

C0. Introduction

C0.1

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

Givaudan is shaping the future of food, fragrances and beauty, by becoming the innovation and co-creation partner of choice to our customers.

We maintain our leadership position by challenging ourselves daily, inspiring our partnerships across the globe and serving our customers with heart and soul. With our two business activities, Taste & Wellbeing and Fragrance & Beauty, we provide customers with a broad range of solutions that match consumer demands for clean label, organic and natural ingredients in addition to being their creative partner of choice. Our value proposition reflects the Company’s purpose of creating for happier, healthier lives, with love for nature.

**Touching people’s lives ten times per day**

Together with our customers in the food, beverage, consumer goods and fragrance industries, we create products that delight consumers the world over. From your favourite drink to your daily meal, from prestige perfumes to laundry care, Givaudan is there, inviting you to engage your senses, every day, enjoying moments of delight.

**Committed to innovation and sustainable growth**

With our heritage stretching back over 250 years, we have a long history of creating and innovating scents and tastes. Our creations inspire every day emotions and delight millions of consumers the world over.

We are at the forefront of innovation, with 10% of annual turnover invested in research, exploring and uncovering new and exciting ingredients and technologies to add to our vast palettes and portfolios.

Co-creation and collaboration with customers and partners enable us to innovate and develop game-changing products and solutions. We have a global co-innovation network of accelerators and incubators enabling us to leverage the entrepreneurial and innovative ideas that start-ups have to offer. In addition, we partner with many of the prominent players in the industry to expand and augment innovative thinking, and accelerate the pace and quality of ideation with key suppliers.

We are committed to driving purpose-led, long-term growth with the intention of increasing our positive impact on the world by innovating sustainable solutions while showing our love for nature and leading the way to improve happiness and health for people.

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	October 1 2020	September 30 2021	No	<Not Applicable>

C0.3

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

- Argentina
- Australia
- Belgium
- Brazil
- Chile
- China
- Egypt
- France
- Germany
- Hungary
- India
- Indonesia
- Italy
- Japan
- Malaysia
- Mexico
- Morocco
- Netherlands
- Singapore
- South Africa
- Spain
- Sweden
- Switzerland
- United Kingdom of Great Britain and Northern Ireland
- United States of America

C0.4

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

CHF

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

Specialty organic chemicals

Other, please specify (Fragrance and Flavors compounds)

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	CH0010645932

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
Board-level committee	<p>The entire Board of Directors (= board-level committee) has responsibility for climate-related issues.</p> <p>The Board of Directors is the highest strategic management body of Givaudan. It sets Givaudan's strategy and the investment policy, ensures adequate operational and financial performance, manages succession planning and compensation and oversees Givaudan's internal audit, compliance and risk management and general governance matters. By steering Givaudan's purpose and strategy, the Board of Directors is involved in setting the direction for sustainability matters, including climate related issues, and covering the targets. In the new five-year strategy (2021-2025) the Board of directors decided to include non-financial objectives ("Purpose targets"). These include targets for the pillar "Nature", including absolute GHG emissions reduction for scope 1, 2 and 3.</p> <p>The Board of Directors is also responsible for overseeing Givaudan's Enterprise Risk Management (ERM). Linked to the new five-year strategy, a zero based risk assessment was carried out and approved by the board. The resulting ERM risk universe includes environmental risks and climate change risks (including also physical risks, e.g. climate-related supply chain or operations implications). The risks are discussed at the Board annually as part of the ERM discussion as well as when the situation requires.</p> <p>Example of a climate-related decision made by the Board of Directors within the last two years: Also in connection with the five-year strategy, for the first time, the Board linked long-term executive remuneration to non-financial targets, including GHG emission reduction, as disclosed in the 2021 Compensation Report. From 2021 onwards, environmental targets including net GHG emissions reduction (scope 1, 2 and 3) will account for 10% of the long term remuneration.</p>

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding risk management policies 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	<Not Applicable>	The board receives two updates annually on: - the Sustainability strategy, which includes climate action (agenda items: Programme, Performance and Report)  The board receives annual reports on: - the Enterprise Risk Management (ERM), discussing climate change from a risk angle (agenda item: Risks and Opportunities). - Sustainability function (including climate action performance) (agenda item: Report on Sustainability)  In addition, the Board receives business updates at every Board meeting. These contain references to the consequences of climate change on the business, whenever relevant. The Audit Committee receives biannual reports on Enterprise Risk Management and quarterly reports on Ethics & Compliance.  Major CAPEX, acquisitions and divestitures are part of board's discussion whenever relevant.

**C1.1d**

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

Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1 Yes	The Board considers sustainability and ESG matters, including climate-related issues, an integral part of the Company's strategy. Therefore, familiarity with ESG matters is required from all Board members, as are strong ethical values. The Board's collective knowledge and expertise as well as the diversity of experience of its members are crucial assets in leading a company of Givaudan's size in a complex and fast changing environment with a multitude of stakeholders.	<Not Applicable>	<Not Applicable>

**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)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
President	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Chief Sustainability Officer (CSO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Half-yearly

**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).**

To give a complete overview of the governance of Sustainability, here are the responsibilities on climate related issues of all positions/committees. They are listed in hierarchical order. In bold, are described the highest management-level positions (Presidents and CSO) with responsibility for climate-related issues, as explained in C1.2.

Board of Directors

By steering Givaudan's purpose and strategy, the Board of Directors is involved in setting the direction for sustainability matters, including climate related issues, and covering the targets. The Board is also responsible to ensure that Givaudan's risk management, internal control and compliance systems are efficient and effective.

In Swiss stock-traded companies, the Board of Directors delegate all day-to-day running of the activities to the "Executive Committee", the equivalent of the Anglo-Saxon "C-Suite". Consequently, the Board of Directors of Givaudan has delegated the day-to-day running of Givaudan's activities, including its activities in the matter of sustainability and climate change to the Executive Committee.

Executive Committee

Responsibilities:

The Executive Committee, lead by the Chief Executive Officer (CEO) approves programmes and initiatives with company-wide impact, such as e.g. the adoption of science-based targets / GHG or capital expenditures above a certain amount.

**- Presidents (President Fragrance & Beauty Division and President Taste & Wellbeing Division)**

The Presidents of our two Divisions are members of the Executive Committee and report to the Chief Executive Officer (CEO). They are responsible for assessing and managing the consequences of climate related issues as they affect the divisions. This includes issues of operational continuity, supply chain, customer expectations among others.

**- Chief Sustainability Officer (CSO)**

One of the members of the Executive Committee is the Chief Sustainability Officer (CSO).

**Responsibilities:**

- The CSO has responsibility at Executive Committee level for the entire Global Sustainability programme, including climate related issues. He approves strategy, direction and resources of the programme and serves as the overall executive committee sponsor.
- The CSO is supported by a dedicated Sustainability Leadership Team (SLT) led by the Global Head of Sustainability. This team is made up of internal specialists in corporate responsibility and sustainability as well as dedicated business partners to implement the approach.
- The current incumbent CSO is also responsible for Global Procurement, which ensures an advanced embedding of sustainability issues in the supply chain.

Global Head of Sustainability

The Global Head of Sustainability supports the Executive Committee (EC) and leads the Global Sustainability team and the Sustainability Leadership Team (SLT) to meet Givaudan's sustainability and purpose goals, including climate goals by:

- Developing frameworks and guidelines for each pillar
- Ensuring corporate alignment
- Reporting back to senior management

The Global Head of Sustainability gives guidelines for GHG emission management and energy consumption, including e.g. proposing the adoption of science-based targets on GHG emissions to the Executive Committee.

Environmental Sustainability Team

The Environmental Sustainability Team is part of the Global Sustainability Team, with the responsibilities of:

- defining the overall environmental sustainability strategy of the Company, including the adoption of science-based targets on GHG emissions,
- defining the environmental sustainability programme and master plan, driving its implementation with the relevant stakeholders and tracking its success,
- owning the environmental data (operations and supply chain) and working with the reporting team to ensure data integrity, consistency and accuracy,
- ensuring overall performance disclosure and communication on environmental sustainability, including climate,
- ensuring liaison with external climate agenda, to ensure relevancy of programmes and targets.

The Global head of Environmental Sustainability is a member of the Sustainability Leadership Team (SLT) of Givaudan.

**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	no comment

**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
Corporate executive team	Monetary reward	Emissions reduction target Efficiency target	<p>The short term incentives for all executives include a profitability element (EBITDA) which is heavily influenced by cost efficiency. Reduction of use of energy has a material cost impact.</p> <p>According to the ERM risk assessment process, members of the EC are given specific responsibility over the management of material issues (which include climate change). This is reflected in the short term incentive. The success is measured in comparison with the company strategy targets.</p> <p>In addition, executives and selected management members are eligible to participate in the Performance Share Plan (PSP), which is designed to reward executives and key talent who significantly influence the long-term success of the business and our purpose ambitions.</p> <p>From 1 January 2021, a new PSP aligned with the Givaudan purpose was introduced. The financial metrics of sales and free cash flow traditionally used to calculate the PSP are retained, and are complemented by non financial criteria linked to three of the four focus areas of the Givaudan purpose:</p> <ul style="list-style-type: none"> <li>– Creations (80%): Financial targets of sales and free cash flow</li> <li>– Nature (10%): Environmental targets of net GHG emissions reduction (scope 1, 2 and 3)</li> <li>– People (10%): Social targets of senior leader diversity (women and high growth market representation) and employee safety.</li> </ul>
All employees	Non-monetary reward	Emissions reduction project	<p>Since 2010, all employees can volunteer for their local Green Teams to further develop and update site plans with additional initiatives and deliver improved eco-efficiency. Green Teams contribute to reducing our environmental footprint by coming up with creative ideas to either improve existing operational processes or finding new ways to reduce GHG emissions and energy usage. In this context annual Green Team Awards are granted by the Executive Committee for successful eco-efficiency projects.</p> <p>For example, the Green Team in East Hanover, US, together with the team in the liquids production site and in the naturals building, developed a process to upcycle previously discarded solvents and oils, and reuse them in future production stages.</p> <p>The project had an impressive impact, upcycling 200,000 kg of solvent/oil in a 12 month period, saving costs on raw materials and waste disposal fees and saving 108 metric tonnes of carbon dioxide.</p>
Environment/Sustainability manager	Monetary reward	Emissions reduction target Supply chain engagement	<p>Environment and Sustainability managers objectives and performance are reviewed annually to ensure progress in environmental sustainability performance. This performance assessment comprises both performance against the Company targets on environment (global and local, including GHG emissions for scope 1,2 and 3) and engagement activities across all actors of the value chain. For supply chain engagement the personal objectives and associated incentives relate to the proactive reach out of our Environmental Sustainability Managers to the supplier's representatives, working in collaboration with our procurement organisation (buyers). Also specific contributions to our "connect to win" programme are expected and factored into the engagement objectives and performance of our environmental sustainability managers.</p>
Process operation manager	Monetary reward	Efficiency target	The incentivised performance indicator for operation managers is focused on progress against our target to improve eco-efficiency including an annual target for GHG emission reduction for each manager's scope of responsibility.
Chief Procurement Officer (CPO)	Monetary reward	Supply chain engagement	Supply Chain engagement is driven by the procurement organisation and its buyers, led by the procurement leadership team. Incentivized programme related to supplier engagement that encompass key sustainability aspects is called "Connect to Win" that falls under the procurement innovation pillar of our Global Procurement strategy, lead by our CPO. As such, there are personal objectives and incentive plans related to that.

**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	3	The time horizons for assessing climate-related risks and opportunities are aligned with the time horizons as defined in the Enterprise Risk Management (ERM) framework.
Medium-term	3	5	The time horizons for assessing climate-related risks and opportunities are aligned with the time horizons as defined in the Enterprise Risk Management (ERM) framework.
Long-term	5	15	The time horizons for assessing climate-related risks and opportunities are aligned with the time horizons as defined in the Enterprise Risk Management (ERM) framework.

**C2.1b**

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

### **Description of substantive financial or strategic impact' when identifying or assessing climate-related risks**

At company level climate-related risks are identified as part of the company-wide Enterprise Risk Management (ERM) risk assessment process under the supervision of the Executive Committee (EC). The risks are assessed twice annually for their long term impact (5 to 15 years).

The assessment is conducted with representatives of the divisions and all the functions of the Company. The process is conducted twice a year with monitoring of risk response measures, twice a year as well, and annual reporting to the Board.

Events are assessed for their impact on the Company and they can be risks in themselves and/or drivers for other risks. The likelihood is established as a percentage of a risk materialising over the review period. The impact is established either quantitatively as a cumulative financial impact on the Company's EBITDA or qualitatively as Impact on the achievement of objectives, including reputational impact. We do not use the term "substantive impact", but our rating of impact ranges from Low: little threatened / limited reputational impact, via Medium: threatened / some reputational impact, and High: severely threatened / severe reputational impact, to Very high: critically threatened / critical reputational impact.

"Substantive financial or strategic impact" therefore comprises for us the two categories high and very high impact.

### **Description of the quantifiable indicator(s) used to define substantive financial or strategic impact**

CHF 250M - CHF 500M cumulative impact on EBITDA over 5 years are considered as "high: severely threatened / severe reputational impact"

> CHF 500M cumulative impact on EBITDA over 5 years are considered as "very high: critically threatened / critical reputational impact"

A given risk can be a driver for other commercial risks, which may have an impact on Givaudan. In this way, climate change is a driver for a number of effects which in turn may impact Givaudan's ability to operate. Climate Change and extreme weather conditions are already affecting millions of people, damaging crops and threatening water supplies. A continued build-up of GHG pollution is expected to lead to changed weather patterns and an even greater threat to supplies of natural raw materials. This impacts Givaudan's ability to operate and may translate in disruptions in the supply of natural raw materials, or in the operations due to water scarcity at manufacturing sites. The risks of operational or supply chain disruption have been assessed to have a "high" or above impact as defined above.

## **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**

Description of the process used to determine which risks and/or opportunities could have a substantive financial or strategic impact:

Enterprise Risk Management (ERM): owned by the Corporate Ethics & Compliance Officer & Executive Committee (EC)

At company level climate change risks which could have substantive financial or strategic impact for all value chain stages (direct operations, upstream, downstream) are identified as part of the company-wide ERM risk assessment process under the supervision of the EC. The risks are assessed twice a year for their long term impact (5 to 15 years) and more than once a year for their short-term (0-3 years) and medium-term (3-5 years) impact.

The assessment is conducted with representatives of the divisions and all functions of the Company. The process is conducted twice a year with monitoring of risk response measures twice a year as well, and annual reporting to the Board of Directors.

How Givaudan makes decisions to mitigate, transfer, accept or control climate-related risks and to capitalize on opportunities:

Givaudan's Enterprise Risk Management (ERM) process is the process of assessing, treating and monitoring the effects of uncertainty that may affect the attainment of Givaudan's objectives, especially its publicly stated strategic objectives, or jeopardise Givaudan's long-term business success. ERM reviews all types of risks and opportunities in terms of their nature, their source and their consequences. For the top Company risks, the consequences are stated in terms of impact on the EBITDA of the Group. As part of this process, ERM reviews climate-change related risks and opportunities.

Givaudan's process for prioritizing climate-related risks and opportunities:

The ERM process includes the following steps:

- A structure and comprehensive identification and compilation of essential risks and opportunities on the basis of an overall risk universe, which includes internal and external benchmarks
- Analysis and assessment of the risks and opportunities so identified and determination of their likelihood of occurrence and corresponding impact to understand the underlying risk drivers. Risk prioritisation is based on both qualitative and quantitative analysis using following criteria:
  - The likelihood of the risk/opportunity occurring
  - The qualitative or quantitative impact on the Company or asset
  - The quantitative impact to performance, cost or schedule for risk response measures

- The probability of meeting the opportunity targets on cost, schedule, and/or scope
- The quality of the risk/opportunity data being utilised is also assessed.
- Formulation of the appropriate measures to exploit an opportunity and/or respond to a risk and
- Tracking and reporting of risks and risk response actions

Givaudan's management is accountable for ensuring risks are appropriately and adequately identified and analysed in a timely manner. Management reports annually on the status of the risks and risk response actions to the Board of Directors.

A member of the Executive Committee is designated as the owner of each risk cluster as well as some further risks.

At the strategic level, a member of the Executive Committee is designated as the risk owner for each top Company risk. He or she has the responsibility for managing the risk on a Group-wide basis. Risks below the level of top risks are clustered by risk area.

Each cluster also has an Executive Committee member as its owner, though the actual risks are owned at the appropriate level of management.

Climate related risk and opportunities have been identified as a major risk area.

**Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

Every three years or more

**Time horizon(s) covered**

Short-term  
Medium-term  
Long-term

**Description of process**

Materiality Assessment: owned by the Chief Sustainability Officer (CSO)

The materiality assessment exercise allows identifying the most relevant ESG topics for Givaudan's stakeholders, upon which Givaudan can have an impact through its actions. It can help identify opportunities to readjust and improve the business strategy, also in partnership with our stakeholders. The time horizon of the aspects varies from short to medium to long term depending on the stakeholder's view. The materiality matrix is the outcome of this exercise and is validated by the Executive Committee and publicly disclosed in our integrated reporting suite.

The materiality matrix is revisited on average every three years based on the inputs of major internal and external stakeholders.

Climate change is one of the material topics prioritized in the matrix and being of most concern to Givaudan and to its stakeholders.

**Value chain stage(s) covered**

Direct operations

**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

**Description of process**

Business Continuity Planning (BCP): owned by the divisional management committees

Climate change figures as one of the causes for potential business interruption that are covered by BCP. BCP is managed at the level of the two divisions and includes potential transfer of production from one site to another. This need to transfer can be triggered by a production site being unable to produce because of a climate change related impact, like an extreme weather event or water shortage. The risk horizons for the BCPs are short to medium term. The divisions' BCPs are validated by the divisional management committees.

**Value chain stage(s) covered**

Upstream

**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

**Description of process**

Supply chain: owned by the Chief Procurement Officer and the procurement category leaders

Givaudan uses the "Windmill" process to identify high risk material-supplier combinations and define risk mitigation actions. The future horizon of the risks is short to medium term. The "Windmill" includes climatic risk and is incorporated in SAP as the central location of storage. Yearly maintenance is assured by each buyer responsible of materials segmentation. We also perform a business risk assessment which takes into account Climate Change risks with quarterly risk updates.

**Value chain stage(s) covered**

Direct operations

**Risk management process**

A specific climate-related risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term

Medium-term

**Description of process**

Site operational risks: owned by site managers

Risks at site level are reviewed based on data and site eco-efficiency plans that include GHG emissions. The risk horizon is short to medium term. A special focus is on water scarcity basins where local plans are in place to reduce water risks. Quarterly reporting of individual sites performance regarding emissions is owned by the local EHS manager.

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**C2.2a**

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

	Relevance & Inclusion	Please explain
Current regulation	Relevant, always included	<p>(i) Justification of the decision on the relevance and inclusion of this risk type: As a global player and industry leader in the manufacture of flavours and fragrances, a water and energy dependent industry and with operations in more than 20 countries worldwide, Givaudan is exposed to climate-related regulations that place a price on GHG emissions generated by our production facility, by the use of electricity and fuels. This risk is always included in our risk assessment since it is an existing aspect of our license to operate. It is part of the regular operational risk assessment that are carried out for each site by the operational risk management team which reports to the head of operations.</p> <p>(ii) Example: Our production facility in Vernier, Switzerland, is regulated by the Switzerland Carbon Tax. The amount of the tax is substantial, as it represents around 20% of the energy cost of the site. At the moment, Givaudan pays the tax but is reimbursed because we fulfill the exemption criteria. Indeed, the Swiss Confederation exempts a company upon request. In return the Vernier site of Givaudan committed to reducing its greenhouse gas emissions between 2013 and 2020 without interruption, and continued on a linear basis for the year 2021. If Givaudan were to fail in reducing its greenhouse gas emissions as committed, we risk losing the tax reimbursement. Our energy cost at our Vernier site would then potentially increase by 20%.</p>
Emerging regulation	Relevant, always included	<p>(i) Justification of the decision on the relevance and inclusion of this risk type: Climate-related regulations are increasing world-wide by quantity and location, and with our energy dependent manufacturing operations located in around 20 countries worldwide, the risk of exposure to emerging regulation is high, since the countries in which we operate include countries which have started seeing impacts of climate change, such as Brazil or the US, as well as countries which are or have been active in the area of new climate change legislation, such as the European Union. Any change in climate change regulations (in particular through imposing mandatory GHG reductions) may have an economic impact on Givaudan, such as increased cost of operation (e.g. for additional taxes on fuel, energy or carbon emissions) or increased cost of raw materials passed on by suppliers. Emerging regulation is therefore a risk which is addressed at the company Enterprise Risk Management (ERM) level as well as at the operational risk assessment level for each site.</p> <p>(ii) example: Activities regulated by the EU ETS system include combustion installations to generate steam with a rated thermal input of at least 20 MW. Givaudan's production facility located in Sant Celoni, in Spain, is not at the moment regulated by the EU ETS system because the rated thermal input of the combustion installation does not exceed 20 MW. There is a project to increase the capabilities of steam generation. With the implementation of this extension, the rated thermal input of the steam generation will exceed 20 MW, hence the Sant Celoni facility will be regulated by the EU ETS system. The increase cost of operation has been included in the business case.</p>
Technology	Relevant, always included	<p>(i) Justification of the decision on the relevance and inclusion of this risk type: Ambitious GHG emission reduction is not possible without evolving our technology. This covers our buildings, installations, and products. If Givaudan fails to keep up with the required technological developments, the consequences for Givaudan can range from non-compliance with climate change regulations or self-imposed targets, higher cost of operations, disappointment/loss of customers, dissatisfaction/loss of employees or reputational impact of being seen as not acting to combat climate change. Technology risks are therefore always included in our company-wide risk assessment such as described in C2.2."</p> <p>(ii) Example: In order to reduce the impact of our buildings on the planet as part of a transition to a lower-carbon economy, Givaudan invested CHF 120 million to build a new innovation centre in Kempthal, Switzerland that is designed for energy efficiency and is one of the first facilities in Switzerland to receive a gold certificate from Leadership in Energy and Environmental Design (LEED), the world's most widely recognised green building certification system. It fosters healthy, enjoyable and productive work through user-oriented workplace design that reduces water and energy consumption and improves environmental and economic efficiency by up to 45%.</p>
Legal	Relevant, always included	<p>(i) Justification of the decision on the relevance and inclusion of this risk type: As climate change is becoming a reputational item for our customers, Fast Moving Consumer Goods (FCMG) and food companies in direct contact with consumers, climate change requirements enter more and more frequently as specific quality requirements into contracts with our customers. Non-compliance with climate change risk response requirements can then lead to a breach of contract and litigation/loss of a customer. Legal risks are therefore always included in our company-wide risk assessment such as described in C2.2."</p> <p>(ii) ) Example: some of our large customers, including our biggest customer, require Givaudan to have crisis management/business continuity plans (BCP) in place that include business interruptions due to drought, flooding or other climate-related extreme weather events. If we were unable to provide an adequate BCP/crisis plan or execute it if necessary, we would face claims and potential litigation from our customers.</p>
Market	Relevant, always included	<p>(i) Justification of the decision on the relevance and inclusion of this risk type: Givaudan is exposed to the risk of change from consumers in their preferences for products with fragrances and/or flavours they want to consume and how they acquire them, including substitution of existing products and services with lower emissions options. As a consequence, climate change requirements enter more and more frequently as specific quality requirements into contracts with our customers. Non-compliance with climate change risk response requirements can then lead to a breach of contract and a loss of a customer. Market risks are therefore always included in our company-wide risk assessment such as described in C2.2."</p> <p>(ii) example: One climate related topic which has a market risk is deforestation and the related ingredients from palm oil. Givaudan recognise the importance of responsible sourcing of palm oil and palm derivatives and are members of the RSPO (Round table for Sustainable Palm Oil), strive for RSPO certification scheme implementation across its business and purchase increasing volumes of certified ingredients. If we did not take this approach it would lead to risks of not meeting customer expectations and possible loss of business.</p>
Reputation	Relevant, always included	<p>(i) Justification of the decision on the relevance and inclusion of this risk type: Even though Givaudan is a B2B player without direct visibility to consumers, performance against climate change and environmental targets is important to our customers and to our investors, who are requesting increasingly more transparency on ESG issues, including performance on environmental targets and climate change response measures. Should we fail to address climate change and other non-financial targets in a way that is seen as appropriate by our stakeholders, this may lead to loss of investments, downgrade or non-inclusion in ethical investment indices or negative media attention. This risk is high and is always included in our ERM risk assessment and is also a factor in our materiality assessment.</p> <p>(ii) Example: To mitigate the risk of falling short of stakeholder expectations on non-financial targets, we take a three-step approach: (1) We engage with stakeholders through the process of our Materiality Assessment, (2) we establish targets concerning climate change consistent with reductions required to keep warming to 1.5°C and approved by the Science Based Target initiative and with reference to the UN's SDGs (currently SDGs 12 "Responsible Consumption and Production" and 13 "Climate Action"), and (3) we publish our targets and our performance against them on our website and in our annual mainstream reports (Integrated Annual Report, GRI Report) to the public. In addition, we also engage with investors on questions of climate change and other ESG topics and we participate in climate-change related initiatives like the CDP Climate Change.</p>
Acute physical	Relevant, always included	<p>(i) Justification of the decision on the relevance and inclusion of this risk type: This risk is always included in our Enterprise Risk Management (ERM) assessment as well as at local operational level, as acute physical climate-change related events such as flooding or drought may hit either our own manufacturing abilities or our supply chain, a large part of which is in natural raw materials that are sensitive to climate change. As a manufacturing enterprise using a lot of water and energy, we are at risk of any disturbance of our water and energy supply. Given that our sites are usually close to a river or other water source, extreme weather events such as flooding, may cause us to close a manufacturing site and affect our ability to deliver in time to our customers. This risk is high and is therefore always included in our company-wide risk assessment such as described in C2.2 it is also covered in our divisional business continuity planning.</p> <p>(ii) Example: We have experienced episodes of water supply disruption in our production site in Brasil due to unusual drought. This required transfer of product manufacturing without delay to other locations as per business continuity plan.</p>
Chronic physical	Relevant, always included	<p>(i) Justification of the decision on the relevance and inclusion of this risk type: Climate change has a direct impact on the availability of our key natural resources because it alters ecosystems and disrupts food production and water supplies. This is especially true as a large part of our raw materials are naturals that only grow in certain places in the world. This risk is very high and is therefore included both at corporate level in our Enterprise Risk Management (ERM) assessment as also in our supply chain assessment.</p> <p>(ii) Example: One example is vanilla, which we can only source in the required quality from Madagascar. As probably the biggest user of vanilla, a long-term change in climate that would impact the conditions for vanilla would be particularly detrimental to us, given that because of the particular quality of Madagassian vanilla, we cannot source the product elsewhere.</p>

**C2.3**

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

Yes

**C2.3a**

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

**Identifier**

Risk 1

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Emerging regulation	Carbon pricing mechanisms
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**Primary potential financial impact**

Increased indirect (operating) costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Givaudan is exposed to climate-related regulation that place a price on GHG emissions generated by our production facility, by the use of electricity and fuels. Climate-related regulations are increasing world-wide by quantity and location, and with our operations located in around 20 countries, the risk of exposure to emerging regulation is high. Any change in these regulations may have an impact on Givaudan, such as increased cost of operation (e.g. for additional taxes on fuel, energy or carbon emissions) or cost of raw materials when suppliers pass on their increased production costs through price increases.

(ii) example: Activities regulated by the EU ETS system include combustion installations to generate steam with a rated thermal input of at least 20 MW. Givaudan's production facility located in Sant Celoni is not at the moment regulated by the EU ETS system because the rated thermal input of the combustion installation does not exceed 20 MW. There is a project to increase the capabilities of steam generation. With the implementation of this extension, the rated thermal input of the steam generation will exceed 20 MW, hence the Sant Celoni facility will be regulated by the EU ETS system.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

5000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

Givaudan spent approximately 50 Millions per year on energy costs. Given the current trends in the energy markets in the countries in which Givaudan operates, we project that energy prices of fossil-fuel-sourced electricity would increase by 10% because of carbon taxes. This would negatively impact our bottom line by around 5 millions if we don't reduce our dependence on carbon-based electricity supply.

Figure breakdown: 5,000,000 increase in operating cost = 50 million annual energy cost x 10% price increase.

**Cost of response to risk**

2000000

**Description of response and explanation of cost calculation**

Action being implemented: The primary method to manage this risk is to reduce our dependence on fossil fuel based energy. We do this both through energy efficiency projects and procurement practices in renewable electricity.

**Example:**

To reduce our dependence on fossil fuels, we invested in energy efficiency projects and procure energy from renewable sources. In 2021, 45 production sites were 100% powered by renewable energy by the end of the reporting year. We have reached 84% renewable electricity supplied to all our facilities, a 3% increase compared to 81% in 2020. Givaudan committed to move towards 100% use of electricity from renewable sources by 2025 (RE 100 commitment) and is on track to meet its target.

**Explanation of cost calculation:**

The costs associated with managing energy tax risks over time can be estimated as a percentage of total expenses on renewable electricity (500,000) and expenses on energy efficiency projects (estimated at 2,500,000 during this reporting year) payable over the lifetime of the projects. These costs will be reduced by annual savings from energy efficiency projects (1,000,000). The total estimated cost of response to risk is 2 million CHF.

(2,000,000 = 2,500,000 + 500,000 – 1,000,000).

**Comment**

no comment

**Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Upstream

**Risk type & Primary climate-related risk driver**

Chronic physical	Changing temperature (air, freshwater, marine water)
------------------	--

**Primary potential financial impact**

Increased indirect (operating) costs

**Climate risk type mapped to traditional financial services industry risk classification**

&lt;Not Applicable&gt;

**Company-specific description**

Changes in weather patterns, more variability in seasonal weather, and increasing temperatures already affect ecosystems and drive changes in biodiversity. Givaudan depends on specific raw materials as a source of natural ingredients. Most of the natural ingredients sourced by Givaudan are not commodities, rather specialties produced in small volumes. In recent time, raw material supply chains are becoming more volatile, uncertain, complex and ambiguous (VUCA context). Disruption in the supply of the raw materials we require for our production or volatility of raw material prices due to change in precipitation patterns and extreme variability in weather pattern and increase demand for naturals is likely to happen and may negatively impact our ability to produce at competitive prices and in a timely manner, putting Givaudan at risk. We have seen this significant increase of supply risk on iconic product such as Vanilla (in Madagascar), Spices (ex: chili in India) and Florals (ex.: patchouli in Indonesia, ylang ylang (in Comoros) portfolio.

**Time horizon**

Long-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)**

50000000

**Potential financial impact figure – minimum (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – maximum (currency)**

&lt;Not Applicable&gt;

**Explanation of financial impact figure**

Most of the natural ingredients sourced by Givaudan are not commodities, rather specialties produced in small volumes. In recent time, raw material supply chains are becoming more volatile, uncertain, complex and ambiguous (VUCA context). Disruption in the supply of the raw materials we require due to change in precipitation patterns and extreme variability in weather pattern is likely to happen putting Givaudan at risk. We have seen this significant increase of supply risk on iconic product such as Vanilla, Spices and Florals portfolio.

As consequence, the potential financial impact figure was estimated based on raw material spend from the previous years. By comparing the cost per kg of our VUCA raw materials from 2020 to 2021, this lead to an increase of approximately 50 Mio CHF. We consider that the potential future financial impact is similar to what was observed in the past, this is why we estimate the financial impact figure to 50 Mio CHF.

**Cost of response to risk**

1250000

**Description of response and explanation of cost calculation**

Action being implemented: Givaudan has a Business Continuity Plan (BCP) for sourcing covering a large scale of risk exposure pertaining to climate change. This includes regular assessments of potential risks, including environmental risks such as droughts, fires, rural exodus and back-up plans to maintain the whole supply chain process if any disruption occurs.

Key Risk Management strategies to secure sourcing of our materials are:

- Raw Materials Sourcing integrated in the category management process and as part of Global / Enterprise Risk Management operations
- structured risk mitigation strategy, ("Windmill" process) to anticipate raw materials supply issues and suppliers deficiencies
- Communities at Source projects aiming at securing the most strategic and vulnerable naturals by supporting communities from which we source key natural raw materials through social and environmental projects (example with patchouli in Indonesia).

Example: Givaudan partnered with an organisation in Indonesia for a sustainable patchouli oil production project in Indonesia. The producers are supported to reduce the environmental impact of production, improve health and safety measures as well as increase their yields.

Cost of management explanation: The operational cost to manage this risk has been 500 K CHF to 2 Mio CHF/year (average: 1.25 Mio CHF) over the past five years. We expect to maintain cost of that magnitude over the next five years.

**Comment**

no comment

**Identifier**

Risk 3

**Where in the value chain does the risk driver occur?**

Downstream

**Risk type & Primary climate-related risk driver**

Reputation	Increased stakeholder concern or negative stakeholder feedback
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**Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

**Climate risk type mapped to traditional financial services industry risk classification**

&lt;Not Applicable&gt;

**Company-specific description**

Even though Givaudan is a B2B player without direct visibility to consumers, performance against climate change and environmental targets is important to our customers

and to our investors, who are requesting increasingly more transparency on ESG issues, including performance on environmental targets and climate change response measures. Should we fail to address climate change and other non-financial targets in a way that is seen as appropriate by our stakeholders, this may lead to loss of investments, downgrade or non-inclusion in ethical investment indices or negative media attention. It could negatively impact our brand for our customers and reduce demand for our products and even lead to the loss of market share and/or commercial agreements with key customers. It can also negatively impact the Company' share price.

**Time horizon**

Short-term

**Likelihood**

Likely

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

50000000

**Potential financial impact figure – maximum (currency)**

200000000

**Explanation of financial impact figure**

The potential financial implications of damage to our reputation in case this risk is unmitigated could be significant and would include value of lost sales and the loss of market capitalization due to a fall in share price. We estimate the financial cost were this to happen to be approximately 50 Mio CHF to 200 Mio CHF/year. This estimated figure relates to the value of lost commercial agreements with key customers who put sustainability performance as an essential criteria for commercial agreements. Due to steady increase of our customer base that put sustainability as an essential criteria for commercial agreements, this figure is likely to increase in the future.

**Cost of response to risk**

2200000

**Description of response and explanation of cost calculation**

Action being implemented: We manage this risk by implementing a strong sustainability programme to be an industry leader in environmental performance. As part of our strategy, Givaudan has committed to reduce absolute Scope 1 and 2 GHG emissions by 70% between 2015 and 2030. We have also set a goal to reduce Scope 3 GHG emissions by 20% over the same period. Our targets are approved by the Science Based Targets initiative. They are in line with the global effort to keep temperature increases below the 1.5°C threshold, a key goal of the 2015 Paris Agreement on climate action. In support of those goals, Givaudan has also committed to ensure that by 2025 all of the electricity it buys will come from renewable sources.

Example: Integrated annual report and GRI reporting is externally audited and assured to guarantee reliability of our reported performance.

Cost of management explanation: Mitigating this risk is fully embedded in Givaudan's Company strategy and environmental goals. The costs of management of this risk can be viewed as linked to the costs to implement our GHG reduction programmes ( about 2 Mio CHF during 2021). Other costs linked closely to our reputation include fees for auditing and external data assurance ( in the range of 200 K CHF/year). Cost of response to risk = 2,000,000 + 200,000 = 2'200'000 CHF

**Comment**

no comment

**Identifier**

Risk 4

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Acute physical	Drought
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**Primary potential financial impact**

Increased indirect (operating) costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Changes in precipitation could adversely impact our production operations (manufacturing plants) using ground water. We have experienced episodes of water supply disruption at our sites in Jaguaré, Brazil and Jigani, India. Water scarcity (low groundwater levels) is subjected to an increase in frequency in the future.

**Time horizon**

Long-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

75000

**Potential financial impact figure – maximum (currency)**

150000

**Explanation of financial impact figure**

Increased operational costs due to cost for water in a context of scarcity. Financial impact is estimated at an increase of 5 to 10% , meaning 75 to 150 KCHF/year (on average this is about 115 KCHF/year).

**Cost of response to risk**

225000

**Description of response and explanation of cost calculation**

Action being implemented: This risk is managed by two means:

- 1) Reduce our water consumption. We do this through water efficiency projects.
- 2) Business Continuity Plan (BCP) for production sites exposed to water scarcity. This includes regular assessments of potential risks and back-up plans to maintain the whole supply chain process if any disruption occurs. In such regions, additional water supply systems are set up for a transitional period of time.

Example: In Mako, our manufacturing site in Hungary which has a large water requirement, continued efforts have been made to reduce water consumption by optimizing water use in particular parts of the site's manufacturing processes. One of the main goals was to find and reuse previously drained potable water from the equipment, and a main action was to rationalize the unnecessary use of tap water. The results included recirculating of potable water in stirring motors, a reduction of 60% in the quantity of cooling water used in the spray dryer stirring motors, and the rationalizing of tap water on the site.

Cost of management:

The costs includes : 1) the money spent on water efficiency projects (estimated at 400 KCHF during this reporting year ) payable over the lifetime of the projects. These costs have been balanced by associated savings from water efficiency ( calculated at 200 KCHF /year) 2) direct costs for water supply by tanks and trucks as a risk mitigation (buying water and cost for transport by trucks of 25 KCHF in 2021).

cost of management = 400 KCHF - 200 KCHF + 25 KCHF = 225 KCHF

**Comment**

no comment

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

Yes

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

Opp1

**Where in the value chain does the opportunity occur?**

Downstream

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

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

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

Givaudan customers operate in markets where consumers have high environmental sensitivity, for example in Europe. There are commercial opportunities to effectively anticipate our customers' needs and help them to respond to consumer behaviour changes. Givaudan is well positioned to take advantage of preference for low carbon products because of our initiatives on responsible sourcing and sustainable innovation (e.g. reuse and recovery of process side stream and waste).

As our customers become more environmentally aware, Givaudan has the opportunity to differentiate from its competition by staying ahead in terms of eco- design and ensuring our marketing and sales reflect the progress we make in eco-efficiency.

**Time horizon**

Long-term

**Likelihood**

Likely

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – minimum (currency)**

150000000

**Potential financial impact figure – maximum (currency)**

300000000

**Explanation of financial impact figure**

1) Givaudan's global sales in 2021 were CHF 6.7 billion. We estimate the financial implications of growth of 'responsible products consumption' in a range of 100 to 200 Mio CHF, corresponding to the aggregated value of major commercial briefs we receive from key customers for selected brands with explicit and mandatory sustainable positioning.

2) Financial implications of our competitive advantage could include :

- Increased product demand and sales revenue due to visibility of our progress on GHG emission reduction and product efficiency design.
- Avoided costs to deal with more stringent regulations or fines
- Associated indirect impact on reputation.

We estimate the financial implications were this to happen to be approximately 50 Mio CHF to 100 Mio CHF/year, corresponding to our increased presence in key customer core listing.

Combining 1) and 2), this means that the potential financial figure ranges from 150 Mio CHF (100 +50) and 300 Mio CHF (200 + 100)

**Cost to realize opportunity**

281000000

**Strategy to realize opportunity and explanation of cost calculation**

Action being implemented:

We have strong R&D programmes to improve intrinsic, including environmental, properties of our products. Modern biotechnology techniques enable us to produce existing molecules or create new captives. In designing innovative processes, we also look at how we can reuse and recover process side streams (upcycling). By following green chemistry principles, we ensure ingredients are safe by design and that our processes make efficient use of energy and materials, while reducing water consumption and waste.

Example:

Our portfolio of upcycled materials increased in 2021 with for example, our Active Beauty business launching Omegablue®. Omegablue® is a cosmetic ingredient created from upcycled wild bilberries. Traditionally used in the food industry for their juice and sugar, bilberries are also an excellent source of anthocyanidins, which are extracted from the pulp and fruit skin for the supplement and pharmaceutical industries. The tiny seeds of the berries contain up to 20% of linoleic acid (omega-6) and α-linolenic acid (omega-3) in an optimal ratio. Both are known for their capabilities to improve hydration and skin barrier functionality.

This ground-breaking 'upcycling' approach helps us to reduce waste and minimise our environmental impact, in line with our commitment to sustainability and consumers' demand for products that are both highly effective and produced in a responsible way.

Cost to realize opportunity:

R&D investments (including green chemistry and eco-design technologies) were of 562 Mio CHF in 2021. Out of this, we estimate that 50% (281 Mio CHF) of R&D contributes to enhancing environmental properties of our products.

**Comment**

no comment

**Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Upstream

**Opportunity type**

Resilience

**Primary climate-related opportunity driver**

Participation in renewable energy programs and adoption of energy-efficiency measures

**Primary potential financial impact**

Other, please specify (Increased reliability of supply chain and ability to operate under various conditions)

**Company-specific description**

Most of the natural ingredients sourced by Givaudan are not commodities, rather specialties produced in small volumes. In recent time, raw material supply chains are becoming more volatile, uncertain, complex and ambiguous (VUCA context). Disruption in the supply of the raw materials we require due to change in precipitation patterns and extreme variability in weather pattern is likely to happen putting Givaudan at risk. We have seen this significant increase of supply risk on iconic product such as Vanilla, Spices and Florals portfolio.

We have the unique opportunity to train farmers/smallholders on good and sustainable agriculture practices in order for them to adapt in the fast changing weather patterns and their impact on crop yield, drought, water management. For Givaudan, it is a benefit to foster farmers/smallholders and secure supply chain for our iconic substances. These are long term agreements for mutual benefits.

**Time horizon**

Long-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)**

25000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The attractiveness through improved supply chain practices is not necessarily mainstream today. Indeed, besides the many big leading customers being very explicit and engaged commercially on more sustainable supply chains, the vast majority of customers are satisfied by more conventional supply chains. This is why the commercial opportunity is covering only a part of our turnover, thus the conservative value of 25 Mio CHF mentioned. We know that this part will only increase as consumers demands for more sustainable products will drive a higher engagement of Givaudan customers, this is why we expect this value to increase steadily over the coming years. Beyond this opportunity it is essential to understand that the investments we make in our supply chains (for example with our "sourcing at origin programme") are directly contributing to making our own business model and company more sustainable, even if it does not translate directly today to more sales opportunities. The 25 MioCHF is calculated by adding up the main new briefs received with sustainability credentials made explicit by our key customers as "must have".

**Cost to realize opportunity**

350000

**Strategy to realize opportunity and explanation of cost calculation**

Action being implemented:

In 2021, Givaudan launched its flagship Sourcing4Good programme; a vital part of delivering on our ambition to responsibly source all materials and services in a way that protects people and the planet by 2030. Sourcing4Good is based on collaboration and knowledge sharing, experience and expert input from suppliers, customers and partners. It is based on industry criteria ranging from environmental and social benchmarks to improved supply chain security, greater transparency, and more relevant supply chain information. It offers suppliers more visibility and partnership opportunities and gives customers increased access to safe, high-quality products sourced in a responsible way, as well as greater oversight and detailed knowledge of their supply chains.

Givaudan, as part of its Sourcing4Good programme is working on strategic partnerships for supply chain collaboration and backward integration capacity development through exploration of new territories and increase of attractiveness of local agricultural operations.

In parallel, programmes are in place with local communities with a solid social and environmental dimensions: reforestation programmes, training and opportunity development for workers in securing product collection networking.

Example:

Clove Leaf Oil in Madagascar: dedicated resources were injected to drive the switch from fuelwood to spent leaves for distillation. It consisted of the development and installation of a pilot distillation unit that drives the reduction of 70% of fuelwood, by replacing it with spent leaves, that were previously left on the ground. This project further enhanced the traceability of the full chain, its security as well as mitigating costs fluctuations. This work enabled all foundation elements to allow a sustainable certification scheme to be put in place in the short term (2020/2021). The certification is FFL (Fair for life).

The cost of realizing the opportunity of 350 kCHF relates to additional investments made in human, CAPEX and OPEX resources to develop our programmes with local communities.

**Comment**

no comment

**Identifier**

Opp3

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of new technologies

**Primary potential financial impact**

Reduced indirect (operating) costs

**Company-specific description**

Ambitious GHG emission reduction is not possible without innovation and evolving our technologies. We seek for opportunities to partner with experts from diverse fields in finding new ways to improve our environmental performance. Givaudan invests substantially in R&D. We look at energy intensive activities of our processes, and seek for opportunities to use new technologies to achieve the same performance with reduced GHG emissions. We have found that solar heat offers an energy-efficient way to power industry's needs for cooling and refrigeration. This translates to about 40% reduction in energy consumption for our refrigeration and regulating room temperature in our offices. This technology is particularly maximized in sites located in tropical countries where the climate is warm all year-round.

It is particularly attractive to Givaudan for two main reasons:

- First it is in line with our bold climate ambitions
- Secondly, every Givaudan production plant needs heating and cooling, and it would be relatively easy to replicate this technology and would provide Givaudan a competitive advantage.

**Time horizon**

Medium-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>



### Explanation of financial impact figure

The annual potential financial impact corresponds to the reduction of electricity for cooling and refrigeration purposes in the 3 major sites for a 10 year period if the actual cooling and refrigeration system was replaced by an alternative technology, as explained below in strategy to realize opportunity.

annual savings site 1: 55'000 CHF

annual savings site 2: 25'000 CHF

annual savings site 3: 20'000 CHF

Potential financial impact = (annual savings site 1 + annual savings site 2 + annual savings site 3) x 10 years (minimum lifetime of the initiative) = (55'000 + 25'000 + 20'000)\*10 = 1'000'000 CHF

### Cost to realize opportunity

450000

### Strategy to realize opportunity and explanation of cost calculation

Action being implemented:

We seek for opportunities to partner with experts from diverse fields in finding new ways and technologies to improve our environmental performance.

We look at energy intensive activities of our processes, in particular cooling and refrigeration, and seek alternative technologies to achieve the same performance and jointly reduce our GHG emissions. We have found that solar heat offers an energy-efficient way to power industry's needs for cooling and refrigeration. The opportunity is developing the technology that will be able to efficiently and reliably respond to variable needs across a range of processes and sites.

Example:

Started in 2018, an innovative partnership was created aiming at finding new sources of energy. Givaudan joined the consortium participating in HyCool, an innovative energy technology project funded by the EU with the aim of developing cost-effective solutions using solar heat for industrial purposes. HyCool is an innovative project to promote the use of Solar Heat in Industrial Processes (SHIP). The unique technology couples patented solar thermal collectors with special hybrid heat pumps with the aim of providing flexible and cost-efficient cooling systems for industrial applications. By maximising the use of renewable energy through made-in-Europe innovation, HyCool's objective is to minimise emissions of greenhouse gases. Our site in Sant Celoni, Spain was selected as the HyCool project test site for the chemical industry. This project is a unique opportunity to work with leading innovation and technology experts. This project will help us reduce GHG emissions and decrease energy consumption from electricity and gas. In 2020, the project has received funding from the EU. The pilot project has been ongoing and the results of the study will be released in 2022. If successful, our plan is to implement the Hycool project in our sites located in sunny areas.

Cost to realize opportunity:

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 792073.

Resources to Givaudan: 300 kCHF (cost of internal employees, permits and taxes)

Equipment (CAPEX & contractor labor): 150 kCHF

Cost to realize opportunity = 300 kCHF + 150 kCHF = 450 kCHF

### Comment

no comment

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### Identifier

Opp4

### Where in the value chain does the opportunity occur?

Downstream

### Opportunity type

Products and services

### Primary climate-related opportunity driver

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

### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

### Company-specific description

We are committed to driving the global transition to more mindful diets by creating more diverse food choices. Our Plant Attitude platform offers access to an entire ecosystem of experts, technologies and an integrated portfolio for the co-creation of plant-based food experiences, meeting consumer needs. From fundamental scientific understanding to holistic product design, we deliver customised solutions to develop delightful plant-based recipes.

Background:

The way food is currently produced and consumed across the globe is driving many nutritional, environmental and socioeconomic challenges. Food Systems Transformation requires, among other elements, a shift to more sustainable dietary patterns, including an increased consumption of plant-based foods. A shift to plant-based diets can help boost health, while relieving pressure on natural ecosystems, reversing biodiversity loss and reducing greenhouse gas emissions related to food. The FAO estimates in their Sustainable Healthy Diets Guiding Principles that global adoption of a 'low-meat diet' can reduce diet-related GHGs by nearly 50 percent.

Consumers are increasingly aware of the ethical and environmental impacts of their food and are turning towards plant-based meat and fish analogues. Research has shown that the Covid-19 pandemic has accelerated this trend. In the future, we expect that many more people will be 'flexitarians', eating both plant-based and meat-based foods in their diets, shifting some of their meat-based consumption to plant-based alternatives.

Our food industry customers are innovating to bring great tasting plant-based foods to the market. We aim to be the co-creation partners of choice, supporting our customers in this journey by providing solutions to ensure their plant-based products taste and look great, as well as improving the nutritional profile of plant-based food. By enabling this shift to more sustainable diets, we enable consumers to reduce the carbon footprint of their diets, and seek to contribute to a more sustainable food system overall.

### Time horizon

Long-term

### Likelihood

Very likely

### Magnitude of impact

Medium

### Are you able to provide a potential financial impact figure?



Yes, a single figure estimate

**Potential financial impact figure (currency)**

5500000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

Givaudan has a Purpose ambition to double our overall business (across our two divisions) by 2030 through creations that contribute to happier, healthier lives. This means doubling our revenue from 5,500 MM CHF to 11,000 MM CHF in 2030. In Taste & Wellbeing, we create food experiences that do good and feel good, for body, mind and planet; our work on plant-based products (through our 'Plant Attitude' platform) is one of the platforms contributing to the overall company growth ambition.

**Cost to realize opportunity**

562000000

**Strategy to realize opportunity and explanation of cost calculation**

Givaudan invested 562 million CHF overall in R&D in 2021. Investment in our Plant Attitude platform forms part of this overall Givaudan investment.

Our strategy to continue our leadership in Plant Attitude builds on an entire ecosystem of experts, technologies and an integrated portfolio specifically designed for meat, fish or dairy alternatives.

Investment will be across a number of areas, from in-house innovation and thought leadership to collaboration with partners and academia. Some examples as follows;

- Examples of sites designed for co-creation include the Protein Innovation Centre (PIC) in Singapore and the new Protein Hub at our flagship Zurich Innovation Centre in Kempthal, Switzerland. The PIC welcomes food processing companies, start-ups and university researchers from across the Asia Pacific region keen to co-create plant-based food experiences. The Centre combines the pilot technology of Bühler's extrusion and processing equipment with Givaudan's new culinary facilities and its world-leading expertise in flavour, taste, ingredient and product development.

The Protein Hub builds on Givaudan's industry leading expertise in taste, texture, colours, proteins and ingredients, and provides the experts, technologies and equipment to help accelerate the development of alternative proteins. Customers can come to the Protein Hub to work on all types of applications and every aspect of the product development process, from initial ideation and consumer insights to hands-on prototyping sessions – all with the aim of getting products to market quickly.

- Our Scale It Up! challenge with Cargill, Bühler and Puris is another example of this kind of innovation. In 2021, these four companies teamed up to create an innovation challenge for start-ups in North America focused on alternative protein products in the form of plant-based meat and dairy alternatives. The 'Scale it up!' innovation challenge is meant as an opportunity for start-ups to get first-class support from leaders in the food value chain. It accelerates and scales their project, product or solution with the support of Bühler, Cargill, Givaudan and Puris and their expertise, networks and first class facilities. It is meant to help these companies bring healthy and planet-friendly products to market more quickly.

Our Plant Attitude platform enables the transition to healthier and lower GHG emission diets as well as a more sustainable, regenerative food system.

**Comment**

no comment

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### C3. Business Strategy

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#### C3.1

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**(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**

We have a different feedback mechanism in place

**Description of feedback mechanism**

Our Climate positive transition plan is shared with our shareholder and investor community via our annual integrated reporting suite, ESG investor roadshows that take place several times a year, and around corporate events like the AGM.

During these events (face to face or conference calls) feedback is gathered verbally, or in written format, and coordinated by our head of investor relations who reports to our CEO.

Additional feedback is also gathered via our corporate website and company email.

The head of investor relationship have bi-weekly touchpoints with the head of sustainability and with corporate communications to review feedback received thus enhancing disclosure and transparency on our climate positive transition plan

**Frequency of feedback collection**

More frequently than annually

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

p.53-62

GIV\_2021\_GRISustainabilityReport.pdf

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

<Not Applicable>

**Explain why climate-related risks and opportunities have not influenced your strategy**

<Not Applicable>

**C3.2**

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

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

**C3.2a**

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

Climate-related scenario		Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios	IEA NZE 2050	Company-wide	<Not Applicable>	<p>Our Climate positive journey that is inclusive of Scope 1+2+3 is aligned and contributed to IEA's Net Zero by 2050 scenario presents a roadmap for the energy sector to transition to a net zero energy system by 2050. It assumes that advanced economies will reach net zero in advance of 2050 and sets out an emissions trajectory consistent with a 50% chance of limiting the global temperature rise to 1.5°C without a temperature overshoot.</p> <p>We are factoring into our overall investment plan that our Climate positive journey will tangibly benefit from reinforced climate regulations in advanced economies driving decarbonisation of our synthetics suppliers (petrochemical derived and energy intensive) thus supporting the drastic reduction of about a major part of our Scope 3 emissions related to synthetics raw materials. For our global operational sites we also count on the rise of country related subsidies to accelerate the complete shift from fossil fuels sources of energy (natural gas) to fully renewable sources for our Scope 1 before 2040 (to be noted our Scope 2 will be eliminated on or before 2025 due to the purchase of 100% of renewable electricity).</p>
Physical climate scenarios	Customized publicly available physical scenario	Country/area	2.1°C - 3°C	<p>The aim of this scenario (the 2.7 degree scenario that is very likely from latest forecast and information from IPCC and other government alignments) was to explore alternative opportunities to guarantee supply by looking at the following angles: alternative raw material source, reformulation, safety stocks and ensure resources are spent in the right area (R&amp;D, innovation, procurement strategy, operational stock management, ...). We used a participatory approach and involved selected stakeholders in the exercise.</p> <p>The exercise has been defined geographically (for example with the inclusion of the countries most exposed to climate change and its implications on water scarcity and biodiversity loss, in particular the tropical area) and for selective crops most exposed to climate change implications and the horizon (2030, 2040, 2050) which also served as a reference</p> <p>Among the main data acquired for the scenario are those relating to the crops we are buying and the characteristics of the environments of origin that could change as a result of climate change.</p> <p>Changes made: we now better leverage our growing internal team expertise like agronomy experts to define key areas to look into, bring external support if required and collaborate with suppliers if needed. (example: where drip-irrigation make sense, where it does not to boost the plant resilience in low water table environments)</p> <p>Assumptions concerned the change of local weather patterns characteristics and impact on communities behaviors (replacing crops by other crops less affected by weather patterns or water scarcity challenges).</p> <p>While our company strategy follows a five-year plan, in the case of scenarios, we have tried to project long term horizons (2030, 2040 and 2050) to help us understand what changes or specific interventions in resilience / agricultural practices should be made to our supply chain.</p> <p>Finally, the analysis included a number of physical risks that may occur: cyclonic events, drought, drastic loss of pollinators (insects / birds /...), floods, precipitation, water tables level drop....</p>

**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**

How can supply chain interruptions due to climate change impact the company and its value chain?

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

Evaluating different scenarios complementing our ERM (Enterprise Risk Management) approach allows the company to identify additional risk drivers for of raw material supply disruptions to assess additional mitigation measures and / or recovery plans. From a business point of view, supply difficulties have an impact on costs, lead times to supply to our customers and will affect our ability to provide our customers. Our revenue and reputation could be affected.

Changes made: our engagement in climate action has further increased driving more ambitious investments & strengthening targets to improves our ability to implement the most favorable scenarios. In parallel additional business continuity activities has been developed in the area of accelerating the development of alternative raw materials sources in some specific cases.

We are also focusing on supplier engagement to use our company as a force for good within our supply chain to raise awareness on climate change and necessary upcoming improvements in agricultural practices.

Example: Grapefruit and vanilla supply shortages are concrete examples of what scenario analysis has identified as potential risks. The way we are anticipating these potential problems is by diversifying our supply from different crops, sources, regions and developing bio-transformation processes that have the potential to generate desired end-products starting from other organic sources. In addition to that we continue to develop a range of natural-identical materials (synthetics) complementing our naturals portfolio, deciding the increase of safety stocks, as well as reformulation possibilities to reduce the resilience on potentially exposed raw materials.

**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

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>Description of influence:</p> <ol style="list-style-type: none"> <li>The opportunity to provide low-carbon products to our customers (see C2.4a, opp 1) and to be a co-creation partner of choice, supporting our customers in their plant-based journey by providing solutions to ensure their plant-based products taste and look great, as well as improving the nutritional profile of plant based food (see C2.4a, opp 4) has influenced the growth enabler 'Creations' of our current 2025 company strategy "Committed to Growth, with Purpose", expanding strategic relationships with suppliers, start-ups and partners; enhancing co-creation with customers.</li> <li>With consumer demand for responsible products, including low-carbon products and plant-based products, increasing, we work with our customers and other key stakeholders to develop solutions to satisfy this consumer demand for these products. Our leading scientific research means that customers are benefiting from products that use fewer resources and have a lower environmental impact. This constitutes the opportunity for added revenues in new product areas.</li> </ol> <p>We maximize value, we also partner with our suppliers to create a differentiating and profitable business. Through supplier enabled innovation, suppliers tap into their innovative resources and together we achieve a level of innovation that is beyond what we can do on our own.</p> <p>Time horizon:</p> <p>Given that the customer demand for low-carbon products and plant-based solutions is gradually developing and expected to increase in the future, the time horizon considered is short, medium and long term. It is already integrated in our current 2025 strategy (short term) and is integrated in our Purpose (medium and long term).</p> <p>Case study of the most substantial strategic decision made:</p> <p>As part of our Supplier Enabled Innovation Programme, we have a strategic initiative with a selected number of partners called "Connect to Win". Its aim is to unlock value from our existing supplier relationships and create a pipeline of technological innovation that differentiates us in the market. It is a structured, open door approach that acknowledges the possibilities of adding significant value to our existing procurement approaches while creating value in Givaudan's innovation agenda. Through this collaboration with strategic suppliers we are able to enhance the rapid development of, among others, low-carbon products.</p>
Supply chain and/or value chain	Yes	<p>description of the influence:</p> <ol style="list-style-type: none"> <li>The risk of a disruption in the supply of the raw materials required for our production and/or volatility of raw material prices may negatively impact our ability to produce at competitive prices and in a timely manner (see risk 2 of C2.3a). It has been identified as a major risk to the business and is reflected in the annual financial planning, since raw material prices impact our profitability margins. This risk has influenced Givaudan's long-term business strategy in many ways, characterised by an increased use of risks and opportunities assessments from protecting future supply chains while continuing to respond to consumers and market needs. The way we source, for example: with an annual spend of over CHF 2 billion in raw materials and indirect materials &amp; services, procurement is a strategic pillar with a high impact on the profitability of the Company. Sustainable sourcing is one of the five pillars of the Company's growth strategies. This is why our "Windmill" process includes risks related to Climate Change and weather conditions and is used to develop risk-based sourcing strategies and strategic partnerships with suppliers. There are currently 100 category initiatives touching 50% of the spend.</li> <li>The opportunities to secure our raw material supply chain through our Sourcing4Good (S4G) programme (substantial strategic decision), as explained in opp. 2 of C2.4a, are an integral part of the "creations and nature" pillar of our 2025 business strategy. The "sourcing at origin" programme is about being present at the origin of the raw materials, building strong and long term relationships with smallholder producers and fostering local value creation and good agricultural practices to secure the supply and quality of key natural ingredients.</li> </ol> <p>time horizon:</p> <p>Short-medium term for "sourcing at origin" Medium-long term for windmill process and S4G</p> <p>Case study:</p> <p>For example, Black Pepper Oil supply from Madagascar is now covered under our S4G programme, enabling well controlled agricultural practices at farm level that enables official Organic certification and thus better environmental footprint, whilst ensuring security of supply risk whilst stabilising the cost base fluctuations overtime. This is all enabled by our "sourcing at origin" programme that is inclusive from smallholder farmers to distillers and distributors.</p>
Investment in R&D	Yes	<p>Description of the influence:</p> <ol style="list-style-type: none"> <li>The opportunity to provide low-carbon products to our customers (see C2.4a, opp. 1) and the opportunity to support our customers in their plant-based journey (see C2.4a, opp. 4) has influenced the pillar 'Creations' of our current 2025 business strategy. Investment in R&amp;D, innovation and technology and strong R&amp;D programmes enable us to satisfy the increasing demand for low-carbon products and plant-based solutions and to improve intrinsic environmental properties of our products in general.</li> <li>Addressing the looming shortage of raw materials (see in C2.3a risk 2) has also influenced the pillar "Creations" of our current 2025 business strategy. The R&amp;D there is focused on generating alternative sources of materials from alternative ingredients or even from waste streams.</li> <li>Our GHG emission reduction programme (see C2.4a opp. 3), is part of our Purpose and included in the pillar "Nature" of our current 2025 business strategy. In light of these targets, a number of short term strategy changes have been influenced, for example, our focus on green chemistry and compacted design via a wide-ranging assessment of Givaudan's chemistry to establish baseline performance and improvement measures for our innovation and manufacturing processes.</li> </ol> <p>Time horizon:</p> <p>Short, medium and long term</p> <p>Case study of the most substantial strategic decision made:</p> <p>In designing innovative processes, we also look at how we can reuse and recover process &amp; waste side streams (upcycling). By following green chemistry principles, we ensure ingredients are safe by design and that our processes make efficient use of energy and materials, while reducing water consumption and waste.</p> <p>One of the latest sustainable ingredient is KoffeeUp™. It is a sustainable beauty oil crafted from upcycled Arabica coffee. KoffeeUp™ has natural, eco-conscious and effective properties bringing facial skin care benefits to consumers. It was developed in collaboration with a biotech start-up that focuses on upcycling spent coffee grounds/waste into active and functional ingredients for cosmetics.</p> <p>This ground-breaking "upcycling" approach reduces waste and minimises our environmental impact, in line with our commitment to sustainability and consumers' demand for products that are both highly effective and produced in a responsible way.</p>
Operations	Yes	<p>Description of the influence:</p> <ol style="list-style-type: none"> <li>Givaudan is exposed to climate-related regulation that place a price on GHG emissions generated by our production facility, by the use of electricity and non-renewable fuel sources. Climate-related regulations are increasing world-wide by quantity and location, and with our operations located in around 20 countries, the risk of exposure to emerging regulation, as explained in C2.3a risk 1, has influenced our business strategy. Within the "How we act: Excellence, Innovation &amp; Simplicity - in everything we do" pillar we have the ambition to decouple growth and environmental impact by developing yearly GHG reduction initiatives that compensate for the output growth. In signing up for the SBT and RE100 commitments (substantial strategic decision) prior to the Paris Agreement, Givaudan demonstrates its ambition to mitigate climate change and its desire to work in a broad global partnership of proactive companies dedicated to making a positive difference.</li> <li>The risk of extreme weather events in locations where we operate leading to water supply shortage and potential business interruption, as explained in C2.3a risk 4, has a potential negative impact on the "Nature" pillar of our 2025 business strategy. To ensure the delivery of high quality products and services that are cost-effective, safe, sustainable and in a timely manner we have put in place a water stewardship programme. We also address transfers due to operations continuity issues in our business continuity plans.</li> </ol> <p>Time horizon</p> <p>Short,medium and long term</p> <p>Case study of the most substantial strategic decision:</p> <p>We recognize strong action is needed to mitigate the most damaging effects of climate change. Our commitments were taken to the highest level by:</p> <ul style="list-style-type: none"> <li>- Aligning our Science-Based Targets to 1.5°C</li> <li>- Joining the global movement of leading companies committed to set 1.5°C science-based emissions reduction targets aligned with a net-zero future by signing the UN Pledge</li> <li>- Announcing our ambition to be Climate Positive before 2050 inclusive of scope 1, 2 and 3</li> </ul>

**(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 Capital expenditures Capital allocation Acquisitions and divestments Assets	<p>1. Revenues Description of the impact: Revenues are impacted both positively and negatively depending on the risk and opportunity. (+): The opportunity to provide low-carbon products (as explained in C2.4a, opportunity 1) and the opportunity to be a co-creation partner of choice, supporting our customers in their plant-based journey by providing solutions to ensure their plant-based products taste and look great, as well as improving the nutritional profile of plant based food (see C2.4a, opportunity 4) contribute to an increase in our revenues. (-) The risk of a disruption in the supply or volatility of raw material prices (as explained in C2.3a, risk 2) increases raw material spend and thereby decrease our revenues.</p> <p>magnitude of the impact/time horizon: The impact (increase) in the revenues through customer demand for low-carbon products and plant-based solutions is low at the moment as the demand for low-carbon products and plant-based solutions is slowly moving. We expect an increase over the medium term as a result of the growing demand for low-carbon products and plant-based solutions. The impact (decrease) in the revenues through raw material price increases or in the event of severe raw material shortage and consequently inability to supply, is currently medium. So far the impact has been mitigated thanks to our ability to diversify our geographical or physical sources of raw materials. In some cases though, these alternative sourcing came at higher cost for the company.</p> <p>2. Direct costs Description of the impact: a. Climate-related regulations are increasing world-wide by quantity and location, and with our operations located in around 20 countries, the risk of exposure to emerging regulation is high, as explained in C2.3a risk 1. Any tightening of these regulations may have a negative impact on Givaudan's operating costs (e.g. for additional taxes on fuel, energy or carbon emissions). b. The risk of extreme weather events in locations where we operate leading to water supply shortage and potential business interruption, as explained in C2.3a risk 4, is impacting operating costs through cost of the business continuity plan to anticipate transfers due to operations continuity issues.</p> <p>magnitude of impact/time horizon: The order of magnitude of the impact is currently less than 5% of total operating costs, which is considered as a low impact and is expected to increase over the medium term.</p> <p>3. Capital expenditures/Capital allocation Description of the impact: a) Spend on R&amp;D/Innovation to pursue opportunities to develop new products and reduce GHG emissions (as explained in C2.4a opportunities 1, 3 &amp; 4) have an impact on current and future allocation of capital expenditures. In 2021 our total investment in R&amp;D was CHF 562 million. b) The cost to mitigate the risk of loss of reputation through adaptation and mitigation activities, as explained in C2.3a risk 3 is directly linked to the costs to implement our GHG reduction programmes which is done mostly through capital expenditures. Our investment in capital expenditure is around 4% of sales annually.</p> <p>Magnitude of impact: The magnitude of the impact is high, as borne out by e.g. our investment in R&amp;D, which amounts to 8-9% of sales.</p> <p>case study of how climate-related risks and opportunities have influenced the financial planning and time horizon: Our global CAPEX &amp; OPEX governance ensures appropriate financial planning supports our sustainable development in an integrated way. In deed additional OPEX costs associated to converting our renewable electricity sources from conventional to fully renewable (as part of RE100) are embedded and absorbed into our normal energy procurement schemes. The additional 2.1 million CHF has been factored in our 2020 - 2025 budget cycles as well as 2.8 million CHF for the period 2025 - 2030. Same has been done for our CAPEX allocation process, where more efficient technologies than usual are and will continue to be selected for key site developments. These additional investments are embedded and absorbed into our normal CAPEX projects selection schemes and site masterplanning decisions. A 25 million CHF investment has been factored in our 2020 - 2025 budget cycles to accelerate the decarbonization plans for scope 1. It is foreseen that an additional 15 million CHF will be integrated in the 2025 - 2030 period to achieve our 2030 SBT milestone.</p> <p>4. Acquisitions and divestments: Description of the impact: Acquisitions in the area of naturals result in a higher exposure to climate change related risks, but at the same time allows us to diversify geographically. We are also looking to create investments, partnerships and alliances within an overall eco-system which would support our sustainability ambitions. Examples are partnerships with academia, start-ups and with suppliers through our "connect to win" program.</p> <p>Magnitude of the impact/time horizon: Currently, the impact is low and we expect an increase in the future.</p> <p>5. Assets Description of the impact: We have a plan to systematically maintain and/or upgrade our facilities allowing a reduction of GHG emissions and switch to renewable energy. These plans are part of our sites maintenance strategies and 5 years strategic CAPEX.</p> <p>Magnitude of the impact/time horizon: Givaudan is typically investing around 4% of sales, more than CHF 200 million each year on capital investment projects which include investments in technology, maintenance of our manufacturing locations and new investments in new markets / new facilities. The order of magnitude of the impact is medium and is expected to increase over the medium term.</p>

**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?**

Yes

**C3.5a**

**(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's transition to a 1.5°C world.**

**Financial Metric**

CAPEX

**Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)**

2

**Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)**

5

**Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)**

10

**Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world**

Our global CAPEX & OPEX governance ensures appropriate financial planning supports our sustainable development in an integrated way. For our CAPEX allocation process, where more efficient technologies than usual are and will continue to be selected for key site developments. These additional investments are embedded and absorbed into our normal CAPEX projects selection schemes and site masterplanning decisions. A 25 million CHF investment has been factored in our 2020 - 2025 budget cycles to accelerate the decarbonization plans for scope 1. It is foreseen that an additional 15 million CHF will be integrated in the 2025 - 2030 period to achieve our 2030 SBT milestone.

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**Financial Metric**

OPEX

**Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)**

5

**Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)**

10

**Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)**

10

**Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world**

Our global CAPEX & OPEX governance ensures appropriate financial planning supports our sustainable development in an integrated way. In deed additional OPEX costs associated to converting our renewable electricity sources from conventional to fully renewable (as part of RE100) are embedded and absorbed into our normal energy procurement schemes. The additional 2.1 million CHF has been factored in our 2020 - 2025 budget cycles as well as 2.8 million CHF for the period 2025 - 2030.

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## C4. Targets and performance

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### C4.1

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

Absolute target

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#### C4.1a

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**(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**

2017

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

Scope 2

**Scope 2 accounting method**

Market-based

**Scope 3 category(ies)**

<Not Applicable>

**Base year**

2015

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

139374

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

106879

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

<Not Applicable>

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

246253

**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)**

<Not Applicable>

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

100

**Target year**

2030

**Targeted reduction from base year (%)**

70

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

73875.9

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

139608

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

31090

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

<Not Applicable>

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

170698

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

43.8312281619774

**Target status in reporting year**

Underway

**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**

In 2019, Givaudan strengthened its targets, now aiming to reduce absolute scope 1 and 2 GHG emissions by 70% between 2015 and 2030, up from a previous target of a 30% reduction. Our revised target is 1.5°C aligned. In 2021, scope 1 and 2 emissions have reduced by 31% compared to 2015, which means that 44% of the target has been achieved.

Target coverage: all scope 1 and 2 GHG emissions.

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

We made good progress towards our targets in 2021 with absolute total direct (scope 1) and indirect (scope 2) GHG emissions decreasing by 75,600 tonnes. The evolution of absolute total scope 1 and 2 GHG emissions in 2021 vs. the 2015 baseline was -31%.

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

<Not Applicable>

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**Target reference number**

Abs 2

**Year target was set**

2017

**Target coverage**

Company-wide

**Scope(s)**

Scope 3

**Scope 2 accounting method**

<Not Applicable>

**Scope 3 category(ies)**

Category 1: Purchased goods and services

Category 2: Capital goods

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

Category 4: Upstream transportation and distribution

Category 5: Waste generated in operations

Category 6: Business travel

Category 7: Employee commuting

Category 9: Downstream transportation and distribution

**Base year**

2015

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

<Not Applicable>

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

<Not Applicable>

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

2224090

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

2224090

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

<Not Applicable>

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

<Not Applicable>

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

100

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

100

**Target year**

2030

**Targeted reduction from base year (%)**

20

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

1779272

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

<Not Applicable>

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

<Not Applicable>

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

2139587

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

2139587

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

18.9972078468048

**Target status in reporting year**

Underway

**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**

Target coverage: all relevant scope 3 categories: Purchased goods and services, Capital goods, Fuel and energy related activities, Upstream transportation and distribution, Waste generated in operations, Business travel, Employee commuting, Downstream transportation and distribution.

In 2021, we saw a slowdown in our scope 3 GHG emissions with a decrease of 4% against the 2015 baseline figure. We have integrated some recent acquisitions that have an important impact on the overall performance of the company and have therefore modified our emissions profile. We also have to consider the impact of the COVID-19 pandemic situation in the analysis: as an example, some 17,000 tCO<sub>2</sub>e of the reduction are related to a decrease in business travel and employee commuting, despite the growth of the company. While in this instance the effects of the pandemic helped reduce emissions, in some other cases, such as distribution and logistics, it rather contributed to an increase in emissions.

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

In 2021, we saw a slowdown in our scope 3 GHG emissions with a decrease of 4% against the 2015 baseline figure. A detailed explanation on progress per category is given in the 2021 GRI report.

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

<Not Applicable>

---

**C4.2**

**(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

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

Net-zero target(s)

---

**C4.2a**



**(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**

2015

**Target coverage**

Company-wide

**Target type: energy carrier**

Electricity

**Target type: activity**

Consumption

**Target type: energy source**

Renewable energy source(s) only

**Base year**

2015

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

324921

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

0

**Target year**

2025

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

100

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

84

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

84

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

This target is part of our science-based target explained in question C4.1a

**Is this target part of an overarching initiative?**

RE100

**Please explain target coverage and identify any exclusions**

Target coverage: all manufacturing sites

So far 84% of all the electricity we purchase comes from renewable sources. In total 45 of our manufacturing sites are powered solely by electricity from renewable sources by the end of the reporting cycle.

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

Innovative sourcing strategies are an important part of reaching our targets. In 2020, we set a new renewable electricity strategy prioritising first on-site generation, then off-site generation and finally the purchase of Electricity Attribute Certificates (EACs). Our stringent procurement strategy helps add more renewable electricity to the grid. In 2021, we purchased electricity that accounted for 32% of the total energy used across the Company but which equated to 15% of our total CO<sub>2</sub> emissions.

We have made considerable progress in terms of renewable electricity supply (scope 2 GHG emissions) and are on track to meet our commitment to RE100. We attained 84% renewable electricity supply in 2021 and 45 production sites were powered 100% by electricity from renewable sources by the end of the reporting year.

One project, at our Taste & Wellbeing site at Pune in India, involved fitting more than 2,000 solar photovoltaic panels to rooftops, ground mounts and carports to significantly cut reliance on fossil fuels. The installation, which dedicated about 5,300 square metres to the solar panels, resulted in electricity generation of about 971,520 KWh and represents a 20% cut in the use of fossil fuels and a carbon footprint reduction of 1,000 tonnes.

**List the actions which contributed most to achieving this target**

<Not Applicable>

---

**C4.2c**

---

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

**Target reference number**

NZ1

**Target coverage**

Company-wide

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

Abs1

Abs2

**Target year for achieving net zero**

2050

**Is this a science-based target?**

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

**Please explain target coverage and identify any exclusions**

Target coverage: all scope 1 and 2 GHG emissions + all relevant scope 3 categories: Purchased goods and services, Capital goods, Fuel and energy related activities, Upstream transportation and distribution, Waste generated in operations, Business travel, Employee commuting, Downstream transportation and distribution.

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

Yes

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

Our net-zero target is part of our Purpose and is the following:

Before 2050, we will be a climate-positive business based on scope 1, 2 and 3 emissions, with the following milestones:

- RE100 by 2025 (100% renewable electricity by 2025)
- Before 2030, our operations GHG emissions (scope 1 and 2) will be cut by 70% and our supply chain GHG emissions (scope 3) by 20%
- Before 2040, our operations (scope 1 and 2) will be climate-positive and our supply chain emissions will be cut by 50%
- Before 2050, we will become a climate-positive business (scope 1, 2 and 3 will be climate-positive)

In addition, we have committed to the pledge "Business Ambition for 1.5°C" proposed by the United Nations to aim for net-zero value chain emissions by 2050 and intend to follow the net-zero standard that is being developed by the SBTi.

Currently, 84% of our sites are already operating on 100% renewable energy.

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

Though our Climate Strategy prioritises the reduction of emissions, we also look to neutralise or compensate residual emissions that cannot be reduced. Carbon removal solutions are an essential element to going beyond net zero and achieving our climate positive target. The journey in front of us is long and the results will take time. This is why we are starting now.

Our approach is now focused on Natural Climate Solutions (NCS), which aim at the better management, protection and restoration of ecosystems. They target a reduction of GHG emissions related to land use and changes in land use, the capture and storage of additional CO<sub>2</sub> from the atmosphere and, finally, the improvement of ecosystem resilience, thereby helping communities adapt to the increases in flooding and dry spells associated with climate change.

Insetting, that is, the neutralisation of our emissions through a carbon capture and storage project within our value chain, is highly relevant for Givaudan because we have a direct footprint in natural supply chains located in countries where the environment is under pressure. For us, insetting means natural solutions in the supply chains, with the producing communities. It is not the easiest approach because it involves land availability and long term commitment, traceability and auditing. It is the most credible, relevant approach to Givaudan and in line with our SBTi engagements. It will also benefit our communities socially.

The three most relevant insetting solutions for Givaudan are reforestation, improved plantations (for example, firewood plantation for distillation) and improved agricultural practices.

**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 CO<sub>2</sub>e savings.**

	Number of initiatives	Total estimated annual CO <sub>2</sub> e savings in metric tonnes CO <sub>2</sub> e (only for rows marked *)
Under investigation	7	606
To be implemented*	18	15000
Implementation commenced*	23	1107
Implemented*	35	21628
Not to be implemented	5	580

**C4.3b**

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

**Initiative category & Initiative type**

Low-carbon energy consumption	Other, please specify (EACs to cover part of our electricity purchased.)
-------------------------------	--

**Estimated annual CO2e savings (metric tonnes CO2e)**

19597

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

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

0

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

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

1-2 years

**Comment**

We have purchased Energy Attribute Certificates (EACs) for many new additional manufacturing sites in scope for this reporting cycle in alignment with our RE100 implementation plan. These sites are located across different geographies (US, Europe, Asia and Latin America). There is no CAPEX cost, but an OPEX additional cost to purchased these EACs.

**Initiative category & Initiative type**

Energy efficiency in production processes	Process optimization
---	----------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

545

**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)**

5500

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

150000

**Payback period**

&gt;25 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Upgrade of boiler burner with a more efficient one.

**Initiative category & Initiative type**

Energy efficiency in production processes	Cooling technology
---	--------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

306

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

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

46000

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

57000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

21-30 years

**Comment**

Installation of adiabatic cooling on existing chillers.

---

**Initiative category & Initiative type**

Energy efficiency in production processes	Smart control system
---	----------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

187

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

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

19431

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

59396

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

21-30 years

**Comment**

Harmonic mitigation on site's electrical circuits.

---

**Initiative category & Initiative type**

Energy efficiency in production processes	Machine/equipment replacement
---	-------------------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

155

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

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

23000

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

2000

**Payback period**

&lt;1 year

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Installation of scrubber fans.

---

**Initiative category & Initiative type**

Energy efficiency in production processes	Motors and drives
---	-------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

101

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

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

73000

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

130000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Replacement of old motors with new efficient ones.

**Initiative category & Initiative type**

Energy efficiency in production processes	Compressed air
---	----------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

95

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

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

9865

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

30850

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Overall work done to improve the compressed air system in the factory.

**Initiative category & Initiative type**

Energy efficiency in production processes	Process optimization
---	----------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

82

**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)**

13853

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

0

**Payback period**

&lt;1 year

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Project done to be able to work only with one steam boiler.

**Initiative category & Initiative type**

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)
--------------------------------	--

**Estimated annual CO2e savings (metric tonnes CO2e)**

70

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

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

7291

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

1550

**Payback period**

&lt;1 year

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Project done to be able to reduce the operation of the Air Handling Units.

**Initiative category & Initiative type**

Energy efficiency in production processes	Compressed air
---	----------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

64

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

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

47000

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

60000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Installation of a new and more efficient air compressor with a VSD (Variable Frequency Drive)

**Initiative category & Initiative type**

Energy efficiency in production processes	Other, please specify (Collection of different projects to reduce the Scope 1 and 2 emissions.)
---	---

**Estimated annual CO2e savings (metric tonnes CO2e)**

426

**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)**

497640

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

383338

**Payback period**

<1 year

**Estimated lifetime of the initiative**

16-20 years

**Comment**

This project has been added to consolidate all the remaining projects done. In this way the total Scope 1 and 2 savings of 2031 t CO2 eq. reported under question 4.3a from the 34 implemented projects is aligned with the total reduction shown in this question 4.3b.

**C4.3c**

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

Method	Comment
Dedicated budget for energy efficiency	Compared to a "standard" design extra capital is allocated to the design and construction of new green field facilities with higher energy saving design standards.
Employee engagement	At every manufacturing location a Green Team (with employee volunteers) is active, which drives behavioural change in terms of efficient use of energy among the workforce and which is developing and implementing energy saving initiatives
Dedicated budget for low-carbon product R&D	Process engineering department is optimizing existing manufacturing processes through the application of, amongst other things, Green Chemistry principles.
Internal incentives/recognition programs	A selected group of managers has eco efficiency related personal objectives which are related to monetary incentives. Every year the Executive Committee selects a Green Team as the winner of the Green Team Award for the best implemented eco- efficiency improvement idea; internally the names of the winning Green Team are widely communicated and recognized
Compliance with regulatory requirements/standards	This is the basic driver for meeting energy related design standards, which are increasingly put forward in many countries in which we operate
Internal price on carbon	We have identified and agreed on an internal price of carbon mechanism to employ for our scopes 1 and 2 emissions reduction projects. Internal pilot test with real projects have been successful and the ICP is now integrated in the payback with ICP metric. The ICP is also embedded in the Green Chapter analysis which is employed during the CAPEX projects to identify the best sustainable option among the different technical variants available.
Partnering with governments on technology development	Our site in Sant Celoni, Spain hosts a pilot for HyCool, a groundbreaking technology combining solar collectors with absorption chillers to harness solar energy to produce steam, heating and cooling energy with greater efficiency. Funded by the European Union, the installation started in summer 2021 and we are on track to complete the project in May 2022.

**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**

No taxonomy used to classify product(s) or service(s) as low carbon

**Type of product(s) or service(s)**

Other	Other, please specify (concentrated fragrances)
-------	---

**Description of product(s) or service(s)**

Givaudan's Fragrance Compaction programme looks at innovative ways to design much more concentrated fragrances for all product categories. Using higher impact, higher value added ingredients to deliver fragrance performance we are able to offer an increased value proposition to customers while reducing emissions. Fragrance contribution is divided 34 times from standard design with a positive impact in every step where fragrance is involved (RM processing, Manufacturing, Distribution). Using GHG protocol methodology emissions for identical functional unit are reduced by 70%.

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

No

**Methodology used to calculate avoided emissions**

<Not Applicable>

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

<Not Applicable>

**Functional unit used**

<Not Applicable>

**Reference product/service or baseline scenario used**

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

**Explain your calculation of avoided emissions, including any assumptions**

<Not Applicable>

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

1

## C5. Emissions methodology

### C5.1

**(C5.1) Is this your first year of reporting emissions data to CDP?**

No

### C5.1a

**(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?**

**Row 1**

**Has there been a structural change?**

Yes, an acquisition

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

Naturex, Vika and Drom

**Details of structural change(s), including completion dates**

The structural change is a growth due to the acquisitions of Naturex, Vika and Drom which occurred in 2019 (completion date), and are being accounted for the first time in this disclosure. All operations from these acquisitions are now under the ownership of Givaudan and are accounted for in the emissions data of Givaudan. In order to enable a meaningful comparison of environmental performance over time, Givaudan has established a standard process, based on the GHG Protocol, to recalculate its baseline indicators in case of structural changes such as acquisitions, changes in calculation methodology or inventory boundaries. This allows us to compare performance on a like-for-like basis over time. The process includes definitions of recalculation triggers and the process of reporting the information. Thanks to this guidance, Givaudan is able to track its environmental performance in a transparent manner and with confidence that the data are accurate despite changes related to business growth.

### C5.1b

**(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?**

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

### C5.1c

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

	Base year recalculation	Base year emissions recalculation policy, including significance threshold
Row 1	Yes	<p>Baseline recalculation</p> <p>In order to enable a meaningful comparison of environmental performance over time, Givaudan has established a standard process, based on the GHG Protocol, to recalculate its baseline indicators in case of structural changes such as acquisitions, changes in calculation methodology or inventory boundaries. This allows us to compare performance on a like-for-like basis over time. The process includes definitions of recalculation triggers and the process of reporting the information. Thanks to this guidance, Givaudan is able to track its environmental performance in a transparent manner and with confidence that the data are accurate despite changes related to business growth.</p> <p>Reasons for change</p> <p>In 2021, the majority of the changes are due to the impact of integrating information from recently acquired companies Vika, Naturex and Drom into our baseline and past-year data. We also restate data when we identify corrections that must be reflected in the past performance or when we use a new calculation or measurement methodology for certain indicators. This is done with the aim of keeping the data consistent and comparable over time.</p>

## C5.2

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

**Scope 1**

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

106879

**Comment**

no comment



**Scope 2 (location-based)**

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

139374

**Comment**

no comment

**Scope 2 (market-based)**

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

89787

**Comment**

no comment

**Scope 3 category 1: Purchased goods and services**

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

1917037

**Comment**

no comment

**Scope 3 category 2: Capital goods**

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

51722

**Comment**

no comment

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

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

105744

**Comment**

no comment

**Scope 3 category 4: Upstream transportation and distribution**

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

29674

**Comment**

no comment

**Scope 3 category 5: Waste generated in operations**

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

19321

**Comment**

no comment

**Scope 3 category 6: Business travel**

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

24461

**Comment**

no comment

**Scope 3 category 7: Employee commuting**

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

21516

**Comment**

no comment

**Scope 3 category 8: Upstream leased assets**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Givaudan has no upstream leased assets.

**Scope 3 category 9: Downstream transportation and distribution**

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

54617

**Comment**

no comment

**Scope 3 category 10: Processing of sold products**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Givaudan is a business-to-business company and our products are used by our customers to produce end/consumer products, but the concentration of our products as ingredients in these end products is small (usually less than 1%). Moreover, the incorporating techniques of our product do not require any energy related step. By consequence this scope 3 category is not relevant.

**Scope 3 category 11: Use of sold products**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Givaudan is a business-to-business company and our products are used by our customers to produce end/consumer products, but the concentration of our products as ingredients in these end products is small (usually less than 1%). By consequence this scope 3 category is not relevant.

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

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

The majority of our products are applied in food/beverage or personal care products which are consumed as such and do not require any specific waste treatment. By consequence this scope 3 category is not relevant.

**Scope 3 category 13: Downstream leased assets**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Givaudan has no downstream leased assets.

**Scope 3 category 14: Franchises**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Givaudan is not a franchise company.

**Scope 3 category 15: Investments**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Investments are mostly happening around specific product innovation activities which have a limited impact. By consequence this scope 3 category is not relevant.

**Scope 3: Other (upstream)**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

N/A

**Scope 3: Other (downstream)**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

N/A

C5.3

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**(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

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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)

139608

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

no 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

no 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

125501

Scope 2, market-based (if applicable)

31090

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

No 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**

New acquisitions

**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**

We have the following procedure when there are acquisitions: - if the acquisition of the company is done in the first half of the year, then their environmental data (including GHG emission data) is integrated the following year. - if the acquisition of the company is done in the second half of the year, then their environmental data (including GHG emission data) is integrated the year after the following year. This procedure has been externally verified and assured.

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

<Not Applicable>

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

<Not Applicable>

---

**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)**

1902794

**Emissions calculation methodology**

Supplier-specific method

Average data method

Spend-based method

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

4.9

**Please explain**

For Natural and Synthetic raw materials, figures are estimated according to process-based modelling using individual modelling per substance and considering all physical inputs (energy, fertilisers, etc.). The model allows us to identify the carbon footprint of each substance using its weight (kg) and the most accurate emission factors. Emission factors are based on data from global generic Life Cycle Inventory databases (ecoinvent, World Food LCA Database) and internal primary data. Specific emission factors are used for substances representing the highest volume purchased. Proxies have been extrapolated for others.

For other Indirect materials & services categories (excluding existing categories), figures are calculated through the ESCHER model – an extended multi-regional input-output model based on Global Trade and Analysis Project (GTAP) data – on the basis of financial values of materials purchased during 2015 and the country of origin. The 2021 GHG emission figure was then calculated by using the 2015 ratio between spend and GHG emissions and extrapolating to the 2021 spend figure.

For packaging materials, the figure was calculated by extracting the number of units used for each type of packaging used at Givaudan from the Company's ERP database. This number was multiplied by the carbon footprint figure for the type of packaging (as received from suppliers or in publicly available databases). The totals for each type of packaging were consolidated to give a total Givaudan figure. For calculating the figure of packaging material it was necessary to have the carbon footprint figure by type of packaging from the suppliers. Scope 3 emission figure coming from packaging material is the 4.9% of scope 3 figure of Purchased goods and services.

**Capital goods**

**Evaluation status**

Relevant, calculated

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

56003

**Emissions calculation methodology**

Spend-based method

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

0

**Please explain**

The figures are calculated through the ESCHER model on the basis of financial values of hardware purchased during 2015. The 2021 GHG emission figure was calculated by using the 2015 ratio between spend and GHG emissions and extrapolating to the 2020 spend figure.

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

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

36349

### Emissions calculation methodology

Average data method

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

0

### Please explain

The calculation considered the primary energy carriers for the production of heat, electricity and steam, and the technology standard in the countries of the respective sites.

The data basis for the life-cycle inventory is the ecoinvent database 3.6 (method: IPCC 2013, 100 years). The scope 3 emissions were estimated directly through the analysis of the respective ecoinvent datasets by subtracting scope 1 and 2 emissions from overall emissions. Scope 3 emissions for the delivery of electricity (infrastructure, grid losses and direct emissions) have also been accounted for.

Covers the energy purchased as primary energy sources, purchased steam and electricity.

## Upstream transportation and distribution

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

39990

### Emissions calculation methodology

Distance-based method

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

0

### Please explain

We monitor the environmental impact of transportation (air, ship and road) by calculating the associated GHG emissions. We do this through a model that tracks all transport movements through our SAP system (by mode of transport), from delivery to receipt locations of raw materials. To calculate the GHG footprint, we use emission factors per mode of transport according to the Cefic (European Chemical Industry Council) guideline.

## Waste generated in operations

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

24084

### Emissions calculation methodology

Waste-type-specific method

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

0

### Please explain

Emission factors on a per tonne waste basis (as extracted from scope 3 guidance documents from WBCSD + WRI) have been multiplied with the total weight of waste generated at our manufacturing locations.

## Business travel

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

1794

### Emissions calculation methodology

Average data method

Distance-based method

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

95

### Please explain

Data on distance travelled are collected through our global and local travel agencies. To calculate the GHG footprint, emission factors per haul and class are used according to the 2021 Department for Environment, Food and Rural Affairs (Defra, UK) definition. We use the Emission factor including the RF effect.

## Employee commuting

### Evaluation status

Relevant, calculated

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

13277

### Emissions calculation methodology

Site-specific method

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

42

### Please explain

The reported 2021 figure is based on our new employee commuting survey/questionnaire, which was conducted for the fourth time. This year we also adapted our model so it includes the Defra emission factors for 2015, 2020 and 2021 for the respective survey. We collected information from about 7000 employees on commuting habits by including mode of transport and distance covered. The GHG emissions related to the category are calculated by multiplying the distance per dedicated mode of transport emission factors (according to Defra's GHG conversion factor). The total emissions are then extrapolated for all employees including the recent acquisitions integrated in the report. In light of the COVID-19 pandemic situation, we included parameters allowing us to collect information on commuting restrictions so we can compare regular performance and include the impact of the pandemic in this category. The next survey is planned for 2024.

## Upstream leased assets

### Evaluation status

Not relevant, explanation provided

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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

Givaudan has no upstream leased assets.

## Downstream transportation and distribution

### Evaluation status

Relevant, calculated

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

65297

### Emissions calculation methodology

Distance-based method

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

0

### Please explain

We monitor the environmental impact of transportation (by air, ship and road) by calculating the associated GHG emissions. We do this through a model that tracks all transport movements through our SAP system (by mode of transport), from delivery to receipt locations of intercompany deliveries and deliveries to customers. To calculate the GHG footprint, we use emission factors per mode of transport according to the Cefic guideline

## Processing of sold products

### Evaluation status

Not relevant, explanation provided

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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

Givaudan is a business-to-business company and our products are used by our customers to produce end/consumer products, but the concentration of our products as ingredients in these end products is small (usually less than 1%). Moreover, the incorporating techniques of our product do not require any energy related step. By consequence this scope 3 category is not relevant.

## Use of sold products

### Evaluation status

Not relevant, explanation provided

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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

Givaudan is a business-to-business company and our products are used by our customers to produce end/consumer products, but the concentration of our products as ingredients in these end products is small (usually less than 1%). By consequence this scope 3 category is not relevant.

## End of life treatment of sold products

### Evaluation status

Not relevant, explanation provided

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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

The majority of our products are applied in food/beverage or personal care products which are consumed as such and do not require any specific waste treatment.

## Downstream leased assets

### Evaluation status

Not relevant, explanation provided

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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

Givaudan has no downstream leased assets.

## Franchises

### Evaluation status

Not relevant, explanation provided

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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

Givaudan is not a franchise company.

## Investments

### Evaluation status

Not relevant, explanation provided

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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

Investments are mostly happening around specific product innovation activities which have a limited impact. By consequence this scope 3 category is not relevant.



**Other (upstream)**

**Evaluation status**

Not relevant, explanation provided

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

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

**Please explain**

Givaudan has no other (upstream) category.

**Other (downstream)**

**Evaluation status**

Not relevant, explanation provided

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

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

**Please explain**

Givaudan has no other (downstream) category.

C6.7

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

Yes

C6.7a

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**(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	3971	Calculated from biogas, biofuel and biomass consumption.

C6.10

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(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**

0.000025375

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

170698

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

672700000

**Scope 2 figure used**

Market-based

**% change from previous year**

14

**Direction of change**

Decreased

**Reason for change**

The 2021 intensity figure decreased with the implementation of emission reduction activities such as low carbon energy purchase, energy efficiency in processes and in building services.

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**Intensity figure**

0.2922

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

170698

**Metric denominator**

metric ton of product

**Metric denominator: Unit total**

584154.76

**Scope 2 figure used**

Market-based

**% change from previous year**

11

**Direction of change**

Decreased

**Reason for change**

The 2021 intensity figure decreased with the implementation of emission reduction activities such as low carbon energy purchase, energy efficiency in processes and in building services.

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## C7. Emissions breakdowns

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### C7.1

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

No

### C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Argentina	1675.1
Australia	283.6
Brazil	948.1
China	1491.1
Egypt	242.1
France	5756
Germany	2205.4
Hungary	3750.8
India	2055.4
Indonesia	1586.9
Japan	234.5
Mexico	26871.7
Netherlands	6944.2
Singapore	25
South Africa	233.1
Spain	5639.1
Switzerland	30500.1
United Kingdom of Great Britain and Northern Ireland	1169.1
United States of America	35286.1
Malaysia	0.2
Belgium	1079.5
Chile	2783.6
Italy	2727.8
Morocco	5983.5
Sweden	135.7

**C7.3**

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

By business division

**C7.3a**

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

Business division	Scope 1 emissions (metric ton CO2e)
Taste and Wellbeing	91297.5
Fragrance and Beauty	48310.2

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

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

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions, metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	95640	<Not Applicable>	This figure was calculated by taking the total scope 1 figure (139,608 metric tons CO2e) and 1) subtracting the scope 1 figure of 2 non-manufacturing sites included in our scope (2,980 metric tons of CO2e) and 2) excluding 30% of GHG emissions that are not related to chemical production activities. This 30% was estimated based on average non-chemical production activities per site and includes, among others building heating and transportation (29,860 metric tons CO2e). scope 1 emissions for chemical production activities. (139,608-2,980)*0.7=95,640
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

**C7.5**

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Argentina	2316.4	2301.1
Australia	1109.5	1400.3
Brazil	2775.2	0
China	19785.2	3999.3
Egypt	1586.9	1586.8
France	1321.7	0
Germany	2522.2	74.5
Hungary	4891.9	0
India	8038.9	762.8
Indonesia	6490.5	4074.3
Japan	801.4	252.2
Mexico	5250.8	2829.5
Netherlands	6561	0
Singapore	6854	3536.1
South Africa	1720.4	1721.1
Spain	3966.2	364.5
Switzerland	799.7	55.2
United Kingdom of Great Britain and Northern Ireland	3006.8	1580.7
United States of America	39098.4	452.1
Malaysia	722.7	514.4
Belgium	185.4	0
Chile	598.7	363.8
Italy	1195.8	1195.8
Morocco	3731	3887.3
Sweden	170.5	138

C7.6

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

By business division

C7.6a

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

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Taste and Wellbeing	100206	23635
Fragrance and Beauty	25295	7455

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

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

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	78187	20208	Scope 2, location-based: This figure was calculated by taking the total scope 2 location-based figure (125,501 metric tons CO2e) and 1) subtracting the scope 2 figure of 2 non-manufacturing sites included in our scope (5,214 metric tons of CO2e) and 2) excluding 35% of GHG emissions that are not related to chemical production activities. This 35% was estimated based on average non-chemical production activities per site and includes, among others, buildings heating and wastewater treatment plants (WWTP). Scope 2, location-based, emissions for chemical production activities: $(125,501 - 5,214) * 0.65 = 78,187$ . Scope 2, market-based: This figure was calculated by taking the total scope 2 market-based figure (31,090 metric tons CO2e) and 1) subtracting the scope 2 figure of 2 non-manufacturing sites included in our scope (0 metric tons of CO2e) and 2) excluding 35% of GHG emissions that are not related to chemical production activities. This 35% was estimated based on average non-chemical production activities per site and includes, among others, buildings heating and WWTP. Scope 2, market-based, emissions for chemical production activities: $(31,090 - 0) * 0.65 = 20,208$ .
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C-CH7.8

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

Purchased feedstock	Percentage of Scope 3, Category 1 tCO2e from purchased feedstock	Explain calculation methodology
Ethanol	0.9	For Natural and Synthetic raw materials, figures are estimated according to a process-based modelling using individual modelling per substance and considering all physical inputs (Energy, fertilizers, etc). The model allows to identify the GHG emission footprint of each substances using their weight and the most accurate emission factors. Emission factors are based on data from global generic Life Cycle Inventory databases (ecoinvent, World Food LCA Database) and internal primary data. The percentage of Scope 3, category 1 from Ethanol, was calculated taking the ration between 2021 Ethanol GHG emission footprint and total 2021 Scope 3 category 1 GHG emission footprint.
Methanol	0.2	For Natural and Synthetic raw materials, figures are estimated according to a process-based modelling using individual modelling per substance and considering all physical inputs (Energy, fertilizers, etc). The model allows to identify the GHG emission footprint of each substances using their weight and the most accurate emission factors. Emission factors are based on data from global generic Life Cycle Inventory databases (ecoinvent, World Food LCA Database) and internal primary data. The percentage of Scope 3, category 1 from Methanol, was calculated taking the ration between 2021 Methanol GHG emission footprint and total 2021 Scope 3 category 1 GHG emission footprint.
Specialty chemicals	42.7	For Natural and Synthetic raw materials, figures are estimated according to a process-based modelling using individual modelling per substance and considering all physical inputs (Energy, fertilizers, etc). The model allows to identify the GHG emission footprint of each substances using their weight and the most accurate emission factors. Emission factors are based on data from global generic Life Cycle Inventory databases (ecoinvent, World Food LCA Database) and internal primary data. The percentage of Scope 3, category 1 from Specialty chemicals, was calculated taking the ration between 2021 Specialty chemicals GHG emission footprint and total 2021 Scope 3 category 1 GHG emission footprint
Other base chemicals	2	For Natural and Synthetic raw materials, figures are estimated according to a process-based modelling using individual modelling per substance and considering all physical inputs (Energy, fertilizers, etc). The model allows to identify the GHG emission footprint of each substances using their weight and the most accurate emission factors. Emission factors are based on data from global generic Life Cycle Inventory databases (ecoinvent, World Food LCA Database) and internal primary data. The percentage of Scope 3, category 1 from other base chemicals, was calculated taking the ration between 2021 other base chemicals GHG emission footprint and total 2021 Scope 3 category 1 GHG emission footprint.

**C-CH7.8a**

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

	Sales, metric tons	Comment
Carbon dioxide (CO2)	0	We do not sell this output product.
Methane (CH4)	0	We do not sell this output product.
Nitrous oxide (N2O)	0	We do not sell this output product.
Hydrofluorocarbons (HFC)	0	We do not sell this output product.
Perfluorocarbons (PFC)	0	We do not sell this output product.
Sulphur hexafluoride (SF6)	0	We do not sell this output product.
Nitrogen trifluoride (NF3)	0	We do not sell this output product.

**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	19597	Decreased	11.5	This figure (% emission value) represents the decrease in emissions from 2020 to 2021 which comes from emissions reductions from additional renewable energy consumption as explained in questions C4.3a and b. In 2021, emissions reduction from renewable energy consumption reduced by 19,597 tCO2e our total scope 1 and 2 emissions. In 2021, scope 1 and 2 emissions were of 170,698 tCO2e. The emission value in percentage due to emission reduction from renewable energy consumption in 2021 is of: $(19,597/170,698) * 100\% = 11.5\%$ .
Other emissions reduction activities	2031	Decreased	1.2	This figure (% emission value) represents the decrease in emissions from 2020 to 2021 which comes from other emissions reductions activities as explained in questions C4.3a and b. In 2021, emissions reduction from other reduction activities reduced by 2,031 tCO2e our total scope 1 and 2 emissions. In 2021, scope 1 and 2 emissions were of 170,698 tCO2e. The emission value in percentage due to emission reduction from other emissions reduction activities in 2021 is of: $(2,031/170,698) * 100\% = 1.2\%$ .
Divestment		<Not Applicable >		
Acquisitions		<Not Applicable >		
Mergers		<Not Applicable >		
Change in output		<Not Applicable >		
Change in methodology		<Not Applicable >		
Change in boundary		<Not Applicable >		
Change in physical operating conditions		<Not Applicable >		
Unidentified		<Not Applicable >		
Other		<Not Applicable >		

## 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)	LHV (lower heating value)	6416	699859	706275
Consumption of purchased or acquired electricity	<Not Applicable>	292842	45354	338196
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	4756	17699	22455
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	2368	<Not Applicable>	2368
Total energy consumption	<Not Applicable>	306382	762912	1069294

C-CH8.2a

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

**Consumption of fuel (excluding feedstocks)**

**Heating value**

LHV (lower heating value)

**MWh consumed from renewable sources inside chemical sector boundary**

4492

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

479735

**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**

484227

**Consumption of purchased or acquired electricity**

**Heating value**

<Not Applicable>

**MWh consumed from renewable sources inside chemical sector boundary**

177484

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

29527

**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**

207011

**Consumption of purchased or acquired steam**

**Heating value**

<Not Applicable>

**MWh consumed from renewable sources inside chemical sector boundary**

3091

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

11505

**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**

14596

**Consumption of self-generated non-fuel renewable energy**

**Heating value**

<Not Applicable>

**MWh consumed from renewable sources inside chemical sector boundary**

1445

**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**

1445

**Total energy consumption**

**Heating value**

<Not Applicable>

**MWh consumed from renewable sources inside chemical sector boundary**

186512

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

520767

**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**

707279

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	No
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**

LHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

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

0

**Comment**

Givaudan has no sustainable certified biomass.

**Other biomass**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

6285

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

6285

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

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

0

**Comment**

no comment

**Other renewable fuels (e.g. renewable hydrogen)**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

131

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

131

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

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

0

**Comment**

no comment

**Coal**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

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

0

**Comment**

no coal consumption

**Oil**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

37293

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

37293

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

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

0

**Comment**

no comment

**Gas**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

601870

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

499872

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

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

101997

**Comment**

no comment

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

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

58449

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

58449

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

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

0

**Comment**

No comment

**Total fuel**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

704028

**MWh fuel consumed for self-generation of electricity**

<Not Applicable>

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

602031

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

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

101997

**Comment**

no comment

**C8.2d**

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	2369	2369	2369	2369
Heat	2252	2252	2252	2252
Steam	0	0	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)**

1445

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

1445

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

1445

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

0

**Heat**

**Total gross generation inside chemicals sector boundary (MWh)**

0

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

0

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

0

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

0

**Steam**

**Total gross generation inside chemicals sector boundary (MWh)**

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

**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)**

5214

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

8267

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

13481

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Australia

**Consumption of electricity (MWh)**

2022

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

1303

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

3325

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Belgium

**Consumption of electricity (MWh)**

1110

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

4096

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

5206

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Brazil

**Consumption of electricity (MWh)**

8198

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

7488

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

15686

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Chile

**Consumption of electricity (MWh)**

978

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

45132

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

46110

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

China

**Consumption of electricity (MWh)**

25164

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

18055

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

43219

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Egypt

**Consumption of electricity (MWh)**

2977

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

1194

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

4171

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

France

**Consumption of electricity (MWh)**

28267

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

28565

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

56832

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Germany

**Consumption of electricity (MWh)**

5378

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

10559

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

15937

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Hungary

**Consumption of electricity (MWh)**

15579

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

18515

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

34094

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

India

**Consumption of electricity (MWh)**

10812

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

7777

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

18589

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Indonesia

**Consumption of electricity (MWh)**

8596

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

7832

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

16428

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Italy

**Consumption of electricity (MWh)**

3657

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

13471

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

17128

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Japan

**Consumption of electricity (MWh)**

1630

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

1059

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

2689

**Is this consumption excluded from your RE100 commitment?**

No

**Country/area**

Malaysia

**Consumption of electricity (MWh)**

1363

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

110

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

1473

**Is this consumption excluded from your RE100 commitment?**

No

**Country/area**

Mexico

**Consumption of electricity (MWh)**

9676

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

125521

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

135197

**Is this consumption excluded from your RE100 commitment?**

No

**Country/area**

Morocco

**Consumption of electricity (MWh)**

5659

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

21013

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

26672

**Is this consumption excluded from your RE100 commitment?**

No

**Country/area**

Netherlands

**Consumption of electricity (MWh)**

14385

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

36199

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

50584

**Is this consumption excluded from your RE100 commitment?**

No

**Country/area**

Singapore

**Consumption of electricity (MWh)**

16628

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

537

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

17165

**Is this consumption excluded from your RE100 commitment?**



No

---

**Country/area**

South Africa

**Consumption of electricity (MWh)**

2102

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

1122

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

3224

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Spain

**Consumption of electricity (MWh)**

13772

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

27780

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

41552

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Sweden

**Consumption of electricity (MWh)**

2710

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

5708

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

8418

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

Switzerland

**Consumption of electricity (MWh)**

55970

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

144735

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

200705

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

United Kingdom of Great Britain and Northern Ireland

**Consumption of electricity (MWh)**

6179

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

11035

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

17214

**Is this consumption excluded from your RE100 commitment?**

No

---

**Country/area**

United States of America

**Consumption of electricity (MWh)**

90460

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

173121

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

263581

Is this consumption excluded from your RE100 commitment?

No

---

Country/area

Mexico

Consumption of electricity (MWh)

16762

Consumption of heat, steam, and cooling (MWh)

0

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

16762

Is this consumption excluded from your RE100 commitment?

Yes

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## C8.2h

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

Country/area of renewable electricity consumption

Belgium

Sourcing method

Green electricity products from an energy supplier (e.g. Green Tariffs)

Renewable electricity technology type

Sustainable Biomass

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

1110

Tracking instrument used

GO

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

1110

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

Belgium

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

2000

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

2021

Brand, label, or certification of the renewable electricity purchase

No brand, label, or certification

Comment

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2000 has been selected as a "random" number since the provider at the time of the CDP reporting compilation could not share this piece of information for 2021 and the option "unknown" is not available.

---

Country/area of renewable electricity consumption

Brazil

Sourcing method

Green electricity products from an energy supplier (e.g. Green Tariffs)

Renewable electricity technology type

Wind

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

8198

Tracking instrument used

I-REC

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

8198

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)

2017

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

---

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

---

**Country/area of renewable electricity consumption**

China

**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)**

24457

**Tracking instrument used**

I-REC

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

24457

**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)**

2012

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2012 has been selected since it is the common year among all different assets. The commissioning years of all assets, in addition to 2012, are also 2005 and 2013.

---

**Country/area of renewable electricity consumption**

France

**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)**

28121

**Tracking instrument used**

GO

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

28121

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

Finland

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

1996

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 1996 has been selected because on average the many assets which are generating the EACs we are purchasing are older than 30 years.

In the question "Country/area of origin (generation) of the renewable electricity/attribute consumed" Finland has been chosen. The many assets which are generating the EACs we are purchasing are located in Finland and Norway, but it is not possible to select more than 1 country.

---

**Country/area of renewable electricity consumption**

Germany

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Hydropower (capacity unknown)

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

5009

**Tracking instrument used**

GO

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

5009

**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)**

1952

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 1952 has been selected as per information received by one of the providers. The other provider at the time of the CDP reporting compilation could not share this piece of information for 2021 and the option "unknown" is not available.

In the question "Country/area of origin (generation) of the renewable electricity/attribute consumed" the country "France" has been selected as per information received by the one of the providers. The other provider at the time of the CDP reporting compilation could not share this piece of information for 2021.

---

**Country/area of renewable electricity consumption**

Hungary

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Wind

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

15579

**Tracking instrument used**

GO

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

15579

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

Greece

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

2012

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2012 has been selected as a median year of the different assets' commissioning years. The different assets have commissioning years as such: 2010, 2011, 2012, 2015 and 2017.

---

**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)**

8840

**Tracking instrument used**

I-REC

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

8840

**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)**

2013

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2013 has been selected since the majority of assets have been commissioned in 2013. Only one asset was commissioned in 2001.

---

**Country/area of renewable electricity consumption**

Indonesia

**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)**

3438

**Tracking instrument used**

I-REC

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

3438

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

Indonesia

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

2014

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2014 has been selected since it is the commissioning date of the asset which provides us with more EACs. The other assets were commissioned in 2015 and 2020.

---

**Country/area of renewable electricity consumption**

Japan

**Sourcing method**

Unbundled Energy Attribute Certificate (EAC) purchase

**Renewable electricity technology type**

Renewable electricity mix, please specify (Unknown)

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

966

**Tracking instrument used**

Other, please specify (NFC (non fossil certificate) as Co2 free electricity )

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

966

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

Japan

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

2019

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

---

**Country/area of renewable electricity consumption**

Malaysia

**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)**

494

**Tracking instrument used**

I-REC

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

494

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

Malaysia

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

2017

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

---

**Country/area of renewable electricity consumption**

Mexico

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Wind

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

4246

**Tracking instrument used**

Contract

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

4246

**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)**

2014

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

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**Country/area of renewable electricity consumption**

Netherlands

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Wind

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

14357

**Tracking instrument used**

GO

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

14357

---

**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)**

2020

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2000 has been selected as a "random" number since the providers at the time of the CDP reporting compilation could not share this piece of information for 2021 and the option "unknown" is not available.

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**Country/area of renewable electricity consumption**

Singapore

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Solar

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

3850

**Tracking instrument used**

TIGR

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

3850

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

Singapore

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

2019

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2019 has been selected as a median year of the different assets' commissioning years. The different assets have commissioning years as such: 2016, 2018, 2019, 2020 and 2021.

---

**Country/area of renewable electricity consumption**

Spain

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Wind

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

12556

**Tracking instrument used**

GO

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

12556

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

Spain

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

2020

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers

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Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2000 has been selected as a "random" number since the documents received by the provider at the time of the CDP reporting compilation do not share this piece of information and the option "unknown" is not available.

---

**Country/area of renewable electricity consumption**

Sweden

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Renewable electricity mix, please specify (Unknown - the provider at the time of the CDP reporting compilation could not share this piece of information for 2021 and the option "unknown" is not available.)

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

2710

**Tracking instrument used**

GO

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

2710

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

Sweden

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

2000

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2000 has been selected as a "random" number since the provider at the time of the CDP reporting compilation could not share this piece of information for 2021 and the option "unknown" is not available.

In the question "Country/area of origin (generation) of the renewable electricity/attribute consumed" the same country of the question "Country/area of renewable electricity consumption" has been chosen. This is done because the the provider at the time of the CDP reporting compilation could not share this piece of information and the option "unknown" is not available.

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**Country/area of renewable electricity consumption**

Switzerland

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Hydropower (capacity unknown)

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

52526

**Tracking instrument used**

GO

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

52526

**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)**

2000

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2000 has been selected as a "random" number since the provider does not have all commissioning date of each and every hydraulic power stations concerned and the option "unknown" is not available.

In the question "Country/area of origin (generation) of the renewable electricity/attribute consumed" the country of "France" has been chosen. This is done because the renewable electricity/attribute are generated within the EU, but there is no possibility to select the EU in the drop-down menu. The provider disclosed that the renewable electricity is produced by a mix of European hydraulic power stations and that there is not a single hydraulic power station but a great number of them.



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**Country/area of renewable electricity consumption**

Switzerland

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Hydropower (capacity unknown)

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

655

**Tracking instrument used**

GO

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

655

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

Switzerland

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

2000

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2000 has been selected as a "random" number since the provider at the time of the CDP reporting compilation could not share this piece of information for 2021 and the option "unknown" is not available.

---

**Country/area of renewable electricity consumption**

United Kingdom of Great Britain and Northern Ireland

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Wind

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

4453

**Tracking instrument used**

REGO

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

4453

**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)**

2000

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2000 has been selected as a "random" number since the provider at the time of the CDP reporting compilation could not share this piece of information for 2021 and the option "unknown" is not available.

---

**Country/area of renewable electricity consumption**

United Kingdom of Great Britain and Northern Ireland

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Renewable electricity mix, please specify (Unknown - the provider at the time of the CDP reporting compilation could not share this piece of information for 2021 and the option "unknown" is not available.)

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

1128

**Tracking instrument used**

REGO

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

1128

**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)**

2000

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

2021

**Brand, label, or certification of the renewable electricity purchase**

No brand, label, or certification

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2000 has been selected as a "random" number since the provider at the time of the CDP reporting compilation could not share this piece of information for 2021 and the option "unknown" is not available.

---

**Country/area of renewable electricity consumption**

United States of America

**Sourcing method**

Green electricity products from an energy supplier (e.g. Green Tariffs)

**Renewable electricity technology type**

Wind

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

62893

**Tracking instrument used**

US-REC

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

62893

**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)**

2015

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

2021

**Brand, label, or certification of the renewable electricity purchase**

Other, please specify (1/3 has a Green-e label, whereas the remaining 2/3 have no brand, label or certification.)

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2015 has been selected. Some assets have a commissioning year of 2015, some others as per provider are 15 years or newer whereas for a minority are unknown.

---

**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)**

26317

**Tracking instrument used**

US-REC

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

26317

**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)**

2010

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

2021

**Brand, label, or certification of the renewable electricity purchase**

Other, please specify (83% has a Green-e label, whereas the remaining 17% have no brand, label or certification.)

---

**Comment**

In the question "Vintage of the renewable energy/attribute" it is possible to select only 1 year for the vintage of the energy/attribute but our scope of reporting period covers Q4 2020 to Q3 2021 --> the year 2021 has been selected since the majority of the quarters at stake in the reporting period are in 2021.

In the question "Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)" the year 2000 has been selected as a "random" number since the providers are sharing with us that the majority of the assets (83%) are 15 years or newer whereas for a minority (17%) the commissioning years are unknown.

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## 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**

Sweden

**Sourcing method**

Heat/steam/cooling supply agreement

**Energy carrier**

Steam

**Low-carbon technology type**

Sustainable biomass

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

5149

**Comment**

no comment

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## C8.2j

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

Australia

**Renewable electricity technology type**

Solar

**Facility capacity (MW)**

0.23

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

261.4

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

0

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

261.4

**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**

Australian LGC

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

261.4

**Comment**

The Renewable Electricity generation is done via on site PV panels installed in one manufacturing site in Australia.

---

**Country/area of generation**

France

**Renewable electricity technology type**

Solar

**Facility capacity (MW)**

0.01

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

145.4

---

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)  
145.4

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  
<Not Applicable>

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]  
145.4

**Comment**  
The Renewable Electricity generation is done via on site PV panels installed in one site in France.

---

Country/area of generation  
India

Renewable electricity technology type  
Solar

Facility capacity (MW)  
0.03

Total renewable electricity generated by this facility in the reporting year (MWh)  
31.4

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)  
31.4

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  
<Not Applicable>

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]  
31.4

**Comment**  
The Renewable Electricity generation is done via on site PV panels installed in one manufacturing site in India.

---

Country/area of generation  
India

Renewable electricity technology type  
Solar

Facility capacity (MW)  
0.04

Total renewable electricity generated by this facility in the reporting year (MWh)  
56.3

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)  
56.3

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  
<Not Applicable>

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

---

56.3

**Comment**

The Renewable Electricity generation is done via on site PV panels installed in one manufacturing site in India.

---

**Country/area of generation**

India

**Renewable electricity technology type**

Solar

**Facility capacity (MW)**

0.75

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

921.1

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

921.1

**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**

<Not Applicable>

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

921.1

**Comment**

The Renewable Electricity generation is done via on site PV panels installed in one manufacturing site in India.

---

**Country/area of generation**

Malaysia

**Renewable electricity technology type**

Solar

**Facility capacity (MW)**

0.4

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

127.9

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

127.9

**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**

<Not Applicable>

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

127.9

**Comment**

The Renewable Electricity generation is done via on site PV panels installed in one manufacturing site in Malaysia.

---

**Country/area of generation**

Netherlands

**Renewable electricity technology type**

Solar

**Facility capacity (MW)**

0.03

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

28.5

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

---

28.5

**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**  
<Not Applicable>

**Total self-generation counted towards RE100 target (MWh) [Auto-calculated]**  
28.5

**Comment**  
The Renewable Electricity generation is done via on site PV panels installed in one manufacturing site in the Netherlands.

---

**Country/area of generation**  
South Africa

**Renewable electricity technology type**  
Solar

**Facility capacity (MW)**  
0.32

**Total renewable electricity generated by this facility in the reporting year (MWh)**  
310.7

**Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)**  
310.7

**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**  
<Not Applicable>

**Total self-generation counted towards RE100 target (MWh) [Auto-calculated]**  
310.7

**Comment**  
The Renewable Electricity generation is done via on site PV panels installed in one manufacturing site in the South Africa.

---

**Country/area of generation**  
Switzerland

**Renewable electricity technology type**  
Solar

**Facility capacity (MW)**  
0.3

**Total renewable electricity generated by this facility in the reporting year (MWh)**  
256.9

**Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)**  
256.9

**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**  
<Not Applicable>

**Total self-generation counted towards RE100 target (MWh) [Auto-calculated]**  
256.9

---

**Comment**

The Renewable Electricity generation is done via on site PV panels installed in one manufacturing site in the Switzerland.

**Country/area of generation**

Switzerland

**Renewable electricity technology type**

Solar

**Facility capacity (MW)**

0.21

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

229.1

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

0

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

229.1

**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**

Other, please specify (Certificat d'origine naturemade (label suisse))

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

229.1

**Comment**

The Renewable Electricity generation is done via on site PV panels installed in one manufacturing site in the Switzerland.

**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.**

Givaudan has committed to power by 2025 its sites with 100% renewable electricity. The actions implemented allowing to cover 84% so far, as well as the next ones needed to be reaching 100%, are directly and indirectly contributing to bringing new capacity in the grid in the areas where we operate.

Our RE100 roadmap is taking into account different variables such as additionality, price stability, long term vs short term commitments/exposure, complexity of implementation, effort of resources vs benefits and reduction of electricity purchase via renewable self generation. These global factors are considered on an ad-hoc basis when regional and local decisions are needed to be done to advance on our RE100 journey. If new capacity related projects are showing the best ratio among the above-mentioned variables, they will be prioritized.

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

	Challenges to sourcing renewable electricity	Challenges faced by your organization which were not country-specific
Row 1	Yes, in specific countries/areas in which we operate	<Not Applicable>

**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	We are facing extreme challenges in Singapore to purchase renewable electricity from Singapore itself (lack of space, lack of quickly available new additional asset and the remaining EACs prices are skyrocketing) We have been looking for available options with our local providers, but we are NOT signing purchasing contracts proposed from our suppliers from assets from Malaysia, Cambodia, etc. since we do not want to take the risk to be then refused by RE100. The issue is that the Singaporean government is working on adding additional cables for the physical transfer of electricity, but we are scared than even if technically this can be "rapidly" done, all the sound accounting trans-border rules for EACs requested by the proposed RE100 changes won't be soon there. We have a claim to hit 100% RE by 2025 and we are facing serious issues to meet this with our factories in Singapore (they cannot be excluded from the reporting since the kWh are higher than the current Materiality Threshold allowed by RE100).

C-CH8.3

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

No

C9. Additional metrics

C9.1

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

**Description**

Energy usage

**Metric value**

6.52

**Metric numerator**

GJ

**Metric denominator (intensity metric only)**

tonnes of production

**% change from previous year**

1

**Direction of change**

Decreased

**Please explain**

No further explanation

C-CH9.3a

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

**Output product**

Specialty chemicals

**Production (metric tons)**

584155

**Capacity (metric tons)**

600000

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

0.3

**Electricity intensity (MWh per metric ton of product)**

0.6

**Steam intensity (MWh per metric ton of product)**

0.04

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

0

**Comment**

no comment

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

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

	Investment in low-carbon R&D	Comment
Row 1	Yes	no comment

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
Bio-technology	Full/commercial-scale demonstration	≤20%		<p>Biotechnology holds enormous potential for carving out a more sustainable future for perfumery and for our planet. At Givaudan, it has already led to some extraordinary innovations. For example, we can now use green chemistry including a biotransformation step to produce the biodegradable ingredient Ambrofix® ,an iconic molecule in perfumery, from sustainably sourced sugar. This results in 100% renewable carbon, in line with our FiveCarbon Path™ , and uses 100 times less land compared to the traditional production method starting from clary sage. Akigalawood® is another example of a raw material we achieved to produce through biotechnology and a ground-breaking and environmentally friendly process.</p> <p>The FiveCarbon Path™, is the new Givaudan sustainability ambition for molecules. We employ green chemistry methods for efficient carbon use, meaning that all carbon atoms in the bio-based starting material end up in the final product, resulting in zero carbon waste and thus limiting carbon emissions.</p> <p>Thanks to its green chemistry and biotech approach, the FiveCarbon Path™ is a crucial part of Givaudan's strategy and purpose.</p>

**C10. Verification**

**C10.1**

**(C10.1) Indicate the verification/assurance status that applies to your reported emissions.**

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

**C10.1a**

**(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.**

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

Givaudan2021CDPverificationStatementJune2022.pdf

GIV\_2021 GRI Sustainability Report.pdf

**Page/ section reference**

GRI 305-1: Direct (Scope 1) GHG emissions: figure on p.55 of the 2021 GRI Sustainability Report

GRI Content Index with details on external assurance for GRI 305-1: p. 123 of the 2021 GRI Sustainability Report

Independent Assurance Statement: p.130-131 of the 2021 GRI Sustainability Report

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

100

**C10.1b**

**(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.**

**Scope 2 approach**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

Givaudan2021CDPverificationStatementJune2022.pdf

GIV\_2021 GRISustainabilityReport.pdf

**Page/ section reference**

GRI 305-2: Indirect (Scope 2) GHG emissions: figure on p.55 of the 2021 GRI Sustainability Report

GRI Content Index with details on external assurance for GRI 305-2: p. 123 of the 2021 GRI Sustainability Report

Independent Assurance Statement: p.130-131 of the 2021 GRI Sustainability Report

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

100

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## C10.1c

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**(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.**

**Scope 3 category**

Scope 3: Purchased goods and services

Scope 3: Capital goods

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

Scope 3: Upstream transportation and distribution

Scope 3: Waste generated in operations

Scope 3: Business travel

Scope 3: Employee commuting

Scope 3: Downstream transportation and distribution

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

Givaudan2021CDPverificationStatementJune2022.pdf

GIV\_2021 GRISustainabilityReport.pdf

**Page/section reference**

All the content of our 2021 GRI Sustainability Report, including GRI 305-3: Other indirect (Scope 3) GHG emissions, has been verified through third-party/external audit.

305-3: Other indirect (Scope 3) GHG emissions: figure on p.60 of the 2021 GRI Sustainability Report

GRI Content Index with details on external assurance for GRI 305-3: p. 123 of the 2021 GRI Sustainability Report

Independent Assurance Statement: p.130-131 of the 2021 GRI Sustainability Report

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

100

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## C10.2

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**(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

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**(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	Progress against emissions reduction target	ISAE3000	All the content of our 2021 GRI Sustainability Report, including targets and progress, has been verified through third-party/external audit. - GRI 305-5: Reduction of GHG emissions: figures on p.55 of the 2021 GRI Sustainability Report - GRI Content Index with details on external assurance for GRI 305-5: p. 123 of the 2021 GRI Sustainability Report - Independent Assurance Statement: p.130-131 of the 2021 GRI Sustainability Report GIV_2021 GRI Sustainability Report.pdf
C8. Energy	Energy consumption	ISAE3000	All the content of our 2021 GRI Sustainability Report, including energy consumption, has been verified through third-party/external audit. - GRI 302-1: Energy consumption and reduction with the organisation: figures on p.54 of the 2021 GRI Sustainability Report - GRI Content Index with details on external assurance for GRI 302-1: p. 123 of the 2021 GRI Sustainability Report - Independent Assurance Statement: p.130-131 of the 2021 GRI Sustainability Report GIV_2021 GRI Sustainability Report.pdf
C6. Emissions data	Year on year emissions intensity figure	ISAE3000	All the content of our 2021 GRI Sustainability Report, including GHG emission intensity figures (GHG emissions per ton of product), has been verified through third-party/external audit. - GRI 305-4: GHG emissions intensity: figures on p.55 of the 2021 GRI Sustainability Report - GRI Content Index with details on external assurance for GRI 305-4: p. 123 of the 2021 GRI Sustainability Report - Independent Assurance Statement: p.130-131 of the 2021 GRI Sustainability Report GIV_2021 GRI Sustainability Report.pdf
C7. Emissions breakdown	Renewable energy products	ISAE3000	All the content of our 2021 GRI Sustainability Report, including percentage of renewable electricity, has been verified through third-party/external audit. - percentage of renewable electricity in GRI 305-5: Reduction of GHG emissions: figures on p.55 of the 2021 GRI Sustainability Report - GRI Content Index with details on external assurance for GRI 305-5: p. 123 of the 2021 GRI Sustainability Report - GRI Content Index with details on external assurance for GRI 305-5: p. 123 of the 2021 GRI Sustainability Report - Independent Assurance Statement: p.130-131 of the 2021 GRI Sustainability Report GIV_2021 GRI Sustainability Report.pdf

GIV\_2021  
GRISustainabilityReport.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.**

Switzerland carbon tax

**C11.1c**

**(C11.1c) Complete the following table for each of the tax systems you are regulated by.**

**Switzerland carbon tax**

**Period start date**

January 1 2021

**Period end date**

December 31 2021

**% of total Scope 1 emissions covered by tax**

21.8

**Total cost of tax paid**

1268663.47

**Comment**

The Swiss Confederation exempts a company upon request. In return the company commits to reducing its greenhouse gas emissions without interruption by 2021. Only at the end of the commitment period, during 2023, will it be conclusively determined whether the target is met. This gives the company some flexibility to smooth out annual production fluctuations. If large, permanent changes are made during the commitment period, the Confederation may re-assess the targets. Givaudan pays the tax but is reimbursed because we follow the exemption criteria. Due to the pandemic, the cycle supposed to end in 2020 has been firstly postponed to 2021 and then to 2022. As of 2023 the new cycle with new ways of working (currently still unknown) should take place.

**C11.1d**

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

This system concerns our Swiss sites. The Swiss Confederation exempts a company upon request. In return the company commits to reducing its GHG emissions without interruption by 2021.

To comply with this system, we have committed to:

- fulfill our obligations resulting from public law : achieve our GHG emissions and energy efficiency objectives.
- provide the Swiss Confederation with truthful, complete and precise information regarding our GHG emission objectives and figures.

In order to fulfill our commitments:

- An action plan has been developed with energy saving actions to reduce our GHG footprint.
- A review of our performance and progress against our plan is taking place annually with management.
- If required at the end of the commitment period, allowances that have been accumulated in the last years could be used to compensate for a surplus of GHG emissions. In view of the plan, we will most probably not need to use these allowances.

**C11.2**

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

No

**C11.3**

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

Yes

**C11.3a**

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

#### Objective for implementing an internal carbon price

Navigate GHG regulations  
Change internal behavior  
Drive low-carbon investment  
Stress test investments  
Identify and seize low-carbon opportunities

#### GHG Scope

Scope 1  
Scope 2

#### Application

The ICP has been integrated in the CAPEX as well as Continuous Improvement approval processes to ensure that the most efficient financial and decarbonizing Scope 1 and 2 projects are selected for implementation. Paybacks are now calculated with and without ICP to stress the importance of anticipating and reducing upfront the CO2 emissions for Scope 1 and 2.

#### Actual price(s) used (Currency /metric ton)

90

#### Variance of price(s) used

We have decided to start with an "uniform pricing"--> a single price that is applied throughout the company independent of geography, business unit, or type of decision. After an analysis done with peers and customers and carbon taxes, we have decided to employ as per reference with the UN Global Compact report the ambitious threshold of 100 USD/metric (90 CHF/metric ton).

We want firstly to start getting experience working with this single price to then decide how to use the ICP lever at best, either by adapting the price in time and/or selecting ad-hoc prices per geographies.

#### Type of internal carbon price

Shadow price

#### Impact & implication

We are at the initial stages of implementing the Internal Carbon Price (ICP). Presently, our decision-makers have included ICP, incorporating the value of 90 CHF/t in project calculations. Top management is supportive of this change and is requesting ICP inclusion for all proposals of implementation in operations sites worldwide. Referring to question 4.3 a, projects in the categories "Under Investigation" and "To be implemented", potentially bringing savings of 1351t CO2 eq., have been selected and prioritized due to the ICP integration.

Adding an ICP has helped guide our decision-making toward our goal to meet our SBT targets and net-zero targets (become a climate-positive business by 2050) by ensuring that all of our investments and operations are moving towards gradually removing our greenhouse gas emissions as these are seen as additional costs. In addition, we also see that reducing GHGs and initiating projects going into this direction are initiatives that provide value for our company.

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## C12. Engagement

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### C12.1

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

Yes, our suppliers  
Yes, our customers/clients  
Yes, other partners in the value chain

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### C12.1a

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

##### Type of engagement

Information collection (understanding supplier behavior)

##### Details of engagement

Collect climate change and carbon information at least annually from suppliers

##### % of suppliers by number

2

##### % total procurement spend (direct and indirect)

50

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

40

##### Rationale for the coverage of your engagement

Our supplier engagement strategy is based around our CDP Supply Chain Programme, where we selected our suppliers based on the following criteria:

- For raw materials: top suppliers by volume and strategic suppliers to our business ;
- For Indirect Materials & Services: top suppliers by spend in the relevant categories and in which we have the most influence: logistics, packaging, IT/Telecom, industrial supply/equipment/maintenance and energy/utilities.

This represents the 2% of our suppliers by number, 50% of the total procurement spend, and 40% of supplier-related Scope 3 emissions.

In 2021, we participated for the fifth year in the CDP Supply Chain Programme, asking our key suppliers to provide data on climate change through the supply chain module of the CDP's Climate Change Questionnaire. The survey asks suppliers to identify risks and opportunities associated with climate change, report what their emissions are

and give details on their emissions management strategy including targets and action they are taking to reduce emissions.

#### Impact of engagement, including measures of success

Impact of engagement:

Our ambition is to drive action through supply chain engagement. All the data collected through the CDP Supply Chain programme is contributing to gain understanding of our supply chain. The level of the impact of engagement varies depending on the level of maturity of our suppliers on climate action:

- For suppliers with leading and managing climate related issues, we seek to create partnerships with them to put in place collaborative measures or programmes to reduce our common emissions and cascade action further down the supply chain.
- For suppliers starting their climate action journey, we work towards a shift in their behaviour and provide support and guidance to improve their journey.

This is aligned with and contributes to deliver on our science-based target for scope 3 emissions.

Measure of success:

We measure the success of our engagement with suppliers through the CDP Supply Chain Programme through different KPIs:

1. Supplier response rate: Success will be measured by the supplier response rate wherein we set the target of 70% (higher than last year's 66%). In 2021, our supplier response rate was 83%. The +17% increase in suppliers responding to the questionnaire compared to last year is a resounding success because it means that more suppliers are embarking on their climate action journey. This first KPI (supplier response rate) is a way to measure the new suppliers starting and reporting on their climate action journey.

2. Percentage of suppliers with a leadership (A or A-) or management (B or B-) score: 51% of our supplier responders (29% last year).

3. Percentage of suppliers reporting active targets: 78% (80% last year)

4. Percentage of suppliers engaging their own suppliers: 82% (66% last year)

These three KPIs (2, 3 and 4) are a way to measure how many suppliers have a high level of maturity on their climate action journey. With these suppliers we are working to find collaborative measures or programmes to reduce our common emissions. An example of a collaborative measure proposal is combining several orders into full container loads to reduce transport emissions. Supplier cascading commitments in their own supply chain is also a key element to drive action. In 2021, for all these three KPIs (2, 3 and 4), there is improvement in the number of suppliers, which is a measure of success.

#### Comment

no comment

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#### 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

2

#### % total procurement spend (direct and indirect)

50

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

40

#### Rationale for the coverage of your engagement

As explained in the first supplier engagement activity of C12.1a, in 2021, we participated for the fifth year in the CDP Supply Chain Programme, asking our key suppliers to provide data on climate change through the supply chain module of the CDP's Climate Change Questionnaire. In that context, Givaudan has worked in collaboration with the other Fragrances & Flavors (F&F) houses to educate suppliers about climate change and their importance in our climate action journey. The ultimate goal was to increase the number of suppliers responding to CDP Climate Change questionnaire and to increase the quality of the responses. This was done through a series of webinars hosted jointly by the the four biggest F&F houses, and moderated by the CDP Supply Chain team. A supplier feedback webinar was also organized with the same hosts to thank the suppliers for their participation in the programme and more importantly to explain what we will do with the data provided. The suppliers invited to the webinar were all the suppliers included in our CDP Supply Chain Programme. The criteria Givaudan has followed to select the suppliers were the following:

- for raw materials suppliers: top suppliers by volume and strategic suppliers to our business - for indirect materials and services suppliers: top suppliers by spend in the relevant categories and in which we have the most influence: logistics, packaging, IT/Telecom, industrial supply/equipment/maintenance and energy/utilities.

#### Impact of engagement, including measures of success

Impact of engagement:

Our ambition is to drive action through supply chain engagement and to work in collaboration across the industry. The CDP Supply Chain programme is one of the tools that Givaudan has chosen to gain understanding of its supply chain and engage with its suppliers on climate action. By joining efforts with the other F&F houses and participating together in the supplier engagement webinars, not only did the numbers of suppliers engagement increased, but the importance of climate action in the F&F industry was decoupled.

Measure of success: Collaboration across the industry and across sectors is important to be successful.

We measure the success of our engagement with suppliers through the webinars by the increase of supplier response rate in our CDP Supply Chain programme: In 2021, our supplier response rate was 83% compared to 66% in 2020 with an increase of number of supplier by 38. This KPI (supplier response rate) is a way to measure the new suppliers starting and reporting on their climate action journey. The +30 suppliers responding to the questionnaire compared to last year is a measure of success because it means that more suppliers are embarking on their climate action journey.

For each supplier that has responded to CDP Supply Chain we receive a scorecard summarizing their disclosure. These scorecards are used by the supplier relationship managers (SRM) and category managers (CM) to engage with their suppliers and see what can be improved and how to collaborate.

A supplier engagement toolkit has also been prepared by the Sustainability team in collaboration with the Procurement function for the SRM and CM) to help them engage with their suppliers on Sustainability topics in Procurement (Climate Action, Water, Responsible Sourcing, Plastics,...).

This toolkit includes a clear Call to Action for Climate Action for our suppliers. The main request are:

- Engage with Givaudan on our overall climate goals via our key memberships including RE100
- Collaborate with us to reduce emissions and lower climate-related risk across our supply chain
- Engage with our Scope 3 journey by setting up Science-Based targets
- Report on your emissions and integrate renewable electricity into your climate journey
- Share your current initiatives, your long term views, technologies... and suggest where Givaudan can support or collaborate

#### Comment

no comment

## C12.1b

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

#### Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to education customers about your climate change performance and strategy
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#### % of customers by number

42

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

42

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

Rationale for selecting this group of customers:

We have seen a huge increase in the number of customers asking us about Climate action, particularly GHG emission reduction in the last few years - the number of requests are doubling year over year. Customers want to know about our activities to reduce GHG emissions and energy consumption in particular, and how we adapt to a changing climate. Customers are also increasingly seeking collaboration on sustainability and our help as their supplier in meeting their own scope 3 targets, as well as recognizing how our products might enable them to formulate lower-emission final products. Our engagement with customers spans both customers who requested information about our climate action, as well as customers that we proactively engage on sustainability topics based on our mutual interest and engagement and/or identified collaboration opportunities.

Scope of engagement:

The scope of engagement was calculated in terms of percentage of sales. Based on this data, around 20% of our customers request CDP Supply Chain responses. Additionally, our approach to Climate Action is the second most frequently asked topic within the sustainability space. Our best estimate is therefore that twice the figure of CDP requestors, or around 42% of our customers, have high levels of interest in Givaudan's climate initiatives. Without an easy system to attribute emissions as reported in C6.5 for each supplier the best estimation is that it addresses around 42% emissions.

Due to this high customer interest, apart from answering customer queries, we also launched Givaudan's Climate Positivity campaign. It intends to actively engage the general public incl. our customers by providing public information about the company's initiatives in reducing our GHG emissions. Through ongoing customer dialogue, we share details about our sustainability programme, exchange learnings and best practices, as well as support our customers' footprinting and GHG emissions reduction efforts.

#### Impact of engagement, including measures of success

Impact of engagement:

Our engagement on environmental sustainability contributes to our 2025 strategy as well as our Purpose commitments. It helps us build valuable partnerships and trust with our customers by understanding their expectations of us, sharing information and being transparent; this in turn adds to Givaudan's reputation as a responsible partner of choice.

Measure of success:

We track all customer requests on sustainability (including climate action questions). We strive for 100% response rate, which we achieved in 2021. This contributes to our aim of being a responsible partner of choice. Customers are increasingly looking at us to help support and contribute to their own scope 3 targets. We have received excellent feedback because of our transparency, prompt and adequate response to customer demands for Climate Action information. This helps us build valuable trust from our customers and it increases our brand reputation. We have also secured recognition for our climate action activities through third party scoring assessments driven by our major customers, such as 'Gold' supplier status in S LOCT.

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## C12.1d

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**(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

Description of our climate-related engagement strategy with other partners in the value chain

The communities and neighbourhoods in which we operate and source our materials are critical to our long-term success. Our business can affect these communities, and local stakeholders can in turn have an impact on our activities. Recognising and supporting the broader development goals of these local communities is essential to acknowledging their important contributions and we are committed to supporting them to build stable lives. The close working relationships we establish with the very people who grow, collect and distill our raw materials are key to our continued success in securing the long-term supply of the ingredients we rely on for our flavours and fragrances. Maintaining a good reputation in communities where we have a manufacturing or commercial presence is also essential as it helps attract the right talent and personnel to the Company. Overall, good relations allow us to work together on projects and causes that benefit the community, help to protect local ecosystems and support livelihoods. This translates into economic or social benefits such as improving access to education or mental or physical health for the local communities as well as sustainable success for Givaudan.

Many of our most precious natural ingredients come from places that are vulnerable to political, economic and natural upheavals, and so we recognise that we have a role to play in helping producer communities build stable and secure lives. We partner and support local communities through a variety of social and environmental projects (including climate-related projects), from working with farmers on improved agricultural practices in Indonesia to supporting women in their entrepreneurial projects in the Comoros islands, among many other initiatives.

Many of these initiatives receive funding from the Givaudan Foundation, a not-for-profit organisation working in collaboration with local and international implementing partners and the communities themselves.

Explanation of who 'other partners in the value chain' constitutes

The other partner in the value chain with whom we engage on climate-related initiatives are the local communities.

We define local communities as persons or groups of people involved in producing/collecting raw materials in Givaudan's value chains as well as those living and/or working in any areas that are economically, socially or environmentally impacted (positively or negatively) by Givaudan's operations. The local community can range from people living adjacent to operations through to isolated settlements at a distance from operations which may experience the impacts of these operations. On most sites, formal relationships have been established with local authorities and with significant organisations representing neighbours, or working on specific environmental and social issues.

A case study/example of your climate-related engagement strategy with other partners in the value chain

By the end of 2021, Givaudan and the Givaudan Foundation had planted more than 750,000 trees together with communities producing clove leaf oil in Madagascar. The project is being implemented by the NGO Action Intercooperation Madagascar (AIM). The local AIM team engages farmers distilling essential oil from clove leaves as well as other community members as active project stakeholders.

The objective of the project is to avoid the overuse of local forests by giving producers access to a sustainable source of firewood. The smallholders distilling clove leaf oil in remote areas of the Analanjrofo region of Madagascar have no other option than using wood as a source of energy. The project helps them plant trees for their own use. As a result, they do not rely on buying wood that might not have been sustainably produced. This allows them to reduce their production costs and increase their household income.

Sample-based evaluation indicates that most of the trees planted as part of the project have been used by the farmers as a source of energy for distillation and that many farmers are replanting trees on their own. To systematically document the impact of the project on the climate, a new monitoring approach is currently being rolled out.

Complementing the sustainable production of firewood, Givaudan is partnering with the German Agency for International Cooperation (GIZ) to develop more efficient distillation equipment with the local stakeholders. This will reduce the volume of firewood needed as fuel for distillation.

This partnership with GIZ follows the principle of linking environmental benefits with social advantages for producers. Not only can farmers and distillers benefit from higher productivity, but they will also receive training on financial management and entrepreneurship.

**C12.2**

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

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

**C12.2a**

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**(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**

Complying with regulatory requirements

**Description of this climate related requirement**

Givaudan approaches this in a number of ways. Our responsible sourcing program, Sourcing4Good, has four different levels. At the first, Active, level, we share our Responsible Sourcing Policy with all of our active suppliers. In this policy we state very clearly that we expect our suppliers must have programs and systems in place to achieve regulatory compliance with their environmental management practices.

At the next, Engaged, level, for our suppliers of natural raw materials, we request that our prioritised raw materials suppliers complete our "Due Diligence Questionnaire" (DDQ) in which we request the suppliers to share a number of different data points, including detailing any potential risks to environmental issues in their particular supply chain. This helps us to understand the correct follow-up actions we need to take with our prioritised materials suppliers.

At the third, Committed, level, we undertake 3rd party audits at factory and farm level in selected key supply chains using audit protocols which ask specific questions on environmental regulatory requirements. We use the Sedex SMETA 4 pillar protocol at factory level, and the SAI Platform Farm Sustainability Assessment (FSA) or the Union for Ethical Bioproducts (UEBT) farm standard for our farm level verification.

At the final, Advanced, level, we work on transformational projects in specially selected supply chains where we are able to go into a deeper level of diligence on social or environmental topics.

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

100

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

11

**Mechanisms for monitoring compliance with this climate-related requirement**

Supplier self-assessment

First-party verification

On-site third-party verification

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

Other, please specify (Our first response is always to work with a supplier on the continuous improvement of their sustainability performance)

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**Climate-related requirement**

Climate-related disclosure through a public platform

**Description of this climate related requirement**

As explained in C12.1a, in 2021, we participated for the fifth year in the CDP Supply Chain Programme, asking our key suppliers to provide data on climate change through the supply chain module of the CDP's Climate Change Questionnaire. The survey asks suppliers to identify risks and opportunities associated with climate change, report what their emissions are and give details on their emissions management strategy including targets and action they are taking to reduce emissions.

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

50

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

42

**Mechanisms for monitoring compliance with this climate-related requirement**

Supplier scorecard or rating

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

Retain and engage

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**Climate-related requirement**

Setting a science-based emissions reduction target

**Description of this climate related requirement**

As explained in C12.a, a supplier engagement toolkit has been prepared by the Sustainability team in collaboration with the Procurement function for the Supplier Relationship Managers (SRM) and Category Managers (CM) to help them engage with their suppliers on Sustainability topics in Procurement (Climate Action, Water, Responsible Sourcing, Plastics,...).

This toolkit includes a clear Call to Action for Climate Action for our suppliers, including a request to commit and set a science-based target.

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

50

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

32.5

**Mechanisms for monitoring compliance with this climate-related requirement**

Supplier scorecard or rating

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

Retain and engage

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**C12.3**

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**(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

**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)**

GRI p.9

Business Ambition for 1.5 °C: Our Only Future is a communications and advocacy campaign calling for businesses to step up and do their part in limiting global temperature rise to 1.5°C in response to the climate crisis. The call-to-action was announced by more than 25 business, civil society and UN leaders in June 2019, and it calls on companies to commit to setting verifiable science-based targets at 1.5°C and achieve net-zero emissions economy by 2050. In 2019, Givaudan has signed the pledge "Business Ambition for 1.5°C" proposed by the United Nations to aim for net-zero value chain emissions by 2050. The signing of the pledge is a key milestone on Givaudan's path to reaching its ambition of becoming climate-positive before 2050 for all three scopes, with the Company purpose.

BusinessAmbition1.5mediarelease.pdf

GIV\_2021 GRISustainabilityReport.pdf

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

Climate actions are well represented in our strategy and action plan. We continuously align the activities of the two divisions and of the corporate functions around the agreed commitments and targets and we widely share within the organisation through KPIs and scorecards (e.g. eco-efficiency CAPEX investments are frequently discussed by several leadership teams, including the executive committee). This allows the company to be fully aligned internally and to speak with unitary voice on the topic inside external bodies and multi stakeholders platforms.

Specifically for IFRA (International Fragrance Association ) and IOFI (International Organization of the Flavor Industry), by sitting on the board of Directors of these industry associations and being a very active working group member we ensure consistent and proactive alignment between our company strategy and necessary industry alignment that always takes place in a pre-competitive base. The industry association and its regional representatives are the liaison for policy makers across geographies. Until now Givaudan has always set and delivered higher standards and requirements on all sustainability aspects compared to the industry association positioning with regards to policy makers. In the future, in case there is an inconsistency we would escalate the matter to the board of directors of the association before anything is officially translated into policies, provide detailed insights on our claims to enable high quality discussions at board level and defend our position. We will use all established means described in the association governance (from proposing alternatives up to vetoing) so the board of directors can land on consensus for a revised industry positioning with regards to Policy makers.

**Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate**

<Not Applicable>

**Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate**

<Not Applicable>

**C12.3b**

**(C12.3b) Provide details of the trade associations your organization 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 (IFRA - International Fragrance Association and IOFI - International Organization of the Flavor Industry)

**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 have already influenced them to change their 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)**

IFRA-IOFI is working on a Sustainability Initiative called "A Sense of Responsibility, a Commitment to Sustainability", which is an Initiative of the Flavor and Fragrance Industries.

In this sustainability initiative, there is a section on commitments to sustainability including how to reduce our industries' environmental footprint and address climate change.

Givaudan is represented on the board of the association which strengthens our implication and influence in advancing climate action.

We actively participate in the discussions bringing a progressive view on what our industry can and should do to mitigate emissions both at level of operations and notably, in the supply chain. Reducing Scope 3 emissions is identified as a common challenge best addressed by the definition of industry-wide good practices.

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

**Describe the aim of your organization's funding**

<Not Applicable>

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

Yes, we have evaluated, and it is aligned

**C12.4**

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

**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

GIV\_2021\_ReportingSuite\_6.pdf

**Page/Section reference**

- Givaudan 2021 Integrated Annual Report
- Our impact in 2021: p. 6-7
- Chairman's letter: p.10-11 and CEO interview: p. 12-15
- Our 2025 Strategy Progress Against our Targets: p. 24
- Our 2025 strategy: "Committed to Growth, with Purpose": p. 18-25
- Trends, risks and opportunities – Creating possibilities: p.28-31
- Nature piece of the 2025 Strategy: p. 70-87

**Content elements**

- Strategy
- Risks & opportunities
- Emissions figures
- Emission targets
- Other metrics

**Comment**

No comment

**Publication**

In voluntary sustainability report

**Status**

Complete

**Attach the document**

GIV\_2021 GRISustainabilityReport.pdf

**Page/Section reference**

- Givaudan 2021 GRI Sustainability Report
- GRI 102: General disclosure - Strategy p. 4; 6
- GRI 102: General disclosure - Governance p. 34-37
- GRI 300: Environmental - GRI 305: Emissions p. 55; 60
- GRI 300: Environmental performance indicators p. 78-80

**Content elements**

- Governance
- Strategy
- Emissions figures
- Emission targets
- Other metrics

**Comment**

No 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	Scope of board-level oversight
Row 1	No, but we plan to have both within the next two years	<Not Applicable>	<Not Applicable>

**C15.2**

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

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments only	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 Commitment to secure Free, Prior and Informed Consent (FPIC) of Indigenous Peoples Commitment to no trade of CITES listed species	<Not Applicable>

**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?	Portfolio
Row 1	Yes, we assess impacts on biodiversity in our upstream value chain only	<Not Applicable>

**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 Other, please specify (Hiring of a Global Biodiversity Lead for the company)

**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	Please select

**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	Impacts on biodiversity Biodiversity strategy	p.76-77 GRI Report 2021 GIV_2021_GRI_SustainabilityReport.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.**

no additional information

**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	Chief Executive Officer (CEO)	Chief Executive Officer (CEO)