteria, our internal and external experts attributed this opportunity to a shift in consumer preferences in the top-down part of the identification related step described above.
Task: to determine if this opportunity has a financial impact of 500 T€ or higher and subsequently to select a response action
Action: To do so we follow the assessment process described in the text above including the comparison against the outlined threshold. The impact of this opportunity

has been estimated to 20.4 million € EBIT per year, well above the defined threshold. Hence, this opportunity has a substantive impact. Our method to manage this opportunity has 5 steps
1. Systematic reduction of energy consumption and emissions.
2. Increase transparency
3. Identification of stakeholder needs
4. Initiation of program strategies
5. Implementation of long-term projects
Result: Symrise decided to increase its production capacity for L-Menthol and by doing this approx. 500 kt CO2/year were avoided

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Symrise has to comply with all legal regulations originating from climate related policy regulations and faces respective economic consequences. As our production is energy intensive, the resulting risks are relevant. Thus they are included in our risk assessment. An example is that our operation costs my risk due to the EU ETS risk. This creates CO2 costs that must be borne by operators in form of direct compliance costs from buying CO2 certificates and indirect costs (from price effects in electricity bills). 2030 ETS target and effects from the market stability reserve CO2 prices may increase which would lead to higher operating costs: This affects both the direct ETS compliance costs for Symrise as well as indirect costs from rising power prices. Symrise currently operates one facility under the ETS with an output of 30 MWh. This is a CHP-plant located in our HQ in Holzminden. The volume of free-of-cost allocation shrinks year by year. Indirect costs originate from the passing carbon costs on to energy users. Utilities are able to do this, as the marginal power plant (power plant at the end of the merit order) defines the price at energy exchanges. In France, Germany, Hungary and the UK, Symrise is exposed to indirect ETS costs. We assess the risk by calculating the potential effects on operating costs. To do so, we have estimated direct and indirect EU-ETS related cost increases which are finally to be added up..

Emerging regulation	Relevant, always included	As our production is energy intensive, risks due to emerging regulations are relevant. We face emerging regulation risks for example in the context of the German Renewable Energies Act levy. In particular, the current partial exemption of the power produced in our highly efficient gas-fired CHP plant in Holzminden from the levy ("EEG-Umlage-Befreiung") could be abolished in an upcoming reform, prompting disadvantageous cost effects. The complete elimination of this discount in the worst case may increase our operational costs considerably. This could subsequently negatively influence the economics of the CHP-plant. It has required the significant investment of 30 million € and reduces our carbon emissions by more than 20.000 tons/year. The exemption from the levy has been one of our rationales for investing.
Technology	Not relevant, included	While technical optimization is crucial for keeping pace with current developments in a competitive market and our steady modernization of production facilities and technologies at Symrise, we currently do not see any real directly climate related technology risks at Symrise that may result in financial impacts of relevance to our business. However, we have included technology risks into our multi-disciplinary company-wide risk management process. Our rationale for deeming climate related technology risks as not relevant is as follows: The technologies required for the decarbonisation of our direct operations are well established and mature technologies. Examples are CHP-plants, waste heat recovery and drying technologies at our productions sites e.g. in Holzminden. Thus, by using them we do not face technology risk. Here, the situation is considerably different from the base chemical sector, in which several decarbonisation technologies are still in the pilot phase or even subject to R&D. Of course, the decarbonisation of our production is furthermore dependent on the availability of CO2-free power and fuel. However, the respective technology risks are borne by third parties, i.e. by power and fuel suppliers. We conclude that unlike the situation in other sectors (where there is the risk of imminent or already ongoing technological changes) we do not see how such technological changes could affect the way we do our business now or in the near future at Symrise.
Legal	Not relevant, included	Symrise continuously monitors and includes into the multi-disciplinary company-wide risk management process the risk of climate related lawsuits on a medium-term basis.

		Our rationale for deeming climate related legal risks as not relevant is as follows: Despite the increasing number of such litigations Symrise doesn't see itself exposed to this type of risk. This is due to the clear difference in emissions size of the already sued companies in contrast to our limited footprint, the sector focus of such litigation acts and our ambitious climate targets and related programs at Symrise. Furthermore, the legal consequences of non-compliance with policy regulations such as the EU-ETS could be regarded as "legal risk". However, please note that we consider this issue rather a regulatory risk.
Market	Relevant, always included	Symrise faces climate-related market risks which originate from its supply and demand side. The following example describes a climate-related market risk in our supply chain: If water demanding agricultural goods such as tomatoes are sourced from a water-stressed country, rising temperature may result in shrinking harvests. The resulting shortage on the market may lead to increasing costs. Increasing costs for raw materials such as onions, citrus and vanilla products, etc. are also related to lower yields in agriculture farming due to warming or other climate change related pattern. Such fruits are currently sourced from countries like Germany, France, Italy, US and Madagascar. They are used to produce extracts, which can be used to boost taste and odour. Price increases on our supply side leading to increasing prices for our products, might potentially resulting in lower market demand for our products. This could cause lower demand from our customers, who may switch to other alternatives. Thus, our ability to pass on increased operating costs due to physical climate change might be limited. We assess the risk as follows: In order to assess our climate related supply chain risk, we assess respective price increases which occurred in the past. On this basis, we also estimate potential future price volatilities driven by climate change. Here vanilla shall serve as an example: Madagascar provides 80 percent of the vanilla used throughout the world. The tropical cyclone Enawo that hit Madagascar in March 2017 damaged thousands of vanilla plants, creating a worldwide surge in prices and a frenzy among ice cream makers to secure supplies of the flavoring extract. The price for vanilla bean pods reached a record high of more than $600 per kilogram.
Reputation	Relevant, always included	Symrise faces climate-related reputation risks. The following example illustrates this: Our key customers focus in their supplier evaluation increasingly on our carbon reduction performance. Not meeting these expectations might result in supplier rating devaluation. As a consequence, core listings could be lost, which may eventually exclude us from new

		business and therefore reduce our future turnover and hence have a negative impact on our EBIT. The background to this is that consumers are expected to focus on climate friendly products. Thus, climate performance is of high and even growing importance for our key customers – e.g. the world leading cosmetics companies. Symrise produces high quality products (fragrances, flavours, cosmetic ingredients and aroma chemicals as well as sensorial and nutritional solutions for the perfume, cosmetic, pharmaceutical, food, beverage, pet and baby food industries) in a very sustainable way, e.g. with low carbon footprints. Our customers (B2B) concentrate on climate friendly ingredients as input to their products. This leads to a substitution of products, shifting from carbon intensive to climate friendly ones. If we do not perform at least as good as our competitors or do fail to inform potential clients in a convincing way about our climate related performance, we would expect our market share to decrease.
Acute physical	Relevant, always included	Hazardous weather events such as floods and storms could have negative effects on our direct operations and on our supply with agricultural raw materials. As an example, they can cause damages to our production facilities and lead to business interruptions. Thus, risks that are event-driven, including increased severity of extreme weather events such as cyclones, hurricanes, or floods are included into the Symrise Risk Assessment. In particular our facilities in the US in Charleston, Georgia and Florida are exposed to potential damages by acute physical effects. Our risk assessment is done by taking business interruption, capital damage and increasing transport costs into account. Due to our contingency plan, which determines the procedure in case of disruption to our supply chain or sites, we relocate our production to other facilities worldwide to ensure an ongoing business and the ability to deliver our customers. These additional costs are also included in our assessment.
Chronic physical	Relevant, always included	For many regions worldwide, water scarcity is one of the major chronic effects of physical climate change. In case of Symrise, this can have negative effects on our direct operations and on our supply with agricultural raw materials. As an example, water scarcity can lead to business interruptions. We have multiple facilities in water stressed regions, for example in Egypt and Chennai, India. As mean temperatures are going to increase due to climate change, tensions between the local populace and the industry about the distribution of the limited available fresh water are expected to intensify. These tensions also represent reputational risks, which Symrise strictly wishes to avoid. For the production the physical risk may eventually force Symrise to shut down facilities during times of extreme water scarcity. This can obviously reduce our revenues

		leading to a negative climate related impact on our EBIT

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?

Upstream

Risk type & Primary climate-related risk driver

Chronic physical

Water scarcity

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

We purchase a lot of agricultural goods such as tomatoes and vanilla. These materials are used to produce extracts, which can be used to boost taste and odour. These agricultural goods are usually sourced from water-stressed countries, like USA and Madagascar. Rising temperature may result in shrinking harvests for our suppliers due to water scarcity. The resulting shortage on the market may lead to increasing prices and as a result to increasing operational costs for us. Lower yields in agriculture farming for raw materials such as citrus and vanilla are also related to other climate change related patterns, like floods or hurricanes. Increasing prices on our supply side will result in a lower EBITDA margin for us.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

60,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

To assess our climate related supply chain risk we assess respective price increases which occurred in the past. On this basis, we also estimate potential future price volatilities driven by climate change. Example Vanilla: Madagascar provides 80% of the vanilla used throughout the world. The tropical cyclone Enawo hit Madagascar in 2017 and damaged thousands of vanilla plants, creating a worldwide surge in prices. The price for vanilla bean pods has reached a record high of more than 600€/kg. We assess this risk by multiplying purchased volume of vanilla with an estimated price of 600€/kg. Similarly, as another example, hot and dry summers in Europe and Africa might boost the price of key strategic agricultural raw materials. Vegetables like onions, garlics, carrots, beetroots, celeriacs, fruits like citrus, bergamot, oranges, cherries, strawberries, bananas, coconuts, cranberries, herbs like cloves, mint, parsley, camomile and various types of cereals, just to name a few. Symrise has approx. 200 agri- and aquacultural raw materialswhich are used in larger quantities. In order to estimate our total exposure we have to add up the potential climate related cost effects for all the above mentioned agri- and aquacultural raw materials exposed to such effects calculated by purchased volumes multiplied by an estimated price increase. This leads to an estimation of our "raw material costs at climate risk" of some 60 million €.
Calculation: 200 agri- and aquacultural raw materials which are used in larger quantities x 300,000 € = 60 million €.

Our calculation is based on the example of onions:
Hot summers in Germany and the resulting risk for drought might lead to lower production volumes of onions, which leads to reduced volumes available and increasing prices. For onions, this risk can be estimated with approx. 300,000 €.

Calculation:
7,000 tons of onions farmed for Symrise p.a.
2,000 tons estimated loss of approx. 30% due to drought (happened in 2018)

On costs for 2,000 tons of onions from the market (not contracted but to be sourced at higher prices) approx. 130-150 €/to resulting risk = 2,000 x 150€ = 300,000 €
The prices for Symrise farmed / contracted onions are fixed by time of planting, not during harvest. Prices are relatively safe for us, risk born by farmers ("no risk" for Symrise).

For agri- and aquacultural raw materials which we use in smaller quantities we do have

appropriate insurance policies.

Cost of response to risk

2,400,000

Description of response and explanation of cost calculation

We can't avoid the risk completely, but we try to reduce the impact. Thus our strategy is to identify significant climate drivers in our portfolio and use this information to take appropriate actions as shown in the following CASE STUDY for onions.
Situation: Increasing costs for onions are related to lower yields in agricultural farming due to climate change related effects.
Task: The impact of increasing costs needs to be mitigated.
Action: To manage this we conduct different activities. We work closely with our supplier and establish long-term agreements to make sure that even if the availability of agricultural products shrinks, we are still able to obtain our raw materials for a predefined ceiling price: e.g. the price for onions is fixed by contract at the time of plantation. To reduce the effect of one local extreme weather event we have suppliers all over the world. This is part of our general diversification approach regarding our sourcing strategy – thus without additional costs. But we maintain dedicated stock levels for onions (120 tons) to be able to react to fluctuations in availability: Thus even if a year's harvest falls 25% short we still have enough volumes to compensate for these losses.
Result: All these measures reduce the financial impact on operating costs due to higher market prices and allow us to have a secured financial and operational planning.
The related costs for management is an estimation of costs, based on the costs for maintaining dedicated stock levels.

How can we compensate / which risk management is in place?
Normally onions are contracted in a volume enabling 15 month reach. Hence, even if a crop is 25% short, we have enough volumes to compensate these losses in volumes. Product is shelfstable (no risk), storage costs are approx. 100 €/ton p.a. -->120 ton * 100€/ton = 12,000€ p.a. for 120 tons onion juice concentrate.

Calculation: 200 agri- and aquacultural raw materials which are used in larger quantities x 12,000 € = 2.4 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?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Shift in consumer preferences

Primary potential financial impact
Increased revenues resulting from increased production capacity

Company-specific description
Consumers are expected to focus on climate friendly products. Thus, climate performance is of high and ever growing importance for our key customers – e.g. the world leading cosmetic companies. Symrise produces high quality products (fragrances, flavors, cosmetic ingredients and aroma chemicals as well as sensorial and nutritional solutions for the perfume, cosmetic, pharmaceutical, food, beverage, pet and baby food industries) in a very sustainable way, e.g. with low carbon footprints. Our customers Pepsico, Unilever and L´Oreal concentrate on climate friendly ingredients as input to their products. This leads to a substitution of products, shifting from carbon intensive to climate friendly ones. If we perform better than our competitors and manage to inform potential clients in a convincing way of our climate related performance, we expect our market share to grow from higher demand for our lower emissions products and thereby also to increase our revenues.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
High

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

Potential financial impact figure (currency)
20,400,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Currently, up to 8% of our turnover (equalling 272 million EUR) is related to customers who explicitly pay attention to climate issues and ask us to participate in the Supply Chain CDP. We already expect a sales growth of 6% for climate sensitive products, but we anticipate that we can boost this value by one quarter to 7.5% (6% * 125% = 7.5%): We tackle this by meeting the high requirements for core listings, including sustainability criteria, and aim at supporting our customers in fulfilling their own sustainability agenda. The financial impact figure is calculated as the annual growth in sales volumes with climate sensitive customers. It is computed by multiplying the current 272 million EUR in turnover with 7.5%. This results in an annual impact figure of 20,4 million EUR.

Cost to realize opportunity

1,100,000

Strategy to realize opportunity and explanation of cost calculation

Further explanation of our 5-step approach:
1. Systematic reduction of energy consumption and emissions.
2. Increase transparency: Assessment of current portfolio to ascertain current impact & discover carbon friendly alternatives.
3. Identification of stakeholder needs: We evaluate the materiality of our identified sustainability aspects annually. Business Unit and Key Account management gets regular customer feedback regarding requirements. This input is used for the materiality matrix & our sustainability agenda.
4. Initiation of program strategies: Goals and policies are developed to ensure consistency with internal & external communication. Related actions are addressed through our sustainability board to all related areas & locations.
5. Implementation of long term projects: All our R&D efforts are managed globally and parallel to expected project returns, since 2012 we have a pipeline sustainability score.

CASE STUDY for an implemented emission reduction:
Situation : Production of menthol from natural materials (peppermint) is very energy intensive.
Task: Reducing related emissions.
Action: Production of synthetic menthol (L-Menthol) causes 90% less CO2 per produced volume than that of natural peppermint. Therefore, we regularly increase our production capacity for L-Menthol.
Result: We avoid approx. 500 kt CO2/year.

Costs for realization:
In January and February 2019, Symrise has doubled its production capacity for

menthols in Charlston, USA. The company is thereby further expanding its leading position for this product worldwide and ensuring reliable supply security at a consistent high quality. The outlook is good. Demand for high-quality menthol products, in particular for dental and personal care, has been growing constantly for years. Symrise has been producing the nature-identical L-menthols since 1974. The total investment was 30 million EUR.
Additionally, the sum of costs for all additional research efforts amounts to approx. 100 k EUR per year. Costs sum up to a total of 30.1 million EUR.
We apply to this investment a depreciation period of 30 years which results in annual costs to realize this opportunity of 1.1 million €.

Comment

C3. Business Strategy

C3.1

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

Row 1

Transition plan

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

Publicly available transition plan

Yes

Mechanism by which feedback is collected from shareholders on your transition plan

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

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

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
Row 1	Yes, qualitative and quantitative

C3.2a

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

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA 2DS	Company-wide		We have used qualitative scenario analysis for the further development of our emission reduction strategy. The AREAS CONSIDERED have been our own direct operations worldwide. The TIME HORIZON has been up to 2050, as we intend to become carbon-neutral by then the latest. We have IDENTIFIED several suitable SCENARIOS for our purpose: The IEA 2DS and the RCP 3.4 scenarios have been used to understand the global process of decarbonization and its implications for the chemical industry as a whole worldwide. To deal more specifically with the specialized chemicals industry, the "Roadmap treibhausgasneutrale Chemie in Deutschland" by VCI (German Chemical Industry Association) has been analysed. It contains several decarbonization pathways, as well as respective requirements regarding policy regulations and technology developments. We have adopted ASSUMPTIONS to company specific data and considered specific INPUTS, such as our revenue planning and our technology base. Thus, in the next step future policy regulations have been assessed by analysing, the EU´s NDC, the EU Green Deal and emerging regulations in Germany, such as the upcoming national emission trading scheme ("BEHG") supplementing the EU-ETS. This way of approaching and discussing scenarios along real developments (ongoing or yet to emerge) is characteristic for our ANALYTICAL METHOD. Furthermore, we have discussed the development of the markets for green power certificates and carbon offsets.
Physical climate scenarios RCP 3.4	Company-wide		We have used qualitative scenario analysis for the further development of our emission reduction strategy. The AREAS CONSIDERED have been our own direct operations worldwide. The TIME HORIZON has been up to 2050, as we intend to become carbon-neutral by then the latest.

			We have IDENTIFIED several suitable SCENARIOS for our purpose: The IEA 2DS and the RCP 3.4 scenarios have been used to understand the global process of decarbonization and its implications for the chemical industry as a whole worldwide. To deal more specifically with the specialized chemicals industry, the “Roadmap treibhausgasneutrale Chemie in Deutschland” by VCI (German Chemical Industry Association) has been analysed. It contains several decarbonization pathways, as well as respective requirements regarding policy regulations and technology developments. We have adopted ASSUMPTIONS to company specific data and considered specific INPUTS, such as our revenue planning and our technology base. Thus, in the next step future policy regulations have been assessed by analysing, the EU´s NDC, the EU Green Deal and emerging regulations in Germany, such as the upcoming national emission trading scheme (“BEHG”) supplementing the EU-ETS. This way of approaching and discussing scenarios along real developments (ongoing or yet to emerge) is characteristic for our ANALYTICAL METHOD. Furthermore, we have discussed the development of the markets for green power certificates and carbon offsets.

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

1. Can Symrise be less dependent on energy usage?
2. Can our Science Based Target be fulfilled before 2030?
3. How can the actual consumption of fossil fuels be replaced?
4. How can the scope 2 emissions be reduced to zero before 2025?

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

1.Can Symrise be less dependent on energy usage?

For Symrise energy efficiency is crucial as we will remain heavily dependent on energy usage, especially heat (75%) and power (25%). The VCI roadmap expects efficiency gains to increasy by 2% p.a. for the specialized chemicals industry in Germany.

2.Can our Science Based Target be fulfilled before 2030?

The results of the scenario analysis confirm our existing strategy, which we will now pursue with even higher ambition. To this aim our board has taken the decision to shorten the time for our science based target to be reached by five years – from 2030 to 2025.
Furthermore, Symrise aims to become carbon neutral by 2050 the latest.
With regard to steam production, for now and at least up to the late 2030s we conclude gas fired cogeneration as well as energetic usage of waste not being suitable for circular-economy-processes and of solid biomass to be the technology of choice.

3.How can the actual consumption of fossil fuels be replaced?

Later on, green hydrogen, synthetic fuels and direct heating by green power have to replace fossil fuels. Furthermore, we are running-up the purchase of renewable electricity and examine a long term procurement strategy by PPAs. In order to increase our energy efficiency we will pursue a comprehensive analysis based on our energy management system ISO 50001. In particular, with a focus on reducing our own fossil based energy demand, we will review the application of advanced technologies and related cooperation with suppliers. We will also invest in R&D to optimise processes. In order to accelerate efficiency related investment we will reduce internal hurdle rates such as required IRRs. Doing so, we use our German production sites as a kind of “pilot case” for the development of our global activitie s.

4.How can the scope 2 emissions be reduced to zero before 2025?

Globally, our Scope 2 emissions have in 2019 made up 33% of our total scope 1 and 2 emissions. Our objective is the reduction of Scope 2 to zero in 2025.
Our strategy is to ramp up our sourcing of CO2 free power has been defined. We started in Germany by sourcing tradeable instruments, i.e. EU- GoOs.
Furthermore, our strategy foresees buying I-RECs in the US, France, Brazil, Mexico and Singapore.
Our strategy has been confirmed by the board. Thus, we have started executing it. In 2019, 24.1 (2018: 18.5%) of our global power consumption has been from renewable sources.

C3.3

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

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	One of our strategy pillars is related to our product portfolio. This portfolio is continuously benchmarked and evaluated by external consultants but also of course our business units and key account management which leads to adjustments of production capacity, investments, products with higher profitability and finally more profitability. Our strategy regarding products and services has twofold been influenced by climate-related risks and opportunities: (A) As clients reveal an increased demand for sustainable manufactured products we aim to meet this demand. (B) As we also experience an increased demand for products such as sunscreen due to rising temperatures, we aim to meet this demand as well. The TIME HORIZON of this strategy is current to long term, from now on until 10 years. We are already executing this strategy and do not expect it to change in the foreseeable future. CASE STUDY: SITUATION: Scent&Care segment the Cosmetic Ingredients division is significantly affected. One of its core products are sunscreens. With longer and hotter summers an increasing volume of sunscreens is needed. We have already experienced a respective increase of sales volume, which we at least partly attribute to climate change: In hot summers demand for sunscreen products increases. TASK: We have to optimize our production facilities in order to meet this demand. ACTION: Respective facilities are not only operated 24/7, but are further optimized by our Maintenance-Teams. Maintenance cycles are optimised to meet the seasonal demand. One major product of our BU Cosmetic Ingredients was transferred to our Holzminden production facility from a supplier in order to increase production capacity and at the same time to increase energy efficiency and decrease supply-chain risks. Our cost indication is based on a recent investment in capacity extension in Charleston of 20 m€. We estimate that some 25% of this

		investment is linked to production capacity increased to meet the higher demand for climate related products. RESULT: We are able to increase our production volume in times when demand is increased
Supply chain and/or value chain	Yes	Our strategy regarding our supply chain (i.e. our upstream value chain) has been influenced by climate-related risks and opportunities as follows: (A) As we have experienced the risk of increased prices for agricultural raw materials through bad harvests, e.g. due to water scarcity, we have defined ways for closer cooperation with our suppliers. (B) As clients reveal an increased demand for sustainable manufactured products we aim to meet this by sourcing sustainable manufactured raw materials. Thus, we are member of the CDP supply chain program. The TIME HORIZON of this strategy is current to long term: We are already executing this strategy and do not expect it to change in the foreseeable future. CASE STUDY: Situation: Scope 3 emissions of the category purchased “goods and services” contribute to approximately 90% to our overall carbon footprint. Task: Encourage our key suppliers to set emission reduction targets. We have committed ourselves as part of our approved Science Based Target (SBT) that 80% of our key suppliers will implement GHG reduction targets by 2020. Action: In 2017, we began working with the CDP Supply Chain Program. In 2019, we asked 125 key suppliers to participate in the CDP supply chain program and to report there on their targets. For the purpose of this target, key suppliers are those suppliers providing Symrise with carbon intensive raw materials. In total, key suppliers are responsible for 60% of our annual purchasing volume. As an alternative they can also report their targets via EcoVadis. Furthermore, we have organized several seminars for our suppliers in cooperation with the CDP. Currently we run an encouragement-campaign. Result: The fact that we track the emission reduction targets of our key suppliers encourages them to set such targets. This in turn leads to considerable emission reductions. Their participation in the CDP supply chain program further enhances their awareness for climate change issues.

		Compared to 2018, the number of returns in the climate change category increased from 58 to 64 in the reporting year. An increased number of suppliers reported having an absolute and/or intensity emissions targets, from 31 suppliers (53%) in 2018 to 40 suppliers (61%) in 2019.
Investment in R&D	Yes	One of our main strategic targets is to heavily reduce our CO2 footprint. One the one hand, this is due to the fact that clients reveal an increased demand for sustainable manufactured products. One the other hand, we aim to reduce costs for CO2 certificates and energy. To achieve this, we inter alia continuously invest in R&D to improve energy and resource efficiency. In the last year we invested approximately 20.4 million € into climate related R&D projects. The TIME HORIZON of this strategy is current to long term: We are already executing this strategy and do not expect it to change in the foreseeable future. CASE STUDY: SITUATION: The production of menthol from natural materials (peppermint) is highly energy intensive while synthetic menthol can be produced with much less CO2 emissions. TASK: Make synthetic menthol that contains a mix of left-turning and right turning molecules suitable for consumption. Only the first ones L-(-) Menthol are contained in natural peppermint and fulfil this requirement. ACTION: we have financed R&D activities to develop a process engineering a method to separate left-turning menthol. We have registered a patented method and based on that started to invest more than 60 m € into the developed technology at industrial scale in Germany and the USA. RESULT: With our newly developed technology we can meet our clients demand in a climate friendly way. The new method causes 90% less CO2 per produced volume than that of menthol from natural resources.
Operations	Yes	One of our main strategic targets is to heavily reduce our CO2 footprint. One the one hand, this is due to the fact that clients reveal an increased demand for sustainable manufactured products, we aim to meet this demand. One

		the other hand, we aim to reduce costs for CO2 certificates and energy. To achieve this, our strategy is to reduce emissions by reduction of our energy consumption and carbon footprint in a systematic way. This changes our operations by making them less carbon intensive. The same effect applies to the ongoing improvement process in context of our running ISO 50001 Management System. Global emissions reduction targets, in particular our new Science Based Target (“SBT”), are subdivided through the entire organization and managed locally on each manufacturing site. Local reviews are aggregated to global level and signed off by our CEO. In 2018 we managed to reduce our scope 3 emissions by more than 250k tons of CO2 while we managed to keep scope 1 and 2 emissions at about the same level. This was managed through the investment in a significant capacity increase for L-Menthol that allowed us to substitute the more carbon intensive natural menthol. The TIME HORIZON of this strategy is current to long term: We are already executing this strategy and do not expect it to change in the foreseeable future. CASE STUDY: SITUATION: Globally, our Scope 2 emissions have in 2019 made up 33% of our total scope 1 and 2 emissions. This mainly due to our demand for electricity. TASK: We aim to reduce our global Scope 2 emissions to zero in 2025. ACTION: A strategy for ramping up our sourcing of CO2 free power has been defined. We started execution of this programme in Germany by sourcing respective tradeable instruments, i.e. EU-guarantees of origin (“GoOs”) In 2018 and 2019 we sourced GoOs. Thereby we have supported the upgrade of wind energy facilities at German-Polish border. Furthermore, our strategy foresees to roll out our sourcing of renewable energy by buying I-RECs in the US, France, Brasil, Mexico and Singapore. RESULT: Our strategy has been confirmed by the board. Thus, we have stated executing it. In 2019, 24.1% (2018: 18.5%) of our global power consumption has been from renewable sources. We will increase this ratio in the future. Symrise has also become a member of the RE 100 initiative.

C3.4

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

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Access to capital Assets Liabilities	In accordance with the TCFD recommendations, the financial planning performed by Symrise takes climate related effects into account. The respective planning elements are of course interdependent and have been considerably influenced by climate related risks. Thus, the effects described below for revenues (which we describe here “pars pro toto”) are closely related to effects in other elements, especially in Capital expenditures and Capital allocation. Our financial planning has a TIME HORIZON of 6 years and applies to all elements influenced. Climate change related effects have been factored into our financial planning and HAVE INFLUENCED our planning in several ways as we consider e.g. effects on increasing demand for some of our products (due to longer and hotter summers), effects from eventual unavailability of production sites (due to physical events like tropical storms) or changing demand by our customers who consider climate aspects in the product properties they buy. CASE STUDY ON REVENUES: Situation: Tropical Storms in South Carolina occur regularly and affect in a negative manner our profits due to delayed production and damages. Task: We need to guarantee our production also in times where some facilities are not available for production. Moreover we need to hedge against costs from repairs, helping us to hedge against effects on our revenues. Action: On the one hand side we create and maintain redundant production capacities worldwide in order to be able to compensate for locally/regionally decreased availability of capacities: E.g. our site in Charleston manufactures Menthol-I (synthetic menthol). If production is disrupted there we may increase production at Holzminden, Germany. This is possible as the Holzminden production capacity has been expanded just recently. Such scenario of shifts in production volumes also entails additional shipping costs as Menthol-I need to be transported overseas to serve our US market supply. On the other hand we use insurance to cover costs for related repairs after natural disasters.

		Result: We are effectively able to limit related cost risks on the revenues.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?

No, but we plan to in the next two years

C4. Targets and performance

C4.1

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

Absolute target

C4.1a

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

Target reference number

Abs 1

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2020

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

299,118

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

1,360

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

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

300,478

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

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

100

Target year

2028

Targeted reduction from base year (%)

80

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

60,095.6

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

285,332

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

2,327

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

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

287,659

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

5.3327531467

Target status in reporting year

New

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

Please explain target coverage and identify any exclusions

The target coverage is company wide and there are not any exclusions. The entirety of the Scope 1 & 2 Emissions were considered.

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

1. Menthol expansion phase 3 35,000 tons CO2eq
2. Expansion CHDD (Globanone) 2000 tons CO2eq
3. Waste incineration boiler in HOL 2000 tons CO2eq
4 Energy efficiency in production processes 5000 tons CO2eq
(New boiler in Cossé, DF, Thierry Lenice)
5. Sustainable allinate process 10 tons CO2eq
(Process opt. fragrances, Niekerken)
6. reduction CO2 SprayDrying
by 30% (Ingo Reiss) 3,000 tons CO2eq
7. 3 Projects from DPF 1,000 tons CO2eq
8. 5 heat boxes replacement in Holzminden 100 tons CO2eq

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

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Target reference number

Abs 2

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Category 1: Purchased goods and services

Base year

2020

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

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

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

1,747,178

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

1,747,178

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

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

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

87

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

87

Target year

2030

Targeted reduction from base year (%)

30

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

1,223,024.6

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

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

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

1,676,583

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

1,676,583

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

13.4683854002

Target status in reporting year

New

Is this a science-based target?

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

Target ambition

Well-below 2°C aligned

Please explain target coverage and identify any exclusions

The SBTi Validation Process started on October 2021 and in February 2022 SBTi has approved the scope 3 target which has the ambition level of Well-below 2 °C.
The Target is covering only the "Purchase of Goods and Services" which represents 87% of the overall Scope 3 Emissions.
Through an intensive exchange with the SBTi, it was decided to exclude the other categories from the target coverage. However, 95% of the Scope 3 emissions were gathered in the GHG Inventory as it can be seen in the question C6.5.

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

Through the CDP Supply Chain and the strategies described in the questions C12.1a and C12.1b

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

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

C4.2a

(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

2018

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2018

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

218,322

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

18.3

Target year

2025

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

100

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

100

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

100

Target status in reporting year

Achieved

Is this target part of an emissions target?

Yes: Abs 1

Is this target part of an overarching initiative?

RE100

Science Based Targets initiative

Please explain target coverage and identify any exclusions

We continually invest in improved energy efficiency and in renewable electricity.

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

List the actions which contributed most to achieving this target

We are continuously increasing the share of PV installations on the roofs of our factories, e.g. in Spain, India, Egypt, etc.

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	8	71,110
To be implemented*	3	200
Implementation commenced*	1	35,000
Implemented*	8	54,205
Not to be implemented	0	0

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 production processes
Combined heat and power (cogeneration)

Estimated annual CO2e savings (metric tonnes CO2e)

20,000

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)

2,400,000

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

20,000,000

Payback period

4-10 years

Estimated lifetime of the initiative

>30 years

Comment

New cogeneration of heat and power plant in Germany / Holzminden. It has started operation in 2017 at 70% capacity and reached full capacity in 2018. At full capacity it saves some 20.000t CO2 per year. Due to the fact full capacity was achieved in 2018, the 2.4 m € annual monetary savings have been achieved since. In total 20 m € have been invested by end of 2018 for the entire project

Initiative category & Initiative type

Energy efficiency in production processes
Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

30,000

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)

3,000,000

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

30,000,000

Payback period

4-10 years

Estimated lifetime of the initiative

>30 years

Comment

Symrise is one of the biggest manufacturers of synthetic Menthol for more than 30 years. We have developed together with our main supplier a much more efficient manufacturing method and therefore we have already decreased our carbon footprint per produced kg Menthol by one third. The synthetic Menthol is a substitute to the natural one, which is extracted from peppermint plants by water steam distillation and a further crystallization process. We have calculated the carbon footprint of our synthetic product is up to 10 times lower than that of the natural material. Between 2019 and

2021 we doubled our production capacity in USA and Germany which helped avoid approx. 30,000 tons CO2.

Initiative category & Initiative type

Energy efficiency in production processes
Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

2,000

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)

160,000

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

1,500,000

Payback period

4-10 years

Estimated lifetime of the initiative

>30 years

Comment

Symrise Total Productive Maintenance Teams continuously improve process and energy efficiency

Initiative category & Initiative type

Energy efficiency in production processes
Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

2,205

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)

200,000

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

1,000,000

Payback period

4-10 years

Estimated lifetime of the initiative

21-30 years

Comment

Summary of various measures to increase process and energy efficiency in USA, Asia-Pacific, France and Germany. Examples are crystallization processes, economized boilers, LED lighting, building insulation and state-of-the-art heat boxes.

C4.3c

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

Method	Comment
Internal finance mechanisms	When it comes to long term investments such as a new CHP, extension of menthol capacity, etc., energy efficiency and CO2 reduction measures are taken into account for the whole life time of the equipment. Every Capex approval contains a substantial evaluation of Carbon Emission reduction measures in tons and € and is finally signed and approved by the CEO and CFO.
Financial optimization calculations	Within the Capital Expenditure Process a "Green Factory" Toolbox is meanwhile implemented. Proposals as well as assessments of building engineers and experts from NGO's are incorporated to be available for the final approval of the board members.

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

The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Chemicals and plastics
Chemical absorption of CO2

Description of product(s) or service(s)

Symrise is one of the biggest manufacturers of synthetic Menthol for more than 30 years. We have developed together with our main supplier a much more efficient manufacturing method and therefore we have already decreased our carbon footprint per produced kg Menthol by one third. We have estimated that the carbon footprint of our product is up to 10 times lower than the natural material, which avoids approx. 250.000 tons up to 500.000 tons. CO2 per anno.
SymTrap®: Extension of energy-saving technology to biofunctional substances. SymTrap® can now not only be used to extract and concentrate volatile flavoring substances – this technology, based on a sophisticated adsorption-desorption process, has been expanded to also provide a gentle method for extracting secondary plant materials with biofunctional properties. With our technology SymTrap we are able to convert several hundred kilograms of raw material into a kilogram of highly concentrated flavor.
The review of the provisions of the EU Taxonomy Regulation has shown that Symrise does not have any taxonomy-eligible economic activities. This does not mean that Symrise's business is less sustainable than activities defined in the EU taxonomy - rather, the EU taxonomy currently only includes those economic activities that are most relevant to reducing greenhouse gas emissions and improving climate resilience.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Functional unit used

Reference product/service or baseline scenario used

Life cycle stage(s) covered for the reference product/service or baseline scenario

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

Explain your calculation of avoided emissions, including any assumptions

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

30

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?

No

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?
Row 1	No

C5.2

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

Scope 1

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

299,119

Comment

Approved by SBTi in Feb 2022

Scope 2 (location-based)

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
1,360

Comment
Location and market-based emissions are equal because all electricity used worldwide was purchased from renewable sources. I-Recs are available on demand. 1360 tons CO2 are related to heat.

Scope 2 (market-based)

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
1,360

Comment
Approved by SBTi in Feb 2022. Location and market-based emissions are equal because all electricity used worldwide was purchased from renewable sources. I-Recs are available on demand. 1360 tons CO2 are related to heat.

Scope 3 category 1: Purchased goods and services

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
1,747,178

Comment
no comment

Scope 3 category 2: Capital goods

Base year start
January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

58,830

Comment

no comment

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

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

63,685

Comment

no comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

47,555

Comment

no comment

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

24,455

Comment

no comment

Scope 3 category 6: Business travel

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
1,280

Comment
no comment

Scope 3 category 7: Employee commuting

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
12,032

Comment
no comment

Scope 3 category 8: Upstream leased assets

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
0

Comment
not applicable

Scope 3 category 9: Downstream transportation and distribution

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
56,835

Comment

no comment

Scope 3 category 10: Processing of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

not applicable

Scope 3 category 11: Use of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

not applicable

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

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

not applicable

Scope 3 category 13: Downstream leased assets

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

not applicable

Scope 3 category 14: Franchises

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

not applicable

Scope 3 category 15: Investments

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

not applicable

Scope 3: Other (upstream)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

not applicable

Scope 3: Other (downstream)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

not applicable

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)

285,332

Start date

January 1, 2021

End date

December 31, 2021

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

299,118

Start date

January 1, 2020

End date

December 31, 2020

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

C6.3

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

Reporting year

Scope 2, location-based

2,532

Scope 2, market-based (if applicable)

2,327

Start date

January 1, 2021

End date

December 31, 2021

Comment

Past year 1

Scope 2, location-based

1,480

Scope 2, market-based (if applicable)

1,360

Start date

January 1, 2020

End date

December 31, 2020

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 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 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

Symrise has Offices in some countries without manufacturing sites. These Offices are not included.

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not relevant

Explain why this source is excluded

Energy consumption of these offices is compared to whole consumption very low (< 0,1 %)

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

1

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

Almost most of our offices are equipped with state-of-the-art technology, such as LED lighting, notebooks, lifts (if applicable), heating or air conditioning and are used 5 days a week. Our production facilities and warehouses are generally operated 24 hours a day, 7 days a week in shift systems. According to the latest estimates, the consumption in the offices is less than 0.1% of the total emissions.

Source

Symrise has acquired facilities word-wide in 2021. These are not fully integrated yet into our Symrise-wide emissions accounting system.

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

Emissions excluded due to a recent acquisition or merger

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions excluded due to a recent acquisition or merger

Explain why this source is excluded

The estimated emissions of these recently acquired sites are not material compared to the existing portfolio (<0.01%).

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

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

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)

1,676,583

Emissions calculation methodology

Other, please specify

We used the Symrise Product Sustainability Scorecard (LCA Tool): For our calculation we used data of public available databases (e.g. Ethanol, glycerine) and literature (e.g. gelatine, essential oils) data..

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

0

Please explain

We started the CDP Supply Chain Program in 2017 to work with our suppliers on a more sustainable value chain. Our suppliers with the highest risk status on climate, water and forests were again requested to follow the CDP Supply Chain Program in 2021. Strategic suppliers, in particular, are eligible for the program. As we defined significantly more suppliers as strategic in the reporting year, almost twice as many

suppliers were invited to participate in the CDP supply chain program compared with the previous year. Given the increase in the number of suppliers considered, the response rate in the climate sector fell from 87 % in the previous year to 58 %. Of the suppliers who participated in the CDP Supply Chain Program, 69 % have set active emissions reduction targets and 88 % have included climate-related issues in their long-term goals. 85 % of participating suppliers reported on their operational GHG emissions. In addition, many suppliers are in turn engaging their own suppliers on climate-related issues: Around 61 % of participating suppliers motivated their own suppliers to set targets. However, there is clear potential for improvement in the use of green electricity: Only around 18 % of the electricity consumed by participating suppliers came from renewable sources and only around 20 % of participants reported renewable energy targets.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

64,380

Emissions calculation methodology

Asset-specific method

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

0

Please explain

Investment in plant, property and equipment in 2021 was 174 million €. We use a conversion factor of the Federal Statistical Office Germany (370 ton CO2 / million €). Our buildings and equipment is usually designed for long term use. Sometimes more than 50 years. Therefore from an LCA perspective their CO2 impact is much lower than the one of operational carbon footprint.

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

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

61,138

Emissions calculation methodology

Other, please specify

Forschungsstelle für Energiewirtschaft e.V." (https://www.ffe.de/

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

0

Please explain

For calculation of scope 3 emissions related to losses of electricity grid and upstream chains we used information of "Forschungsstelle für Energiewirtschaft e.V." (https://www.ffe.de/). The value of 61138 tons CO2 represents: Approx. 16% of Scope 1 emissions related to electricity (losses and upstream chains) Approx. 31% of Scope 3 emissions related to natural gas (upstream chains) Approx. 24% of Scope 3 emissions related to natural gas (upstream chains)

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

59,056

Emissions calculation methodology

Supplier-specific method

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

0

Please explain

We have calculated distances of transportation of our main raw material volume from our main suppliers to our regional hubs and extrapolated to our whole supply volume. These distances are multiplicity with the transported volumes in tons. We have used the tool Ecotransit available at http://www.ecotransit.org/calculation.en.html

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

20,331

Emissions calculation methodology

Supplier-specific method

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

0

Please explain

We have estimated the emissions related to our Waste generated in operations as follows: A significant part of our waste is burnt internally, in plants which are under the scope of the EU ETS. Of course, these belong to scope 1. Based in this experience we know these emissions with high accuracy and brings us in the position to extrapolate emissions for waste which is externally burnt and thus belong to Scope 3.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

932

Emissions calculation methodology

Supplier-specific method

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

0

Please explain

Travelled distances via air, train and car are reported to our sustainability cockpit. For air travelling which is the most important source of emissions we have used the following figures: Distance < 800km = 0.29 kg CO2/km Distance >2000km = 0.15 kg CO2/km Distance >= 800km && <= 2000km = 0.22 kg CO2/km

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

12,741

Emissions calculation methodology

Distance-based method

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

0

Please explain

Extrapolation according to locations (e.g. distance to or size of communities and commuting modes) and numbers of employees working on sites

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Symrise has no upstream leased assets

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

58,685

Emissions calculation methodology

Distance-based method

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

0

Please explain

We have calculated distances of transportation of our main product volume from our regional hubs to main customers and extrapolated to our whole sales. These distances are multiplied with the transported volumes in tons. Also included: Intercompany transport (e.g. finished goods from Symrise Germany to Symrise USA. We have used the tool Ecotransit available at http://www.ecotransit.org/calculation.en.html

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

The carbon footprint of the processing phase of products is less than 0.1%. The emissions of a typical blended product (liquid or solid) is less than 0.1 ton CO2 / ton of product.
The intermediates included in category 10 are only traded through at Symrise and are not processed. In some cases, these products are transported immediately from the supplier to the customer. In this respect, no emissions occur.
For example Vanilla: We harvest vanilla beans and then we ship it to customers so that they start processing. The harvesting process is not an energy intensive process.
We consider that the exclusion of the category 10 is reasonable. This would mean an exclusion of only 0,025% of our total Scope 3 Inventory.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Sold products are usually processed by us or traded. Related to the intended use (Flavors, Fragrances, Cosmetics and functional Ingredients) the carbon footprint related to the use phase of the products is less than 0,1%

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Most of our products are ingredients for flavors and perfume oils with a very high impact or efficiency. These substances are very highly concentrated. For this reason, only about 0.1% or less of these substances are dosed into customers products, which does not necessarily have to be the final end product.
Food or perfume oils produced with Symrise products are not recovered or recycled, because there no need for this.
We consider that the exclusion of the category 12 is reasonable. This would mean an exclusion of only 0,005% of our total Scope 3 Inventory

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Symrise has no downstream leased assets

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Symrise has no franchising activities

Investments

Evaluation status

Not relevant, explanation provided

Please explain

Symrise has only some minor joint ventures with low carbon footprint (< 0,1%) compared to own operations covered in scope 1 and scope 2.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

no further impact known

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

no further impact known

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1, 2020

End date

December 31, 2020

Scope 3: Purchased goods and services (metric tons CO2e)

1,747,178

Scope 3: Capital goods (metric tons CO2e)

58,830

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

63,685

Scope 3: Upstream transportation and distribution (metric tons CO2e)

47,555

Scope 3: Waste generated in operations (metric tons CO2e)

24,455

Scope 3: Business travel (metric tons CO2e)

1,280

Scope 3: Employee commuting (metric tons CO2e)

12,032

Scope 3: Upstream leased assets (metric tons CO2e)

0

Scope 3: Downstream transportation and distribution (metric tons CO2e)

56,835

Scope 3: Processing of sold products (metric tons CO2e)

0

Scope 3: Use of sold products (metric tons CO2e)

0

Scope 3: End of life treatment of sold products (metric tons CO2e)

0

Scope 3: Downstream leased assets (metric tons CO2e)

0

Scope 3: Franchises (metric tons CO2e)

0

Scope 3: Investments (metric tons CO2e)

0

Scope 3: Other (upstream) (metric tons CO2e)

0

Scope 3: Other (downstream) (metric tons CO2e)

0

Comment

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

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	19,782	In a plant in the USA, we have burned a substance ("glydfuel") in small quantities in recent years that was produced during the manufacture of paper from wood. It is therefore a renewable material. However, the amount of glydfuel is expected to go down to zero in the next future, as we want to extract new substances from the glydfuel for further use in our fragrance and cosmetics industry. So it's a typical circular economy approach. In the past, we used the emission factor of light fuel oil as a reference for glydfuel to estimate the CO2 calculations.

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

0.00007519

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

287,659

Metric denominator

unit total revenue

Metric denominator: Unit total

3,825,700,000

Scope 2 figure used

Market-based

% change from previous year

11.9

Direction of change

Decreased

Reason for change

Corresponding emission reduction activities are mainly driven by process optimizations and the continuous operation of the new cogeneration of heat and power plant in Germany/Holzminden. The CHP power plant replaced an old power plant which was run with oil. The switch to the gasfueld CHP power plant saved about 20.000 tons CO2eq per year.
Major corresponding emission reduction initiatives are explained in more detail in C4.3b.

C7. Emissions breakdowns

C7.1

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

No

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Argentina	590
Australia	0
Brazil	6,568
Canada	411

Chile	4,350
China	1,206
Colombia	1,256
Costa Rica	1,631
Ecuador	11,079
Egypt	644
France	20,777
Germany	62,394
Hungary	461
India	19
Japan	45
Madagascar	237
Mexico	8,039
Russian Federation	835
Singapore	3,496
South Africa	311
Spain	3,617
Thailand	529
United Kingdom of Great Britain and Northern Ireland	77
United States of America	158,931
Venezuela (Bolivarian Republic of)	79
Netherlands	1,365

C7.3

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

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Chemicals production	99,182
Non-Chemicals production	186,997

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

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

	Gross Scope 1 emissions, metric tons CO2e	Comment
Chemicals production activities	99,182	Chemical production activities are located in Germany, USA and Mexico. Please note, Symrise has additional Flavor, Fragrance, Cosmetic Ingredients and Nutrition business in these countries. Significant acquisitions of non-chemicals production sites have been done during the past years for the Taste, Nutrition & Health segment.

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Argentina	68	68
Australia	250	250
Brazil	0	0
Canada	0	0
Chile	0	0
China	605	605
Colombia	607	607
Costa Rica	0	0
Ecuador	0	0
Egypt	0	0
France	0	0
Germany	0	0
Hungary	0	0
India	0	0
Japan	107	107
Madagascar	0	0
Mexico	0	0

Russian Federation	143	143
Singapore	0	0
South Africa	256	256
Spain	0	0
Thailand	0	0
United Kingdom of Great Britain and Northern Ireland	0	0
United States of America	291	291
Venezuela (Bolivarian Republic of)	0	0
Netherlands	0	0

C7.6

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

By activity

C7.6c

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

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Chemicals production	291	291
Non-Chemicals production	2,036	2,036

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
Chemicals production activities	291	291	Chemical production activities are located in Germany, USA and Mexico. Please note, Symrise has additional Flavor, Fragrance, Cosmetic Ingredients and Nutrition business in these countries. Significant acquisitions of non-chemicals

			production sites have been done during the past years for the Taste, Nutrition & Health segment.

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
Specialty chemicals	30	For our SBT approval in February 2022 we calculated accurate scope 3 data. Scope 3 emissions contribute to 87% to our overall carbon footprint. 51% of our scope 3 emission comes from meat side streams, mainly chicken. 30% comes from chemicals, 8% from essential oils and 11% from natural materials.

C-CH7.8a

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

	Sales, metric tons	Comment
Carbon dioxide (CO2)	0	
Methane (CH4)	0	
Nitrous oxide (N2O)	0	
Hydrofluorocarbons (HFC)	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	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	967	Increased	0.3	In total, our change in renewable energy consumption has led to an increase of 967 tons CO2 emissions. Dividing this by last year's total CO2 emissions, an increase of 0.3% was achieved. (967/300478)*100 = 0.3%. This very slight increase is due to production facilities that were acquired in the USA in 2019 and 2020 and have a high electrical energy demand. The production volume remained almost the same compared to the previous year. Because the threats of climate change are becoming ever more obvious. And because we take responsibility for future generations. We have set ourselves the ambitious goal of being climate-positive by 2030. This means that the business activities of Symrise will contribute to preventing or sequestering more greenhouse gas emissions from the atmosphere than we produce through our operating activities. We have been sourcing all of our external electricity from renewable sources since 2020. In view of the aggravating situation concerning climate change, we again intensified our efforts in 2021 and thus were able to reach our ambitious goal ahead of schedule. Because of this, we were able to demonstrably cover our external electricity needs worldwide using renewable sources in 2020.
Other emissions	54,205	Decreased	18	In total there are 54205 tons CO2 from other emission reduction activities. The percentage change in emissions due to

reduction activities				emission reduction activities divided by last year's total emissions: (54205 / 300478)*100= 18.0%. This represents a 18.0% decrease in emissions due to emissions reduction activities explained under C 4.3b. Detailed explanation/background: As explained under C4.3b, Symrise is one of the biggest manufacturers of synthetic Menthol for more than 30 years. We have developed together with our main supplier a much more efficient manufacturing method and therefore we have already decreased our carbon footprint per produced kg Menthol by one third. The synthetic Menthol is a substitute to the natural one, which is extracted from peppermint plants by water steam distillation and a further crystallization process. We have calculated the carbon footprint of our synthetic product is up to 10 times lower than that of the natural material. Between 2019 and 2021 we doubled our production capacity in USA and Germany which helped avoid approx. 30,000 tons CO2. Furthermore, the cogeneration of heat and power plant in Germany / Holzminden. It has started operation in 2017 at 70% capacity and reached full capacity in 2018. At full capacity it saves some 20.000t CO2 per year. Due to the fact full capacity was achieved in 2018, the 2.4 m € annual monetary savings have been achieved since. In total 20 m € have been invested by end of 2018 for the entire project. Another 4205 tons CO2 have been reduced by various measures to increase process and energy efficiency in USA, Asia-Pacific, France and Germany. Examples are refurbished and economized boilers, LED lighting and state-of-the-art heat boxes.
Divestment	0		0	no divestment
Acquisitions	12,819		4.3	In total there is a decrease of 12819 tons CO2 resulted from Acquisitions in USA in

				2020, which are now fully operational. The percentage change in emissions due to the decrease of emission divided by last year's total emissions: (12819 / 300478)*100= 4.3%. In Detail: Based on the Acquisition in USA which are now fully operational, total scope 1 decreased from 299118 tons in 2020 to 285332 tons in 2021, which is a decrease of 13786 tons CO2. At the same time, all electricity worldwide has demonstrably been purchased from renewable sources. Total scope 2 increased slightly from 1360 tons CO2 in 2020 to 2327 tons CO2 in 2021, which is an increase of 967 tons CO2. In total 13786 - 967 = 12819 tons CO2.
Mergers	0		0	no merger
Change in output	65,000		21.6	Our total output (tons) of products has increased by 5.8% based on customer demands. Almost most of the capacity increase was achieved in manufacturing sites which consumes high energy for cooling and heating. Based on this, we calculated a CO2 emission increase of 65.000 tons, which is an increase of 21.6%. We calculated the effect of changes in output using an analogous formula as described above. (65000 / 300478)*100= 21.6%. This is an increase of 21.6%
Change in methodology	0		0	No change in methodology
Change in boundary	0		0	No change in boundary
Change in physical operating conditions	0		0	No change in physical operating conditions
Unidentified	1,057		0.4	Of course the calculations reported above contain some uncertainties, especially with respect to the effects of the changes in output. In addition to this, due to our energy efficiency programs, mainly based

				on our ISO 50001 management system, in 2021 we were not able to clearly identify if these projects have been completed or if they are still in the implementation phase. We calculated the effect of unidentified emissions using an analogous formula as described above. (1057/300478)*100 = 0.4%
Other	0		0	

C7.9b

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

Market-based

C8. Energy

C8.1

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

More than 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)	HHV (higher heating value)	144,723	1,455,017	1,599,740
Consumption of purchased or acquired electricity		35,834	281,669	317,503
Consumption of purchased or acquired steam		0	84,167	84,167
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		180,557	1,820,853	2,001,410

C-CH8.2a

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

Consumption of fuel (excluding feedstocks)

Heating value

HHV (higher heating value)

MWh consumed from renewable sources inside chemical sector boundary

97,223

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

701,117

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

798,340

Consumption of purchased or acquired electricity

MWh consumed from renewable sources inside chemical sector boundary

7,778

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

107,779

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

115,557

Consumption of purchased or acquired steam

MWh consumed from renewable sources inside chemical sector boundary

0

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

76,112

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

76,112

Consumption of self-generated non-fuel renewable energy

MWh consumed from renewable sources inside chemical sector boundary

0

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

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

0

Total energy consumption

MWh consumed from renewable sources inside chemical sector boundary

105,001

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

885,008

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

990,008

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	Yes

C8.2c

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

Sustainable biomass

Heating value

HHV

Total fuel MWh consumed by the organization

144,918

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

144,918

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

In a plant in the USA, we have burned a substance ("glydfuel") in small quantities in recent years that was produced during the manufacture of paper from wood. It is therefore a renewable material. However, the amount of glydfuel is expected to go down to zero in the next future, as we want to extract new substances from the glydfuel for further use in our fragrance and cosmetics industry. So it's a typical circular economy approach.
In the past, we used the emission factor of light fuel oil as a reference for glydfuel to estimate the CO2 calculations.

Other biomass

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

no other biomass than biofuel

Other renewable fuels (e.g. renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

no renewable hydrogen in use

Coal

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

No coal in use

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

290,280

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

290,280

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Oil is just in use for the self-generation of steam

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

1,300,843

MWh fuel consumed for self-generation of electricity

72,444

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

1,053,593

MWh fuel consumed for self- cogeneration or self-trigeneration

247,250

Comment

Our total consumption of Gas consumed by the organization is 1.300.843 MWh. Gas is used in almost most of our production facilities to generate steam. But in Germany, we produce electricity and steam with a cogeneration of heat and power plant. The new cogeneration of heat and power plant in Germany / Holzminden started operation in 2017 at 70% capacity and reached full capacity in 2018. At full capacity it saves some 20.000t CO2 per year. The CHP power plant replaced an old power plant which was run with oil.

Total gas consumption in Holzminden was 247.250 MWh in 2021. 45.2% of the total is used for the generation of steam (111.757 MWh), 29.3% is used for the generation of electricity (72444 MWh) and 25.5% are heat losses (63.049 MWh).

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

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Hydrogen is not yet used for energy production, but is in the strategic planning stage.

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

1,736,041

MWh fuel consumed for self-generation of electricity

72,444

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

1,488,791

MWh fuel consumed for self- cogeneration or self-trigeneration

247,250

Comment

Substantial heat losses as it is explained with the example of the cogeneration of heat and power in Germany is part of substantial process and energy efficiency measures by our Total Productive Maintenance Teams.

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	317,503	317,503	35,834	35,834
Heat	0	0	0	0
Steam	84,167	84,167	0	0
Cooling	0	0	0	0

C-CH8.2d

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

Electricity

Total gross generation inside chemicals sector boundary (MWh)

115,557

Generation that is consumed inside chemicals sector boundary (MWh)

115,557

Generation from renewable sources inside chemical sector boundary (MWh)

7,778

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

7,778

Heat

Total gross generation inside chemicals sector boundary (MWh)

0

Generation that is consumed inside chemicals sector boundary (MWh)

0

Generation from renewable sources inside chemical sector boundary (MWh)

0

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

0

Steam

Total gross generation inside chemicals sector boundary (MWh)

76,112

Generation that is consumed inside chemicals sector boundary (MWh)

76,112

Generation from renewable sources inside chemical sector boundary (MWh)

0

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

0

Cooling

Total gross generation inside chemicals sector boundary (MWh)

0

Generation that is consumed inside chemicals sector boundary (MWh)

0

Generation from renewable sources inside chemical sector boundary (MWh)

0

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

0

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area

Argentina

Consumption of electricity (MWh)

1,536

Consumption of heat, steam, and cooling (MWh)

0

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

1,536

Is this consumption excluded from your RE100 commitment?

No

Country/area

Australia

Consumption of electricity (MWh)

742

Consumption of heat, steam, and cooling (MWh)

878

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

1,620

Is this consumption excluded from your RE100 commitment?

No

Country/area
Brazil

Consumption of electricity (MWh)
12,322

Consumption of heat, steam, and cooling (MWh)
97

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

12,419

Is this consumption excluded from your RE100 commitment?
No

Country/area
Canada

Consumption of electricity (MWh)
2,175

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

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

2,175

Is this consumption excluded from your RE100 commitment?
No

Country/area
Chile

Consumption of electricity (MWh)
3,331

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

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

3,331

Is this consumption excluded from your RE100 commitment?
No

Country/area
China

Consumption of electricity (MWh)
18,479

Consumption of heat, steam, and cooling (MWh)
5,158

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

23,637

Is this consumption excluded from your RE100 commitment?
No

Country/area
Colombia

Consumption of electricity (MWh)
1,942

Consumption of heat, steam, and cooling (MWh)
2,133

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

4,075

Is this consumption excluded from your RE100 commitment?
No

Country/area
Costa Rica

Consumption of electricity (MWh)
1,242

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

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

1,242

Is this consumption excluded from your RE100 commitment?

No

Country/area

Ecuador

Consumption of electricity (MWh)

9,583

Consumption of heat, steam, and cooling (MWh)

0

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

9,583

Is this consumption excluded from your RE100 commitment?

No

Country/area

Egypt

Consumption of electricity (MWh)

778

Consumption of heat, steam, and cooling (MWh)

0

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

778

Is this consumption excluded from your RE100 commitment?

No

Country/area

France

Consumption of electricity (MWh)

29,964

Consumption of heat, steam, and cooling (MWh)

0

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

29,964

Is this consumption excluded from your RE100 commitment?

No

Country/area

Germany

Consumption of electricity (MWh)

40,048

Consumption of heat, steam, and cooling (MWh)

0

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

40,048

Is this consumption excluded from your RE100 commitment?

No

Country/area

Hungary

Consumption of electricity (MWh)

400

Consumption of heat, steam, and cooling (MWh)

0

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

400

Is this consumption excluded from your RE100 commitment?

No

Country/area

India

Consumption of electricity (MWh)

1,697

Consumption of heat, steam, and cooling (MWh)

0

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

1,697

Is this consumption excluded from your RE100 commitment?

No

Country/area

Japan

Consumption of electricity (MWh)

250

Consumption of heat, steam, and cooling (MWh)

0

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

250

Is this consumption excluded from your RE100 commitment?

No

Country/area

Madagascar

Consumption of electricity (MWh)

539

Consumption of heat, steam, and cooling (MWh)

0

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

539

Is this consumption excluded from your RE100 commitment?

No

Country/area

Mexico

Consumption of electricity (MWh)

8,672

Consumption of heat, steam, and cooling (MWh)

0

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

8,672

Is this consumption excluded from your RE100 commitment?

No

Country/area

Netherlands

Consumption of electricity (MWh)

1,661

Consumption of heat, steam, and cooling (MWh)

0

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

1,661

Is this consumption excluded from your RE100 commitment?

No

Country/area

Russian Federation

Consumption of electricity (MWh)

1,100

Consumption of heat, steam, and cooling (MWh)

0

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

1,100

Is this consumption excluded from your RE100 commitment?

No

Country/area

Singapore

Consumption of electricity (MWh)

16,364

Consumption of heat, steam, and cooling (MWh)

0

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

16,364

Is this consumption excluded from your RE100 commitment?

No

Country/area

South Africa

Consumption of electricity (MWh)

714

Consumption of heat, steam, and cooling (MWh)

0

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

714

Is this consumption excluded from your RE100 commitment?

No

Country/area

Spain

Consumption of electricity (MWh)

2,517

Consumption of heat, steam, and cooling (MWh)

0

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

2,517

Is this consumption excluded from your RE100 commitment?

No

Country/area

Thailand

Consumption of electricity (MWh)

1,064

Consumption of heat, steam, and cooling (MWh)

0

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

1,064

Is this consumption excluded from your RE100 commitment?

No

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of electricity (MWh)

675

Consumption of heat, steam, and cooling (MWh)

0

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

675

Is this consumption excluded from your RE100 commitment?

No

Country/area

United States of America

Consumption of electricity (MWh)

159,812

Consumption of heat, steam, and cooling (MWh)

75,981

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

235,793

Is this consumption excluded from your RE100 commitment?

No

Country/area

Consumption of electricity (MWh)

Consumption of heat, steam, and cooling (MWh)

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

Is this consumption excluded from your RE100 commitment?

Country/area
Venezuela (Bolivarian Republic of)

Consumption of electricity (MWh)
0

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

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

0

Is this consumption excluded from your RE100 commitment?
No

C8.2h

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

Country/area of renewable electricity consumption
Argentina

Sourcing method
Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type
Hydropower (capacity unknown)

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

1,536

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

1,536

Country/area of origin (generation) of the renewable electricity/attribute consumed

Argentina

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

1,972

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

El Chocón

Comment

Issuer Instituto Argentino de Normalizacion y Certificacion
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

Brazil

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Solar

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

12,322

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

12,322

Country/area of origin (generation) of the renewable electricity/attribute consumed

Brazil

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

2,017

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

FV Sobral I

Comment

Issuer Instituto TOTUM
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

Canada

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Hydropower (capacity unknown)

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

2,175

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

2,175

Country/area of origin (generation) of the renewable electricity/attribute consumed

Canada

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

2,000

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

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify

North American Renewables Registry Certificate of Retirement

Comment

North American Renewables Registry Certificate of Retirement
via FristClimate GmbH, Germany

Country/area of renewable electricity consumption

Chile

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Solar

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

3,331

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

3,331

Country/area of origin (generation) of the renewable electricity/attribute consumed

Chile

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

2,019

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

SCX Santiago Climate Exchange, Av. Presidente Errázuriz 3949, Las Condes, Santiago, Chile.

Comment

SCX Santiago Climate Exchange, Av. Presidente Errázuriz 3949, Las Condes, Santiago, Chile.
via FristClimate GmbH, Germany

Country/area of renewable electricity consumption
China

Sourcing method
Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type
Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)
18,479

Tracking instrument used
I-REC

Total attribute instruments retained for consumption by your organization (MWh)
18,479

Country/area of origin (generation) of the renewable electricity/attribute consumed
China

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2,010

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

Brand, label, or certification of the renewable electricity purchase
Other, please specify
Nashang Hydro

Comment
Issuer CCC
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption
Colombia

Sourcing method
Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type
Solar

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

1,942

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

1,942

Country/area of origin (generation) of the renewable electricity/attribute consumed

Brazil

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

2,017

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

FV Sobral I

Comment

Issuer Instituto TOTUM
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

Costa Rica

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Solar

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

1,242

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

1,242

Country/area of origin (generation) of the renewable electricity/attribute consumed

Mexico

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

2,018

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Aura Solar III

Comment

Issuer CCC
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

Ecuador

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Solar

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

9,583

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

9,583

Country/area of origin (generation) of the renewable electricity/attribute consumed

Brazil

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

2,017

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

FV Sobral I

Comment

Issuer Instituto TOTUM
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

Egypt

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Hydropower (capacity unknown)

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

778

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

778

Country/area of origin (generation) of the renewable electricity/attribute consumed

Turkey

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

2,014

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Kale HES

Comment

Issuer Foton
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption
France

Sourcing method
Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type
Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)
36,497

Tracking instrument used
GO

Total attribute instruments retained for consumption by your organization (MWh)
36,497

Country/area of origin (generation) of the renewable electricity/attribute consumed
France

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2,011

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

Brand, label, or certification of the renewable electricity purchase
Other, please specify
Mann Naturenergie GmbH & Co KG, Germany, Langenbach

Comment
Umweltbundesamt Deutschland, HKNR Herkunftsnachweisregister
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption
Germany

Sourcing method
Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type
Wind

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

40,048

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

40,048

Country/area of origin (generation) of the renewable electricity/attribute consumed

Italy

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

2,011

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Mann Naturenergie GmbH & Co KG, Germany, Langenbach

Comment

Umweltbundesamt Deutschland, HKNR Herkunftsnachweisregister
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

Hungary

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

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

400

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

372

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2,021

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Rejestr Gwarancji Pochodzenia

Comment

Rejestr Gwarancji Pochodzenia
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

India

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Hydropower (capacity unknown)

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

1,697

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

1,697

Country/area of origin (generation) of the renewable electricity/attribute consumed

India

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

2,006

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

400 MW Vishnuprayag Hydro Power

Comment

Issuer CCC

via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

Japan

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Hydropower (capacity unknown)

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

250

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

250

Country/area of origin (generation) of the renewable electricity/attribute consumed

China

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

1,995

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Kaqun Ⅰ Hydropower Station

Comment

Issuer CCC

via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption
Madagascar

Sourcing method
Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type
Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)
539

Tracking instrument used
I-REC

Total attribute instruments retained for consumption by your organization (MWh)
539

Country/area of origin (generation) of the renewable electricity/attribute consumed
South Africa

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2,014

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

Brand, label, or certification of the renewable electricity purchase
Other, please specify
De Aar Solar Power

Comment
Issuer CCC
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption
Mexico

Sourcing method
Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type
Solar

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

8,672

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

8,672

Country/area of origin (generation) of the renewable electricity/attribute consumed

Mexico

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

2,018

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Aura Solar III

Comment

Issuer CCC
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

Netherlands

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

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

1,661

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

1,661

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2,021

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Rejestr Gwarancji Pochodzenia

Comment

Rejestr Gwarancji Pochodzenia
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

Russian Federation

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Hydropower (capacity unknown)

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

1,100

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

1,100

Country/area of origin (generation) of the renewable electricity/attribute consumed

Russian Federation

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

1,972

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Krasnoyarskaya HP

Comment

Issuer Goal Number Seven
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

Singapore

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Hydropower (capacity unknown)

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

16,364

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

16,364

Country/area of origin (generation) of the renewable electricity/attribute consumed

China

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

1,995

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Kaqun Ⅰ Hydropower Station

Comment

Issuer CCC
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption
South Africa

Sourcing method
Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type
Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)
714

Tracking instrument used
I-REC

Total attribute instruments retained for consumption by your organization (MWh)
714

Country/area of origin (generation) of the renewable electricity/attribute consumed
South Africa

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2,014

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

Brand, label, or certification of the renewable electricity purchase
Other, please specify
De Aar Solar Power

Comment
Issuer CCC
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption
Spain

Sourcing method
Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type
Sustainable Biomass

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

2,517

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

2,517

Country/area of origin (generation) of the renewable electricity/attribute consumed

Netherlands

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

2,011

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Mann Naturenergie GmbH & Co KG, Germany, Langenbach

Comment

Symrise considers sustainable biomass as a sustainable source for renewable energy, because biomass conserves fossil fuels. Especially in resource-poor countries like Spain, UK, Netherlands, Italy, France, Germany, etc.

Umweltbundesamt Deutschland, HKNR Herkunftsnachweisregister
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

Thailand

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Hydropower (capacity unknown)

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

1,064

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

1,064

Country/area of origin (generation) of the renewable electricity/attribute consumed

China

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

1,995

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

Kaqun Ⅰ Hydropower Station

Comment

Issuer CCC
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

United Kingdom of Great Britain and Northern Ireland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Sustainable Biomass

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

675

Tracking instrument used

REGO

Total attribute instruments retained for consumption by your organization (MWh)

675

Country/area of origin (generation) of the renewable electricity/attribute consumed

United Kingdom of Great Britain and Northern Ireland

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

2,020

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

British Sugar Bury St Edmunds AD Plant

Comment

Symrise considers sustainable biomass as a sustainable source for renewable energy, because biomass conserves fossil fuels. Especially in resource-poor countries like UK, Spain, Netherlands, Italy, France, Germany, etc.

Transfer of Ownership: Renewable Energy Guarantee of Origin (UK REGO)
SmartestEnergy Limited, a limited company exiting under the laws of the UK, registered in England and Wales: No. 03994598, hereby transfers the exclusive ownership of 675 REGO's, representing 675 MWh of renewable electricity, retired on the Renewables and CHP register of OFGEM on 16th June 2022 on behalf of Symrise to balance the electricity consumption of Symrise in 2021 in the UK.
More at www.SmartestEnergy.com
via FirstClimate GmbH, Germany

Country/area of renewable electricity consumption

United States of America

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Hydropower (capacity unknown)

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

159,812

Tracking instrument used

US-REC

Total attribute instruments retained for consumption by your organization (MWh)

159,812

Country/area of origin (generation) of the renewable electricity/attribute consumed

United States of America

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

2,020

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

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify

North American Renewables Registry Certificate of Retirement

Comment

North American Renewables Registry Certificate of Retirement
via FirstClimate GmbH, Germany

C8.2i

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

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

Australia

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Steam

Low-carbon technology type

Other, please specify

None

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

878

Comment

Symrise currently has no low-carbon steam in the reporting year in this country.

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

Brazil

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Steam

Low-carbon technology type

Other, please specify

None

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

97

Comment

Symrise currently has no low-carbon steam in the reporting year in this country.

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

China

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Steam

Low-carbon technology type

Other, please specify

None

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

5.15

Comment

Symrise currently has no low-carbon steam in the reporting year in this country.

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

Colombia

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Steam

Low-carbon technology type

Other, please specify

None

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

2,133

Comment

Symrise currently has no low-carbon steam in the reporting year in this country.

Country/area of consumption of low-carbon heat, steam or cooling
United States of America

Sourcing method
None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier
Steam

Low-carbon technology type
Other, please specify
None

Low-carbon heat, steam, or cooling consumed (MWh)
75,981

Comment
Symrise currently has no low-carbon steam in the reporting year in this country.

C8.2j

(C8.2j) Provide details of your organization's renewable electricity generation by country in the reporting year.

Country/area of generation
Brazil

Renewable electricity technology type
Solar

Facility capacity (MW)
10,000

Total renewable electricity generated by this facility in the reporting year (MWh)
6,247

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)
6,247

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)
0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

6,247

Comment

Country/area of generation

Canada

Renewable electricity technology type

Solar

Facility capacity (MW)

2,000

Total renewable electricity generated by this facility in the reporting year (MWh)

1,150

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

1,150

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

1,150

Comment

Country/area of generation

Chile

Renewable electricity technology type

Solar

Facility capacity (MW)

2,000

Total renewable electricity generated by this facility in the reporting year (MWh)

1,350

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

1,350

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

1,350

Comment

Country/area of generation

Colombia

Renewable electricity technology type

Solar

Facility capacity (MW)

2,000

Total renewable electricity generated by this facility in the reporting year (MWh)

1,350

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

1,350

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

1,350

Comment

Country/area of generation

Ecuador

Renewable electricity technology type

Solar

Facility capacity (MW)

5,000

Total renewable electricity generated by this facility in the reporting year (MWh)

4,192

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

4,192

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

4,192

Comment

Country/area of generation

France

Renewable electricity technology type

Solar

Facility capacity (MW)

2,000

Total renewable electricity generated by this facility in the reporting year (MWh)

1,158

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

1,158

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

1,158

Comment

Country/area of generation

Germany

Renewable electricity technology type

Solar

Facility capacity (MW)

11,000

Total renewable electricity generated by this facility in the reporting year (MWh)

9,725

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

9,725

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

9,725

Comment

Country/area of generation

India

Renewable electricity technology type

Solar

Facility capacity (MW)

250

Total renewable electricity generated by this facility in the reporting year (MWh)

108

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

108

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

108

Comment

Country/area of generation

Madagascar

Renewable electricity technology type

Solar

Facility capacity (MW)

700

Total renewable electricity generated by this facility in the reporting year (MWh)

539

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

539

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

539

Comment

Country/area of generation

Netherlands

Renewable electricity technology type

Solar

Facility capacity (MW)

500

Total renewable electricity generated by this facility in the reporting year (MWh)

214

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

214

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

214

Comment

Country/area of generation

Spain

Renewable electricity technology type

Solar

Facility capacity (MW)

1,600

Total renewable electricity generated by this facility in the reporting year (MWh)

1,394

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

1,394

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

1,394

Comment

Country/area of generation

United Kingdom of Great Britain and Northern Ireland

Renewable electricity technology type

Solar

Facility capacity (MW)

1,000

Total renewable electricity generated by this facility in the reporting year (MWh)

631

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

631

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

631

Comment

Country/area of generation

United States of America

Renewable electricity technology type

Solar

Facility capacity (MW)

10,000

Total renewable electricity generated by this facility in the reporting year (MWh)

7,808

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

7,808

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

7,808

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.

Like other manufacturing companies, Symrise causes direct and indirect greenhouse gas (GHG) emissions that cause the earth's average temperature to rise. This has far-reaching consequences for humans and nature: areas that are being desertified, an increase in floods and resulting famines and refugee movements. For Symrise, climate change is leading to rising energy and raw material prices as well as climate-related costs, for example, through emissions trading. Reputational damage could also result in the loss of business and a drop in our share price. Climate change simultaneously offers opportunities, for example, through the increased use of efficient technologies that also result in cost savings. Given the urgency of the climate dilemma, SDG 13 requires prompt measures for climate protection. Among all of the stakeholders, the significance of the topic is also underlined by the result of our materiality analysis conducted in 2019 – with the high rating of the topic "climate protection and emissions reduction" for Symrise as well as its relevance and impact on external stakeholders.
Corporate Sustainability, supported by the Sustainability Board, is responsible for the topic of emissions reduction. The Sustainability Board meets several times per year to discuss, assess and report on climate-related data and developments. The goals and programs are determined by the Sustainability Board and finally approved by the CEO. The Risk Management department assesses company-specific risks and rewards related to climate change at least once a year and reports the findings to the Executive Board.
Symrise compiles the greenhouse gas emissions of its operating activities according to the internationally recognized Greenhouse Gas (GHG) Protocol Corporate Standard. We report on them according to direct emissions (Scope 1), energy-indirect emissions (Scope 2) and other indirect emissions (Scope 3).
As of 2030, Symrise is committed to being climate-positive at all its global production sites based on the Scope 1+2 emissions of the GHG Protocol. Furthermore, we want to increase the eco-efficiency of GHG emissions by more than 60 % by 2025 compared with 2010 – this would mean that we would achieve our Science Based Target set in 2017 five years ahead of schedule. In the reporting year, we were able to increase the eco-efficiency of GHG emissions (Scope 1+2), based on added value, by 11.3 % (2020: 13 %) and thus achieved our interim target for 2021. Between 2016 and 2020, we were able to reduce Scope 3 emissions by 36 %. By 2025, we want to increase the eco-efficiency of Scope 3 emissions by 15 % compared to 2020. In 2021, Symrise developed a new Science Based Target aimed at a maximum global warming of 1.5°C, which meets the highest level of ambition currently possible. The target was approved by the Science Based Targets Initiative in February 2022. Symrise aims to reduce GHG emissions (Scope 1+2) by 80 % by 2028 compared to 2020. Scope 3 emissions from purchased goods and services are to be reduced by 30 % by 2030 compared to 2020.

We achieve our climate goals through various measures: Since 2020, for example, we have demonstrably sourced our global external electricity requirements from renewable sources. Furthermore, we continue to review power purchase agreements (PPAs) and thus promote the energy transition. We continuously increase energy and process efficiency at all production sites.
Through various energy and process efficiency measures, we saved almost 60,000 metric tons of carbon dioxide equivalents in the reporting year: These include our cogeneration plant at the Holzminden site, which reduces our emissions from energy generation by around 20,000 metric tons of carbon dioxide equivalents annually. Ongoing measures by our local Total Productive Maintenance teams are continuously also replacing energy-intensive consumer equipment such as motors, ventilation or heating systems, compressed air systems and boilers for the production of steam and cooling with more efficient alternatives.

In the context of decarbonisation, we want to replace all our fossil fuels with electricity and hydrogen from renewable sources. Since this year, work has been underway on an ambitious plan to transition country by country.

To drive environmental and climate protection forward together with other stakeholders, Symrise is active in numerous initiatives and continuously joins new associations. Symrise is a for instance member of the RE100 Initiative.

With its emission reduction targets and its commitment to numerous initiatives, Symrise takes a pioneer role in climate protection in the flavor and fragrance industry and acts in accordance with the resolutions of the UN climate conferences and the recommendations of the current IPCC.

C8.2l

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

	Challenges to sourcing renewable electricity
Row 1	Yes, in specific countries/areas in which we operate

C8.2m

(C8.2m) Provide details of the country-specific challenges to sourcing renewable electricity faced by your organization in the reporting year.

Country/area	Reason(s) why it was challenging to source renewable electricity within selected country/area	Provide additional details of the barriers faced within this country/area
Singapore	Limited supply of renewable electricity in the market Prohibitively priced renewable electricity	That was the reason that we purchased from China

Madagascar	Limited supply of renewable electricity in the market	That was the reason that we purchased from South Africa

C-CH8.3

(C-CH8.3) Does your organization consume fuels as feedstocks for chemical production activities?

Yes

C-CH8.3a

(C-CH8.3a) Disclose details on your organization's consumption of fuels as feedstocks for chemical production activities.

Fuels used as feedstocks

Liquid biofuel

Total consumption

13,040

Total consumption unit

metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

1.47

Heating value of feedstock, MWh per consumption unit

9.58

Heating value

HHV

Comment

13.040 tons of liquid biofuel (Glidfuel) is equal to 19.127 tons of CO2. 13.040 tons liquid biofuel replaces primary energy of about 124.862 MWh.

Fuels used as feedstocks

Gasoline

Total consumption

5,581

Total consumption unit

metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

2.6

Heating value of feedstock, MWh per consumption unit

621,977

Heating value

HHV

Comment

5.581 tons of gasoline is equal to 14.511 tons of CO2.

C-CH8.3b

(C-CH8.3b) State the percentage, by mass, of primary resource from which your chemical feedstocks derive.

	Percentage of total chemical feedstock (%)
Oil	33
Natural Gas	66
Coal	0
Biomass	0
Waste (non-biomass)	0
Fossil fuel (where coal, gas, oil cannot be distinguished)	0
Unknown source or unable to disaggregate	0

C9. Additional metrics

C9.1

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

Description

Waste

Metric value

14,004

Metric numerator

ton

Metric denominator (intensity metric only)

% change from previous year
17.7

Direction of change
Decreased

Please explain
Total Productive Maintenance teams have significantly improved process and energy efficiency of our facilities

Description
Energy usage

Metric value
7,205

Metric numerator
TJ

Metric denominator (intensity metric only)

% change from previous year
0.2

Direction of change
Decreased

Please explain
Total Productive Maintenance teams have significantly improved process and energy efficiency of our facilities although production volume increased by 5.8%

C-CH9.3a

(C-CH9.3a) Provide details on your organization's chemical products.

Output product
Specialty chemicals

Production (metric tons)
181,077

Capacity (metric tons)
200,000

Direct emissions intensity (metric tons CO2e per metric ton of product)

0.78

Electricity intensity (MWh per metric ton of product)

61.1

Steam intensity (MWh per metric ton of product)

0.42

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Synthetic Chemical Ingredients

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	

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	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Radical process redesign	Applied research and development	21 - 40%	88	Over the last 3 years in total 646 m€ have been invested in low-carbon Research and Development. Approx. 40% of this sum is related to the chemical production. This means, 258 m€ have been invested in low-carbon R&D for chemical production activities over the last three years

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
Moderate assurance

Attach the statement

CDP-verification-letter 15.07.2022.pdf

Page/ section reference
Verification Report, pages 1-3.

Relevant standard
AA1000AS

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

Moderate assurance

Attach the statement

CDP-verification-letter 15.07.2022.pdf

Page/ section reference

Verification Report, pages 1-3.

Relevant standard

AA1000AS

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

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

CDP-verification-letter 15.07.2022.pdf

Page/section reference

Verification Report, pages 1-3.

Relevant standard

AA1000AS

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 module verification relates to	Data verified	Verification standard	Please explain
C5. Emissions performance	Year on year change in emissions (Scope 1 and 2)	AA1000AS	Here is the full list: a) Year on year change in emissions (Scope 3) b) Year on year change in emissions (Scope 1 and 2) c) Progress against emission reduction target d)Year on year emissions intensity figure Emissions reduction activities e) For further Details see GRI indicator 305-3 and Symrise Sustainablity Record 2021. Company Goals are defined by our CEO. See page 33 in our Corporate Report 2021 which is attached. 1, 2

[1]220301_Symrise_Corporate_Report_2021.pdf

[2]SYM_gri_2021_EN.pdf

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

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

7.6

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2021

Period end date

December 31, 2021

Allowances allocated

5,500

Allowances purchased

17,000

Verified Scope 1 emissions in metric tons CO2e

21,693

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

As a precautionary measure, we in July 2021 purchased additional 17000 allowances because usually we consume 25000 allowances per year. The account with the allocated allowances cannot be exceeded, otherwise there is a risk of high fees and penalties.

C11.1d

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

DESCRIPTION OF THE STRATEGY: Our strategy is to have sufficient allowances ready to cover our verified emissions on our Union registry in time. In case we do not have enough allowances we would buy the difference on the market
CASE STUDY
Situation: Symrise has one power plant which is under the regime of the EU ETS
Task: Meeting compliance with regards to our emissions under the EU ETS,

Action: In order to make up for the difference between verified emissions and allocated ones in 2021 we either used surplus allowances from previous years or - if required - buy further allowances on the market. To comply with all the requirements of the EU ETS we report and verify our emissions every year well before the deadline of 31st March and surrender the allowances till the 30th of April.
Result: For our power plant under the EU ETS, Symrise makes sure that we are compliant with regards to the volume of emission permits as well as the deadline.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, but we anticipate doing so in the next two years

C12. Engagement

C12.1

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

Yes, our suppliers
Yes, our customers/clients

C12.1a

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

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

% of suppliers by number

5

% total procurement spend (direct and indirect)

50

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

80

Rationale for the coverage of your engagement

Scope 3 emissions of the category “purchased goods and services” contribute to approximately 90% to our overall carbon footprint. 51% of these our scope 3 emission comes from meat side streams, mainly chicken. 30% comes from chemicals, 8% from essential oils and 11% from natural materials.
In total, key suppliers are responsible for 60% of our annual purchasing volume. The rationale to focus our engagement on these suppliers is, that their emission reductions have a considerable quantitative impact. Furthermore, focussing on them reveals a good cost-benefit relationship.
For this reason, Symrise has engaged with the key suppliers to encourage them to set emission reduction targets. To this aim we have organized several seminars for our suppliers in cooperation with the CDP. As of 2030, Symrise is committed to being climate-positive at all its global production sites based on the Scope 1+2 emissions of the GHG Protocol. Furthermore, we want to increase the eco-efficiency of GHG emissions by more than 60 % by 2025 compared with 2010 – this would mean that we would achieve our Science Based Target set in 2017 five years ahead of schedule. In the reporting year, we were able to increase the eco-efficiency of GHG emissions (Scope 1+2), based on added value, by 11.3 % (2020: 13 %) and thus achieved our interim target for 2021. Between 2016 and 2020, we were able to reduce Scope 3 emissions by 36 %. By 2025, we want to increase the eco-efficiency of Scope 3 emissions by 15 % compared to 2020. In 2021, Symrise developed a new Science Based Target aimed at a maximum global warming of 1.5°C, which meets the highest level of ambition currently possible. The target was approved by the Science Based Targets Initiative in February 2022. Symrise aims to reduce GHG emissions (Scope 1+2) by 80 % by 2028 compared to 2020. Scope 3 emissions from purchased goods and services are to be reduced by 30 % by 2030 compared to 2020.
As an alternative suppliers can also report their targets via EcoVadis. Currently we run an encouragement-campaign. If required, we are willing to increase the pressure on our key suppliers and would also consider abandoning business relationships in case of insufficient climate performance. For the purpose of this target, key suppliers are those suppliers providing Symrise with carbon intensive raw materials.

Impact of engagement, including measures of success

MEASURE OF SUCCESS: - Primarily, we measure the success of our engagement by comparing the numbers of key suppliers setting GHG reduction targets with the previous year.
In ORDER TO CONSIDER OUR ENGAGEMENT SUCCESSFUL, AT LEAST 80% of our key suppliers must implement GHG reduction targets.
Any increase in these numbers is considered as success. In addition to this the CDP supply chain program provides us the total emission reduction volume of our participating key suppliers. To some extent we can attribute these savings to our engagement.

IMPACT OF ENGAGEMENT: The fact that we track the emission reduction targets of our key suppliers encourages them to set such targets. This in turn leads to considerable emission reductions. Their participation in the CDP supply chain program further enhances their awareness for climate change issues. As we defined significantly more suppliers as strategic in the reporting year, almost twice as many suppliers (now

80%) were invited to participate in the CDP supply chain program compared with the previous year. Given the increase in the number of suppliers considered, the response rate in the climate sector fell from 87 % in the previous year to 58 %. Of the suppliers who participated in the CDP Supply Chain Program, 69 % have set active emissions reduction targets and 88 % have included climate-related issues in their long-term goals. 85 % of participating suppliers reported on their operational GHG emissions. In addition, many suppliers are in turn engaging their own suppliers on climate-related issues: Around 61 % of participating suppliers motivated their own suppliers to set targets. However, there is clear potential for improvement in the use of green electricity: Only around 18 % of the electricity consumed by participating suppliers came from renewable sources and only around 20 % of participants reported renewable energy targets.
For this reason we considered THE IMPACT OF OUR ENGAGEMENT in 2021 to be successful.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Collaboration & innovation
Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

95

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

3.3

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

RATIONALE: OUR ENGAGEMENT FOCUS is on customers with relevant transport emissions: With regard to our downstream Scope 3 emissions “downstream transportation” is the only relevant category
Therefore, THE SCOPE OF OUR ENGAGEMENT lies on the reduction of transport emissions.

Background explanation: For fragrances, flavours, cosmetic ingredients and petfood there are no significant emissions related to the processing and to the use phase. Our products are usually blended with other components and represent only a very low dosage in final products of our clients. Emissions of a typical blending process are usually low compared to the whole process of producing of our products.

In order to leverage the largest possible emission reduction potentials our engagement

reaches out to as many of our clients as possible. (2021: 95%) To this aim, we have established an integrated supply chain management initiative together with our customers. It comprises the entire value creation chain from raw materials procurement to end products for all our customers and was developed for the efficient harmonization of ordering processes between Symrise and its customers. This so-called Symchronize™ system is a trademarked electronic data processing (EDP) system based on SAP software. It addresses order frequencies, optimized batch sizes, full pallets, and trucks as key criteria to reduce transport and distribution efforts and expenditures. We offer the usage of the Symchronize™ system to all our customers and suppliers. Thus, we aim to reduce- and upstream transport emissions as much as possible.

Impact of engagement, including measures of success

We MEASURE THE SUCCESS based on a KPI that compares our Scope 3 downstream transportation emissions with our sales volumes (tons CO2 from transportation against tons of sales in €).
In 2020 the figure was 16 tCO2/m€. In 2021 our objective was to achieve a further reduction of this KPI by at least 3% (to 15.5 tCO2/m€).

We consider such a decrease IN THIS NUMBER a success.
IMPACT OF OUR ENGAGEMENT:
Looking at 2020 KPI data, our sales specific emissions value for downstream transportation has considerably decreased in 2020 (down from 40 in 2019 to 16 tCO2/m€). In absolute terms our respective 2020 emissions stood at 56.835 t CO2. Our sales - after another year of strong organic growth - have reached 3,521 m €.

In absolute terms our respective 2021 emissions stand at 58,685 t CO2. Our sales - after another year of strong organic growth - have reached 3,825 m €. Thus, the KPI figure in 2021 was15.3 tCO2/m€ with reductions in the order of more than 4%.

We have established an integrated supply chain management initiative together with our customers. It addresses order frequencies, optimized batch sizes, full pallets and trucks as key criteria to reduce transport and distribution efforts and expenditures. By use of Symchronize™ we optimize order frequencies and batch sizes to our specific customer needs. This allows us to achieve full pallets and thereby reduce unnecessary transports. For example, four years ago a key account in the fragrance business ordered one bottle to be delivered on just one pallet, thereby avoiding the mixing up of product batches. After a substantial evaluation and optimization of product tracking based on Symchronize™ this is no longer necessary. Today pallets are fully loaded and transported into the warehouses also of this key account. Furthermore, with the help of Symchronize we manage the number of air transports and consequently try to significantly decrease carbon emissions. Looking at the results of this engagement, we can conclude having successfully addressed our downstream transportation related scope 3 emissions

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

Setting a science-based emissions reduction target

Description of this climate related requirement

Symrise's ambition to integrate sustainable corporate development into integral parts of their corporate strategy drove them to become the first organisation within the flavours and fragrances sector to set and have approved their own SBT back in 2017. In 2022, the SBTi approved the 1.5°C target and the Scope 3 target, which is currently the highest ambition level. The CDP SBTs in China project supported Symrise to take sustainability more deeply into their value chain. To this purpose, Symrise nominated five of their Chinese suppliers to join the 'Cascading commitments down the supply chain in China' project. The success from having four of five suppliers commit to setting a SBT was determined (among else) by Symrise's rigorous supplier contract that stresses that their suppliers must work towards aligning with Symrise's ambitious SBT target, RE100 aspirations and a push to ensure SBT alignment standards are integrated into their internal framework. Suppliers are subject to internal evaluation where internal systems are assessed against climate change, SBTs and RE100 targets. Their supplier selection process considers the effectiveness of adjusting the company boundary to include the group level rather than just a single subsidiary.
Yingyang (China) Aroma Chemical Group commits to reduce absolute scope 1 and 2 GHG emissions 25% by 2030 from a 2020 base year and also commits to reduce scope 3 GHG emissions 29% per CNY revenue within the same timeframe.

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

1

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

1

Mechanisms for monitoring compliance with this climate-related requirement

Certification
Other, please specify

CDP Supply Chain Program ‘Cascading commitments down the supply chain in China’

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

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage indirectly through trade associations

Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly 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)

See Approval Certificate SBTi, and
Sustainability Record 2021, GRI 102-12, page 12: "The French Business Climate Pledge"

SYMR-GER-002-OFF Certificate.pdf

SYM_gri_2021_EN.pdf

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

Already in 2020, the Symrise CEO signed the "IFRA-IOFI Sustainability Charter".
A new imperative
It is increasingly clear that a commitment to sustainable business practices also makes good long- term economic sense.
Whether it is by reducing use of finite resources, careful management of renewable resources, responsible employment practices, promoting leading-edge safety standards, or nurturing of relationships with stakeholders, customers and consumers, all aspects of a business value chain can benefit from a sustainable approach.
It is in this context, and with a strong reference to the United Nations Sustainable Development Goals (SDGs), that the flavor and fragrance industries launch this sustainability initiative.
A framework for progress
Through this voluntary initiative, the flavor and fragrance industries seek to encourage

enhancements in the field of sustainability by offering advice, sharing best practice, and measuring improvement by:
- Raising awareness of sustainability within the sector
- Providing businesses with a toolbox to help them continuously improve their performance
- Reporting on progress at an industry level
- Continuing to build trust between the flavor and fragrance industries and stakeholders
- Identifying opportunities for collaboration to address shared challenges
IOFI and IFRA, as the global organizations representing the flavor and fragrance industries, provide the platform for companies to identify, assess and report on advances in the field of sustainability, setting a framework for progress that encompasses the life-cycle – from sustainable sourcing, to environmental footprint, to well-being of employees, to product safety.

The flavour and fragrance industries aspire to:
- Reduce our industries' environmental footprint and address climate change
- We continuously seek to reduce the environmental footprint of our product portfolio (natural and synthetic)
- We apply measures to efficiently manage resources such as water and energy, reduce GHG emissions, and support the integration of circular economy principles
- We are inspired by green chemistry principles

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify

International Organization of the Flavour Industry (IOFI)

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

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Already in 2020, the Symrise CEO signed the "IFRA-IOFI Sustainability Charter". Consequently, Symrise is strongly supporting the position of the association.

It is increasingly clear that a commitment to sustainable business practices also makes

good long- term economic sense.
Whether it is by reducing use of finite resources, careful management of renewable resources, responsible employment practices, promoting leading-edge safety standards, or nurturing of relationships with stakeholders, customers and consumers, all aspects of a business value chain can benefit from a sustainable approach.
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- Reduce our industries' environmental footprint and address climate change
- We continuously seek to reduce the environmental footprint of our product portfolio (natural and synthetic)
- We apply measures to efficiently manage resources such as water and energy, reduce GHG emissions, and support the integration of circular economy principles
- We are inspired by green chemistry principles

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

100,000

Describe the aim of your organization's funding

As a long-standing member of this association, we have a stronger impact on our suppliers than as a single company. In this respect, we can better enforce our demands to reduce GHG emissions and achieve our Symrise target.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization

Other, please specify

World Business Council For Sustainable Development (WBCSD)

State the organization to which you provided funding

WBCSD is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world. WBCSD's Climate & Energy Program facilitates interaction on cutting-edge climate and energy topics between WBCSD members, their peers and stakeholders as they address critical industry issues and share best practices and solutions.

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

90,000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

WBCSD's Climate & Energy Program facilitates interaction on cutting-edge climate and energy topics between WBCSD members, their peers and stakeholders as they address critical industry issues and share best practices and solutions.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

220301_Symrise_Corporate_Report_2021.pdf

SYM_gri_2021_EN.pdf

Page/Section reference

see Corporate Report 2021 page 33 and see Sustainability Record 2021, GRI 302 and 305

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	For Symrise, global biodiversity is not only a source of raw materials, but also an invaluable source of inspiration and innovation for the development of unique flavors, fragrances and cosmetic or functional ingredients. Among all the stakeholders, the significance of the topic “biodiversity protection” is also underlined in our materiality analysis. However, the global and local impact of human activities has led to a sustained worldwide reduction in biological diversity. The potential effects of this are systematically analyzed and evaluated as part of our sustainability management. The material impact of our business activities on biodiversity is usually indirect and occurs in the supply chain – particularly during raw materials production. This potentially includes overexploitation of wildlife populations or unsustainable extraction practices in agriculture, forestry, fisheries and aquaculture. Impacts from our own production sites, for example, occur through sealing the soil or emitting pollutants into the air or

		soil, which we monitor as part of our operational environmental and site management. Depending on the specific topic, biodiversity is managed and addressed at Symrise partly at the corporate level and partly at the division level in conjunction with Corporate Sustainability. The Chief Executive Officer is directly briefed on biodiversity several times per year. As core goals of the UN Convention on Biodiversity, the preservation and sustainable use of biodiversity and fair distribution of advantages from the use of genetic resources are essential components of our sustainability agenda and our environmental and sustainability management. Our forest cultivation strategy and our land use policy provides us with a framework of action. By signing the “Business and Biodiversity Pledge” of the UN Convention on Biodiversity, we have committed ourselves to acting sustainably in accordance with the core goals of the Convention. In the implementation of our biodiversity goals, we work closely with skilled external stakeholders, such as the Biodiversity in Good Company Initiative or the Union for Ethical Biotrade. Furthermore, we are involved with other member companies of the World Business Council for Sustainable Development (WBCSD) in multi-stakeholder forums, such as the One Planet Business for Biodiversity Initiative. Symrise is also a member of the Initiative Nature Action of WBCSD: The project supports the development of the SBT for Nature.

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species Commitment to no conversion of High Conservation Value areas	CBD – Global Biodiversity Framework SDG CITES

		Commitment to secure Free, Prior and Informed Consent (FPIC) of Indigenous Peoples Commitment to no trade of CITES listed species	

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?
Row 1	Yes, we assess impacts on biodiversity in both our upstream and downstream value chain

C15.4

(C15.4) 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	Land/water protection Land/water management Species management Education & awareness Law & policy Livelihood, economic & other incentives

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	

C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Influence on public policy and lobbying Risks and opportunities Biodiversity strategy	see GRI 304 Biodiversity 1

1SYM_gri_2021_EN.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.

N.A.

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	CEO Symrise AG	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.

Climate protection: Who, if not us? When, if not now?
Please see our Corporate Report 2021 or Sustainability Record 2021
https://www.symrise.com/sustainability/reports-policies-standards-audits/#our-corporate-reports

SC0.1

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

	Annual Revenue
Row 1	3,825,700,000

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

Ajinomoto Co.Inc.

Scope of emissions

Scope 3

Allocation level

Allocation level detail

Emissions in metric tonnes of CO2e

983

Uncertainty (±%)

10

Major sources of emissions

High complex Aroma molecules

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

503

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 85% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member
Altria Group, Inc.

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail

Emissions in metric tonnes of CO2e
207

Uncertainty (±%)
10

Major sources of emissions
High complex Aroma molecules like Menthol

Verified
Yes

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
106

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We have evaluated approx. 85% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member
Bayer AG

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

177

Uncertainty (±%)

10

Major sources of emissions

High complex aroma molecules

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

91

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 85% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

Beiersdorf AG

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

3,597

Uncertainty (±%)

10

Major sources of emissions

High complex aroma molecules

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

1,842

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 85% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

British American Tobacco

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

414

Uncertainty (±%)

10

Major sources of emissions

High complex aroma molecules like Menthol

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

212

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 85% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

Clorox Company

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

1,206

Uncertainty (±%)

10

Major sources of emissions

Steam distilled extracts, like Eucalyptol and Peppermint. High complex aroma molecules like Menthols. Ingredients

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

617

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member
Colgate Palmolive Company

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail

Emissions in metric tonnes of CO2e
101,593

Uncertainty (±%)
10

Major sources of emissions
Steam distilled extracts, like Eucalyptol and Peppermint. High complex aroma molecules like Menthol

Verified
Yes

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
52,006

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We have evaluated approx. 85% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member
Diageo Plc

Scope of emissions
Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

1,949

Uncertainty (±%)

10

Major sources of emissions

Steam distilled extracts and solvents like propylene glycol and ethanol

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

998

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

Estee Lauder Companies Inc.

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

459

Uncertainty (±%)

10

Major sources of emissions

Steam distilled extracts, like Eucalyptol and Peppermint. High complex aroma molecules like Menthol. Ingredients

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

235

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

FIRMENICH SA

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

3,340

Uncertainty (±%)

10

Major sources of emissions

Ingredients

Verified

Yes

Allocation method

Allocation based on the volume of products purchased

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

1,710

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data on CO2 factors of raw material included in final product, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

Givaudan SA

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

7,812

Uncertainty (±%)

10

Major sources of emissions

Ingredients

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

3,999

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data on CO2 factors of raw material included in final product, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

Grupo Boticário

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

991

Uncertainty (±%)

10

Major sources of emissions

High complex aroma molecules like Menthol

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

508

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data on CO2 factors of raw materials included in final product, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail

Emissions in metric tonnes of CO2e
9,176

Uncertainty (±%)
10

Major sources of emissions
Ingredients

Verified
Yes

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
4,697

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data on CO2 factors of raw materials included in final product, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member
Johnson & Johnson

Scope of emissions
Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

4,841

Uncertainty (±%)

10

Major sources of emissions

Sun screens, Steam distilled extracts, like Peppermint

Verified

Yes

Allocation method

Allocation based on the volume of products purchased

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

2,478

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data on CO2 factors of raw materials included in final product, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

KAO Corporation

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

996

Uncertainty (±%)

10

Major sources of emissions

Ingredients

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

510

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

Kobayashi Pharmaceutical Co., Ltd.

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

154

Uncertainty (±%)

10

Major sources of emissions

Ingredients

Verified

Yes

Allocation method

Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
79

Unit for market value or quantity of goods/services supplied
Metric tons

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member
L'Oréal

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail

Emissions in metric tonnes of CO2e
3,060

Uncertainty (±%)
10

Major sources of emissions
Sun screens, Hydrolites, Menthol

Verified
Yes

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member
1,567

Unit for market value or quantity of goods/services supplied
Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

PepsiCo, Inc.

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

63,052

Uncertainty (±%)

10

Major sources of emissions

Whey products, glutamate, sugar and ingredients

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

32,277

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 80% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

Philip Morris International

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

3

Uncertainty (±%)

10

Major sources of emissions

High complex aroma molecules like Menthol

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

1

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

Puig, S.L.

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

234

Uncertainty (±%)

10

Major sources of emissions

High complex aroma molecules

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

120

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

T. Hasegawa Co., Ltd.

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

100

Uncertainty (±%)

10

Major sources of emissions

High complex aroma molecules

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

51

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

Requesting member

Unilever plc

Scope of emissions

Scope 3

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

41,280

Uncertainty (±%)

10

Major sources of emissions

Steam distilled extracts, like Eucalyptol and Peppermint. High complex aroma molecules like Menthols, Sun Screens

Verified

Yes

Allocation method

Allocation based on mass of products purchased

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

21,132

Unit for market value or quantity of goods/services supplied

Metric tons

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

We have evaluated approx. 90% of Sales; data GAPs have been extrapolated to 100%. We used literature data, evaluated common synthesis of main raw materials and own manufacturing data. Currently, there is only less primary data from suppliers available.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

We have used some public available data sources, e.g. the Probas database. We also used scientific studies, data we got from our suppliers and additionally own data of our manufacturing lines. We estimated also the carbon footprint of some products where data for similar processes are available. Some of the data, especially the data from public sources is may not representing the actual manufacturing process of our suppliers. There are also still some data gaps but for most of our natural ingredient we have good insights in carbon footprint related to the manufacturing of such ingredients. However, very often we use our own data for our big volume products. The CO2 emissions caused by high complex chemicals are sometimes not known to us. Our suppliers are very often also not able to provide reliable data, because they have also sometimes a very complex supply chains. However, we reviewed our high volume chemicals and calculated the carbon footprint considering public available data of basic chemicals and possible/comment synthetic roots. Additionally we added an average factor for each cleaning step of the entire supply chain. There is also very often a lack of information related to CO2 caused by transport done by our supplier. Our average transport emission is approx. 0.1 kg CO2/kg product). This includes transport from supplier to us, inter-company transport and transport from our sites to customer. The data is based on transport from/to our major sites/ key customer and main markets. We do not own trucks and use only external logistic companies, therefore we used a public available tool to calculate the approx. carbon footprint. We know the average carbon footprint of each production line and/or manufacturing technology, the data were generated at our HQ's in Germany.

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
Managing the different emission factors of diverse and numerous geographies makes calculating total footprint difficult	Most of the products are tailor made with high complexity (Flavor, Nutrition, Fragrances, Cosmetic Ingredients, etc.). Thousands of raw materials are used from several countries and thousands of suppliers. Allocating of energy consumption to an individual manufacturing process is also not always possible, due to complexity of the process.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

We have a global reporting tool to monitor all sales to all customers globally. We use this tool to get a list of sold products to each requesting customer. With another tool we can break down the product list to identify used raw materials and the manufacturing method we used to manufacture the product. After we calculate the CO2 footprint based on the big volume raw materials and products using data of primary and secondary data as described in point SC 1.2. In 2009 we have conducted a study in cooperation with our main competitors to get more CO2 information of manufacturing of our main supplier. Thirty-eight key ingredients were chosen, 28 synthetic and 10 natural materials, all of which were identified as high tonnage materials as part of the REACH pre-registration process. Unfortunately, when the businesses approached their raw material suppliers it became readily apparent that few of them were able to provide any data at all on their carbon emissions associated with the materials they supply. A questionnaire and covering letter were sent out and followed up personally on numerous occasions. Of the thirty eight suppliers approached only six were able to furnish the companies with any carbon information and in many cases the information was not material specific or so general as to be of little or no use. This was one of the key findings of the project and for some of the companies was very surprising. Furthermore, we have also participated in another study, conducted by the RIFM to calculate the carbon footprint of a "generic fragrances".

To better understand where greenhouse gas emissions occur in the upstream chain and in the production of individual products, Symrise calculated product carbon footprints for onion powder and chicken powder in the reporting year. The analysis was performed in accordance with ISO standard 14067:2018 and the standards of the GHG Protocol. All activities from the production of raw materials to the finished product were considered. The analysis shows: To produce one kilogram of onion powder, around 1.70 kg of carbon dioxide equivalents are emitted – for chicken powder, the figure is around 7.75 kg of carbon dioxide equivalents. In both cases, the production of the raw materials and refrigeration caused the majority of the emissions.

As a result of this, we are currently in the process to get more carbon data of our supply chain. Related to manufacturing flow diagrams which we received from suppliers, or where public data are available, we calculate a carbon footprint and add additional average data of our own manufacturing process to generate data which are as close as possible to the reality. As a basis for such evaluations we apply the CDP Supply Chain program.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

Requesting member

Ajinomoto Co.Inc.

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

It is our ultimate goal, to reduce our energy consumption in a systematic way. Case Study: For example, an ISO 50001 Management System was implemented at all German sites in order to reduce energy consumption. (All other manufacturing sites in the EU have executed successful Energy Efficiency Audits in 2016). Global emissions reduction targets are subdivided through the entire organization and managed locally on each manufacturing site. We review our program and objectives regularly in dedicated environmental committees. Responsibilities are defined; budget is allocated to defined measures. Best practices are shared by an electronic system, regular meeting and internal and external audits throughout the entire organization. Our operational excellence teams are trained and well experienced and harmonize our processes globally in order to improve e.g. energy and process efficiency. Annually we conduct Management Reviews with environmental experts and local management teams, which are then aggregated to regional and global level and signed off finally by our CEO. Consequently the CEO knows about risks and opportunities and consequently can approve CapEx for projects which add value to our customers but also to Symrise. One example is the significant investment of 30 m€ in 2017 for our power-heat co-generation plant in Germany, which reduces our carbon emission by more than 20000 tons/year.

Requesting member

Altria Group, Inc.

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

It is our ultimate goal, to reduce our energy consumption in a systematic way. Case Study: For example, an ISO 50001 Management System was implemented at all German sites in order to reduce energy consumption. (All other manufacturing sites in the EU have executed successful Energy Efficiency Audits in 2016). Global emissions reduction targets are subdivided through the entire organization and managed locally on each manufacturing site. We review our program and objectives regularly in dedicated environmental committees. Responsibilities are defined; budget is allocated to defined measures. Best practices are shared by an electronic system, regular meeting and internal and external audits throughout the entire organization. Our operational excellence teams are trained and well experienced and harmonize our processes globally in order to improve e.g. energy and process efficiency. Annually we conduct Management Reviews with environmental experts and local management teams, which are then aggregated to regional and global level and signed off finally by our CEO. Consequently the CEO knows about risks and opportunities and consequently can approve CapEx for projects which add value to our customers but also to Symrise. One example is the significant investment of 30 m€ in 2017 for our power-heat co-generation plant in Germany, which reduces our carbon emission by more than 20000 tons/year.

Requesting member

Bayer AG

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

It is our ultimate goal, to reduce our energy consumption in a systematic way. Case Study: For example, an ISO 50001 Management System was implemented at all German sites in order to reduce energy consumption. (All other manufacturing sites in the EU have executed successful Energy Efficiency Audits in 2016). Global emissions reduction targets are subdivided through the entire organization and managed locally on each manufacturing site. We review our program and objectives regularly in dedicated environmental committees. Responsibilities are defined; budget is allocated to defined measures. Best practices are shared by an electronic system, regular meeting and internal and external audits throughout the entire organization. Our operational excellence teams are trained and well experienced and harmonize our processes globally in order to improve e.g. energy and process efficiency. Annually we conduct Management Reviews with environmental experts and local management teams, which are then aggregated to regional and global level and signed off finally by our CEO. Consequently the CEO knows about risks and opportunities and consequently can approve CapEx for projects which add value to our customers but also to Symrise. One example is the significant investment of 30 m€ in 2017 for our power-heat co-generation plant in Germany, which reduces our carbon emission by more than 20000 tons/year.

Requesting member

Beiersdorf AG

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

It is our ultimate goal, to reduce our energy consumption in a systematic way. Case Study: For example, an ISO 50001 Management System was implemented at all German sites in order to reduce energy consumption. (All other manufacturing sites in the EU have executed successful Energy Efficiency Audits in 2016). Global emissions reduction targets are subdivided through the entire organization and managed locally on each manufacturing site. We review our program and objectives regularly in dedicated environmental committees. Responsibilities are defined; budget is allocated to defined measures. Best practices are shared by an electronic system, regular meeting and internal and external audits throughout the entire organization. Our operational excellence teams are trained and well experienced and harmonize our processes globally in order to improve e.g. energy and process efficiency. Annually we conduct Management Reviews with environmental experts and local management teams, which are then aggregated to regional and global level and signed off finally by our CEO. Consequently the CEO knows about risks and opportunities and consequently can approve CapEx for projects which add value to our customers but also to Symrise. One example is the significant investment of 30 m€ in 2017 for our power-heat co-generation plant in Germany, which reduces our carbon emission by more than 20000 tons/year.

Requesting member

British American Tobacco

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

1-3 years

Details of proposal

It is our ultimate goal, to reduce our energy consumption in a systematic way. Case Study: For example, an ISO 50001 Management System was implemented at all German sites in order to reduce energy consumption. (All other manufacturing sites in the EU have executed successful Energy Efficiency Audits in 2016). Global emissions reduction targets are subdivided through the entire organization and managed locally on each manufacturing site. We review our program and objectives regularly in dedicated environmental committees. Responsibilities are defined; budget is allocated to defined measures. Best practices are shared by an electronic system, regular meeting and internal and external audits throughout the entire organization. Our operational excellence teams are trained and well experienced and harmonize our processes globally in order to improve e.g. energy and process efficiency. Annually we conduct Management Reviews with environmental experts and local management teams, which are then aggregated to regional and global level and signed off finally by our CEO. Consequently the CEO knows about risks and opportunities and consequently can approve CapEx for projects which add value to our customers but also to Symrise. One example is the significant investment of 30 m€ in 2017 for our power-heat co-generation plant in Germany, which reduces our carbon emission by more than 20000 tons/year.

Requesting member

Clorox Company

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

It is our ultimate goal, to reduce our energy consumption in a systematic way. Case Study: For example, an ISO 50001 Management System was implemented at all German sites in order to reduce energy consumption. (All other manufacturing sites in the EU have executed successful Energy Efficiency Audits in 2016). Global emissions reduction targets are subdivided through the entire organization and managed locally on each manufacturing site. We review our program and objectives regularly in dedicated

environmental committees. Responsibilities are defined; budget is allocated to defined measures. Best practices are shared by an electronic system, regular meeting and internal and external audits throughout the entire organization. Our operational excellence teams are trained and well experienced and harmonize our processes globally in order to improve e.g. energy and process efficiency. Annually we conduct Management Reviews with environmental experts and local management teams, which are then aggregated to regional and global level and signed off finally by our CEO. Consequently the CEO knows about risks and opportunities and consequently can approve CapEx for projects which add value to our customers but also to Symrise. One example is the significant investment of 30 m€ in 2017 for our power-heat co-generation plant in Germany, which reduces our carbon emission by more than 20000 tons/year.

Requesting member

Colgate Palmolive Company

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

It is our ultimate goal, to reduce our energy consumption in a systematic way. Case Study: For example, an ISO 50001 Management System was implemented at all German sites in order to reduce energy consumption. (All other manufacturing sites in the EU have executed successful Energy Efficiency Audits in 2016). Global emissions reduction targets are subdivided through the entire organization and managed locally on each manufacturing site. We review our program and objectives regularly in dedicated environmental committees. Responsibilities are defined; budget is allocated to defined measures. Best practices are shared by an electronic system, regular meeting and internal and external audits throughout the entire organization. Our operational excellence teams are trained and well experienced and harmonize our processes globally in order to improve e.g. energy and process efficiency. Annually we conduct Management Reviews with environmental experts and local management teams, which

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Requesting member

Diageo Plc

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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Requesting member

Estee Lauder Companies Inc.

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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Requesting member

FIRMENICH SA

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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Requesting member

Givaudan SA

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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Requesting member

Grupo Boticário

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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Requesting member

International Flavors & Fragrances Inc.

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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Requesting member

Johnson & Johnson

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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Requesting member

KAO Corporation

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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Requesting member

Kobayashi Pharmaceutical Co., Ltd.

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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example is the significant investment of 30 m€ in 2017 for our power-heat co-generation plant in Germany, which reduces our carbon emission by more than 20000 tons/year.

Requesting member

L'Oréal

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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Requesting member

PepsiCo, Inc.

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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Requesting member

Philip Morris International

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

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Requesting member

Puig, S.L.

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

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Requesting member

T. Hasegawa Co., Ltd.

Group type of project

New product or service

Type of project

New product or service that has a lower upstream emissions footprint

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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Requesting member

Unilever plc

Group type of project

New product or service

Type of project

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

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

0-1 year

Details of proposal

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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

The European Climate Pact Submission

Please indicate your consent for CDP to showcase your disclosed environmental actions on the European Climate Pact website as pledges to the Pact.

No, we do not wish to pledge under the European Climate Pact at this stage

Please confirm below

I have read and accept the applicable Terms