Evonik Industries AG - Climate Change 2020

C0. Introduction

C0.1

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

Evonik is one of the world's leading specialty chemicals companies. Our strengths include the balanced spectrum of our business activities, end-markets, and regions. Around 80 percent of sales come from market-leading positions, which we are systematically expanding. Our strong competitive position is based on close collaboration with customers, high innovative capability, and integrated technology platforms. Our specialty chemicals products make an indispensable contribution

to the benefits of our customers' products, which generate their success in global competition. Close cooperation with our customers enables us to build up a deep knowledge of their business, so we can offer products tailored to their specifications and extensive technical service. Our technology centers and customer competence centers play an important role in this around the world. Market-oriented research and development is a key driver of profitable growth. This is based on our strong innovation culture, which is rooted in our innovation management and management development. As preconditions for Evonik's future viability, sustainable business activities, and responsible conduct are cornerstones of our business model. We drive forward our sustainability activities along the value chain in intensive dialogue with our stakeholders. As well as our own production processes and the products we market, we always consider the supply chain. We have

observed rising demand for products that demonstrate a good balance of economic, ecological, and social factors. That opens up a broad spectrum of future-oriented business opportunities for Evonik in attractive markets. Sustainability has long been a growth driver in many of our businesses. In the light of this, we adopted our new Sustainability Strategy 2020+. Key elements are integrating sustainability into strategic management processes, carbon pricing for all investments, and ambitious targets for the reduction of CO2 emissions and the introduction of global water management.

In the reporting period, our specialty chemicals operations were divided into three chemical manufacturing segments. These operate close to their markets, and customers and have a high degree of entrepreneurial independence. They are supported by a Services segment. The Nutrition & Care and Resource Efficiency segments operate principally in attractive markets with above-average growth rates. Both segments offer customers customized, innovationdriven solutions and the aim is for them to achieve aboveaverage, profitable growth through innovations, investments, and acquisitions. The Performance Materials segment is characterized by processes that make intensive use of energy and raw materials. It therefore concentrates on integrated, cost-optimized technology platforms, efficient workflows, and economies of scale. Our strategic goal for this segment is to contribute earnings to finance the growth of the Evonik Group. Investments and, where

appropriate, alliances concentrate on securing and extending our good market positions.

Most of our customers are industrial companies that use our products for further processing. The range of markets in which they operate is diverse and balanced. None of these end-markets accounts for more than 20 percent of our sales.

Evonik has a presence in more than 100 countries, and 83 percent of sales are generated outside Germany. We have production facilities in 26 countries on six continents and are therefore close to our markets and our customers. Our largest production sites, for example, Marl, Wesseling, and Rheinfelden (Germany),

Antwerp (Belgium), Mobile (Alabama, USA), Shanghai (China), and Singapore, have integrated technology platforms used by various units.

Forward-Looking Statements:The following answers to the questions of the Carbon Disclosure Project prepared by Evonik include forward-looking statements that are subject to risks and uncertainties, including those pertaining to the anticipated benefits to be realized from the proposals described herein. Evonik has based these forward-looking statements on its views with respect to future events and financial performance. Actual financial performance could differ materially from that projected. Forward-looking statements represent estimates and assumptions only as of the date that they were made. The information contained in these answers is subject to change without notice and Evonik does not undertake any duty to update the forward-looking statements, and the estimates and assumptions associated with them, except to the extent required by applicable laws and regulations.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2019	December 31 2019	Yes	3 years

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Australia
Belgium
Canada
China
France
Germany
Hungary
India
Indonesia
Italy
Japan
Netherlands
New Zealand
Poland
Portugal
Singapore
Slovakia
South Africa
Spain
Sweden
Taiwan, Greater China
Thailand
Turkey
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.

EUR

C0.5

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

Operational control

C-CH0.7

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

Row 1

Bulk organic chemicals

Polymers

Bulk inorganic chemicals

Chlorine and Sodium hydroxide
Soda ash

Other chemicals

Specialty chemicals

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
Director on board	The highest level of direct responsibility for climate change topics lies with the member of the Board of Management responsible for Human Resources, Sustainabilty and HSEQ (Health, Safety, Environment and Quality) RATIONALE: Sustainability including climate protection is a core element within Evonik´s business strategy and risk management. As the corporate structure of Evonik consists of three different business units supported by a fourth one providing infrastructure services only on board level can be assured that an overarching approch takes place with respect to sustainability. Decisions about production, energy efficiency and climate protection initiatives can go hand in hand. This Board Member is one of four corporate directors on the board. The position was selected for oversight of all climate-related issues to ensure climate-related targets and measures are driven on a Group level to ensure a comprehensive and cohesive approach to climate protection.

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 Reviewing and guiding business plans Setting performance objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	Climate-related topics are brought to the members of the board as needed by the Head of Corporate ESHQ. The head of ESHQ reports annually directly about environmental key performance indicators including climate-related KPIs, as well as climate-related target achievement. This information takes place in the context of a Board meeting dedicated to the discussion of sustainability KPIs as part of the Board's approval of Evonik´s sustainability report. In addition CHRO and Head of ESHQ are members of the Corporate Responsibility Steering Committee and the Corporate ESHQ Steering Committee, both chaired by the Chief human ressource officer. Relevant topics in the field of sustainability, environment, safety, health and quality including the status and progress of various programs are discussed with the Heads of Evonik´s segments and members of Evonik´s extended board on a quaterly base. CONTRIBUTION OF GOVERNANCE MECHANISMS TO BOARD OVERSIGHT: The governance mechanisms selected ensure that the Board has a comprehensive view on climate-related issues and can ensure a coherent and Group-wide response, if needed.

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
Other C-Suite Officer, please specify (C-ESHQ - senior vice president of corporate ESHQ (environment, safety, health and quality) with direct report to the board)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly

C1.2a

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

The Chief Human Ressource Officer reorts directly to the CEO and is the direct superior to the Head of Corporate ESHQ leading the group-wide activities on Health, Safety, Environment and Quality. In addition CHRO and Head of ESHQ are members of the Corporate Responsibility Steering Committee and the Corporate ESHQ Steering Committee, both chaired by the CHRO. Relevant topics in the field of sustainability, environment, safety, health and quality including the status and progress of various programs are discussed between CHRO, Head of ESHQ and the Heads of Evonik´s segments and members of Evonik´s extended board on a quaterly base. The Heads of the segments are responsible to implement the strategic aproach decided on group level within their segment.

RATIONALE: Sustainability including climate protection is a core element within Evonik´s business strategy and risk management. As the corporate structure of Evonik consists of three different business units supported by a fourth one providing infrastructure services only on board level can be assured that an overarching approch takes place with respect to sustainability. Decisions about production, energy efficien cy and climate protection initiatives can go hand in hand. This Board Member is one of four corporate directors on the board. The position was selected for oversight of all climat e-related issues to ensure climate-related targets and measures are driven on a Group level to ensure a comprehensive and cohesive approach to climate protection.

The climate-related monitoring process is closely related to our reporting process. As the CHRO responsible for Human Resources, Sustainability and Environment, Health, Safety and Quality is directly responsible for our climate-related reporting. E.g. In 2019, he was responsible for signing off the climate-related sections in our Sustainabilty report and Evonik´s response to the CDP Climate request 2019.

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	Evonik Innovation Award for improvements in process efficiency

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 inventivized	Comment
All employees	Monetary reward	Emissions reduction project	Each year, Evonik Industries presents the Innovation Award, which recognizes the most successful researchers in the Company , either by recognizing the development of new products/systems or new and improved processes resulting in lowering emissions or reduced energy consumption. Recognition is an important driver of creativity. This is why working on new ideas at Evonik Industries is richly rewarded in such a variety of ways. To motivate our most creative minds in research and development, for example, we have an internal Innovation Award, which is presented annually to acknowledge outstanding research achievements worth €30.000. Evonik´s Innovation award is part of the overall incentive system impacting climate change issues, either by recognizing the development of new products/systems or new and improved processes.
All employees	Monetary reward	Efficiency project	Each year, Evonik Industries presents the Innovation Award, which recognizes the most successful researchers in the Company , either by recognizing the development of new products/systems or new and improved processes resulting in lowering emissions or reduced energy consumption. Recognition is an important driver of creativity. This is why working on new ideas at Evonik Industries is richly rewarded in such a variety of ways. To motivate our most creative minds in research and development, for example, we have an internal Innovation Award, which is presented annually to acknowledge outstanding research achievements worth €30.000. Evonik´s Innovation award is part of the overall incentive system impacting climate change issues, either by recognizing the development of new products/systems or new and improved processes.

C2. Risks and opportunities

C2.1

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

Yes

C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	1	
Medium-term	1	3	
Long-term	3	10	

C2.1b

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

All categories of risks and opportunities including climate change risks/ opportunities are assessed using the same metrics regarding their financial or strategic impact. We define substantive financial or strategic impact on our business as every negative/ positive deviation from plan exceeding defined threshold values.

Risks/opportunities are all events, internal or external to the company, that can negatively/positively influence the achievement of business goals, to include quality and brand image in a specified time period (e.g., current year or mid-term future). Point of departure is the net risk, which corresponds to the value of risk that the company is actually exposed to today which means risk remaining after taking previously established measures and controls into account. Therefore, as a rule, a risk constitutes a negative deviation from the plan.

If possible the magnitude of impact is quantified as a point value or range. If this is not the case verbal assessment based on categories or purely narrative is requested. If applicable the impact shall be assessed as deviation to adj. EBITDA. If the impact does not affect the adj. EBITDA other suitable KPIs are used and explained.

Risks are to be assessed using uniform, comprehensible criteria. Its purpose is to prioritize identified risks and thereby shine a clear light on the most important topics concerning the corporation's success.

Risks/ Opportunities are considered as significant if a deviation from the respective (business line level) management unit's plan by 10 million euro with reference to the mid-term horizon is identified. Non-quantifiable risks are to be taken into consideration when they could negatively effect the unit's substantial goals. In so doing Corporate Center units are to use Evonik Industries' goals. A qualitaive/ verbal assessment of impact can include factors such as management attention or damage to reputation. Risks/ Opportunities exceeding 100 Mio. € (expected value) are classified as material/ substantial and risks exceeding 500 Mio. € (Impact) as Going Concern Risk.

Details:

Risks can be assessed as point values or ranges and for some exceptions a purely verbal assessment is allowed. As shown in our finanicial report we classify the probability of occurrence as low (1% – 10%), medium low (11% – 25%), medium (26% - 50%), medium high (51% - 75%) and high (76% -100%) and the impact as low (0 – 10 Mio. €), medium low (10 – 100 Mio. €), medium (100 – 250 Mio. €), medium high (250 – 500 Mio. €) and high (> 500 Mio. €) over a period of three years.

Impact is rated either quantitative or qualitative. The quantitative assessment reflects mainly impact on adj. EBITDA, if adj. EBITDA is no adequate KPI other impacts such as on adjustments, taxes, interest or depreciation are assessed. A qualitative assessment is mainly based on pre-defined criteria (if applicable): Impact on attaining company goals, Damage to reputation due to media influence, Management time required for problem solving and Requirement to report events to government authorities. For all categories an individual description for each classification from low to high (5 groups) is provided. Risks with a potential impact above 500 Mio. € are considered endangering for the existence of the company and are respectively managed. Hypothetical risks, that is, risks with an extremely low probability of occurrence, are classified as irrelevant, regardless of their potential effect. These include, for example, natural events such as earthquakes that, statistically, occur only once every 100 years. The classification of risks as hypothetical should always be done on the basis of commercial prudence.

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

Description of process
IDENTIFICATION: To support the most complete possible identification of risks Evonik maintains a risk landscape that reflect all potential risk areas applicable to Evonik as a chemical company. The risk landscape explicitly includes non-financial risks that stem from all areas. According to the CSR Directive Implementation Act, such risks can include environmental issues. Evonik's Group-wide internal opportunity and risk management forms a central element in the management of the company. Our risk detection system meets the requirements for publicly listed companies and is aligned to international standards and principles such as COSO ERM. The aim is to identify opportunities and risks as early as possible and to define measures to counter and minimize risks and utilize opportunities. Globally all relevant risks including climate change-related risks and opportunities are reported and monitored at an early stage in our management system. The risk coordinator, at the direction of the management unit head, must ensure that it is possible to completely identify all risks applicable to the respective unit by using appropriate processes. This requires that information relevant to risks from subordinate organizations, functional and regional perspectives is taken into consideration appropriately. The identified risks are continuously monitored by the respective risk owners. The Evonik risk portfolio is monitored and validated by the risk committee four times a year. Especially our ESHQ, Utilities & Waste disposal and corporate responsibility departments monitor climate-related legislative changes and academic publications. Potential risks are reported to the head of Corporate ESHQ, head of Corporate Responsibility and head of Technology& Infrastructure, who are accountable for the identification and evaluation of climate-related opportunities & risks. Our businesses continuously monitor market developments and indicate upcoming opportunities to the R&D departments, considering climate-related customer and market needs in R&D (e.g. products that could help to support the fight against climate change). The identified opportunities and risks are updated at least four times a year and incorporated into strategic and mid term planning. ASSESSMENT Risks are assessed on the basis of comprehensible and uniform criteria. The purpose of the assessment is to prioritize identified risks and thereby shine a clear light on the most important topics concerning the company's success. A netting of risks and opportunities is not allowed. Risks are assessed according to their net potential impact and likelihood of ocurrance after implementation of mitigation actions. The assessment is done on the basis of the two criteria, probability of occurrence and impact: - Probability of occurrence: Intensity dimension - probability that a specific risk will actually occur within the period under consideration. - Impact: Quantity dimension - expected impact on the company's goals if the risk occurs. - The product of probability of occurrence and impact is described as the expected value. Please see details regarding assessment of impact under 2.1b. SUBSTANTIVE FINANCIAL IMPACT: Evonik defines risks and opportunities exceeding 100 Mio. € (expected value) over a period of three years as substantial. Those risks and opportunities are separately reported within the financial report. Risks with a potential above 500 Mio. € are considered endangering for the existence of the company. RESPONDING TO RISKS Our risk management process consists of risk identification, assessment, treatment, reporting as well as process monitoring and improvement. Risks, including climate-related risks are identified by risk owners in the operational divisions and functions, assessed according to their potential impact and likelihood. The objective of risk control is to actively influence the risks that were determined within the scope of risk identification and assessment. Risk control must not be seen as an isolated process but, from an organizational aspect, integrated seamlessly into the existing management structure. Consequently, business and risk responsibility are often handled by one unit. Control measures are directed toward actively influencing the probability of occurrence and/or limiting the effect of risks. In many cases there will be a combination of different measures that can control a given risk. If measures and/or controls in the context of the internal control system are relevant for controlling a specific risk, these measures and controls are to be included in the risk report. CASE STUDIES: PHYSICAL Assessing the risk of water stress due to climatic and demographic projections. In 2018 Evonik analyzed in cooperation with firstclimate the water quantity risk for the global productions sites based on projections for climatic and demographic changes. During the project we analyzed the risk for 105 production sites for the next 20 years (esp. focusing on changes between 2020, 2030 and 2040). The assessment included the development and dependency between water availability, water need and water stress. Evonik has used a variety of approaches with regard to its water quantity risk assessments in the past, with subsequent refinements focusing increasingly on Falkenmark and Lindh's basin scarcity criteria and the AWARE (available water remaining) method. The results identify a risk for certain cites until 2040 and the assessment and determination of measures is currently ongoing. A new activity oriented environmental target "Water" hast been introduced and local water management systems are implemented. Overall Evonik is putting special effort in analyzing and mitigating risks at defined priority sites. Those sites have been identified in close cooperation with the business managers. The project is managed by Corporate ESHQ, Corporate Responsibility and the business units complemented with external consultants. The results have been reported to the respective managements and to the board. As stated measures have been agreed on and are now being implemented. TRANSITIONAL Regulatory risk from change of EEG law interpretation: The manager responsible for monitoring climate-related legislation identified the risk from the changed interpretation of the EEG law regarding capacity layer models in January 2017. Ahead of the release of the official interpretation the risk has been identified in close cooperation between Technology & Infrastructure, Political Communications and Legal. The risk was evaluated as unlikely in terms of likelihood and medium in terms of potential impact. The risk was then reported as an ad hoc risk to the respective unit Heads, board members and Corporate Risk Officer.Based on a thorough analysis relevant measures to address the risk were derived and presented to the Board and other relevant bodies in order to achieve endorsement for the proposed path forward.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Evonik considers risk from current regulation. E.g. the impact of cap and trade schemes like the EU ETS, in which Evonik participates. Current legislative discussions in the EU are expected to further increase carbon price. In this respect, the EU Emissions Trading Scheme (EU ETS) is the main regulatory framework that poses a risk to the European industry. Current trends in certificate price appear to be consistent with the regulator's aim for a much higher certificate price to effectively realize steering of energy generation according to climate requirements. Considering this risk, the EU ETS could influence Evonik directly through our own energy generation facilities participating in the EU ETS and indirectly, through our supply chain regarding energy supply, as we expect the prices for our purchased energy to rise. Between 2020 and 2030, Evonik sees a medium low risk due to the possible continuous tightening of the EU ETS. After the carve-outs of Röhm in 2019 of, Steag in 2014 and Carbon Black in 2011, our production is significantly less energy-intensive and any energy cost increase has a much less significant impact on our overall cost position. The continuous GHG emission reduction measures (i.a. replacement of coal-fired power plants in Marl by gas-fired power plants in 2021/22). ii) INCLUSION IN RISK ASSESSMENT: Our Energy Managers, Sustainability Managers and our Legal team constantly monitor climate-related legislative changes and developments and analyze their potential impact on Evonik. Potential risks are reported to the Head of Corporate ESHQ, the Head of Corporate Responsibility and the Head of Technology & Infrastructure, who are accountable for the identification and evaluation of climate-related risks. Also, Enterprise Risk Management is informed about relevant risks as explained in the process description of identifying and assessing of risks.
Emerging regulation	Relevant, always included	i) EXAMPLE: Due to the recent developments in climate and energy politics and as a consequence of the Paris Agreement, it is almost certain that the regulatory pressure will increase on a national, an EU and an international level. One example of a new cap and trade scheme that could potentially affect Evonik in the coming years is the Chinese national carbon trading scheme, which was launched in December 2017 and stepping forward to an operational ETS. As a second example appears the national ETS in Germany starting in 2021 and including transport as well as heat. Evonik will not only have to carry the costs but also fulfill the duties. ii) INCLUSION IN RISK ASSESSMENT: Our Energy Managers, Sustainability Managers and our Legal team constantly monitor climate-related legislative changes and developments and analyze their potential impact on Evonik. Potential risks are reported to the Head of Corporate ESHQ, the Head of Corporate Responsibility and the Head of Technology & Infrastructure, who are accountable for the identification and evaluation of climate-related risks. Also, Enterprise Risk Management is informed about relevant risks as explained in the process description of identifying and assessing of risks.
Technology	Relevant, always included	i) EXAMPLE: In terms of risks, technology could potentially have an impact on our competitiveness via an increase of operational costs or via effects on our reputation. One example are developments in technology in the field of renewable energies, such as wind energy. Evonik still operates coal-fired power plants which will lead to increasing costs in the near future leading to a cost disadvantage. We have already started to switch from coal-fired power plants to gas and steam power stations to ensure competitiveness. The first carbon block hast been replaced in 2016 and two more will follow by 2022 reducing CO2 emission by 280,000 t/a. ii) INCLUSION IN RISK ASSESSMENT: Our Sustainability Managers constantly monitor and analyze technological changes and technical developments that could affect Evonik and analyze their potential impact. Potential risks are reported to the Head of Corporate ESHQ, the Head of Corporate Responsibility and the Head of Technology & Infrastructure, who are accountable for the identification and evaluation of climate-related risks. Also, Enterprise Risk Management is informed about relevant risks as explained in the process description of identifying and assessing of risks. Also, we constantly analyze the potential of emerging technologies such as carbon capture and storage in terms of their potential to help us mitigate climate-related risks and help increase our cost position and reduce GHG emissions.
Legal	Relevant, always included	i) EXAMPLE: Evonik considers the risk from climate-related litigation, e.g. due to issues resulting from the interpretation of climate-related regulations. One potential issue that might lead Evonik to litigate is due to a revision to the Renewable Energy Sources Act (EEG). This EEG revision that became effective at the start of 2017 declared that energy generation via capacity layer models in which several companies share an energy generation plant are not subject to the burden-free self-generation. For existing facilities an option for amnesty exists, if several conditions are met. The burden of prove lies with the participants in the capacity layer model. If the Bundesnetzagentur (Federal Network Agency) does not accept the arguments delivered by the participants EEG-savings of the past (since 2014) and future savings are at risk. Evonik is a participant in a capacity layer model together with other consortium partners since 2008. Considering the new interpretation, the 2017 EEG has applied to capacity layer models, this risk of retroactive EEG apportionment payments could influence our direct operations. Based on a timeframe of 3 years (2015-2017) for which potential retroactive payments could become relevant, Evonik calculates the financial impact of this risk to be medium. Evonik has already endeavored to meet all conditions stipulated for amnesty of existing plants but amnesty is not yet confirmed. ii) INCLUSION IN RISK ASSESSMENT: The manager responsible for monitoring climate-related legislation, especially regulation of energy markets, identified the risk from the changed interpretation of the EEG law regarding capacity layer models in already in 2015. Subsequently he analyzed the risk together with our legal team. The risk was then reported to the Technology& Infrastructure and Legal Leadership Team and the responsible Board Member as well as to Accounting and the Chief Risk Officer. Based on a thorough analysis relevant options to address the risk were derived and presented to the Board and other relevant bodies in order to achieve endorsement for the proposed path forward.
Market	Relevant, always included	i) EXAMPLE: Evonik considers potential market risks, which could potentially affect the demand for our products e.g. through the impact of climate-related reputation or shifts in markets. Markets here include especially sales and raw material markets. Sustainability and thus effects of climate change have an increasing influence on consumer spending and government actions as explained in emerging/ existing regulation. Both effects lead to market shifts that occur in different speed in dependence of the sensibility of the specific end market. Market risks arising from climate change are always included in the Evonik risk management system. Risks as well as opportunities appear in different Business Line where demand for products can decline or increase depending on the level of sustainability. For example, in the cosmetics industry Evonik sees opportunities increasing by demand for cleansing agents that do not rely on tropical oils such as palm oil but can be produced by fermentation which saves rain forests and CO2 emissions. On the other hand, demand can decline e.g. for fossil fuel additives regarding the ongoing trends of e-mobility. ii) INCLUSION IN RISK ASSESSMENT: Our Sustainability and Business Managers constantly monitor our sustainability-related performance incl. climate-related issues. We analyze the sustainability performance of our peers in order to better understand potentially emerging reputational risks. Potential risks are reported to the Heads of ESHQ, Head of Corporate Responsibility and the Heads of the affected business units, who are accountable for the identification and evaluation of climate-related risks. Also, Evonik identifies and prioritizes sustainability-related risks, including those related to climate change, by analyzing the expectations of important stakeholders. These are matched up with an internal assessment, thereby deriving the relevant fields of action for Evonik. The findings are documented. A materiality analysis is carried our regularly.
Reputation	Relevant, always included	i) EXAMPLE: Evonik considers potential risks arising from climate-related reputation which could potentially affect the demand for our products or our access to capital. Worldwide, investors, NGOs and the public are increasingly focusing on how companies are dealing with environmental issues such as climate change and how they are integrating these topics into their business strategies and transparent communication. Evonik maintains different landfills globally, which are carefully managed under compliance with the latest recommendations. Nevertheless, emotional and/or negative press could deteriorate our reputation as an environmentally friendly company, which is key in certain end markets. Currently, there is no indication that climate-related reputation risks might increase for Evonik. E.g., in 2018 the inclusion of Evonik in the Dow Jones Sustainability World and Europe Index, was confirmed – further strengthening our reputation. ii) INCLUSION IN RISK ASSESSMENT: Our Sustainability Managers constantly monitor our sustainability-related performance incl. climate-related issues. In addition, our business managers are observing our customers' and markets' sentiments. Also, we analyze the sustainability performance of our peers to better understand potentially emerging reputational risks. Potential risks are reported to the Heads of ESHQ, Head of Corporate Responsibility and the Heads of the affected business units, who are accountable for the identification and evaluation of climate-related risks. Also, Evonik identifies and prioritizes sustainability-related risks, including those related to climate change, by analyzing the expectations of important stakeholders. These are matched up with an internal assessment, thereby deriving the relevant fields of action for Evonik. The findings are documented. A materiality analysis is carried our regularly.
Acute physical	Relevant, always included	EXAMPLE: Evonik considers potential acute physical risks in the form of climate change-related extreme weather events, such as cyclones, hurricanes or floods which might affect our production facilities. An increase of such weather events affecting our facilities could result in increased operational and capital cost and disruption in our production. Evonik has several production sites in areas that suffered or almost suffered from severe hurricanes or typhoons during the last years. For example, Evonik Oil Additives USA Inc. temporarily had to shut down its production in Deer Park, Texas due to Tropical Storm Harvey in 2017. This risk has been identified by the impacted business early and implemented measures helped to reduce emerging costs significantly. This and similar risks for our production sites worldwide are closely monitored and if appropriated covered by insurance ii) INCLUSION IN RISK ASSESSMENT: The identification of such risks globally coordinated by our internal Insurance Services in close cooperation with production sites and respective business sites. Considering risks from acute physical events due to climate related changes our procurement department observes the reliability of our sourcing network intensely. Identified risks are assessed in cooperation with the accountable business managers and are reported to the Heads of the impacted departments. Depending on the impact and probability of occurrence risks are reported to the Corporate Risk Officer and the accountable board member either ad hoc or during the next regular risk assessment. Currently Evonik sees a potentially medium impact of risks related to acute physical events.
Chronic physical	Relevant, always included	I) EXAMPLE: Evonik considers chronic physical risks due to climate change related changes in precipitation extremes, such as droughts affecting our production (facilities). An increase of such weather events affecting our facilities could result in increased operational and capital cost and disruption in our production. During the last year a severe drought in central Europe resulted in low Rhine water levels that disrupted large parts of important channel transportation, which led to disruption of production in all parts of the Supply Chain based alongside the river or increased transportation costs. This risk has been identified by the impacted business five years ago and implemented measures helped to reduce emerging costs significantly. This and similar risks for our production sites worldwide are closely monitored and if appropriated covered by insurance. ii) INCLUSION IN RISK ASSESSMENT: The identification of such risks globally coordinated by our internal Insurance Services in close cooperation with production sites and respective business sites. Considering risks from chronic physical events due to climate related changes our procurement department observes the reliability of our sourcing network intensely. Identified risks are assessed in cooperation with the accountable business managers and are reported to the Heads of the impacted departments. Depending on the impact and probability of occurrence risks are reported to the Corporate Risk Officer and the accountable board member either ad hoc or during the next regular risk assessment. Currently Evonik sees a potentially medium impact of risks related to chronic or acute physical events.

C2.3

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

Yes

C2.3a

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

Identifier
Risk 1

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

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased direct costs

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

Company-specific description
i) CLEAR DESCRIPTION: Within the context of the Paris Climate Agreement from 2015 and becoming effective in 2016, changes in the national climate policies outside the EU can be observed. China already implemented a pilot system for ETS in seven provinces and started its nationwide system at the end of 2017. However, MUSC as the only ETS eligible site in China so far, is not affected by the national system and will stay in the regional Shanghai ETS. Singapore implemented a CO2 tax in 2019 and Canada urges its provinces to implement a cap and trade scheme or a carbon taxation by otherwise a national backstop in form of a CO2 tax will apply. Due to the current political situation in the US there is no sight for a uniform nationwide legislation regarding the energy and climate protection there. However, US states and municipals continue or expand carbon pricing schemes. Whereas in the EU, the reform of the Emissions Trading System was agreed on in March 2018 and is connected with the attempt to initiate higher certificate prices by cutting the oversupply in the market as well as the free allocation. Since Evonik is a global operating company, changes in the regions' national legislations would have direct as well as indirect effects on energy prices and on production costs of Evonik. ii) EFFECT ON Evonik: Evonik operates 24 facilities that fall within the scope of the EU ETS. In 2020, a new EU ETS installation (La Zaida, Spain, 40,000 t CO2/y) was added due to the Peroxychem purchase. The plants that fall within the scope of the EU ETS emitted 3.3 million metric tons of CO2 in 2019 (2018: 3.5 million metric tons of CO2). Considering this risk, the EU ETS could influence Evonik directly and indirectly, through our supply chain with regard to energy supply, as we expect the prices for our purchased energy to rise. We assume an additional purchase effect on carbon certificates in the EU for Evonik in 2021–2030 when comparing the current free allocation rules with the rules of the fourth trading period. We expect this impact to remain medium-low. After the carve-outs of Röhm in 2019, Steag in 2014 and Carbon Black in 2011, our production is significantly less energy-intensive and any energy cost increase has a much less significant impact on our overall cost position. The continuous GHG emission reduction measures (i.a. replacement of coal-fired power plants in Marl by gas-fired power plants in 2021/22).

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium-low

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

Potential financial impact figure (currency)
270000000

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

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

Explanation of financial impact figure
i) DESCRIPTION: The financial effects of the risk of cap and trade schemes or other CO2 pricing models for Evonik depend a lot on the final legal regulations. Especially within the EU ETS, where the EU is eager to tighten the allocation rules and shorten the free surplus on the market, additional carbon costs are being expected. Ii) CALCULATION: Based on our current knowledge about the EU ETS reform for the fourth trading period (2021 – 2030), we assume an additional purchase effect on carbon certificates in the EU for Evonik in 2021 – 2030 when comparing the current free allocation rules with the rules of the fourth trading period.

Cost of response to risk
36000000

Description of response and explanation of cost calculation
Our target is to cut scope 1 and 2 emissions by 50 percent in absolute terms by 2025 (compared with 2008). Use of alternative technologies and efficient productions processes will help us achieve this. To reduce the impact of increasing CO2 costs Evonik is a) working on more energy-efficient processes and b) already shifted its portfolio to a less CO2 intense business. a) We use a broad spectrum of technical and organizational measures to raise energy efficiency. Examples are co-generating plants and the expansion of integrated structures linking chemical production and energy generation. Third-party production facilities are included in these measures. We also consider using renewable energies. Many of our energy management systems meet the high standard of ISO 50001. In 2019, we invested 36 Mio. € in measures to achieve a further improvement in environmental protection. Investment in environmental protection can fluctuate considerably because it depends on specific projects. For example, in 2019 a new noise insulation wall was erected in Wesseling (Germany). In Schörfling (Austria), action was taken to avoid waste so that solvents could be returned to the production process b) After the carve-outs of Röhm in 2019, Steag in 2014 and Carbon Black in 2011, our production significantly less energy-intensive and any energy cost increase has a much less significant impact on our overall cost position. The continuous GHG emission reduction measures (i.a. replacement of coal-fired power plants in Marl by gas-fired power plants in 2021/22).

Comment
Evonik has defined new environmental targets in the reporting period. We are aiming for an absolute reduction in scope 1 and 2 emissions of 50 percent by 2025, compared with the level in 2008 (status of implementation in 2019: 42 percent). This affirms Evonik's commitment to the Paris Agreement on Climate Change. The relatively short period up to 2025 reflects our view that it is not currently possible to predict technological and regulatory developments beyond this date with sufficient

certainty. Internal CO2 pricing is an additional criterion in the management of major investments. By 2025 we aim to reduce our absolute greenhouse gas emissions by 50 percent compared with 2008 (reference base).

Identifier
Risk 2

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

Risk type & Primary climate-related risk driver

Chronic physical	Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact
Decreased revenues due to reduced production capacity

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

Company-specific description
Climate changes, especially precipitation, can cause flooding, high water or water shortages and thus have an effect on the availability of cooling water and transportation options. The aspect of transportation routes is of special relevance to Evonik. Many German sites are located on or near rivers. Because of this, large volumes of raw materials and products are transported to and from the sites by barge. Consequently, high and low water or climate-related frozen canals can have serious effects on Evonik's production. For example, the water level of the Rhine has effects on raw material availability for the Worms and Wesseling sites. Basically, this risk exists in Europe, Asia, North and South America and, hence, everywhere that Evonik is affected by the availability of river water.

Time horizon
Long-term

Likelihood
Unlikely

Magnitude of impact
Medium-low

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

Potential financial impact figure (currency)
30000000

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

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

Explanation of financial impact figure
The assessment of physical risks in terms of climate changes is fraught with uncertainty, as no reliable local climate models exist. Therefore, it is very difficult to make statements regarding the possible costs. For our calculation we assess the impact of past events and project those results to the estimated future business and climate development. According to our expectations and results from the past years we assess the risk resulting from chronic changes in precipitation patterns with 30 Mio. €.

Cost of response to risk
36000000

Description of response and explanation of cost calculation
Within the scope of Evonik's climate strategy, which has recently been further developed; extensive investigations of the 20 biggest sites are done. It is agreed that potential effects of climate changes on the sites and their production facilities be investigated from both logistics and raw material availability aspects. All sites also have emergency plans. These describe in detail what must be done at the site and in the neighborhood in case of incidents. Additionally, we have several insurances (property and business interruption insurances) which should cover most the potential costs. EXAMPLE: Regarding the lower Rhine level in 2018 an interdisciplinary group including delegates from affected businesses, logistics teams, procurement and insurance services defined and agreed on courses of action. Case studies for all affected sites have been carried out focusing on their special conditions (alternative routes, inventory level, transportation methods, critical raw materials). The results have been presented to the board and implemented measures helped to diminish a potential impact. Additionally in 2018 and 2019 extensive external audits focusing on potential impacts of floodings have been carried out.

Comment
In 2019, we invested €36 million (2018: €46million) in measures to achieve a further improvement in environmental protection (+Operating costs for environmental protection facilities of €289 million in 2019.)

Identifier
Risk 3

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

Risk type & Primary climate-related risk driver

Acute physical	Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact
Increased indirect (operating) costs

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

Company-specific description
Tropical cyclones, such as hurricanes and typhoons can shut down plants or affect production. This applies especially to sites near the coastline in North America and Asia (e.g. Japan). These cyclones can not only cause temporary disruptions to plants but can also cause weather-related interruptions in the supply chain. For example, Evonik operates several sites in affected areas in Asia, e.g. Yokkaichi, and the US, e.g. Garyville, Deer Park and Hopewell. Although preventive measured are implemented damage cannot be precluded.

Time horizon
Medium-term

Likelihood
Very unlikely

Magnitude of impact
Medium-high

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

Potential financial impact figure (currency)
300000000

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

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

Explanation of financial impact figure
The assessment of physical risks in terms of climate changes is fraught with uncertainty. Evonik Risk & Insurance Services GmbH is responsible for all of Evonik's insurances. These include business interruption and property damage insurance that provide compensation for at least some of the effects. An internal analysis of possible impacts of Hurricanes revealed that the impact of the inherent risk can be up to 250-500 million € (Medium-High). Nevertheless, events of the last years showed working counter measures, that could lower the financial impact dramatically. For example, Evonik Oil Additives USA Inc. temporarily had to shut down its production in Deer Park, Texas due to Tropical Storm Harvey in 2017. This risk has been identified by the impacted business early and implemented measures helped to reduce emerging costs significantly. This and similar risks for our production sites worldwide are closely monitored and if appropriated covered by insurance

Cost of response to risk
36000000

Description of response and explanation of cost calculation
Within the scope of Evonik's climate strategy, which has recently been further developed; extensive investigations of sites are done. It is agreed that potential effects of climate changes on the sites and their production facilities be investigated from both logistics and raw material availability aspects. All sites also have emergency plans. These describe in detail what must be done at the site and in the neighborhood in case of incidents. Additionally, we have several insurances (property and business interruption insurances) which should cover most the potential costs. Regarding the specific risks in 2015 an external analysis of our risk portfolio has been carried out. This analysis examines the specific risk for our sites arising from different climatic events such as typhoons or heavy rain. Together with internal and external experts preventing measures are examined and if appropriate implemented. Due to the importance of this issue starting in 2019 the analysis will be done annually. Sites that belong to an identified risk group are extensively inspected by external consultants. For example, in 2018 and 2019 different insurance providers carried out inspections focusing on flooding risks.

Comment
In 2019, we invested €36 million (2018: €46million) in measures to achieve a further improvement in environmental protection (+Operating costs for environmental protection facilities of €289 million in 2019.)

Identifier
Risk 4

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

Risk type & Primary climate-related risk driver

Technology	Substitution of existing products and services with lower emissions options

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

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

Company-specific description
A change in buying habits in terms of increased demand for climate-friendly products may lead to falling sales of existing greenhouse gas-intensive products. Evonik sells its products in different markets but is not involved in the area of end customer products. Therefore, changes in consumers' buying habits have an effect on the portfolio and the sales of the end customer industries. However, this has an effect on the products that Evonik sells to companies in these industries. For example, increased use of bio-fuels or other alternative drive systems for cars, especially considering the rising importance of e-mobility, could result in lower sales of MTBE.

Time horizon
Long-term

Likelihood
Unlikely

Magnitude of impact
Medium-low

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

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)
10000000

Potential financial impact figure – maximum (currency)
100000000

Explanation of financial impact figure
At present, the financial effects can be estimated only to a limited extent. The focus of Evonik's risk management system is the planning period of the next three years. However, changes in consumer behavior are more long-term and therefore to be expected beyond this timeframe. Based on current planning, it can be assumed that the cumulated effect would have significant effects on Evonik in the coming years. Hence, we assume an impact of 50 to 100 million €.

Cost of response to risk
4000000000

Description of response and explanation of cost calculation
As an innovative industrial group, by developing new products Evonik ensures the success of its customers and, consequently, its own long-term and profitable growth. We are constantly working on our portfolio to safeguard future success. We identified megatrends and focus on our four growth engines: Health & Care, Smart Materials, Specialty Additives and Animal Nutrition. To foster the realization of the identified opportunities and to mitigate risks regarding the substitution of existing products we focus on these drivers regarding internal R&D as well as acquisitions. Examples of the last years are the acquistions of APD Special Additives, Huber Silica or Dr Straetmans amounting to an investment of about 4 billion EUR. Our innovation pipeline includes both completely new business options and securing and enhancing the prospects of existing businesses. Equal attention is paid to product and process innovations, business models and systems innovations, and environmental and climate protection. Our project portfolio is aligned to the different strategies of the various business lines and we focus on growth engines with high sustainability benefits. During the reporting period, we started to evaluate selected innovation projects using the World Business Council for Sustainables Development's PSA model. We have performed sustainability analyses for our products since 2016. Since 2019, PARCs have been used for this. R&D expenses 2019 428 Mio. €

Comment

Identifier
Risk 5

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

Risk type & Primary climate-related risk driver

Current regulation	Other, please specify (changes in German Renewable Energy Sources Act)

Primary potential financial impact
Increased direct costs

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

Company-specific description
The German Renewable Energy Sources Act (EEG) establishes a monetary support scheme for renewable energy investments and provides for the payment of a levy by electricity consumers to finance this budget. The EEG includes also provisions that exempt certain electricity consumption from the levy or limit the levy for companies whose markets are affected by international competition. Electricity that is self-produced in existing power plants is mainly exempted from the EEG levy. This exemption was reviewed by the German government in 2016 and notified by the European Commission in 2017. Evonik operates a couple of on-site power plants for the production of steam and electricity mainly based on cogeneration (CHP) in Germany. Additionally, some group companies benefit from a limitation of the EEG levy. An amendment of the EEG regarding the exemption or limitation of the EEG levy as well as a changed interpretation of the EEG could be detrimental to Evonik.Evonik in Germany operates a couple of on-site power plants for the production of steam and electricity, mainly based in cogeneration

Time horizon
Long-term

Likelihood
Unlikely

Magnitude of impact
Unknown

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

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

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

Explanation of financial impact figure
Due the large degree of uncertainty regarding the quality and type of possible modifications neither the likelihood nor the impact / potential financial burden can be reasonably estimated

Cost of response to risk
36000000

Description of response and explanation of cost calculation
Our target is to cut scope 1 and 2 emissions by 50 percent in absolute terms by 2025 (compared with 2008). Use of alternative technologies and efficient productions processes will help us achieve this. To reduce the impact of increasing CO2 costs Evonik is a) working on more energy-efficient processes and b) already shifted its portfolio to a less CO2 intense business. a) We use a broad spectrum of technical and organizational measures to raise energy efficiency. Examples are co-generating plants and the expansion of integrated structures linking chemical production and energy generation. Third-party production facilities are included in these measures. We

also consider using renewable energies. Many of our energy management systems meet the high standard of ISO 50001. In 2019, we invested 36 Mio. € in measures to achieve a further improvement in environmental protection. Investment in environmental protection can fluctuate considerably because it depends on specific projects. For example, in 2019 a new noise insulation wall was erected in Wesseling (Germany). In Schörfling (Austria), action was taken to avoid waste so that solvents could be returned to the production process b) After the carve-outs of Röhm in 2019, Steag in 2014 and Carbon Black in 2011, our production significantly less energy-intensive and any energy cost increase has a much less significant impact on our overall cost position. The continuous GHG emission reduction measures (i.a. replacement of coal-fired power plants in Marl by gas-fired power plants in 2021/22).

Comment
We are aiming for an absolute reduction in scope 1 and 2 emissions of 50 percent by 2025, compared with the level in 2008 (status of implementation in 2019: 42 percent). This affirms Evonik's commitment to the Paris Agreement on Climate Change. The relatively short period up to 2025 reflects our view that it is not currently possible to predict technological and regulatory developments beyond this date with sufficient certainty. Internal CO2 pricing is an additional criterion in the management of major investments. By 2025 we aim to reduce our absolute greenhouse gas emissions by 50 percent compared with 2008 (reference base).

C2.4

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

C2.4a

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

Identifier
Opp1

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

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

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

Company-specific description
Evonik offers its customers environment-friendly and energy-efficient systems solutions. In view of the limited reserves of fossil fuels, we see this as a major source of opportunities. One example is precipitated silica, where we are a market leader. Precipitated silica is used in combination with silanes to produce tires with low rolling resistance that reduce fuel consumption. We are the only manufacturer worldwide that can offer the tire and rubber industries both components required for tires with low rolling resistance, i.e. silica and silanes. Moreover the addition of the amino acid DL-methionine to animal feed makes an important contribution to all three dimensions of sustainability – environmental, economic and social. Independent studies confirm that the addition of DL-methionine to feed significantly decreases greenhouse gas emissions as well as reducing the amounts of water and land that are required for animal nutrition

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
Medium-high

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

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
250000000

Potential financial impact figure – maximum (currency)
400000000

Explanation of financial impact figure
The financial effects of this opportunity for Evonik depend a lot on the final legal regulations. Therefore, at this time it is not really possible to make a reliable estimation. Additionally, changes in statutory regulations are more long-term and therefore to be expected beyond our planning timeframe. It can be assumed that the cumulated effect would have significant effects on Evonik in the coming years. Based on our current knowledge, we assume effects in the region of €250 - 400 million.

Cost to realize opportunity
400000000

Strategy to realize opportunity and explanation of cost calculation
As an innovative industrial group, by developing new products Evonik ensures the success of its customers and, consequently, its own long-term and profitable growth. We are constantly working on our portfolio to safeguard future success. We identified megatrends and focus on our four growth engines: Health & Care, Smart Materials, Specialty Additives and Animal Nutrition. To foster the realization of the identified opportunities and to mitigate risks regarding the substitution of existing products we focus on these drivers regarding internal R&D as well as acquisitions. Our innovation pipeline includes both completely new business options and securing and enhancing the prospects of existing businesses. Equal attention is paid to product and process innovations, business models and systems innovations, and environmental and climate protection. Our project portfolio is aligned to the different strategies of the various business lines and we focus on growth engines with high sustainability benefits. During the reporting period, we started to evaluate selected innovation projects using the World Business Council for Sustainables Development's PSA model. We have performed

sustainability analyses for our products since 2016. Since 2019, PARCs have been used for this. R&D expenses 2019 428 Mio. €

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Markets

Primary climate-related opportunity driver
Access to new markets

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

Company-specific description
Evonik has identified resource efficiency as a future megatrend and therefore also as a growth area and sees business opportunities from rising demand for existing and new climate protection products. For example, in 2008 the EU Commission decided that the car manufacturers' fleets may not emit more than 130 g CO2 per kilometer on average by 2015. Evonik already makes a contribution towards making automobiles more and more environmentally friendly. With silanes and silica for green tires, catalysts for biodiesel production, oil additives or high-performance polymers, Evonik helps contain climate change. It is also forecast that there will be a worldwide increase in demand for biodiesel in the coming years – also because of legal requirements. For example, the European Union has decided that in 2020 10% of fuel requirements in the transportation sector must be covered by renewable resources. Evonik is one of the leading companies in the field of catalyst production for biodiesel production. For example, the use of sodium methylate as a catalyst produces higher yields in biodiesel production and thus conserves resources.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium-high

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

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
150000000

Potential financial impact figure – maximum (currency)
300000000

Explanation of financial impact figure
At present, the financial effects can be estimated only to a limited extent. The focus of Evonik's risk management system is the planning period of the next three years. However, changes in the climate are more long-term and therefore to be expected beyond this timeframe. Consequently, it is difficult to make a precise forecast. It can be assumed that the cumulated effect would have significant effects on Evonik in the coming years. Based on our current knowledge, we assume effects in the region of €150-300 million.

Cost to realize opportunity
400000000

Strategy to realize opportunity and explanation of cost calculation
As an innovative industrial group, by developing new products Evonik ensures the success of its customers and, consequently, its own long-term and profitable growth. We are constantly working on our portfolio to safeguard future success. We identified megatrends and focus on our four growth engines: Health & Care, Smart Materials, Specialty Additives and Animal Nutrition. To foster the realization of the identified opportunities and to mitigate risks regarding the substitution of existing products we focus on these drivers regarding internal R&D as well as acquisitions. Our innovation pipeline includes both completely new business options and securing and enhancing the prospects of existing businesses. Equal attention is paid to product and process innovations, business models and systems innovations, and environmental and climate protection. Our project portfolio is aligned to the different strategies of the various business lines and we focus on growth engines with high sustainability benefits. During the reporting period, we started to evaluate selected innovation projects using the World Business Council for Sustainables Development’s PSA model. We have performed sustainability analyses for our products since 2016. Since 2019, PARCs have been used for this. R&D expenses 2019 428 Mio. €

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resilience

Primary climate-related opportunity driver
Other, please specify (changes in regulation)

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

Company-specific description
Evonik production facilities worldwide are based on modern standards and have high levels of occupational and environmental safety, so we see opportunities to further increase our market shares. For instance, in 2017 there was an increase in shutdowns of production facilities in China, including those operated by our competitors, to

improve environmental protection and occupational safety.

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

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

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

Explanation of financial impact figure
At present, the financial effects can be estimated only to a limited extent. The point in time of changes in legislation cannot be anticipated exactly. After the increase of shutdowns in 2017 we assume opportunities in the short-term with a significant effect on in Evonik in the comeing years.

Cost to realize opportunity
310000000

Strategy to realize opportunity and explanation of cost calculation
The basis for our actions is an extensive, integrated management system for the environment, safety, health, and quality that applies to the whole of the Evonik Group. The structure of the management system is based on legal requirements and internal regulations such as policies and standard operating procedures. That ensures that we meet compliance requirements and supports continous improvement of our environmental performance. In 2019, we invested 36 Mio. € in measures to achieve a further improvement in environmental protection. Investment in environmental protection can fluctuate considerably because it depends on specific projects. For example, in 2019 a new noise insulation wall was erected in Wesseling (Germany). In Schörfling (Austria), action was taken to avoid waste so that solvents could be returned to the production process. Operating costs for environmental protection facilities counted for 289 Mio. EUR in 2019.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?
Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?
Yes, qualitative and quantitative

C3.1b

(C3.1b) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
2DS	Climate scenarios at Evonik are understood as a range of possible outcomes by considering a variety of alternative possible futures. They challenge conventions about the future, as they are constructed for exploring alternative situations. Climate scenarios can therefore be used to assess the probability of reaching or overshooting targets as well as quantifying the likelihood of risks and opportunities for the business. Plans can then be developed to ensure that the business is ready for the transition to a low carbon future. In addition scenario analysis can give detailled information on potential vulnerability within the value chain e.g. impacts on rawmaterial transport to sites. Evonik has already started to implement climate change scenarios according to the TCFD framwork to make use of the following advantages: Businesses analysis that is flexible or robust for a range of futures. Understanding of the strategic implications of climate related risks and opportunities. In this context Evonik considers two types of scenario analysis: Physical – using the results of global climate models that forecast the Earth's response to changes in the concentrations of GHGs in the atmosphere to understand the impact on business operations. Transitional - scenarios present assumptions about the climate policies and deployment of low carbon technology to limit GHG emissions. They draw conclusions by modelling how policy and energy supply related technology will interact with economic activity, energy consumption and GDP as well as other factors. Based on Evonik´s extensive analyses of all 96 production sites in 26 countries (considering divestments in 2019) long-term projections on water demand and water availability for 2030 and 2040 were updated in 2019. This is aimed to reflect the crucial role of water in chemical operations on the one hand and water (availablility) being the primary natural capital to be impacted by climate change. Summing up, based on the scenario analysis and our accompanying analyses we cannot exclude significant changes in water availability at about one quarter of all sites due to climate change in the next 20-30 years to have the potential to generate substantive negative change in our costs or revenues. IMPACT ON OBJECTIVES/STRATEGY: Taking into consideration the results of our scenario analysis we decided to develop water emergency management plans for sites located in water stressed areas. Special attention will also be paid to sites located at waterways as transportation had to be stopped recently at some sites due to low water. Alternatives like rerouting via train transport have to be explored instead, which actually took place for our sites located at the rhine river in Germany. In addition, we are investigating further potential ways to lower greenhouse gas emissions not just for Evonik but also along the value chain, i.e. new CO2-reduction targets for scope1, scope2 and scope3 emissions. These new targets have been approved by the members of the Board beginning 2019. Analysis Summary: •Existing designated water scarce Evonik production sites do not see significant changes w.r.t. basin water supply. •Changes in water supply due to climate change projections do not appear to be a major driver of water scarcity in the future Water Demand Summary: •Most existing designated water scarce Evonik production sites will see increases in water demand implying greater competition for remaining water resources in the future due to stable or decreasing water stocks •Changes in water demand due to projected socio-economic factors appear to drive most of the future water scarcity for Evonik production sites Water Stress Summary: •Most Evonik production sites alraedy designated as water scarce will see increases in water stress or no change from present conditions . All sites in water stressed areas are subject to special attention by the risk management effective 2019.

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	According to our materiality analysis, climate change is one of the three most important sustainability issues. Risks and opportunities related to the growing demand from customers for sustainable products and services have influenced our product-/services-related strategy and product portfolio as our specialty chemicals products make an indispensable contribution to the benefits of our customers' products, which generate their success on the global market. We have developed the methodology for the Sustainability Analysis 2.0 of our businesses in collaboration with the operational units. The findings of our Sustainability Analysis 2.0 are designed to supplement established internal strategic business analyses. Transparent and quantifiable evaluation of sustainability aspects is necessary to include this perspective in business decisions. The core elements of our analysis are sustainability criteria relating to the ecological and social issues along the value chain, which Evonik classifies as material. These are closely based on the principles and content of the WBCSD Portfolio Sustainability Assessments (PSA). The process was performed for the first time in 2019 with all business lines at Evonik. Evonik took up these findings in its sustainability evaluation of its businesses and uses them to provide specific impetus for ongoing development e.g. as part of the strategic planning process. As a result Evonik`s board decided to intensify its activities in promoting cost-efficient green hydrogen as it becomes a beacon of hope in the energy transition, both as a carbon-free fuel for industry and transportation, and as a key raw material for the chemical industry. Green hydrogen is produced from water by electrolysis using electricity generated from renewable resources. It is still much more expensive than conventional hydrogen. As well as sufficient low-cost electricity generated from renewables, investment in the electrolyzer is a key factor in cost-efficient production of green hydrogen. Evonik has now developed a novel anion exchange membrane (AEM), which should contribute to the breakthrough of electrolytic production of hydrogen. Together with other highly qualified partners Evonik will plan, construct, and test an AEM electrolysis system based on the new membranes from Evonik.
Supply chain and/or value chain	Yes	We expect our suppliers to share our principles and to act correctly in all respects, which means accepting responsibility towards their employees, business partners, society, and the environment. We have therefore issued a special code of conduct for suppliers, setting out binding requirements for these business partners. This is based on our corporate values, the principles of the UN Global Compact, the International Labour Standards issued by the International Labour Organization (ILO), and the Topics addressed by the Responsible Care® initiative like respnsible use of water, Energy Efficiency and Climate protection. By selecting suppliers carefully we enhance the Quality of the entire value chain. On the one hand, we focus on Validation and evaluation of suppliers, and on the other, we specifically monitor certain raw materials. These include renewable rawmaterials and raw materials where there is a potential supply Risk or reputational risk, for example, conflict minerals or biodiversity harming raw materials . We have implemented strategic procurement concepts for these "critical raw materials," whose availability is vital for our production processes. These processes are integrated into a Management System. Evonik also drives forward sustainability and transparency in the supply chain through the sector initiative Together for Sustainability (TfS), where we are one of the six founding members. The aim of TfS is the joint development and implementation of a global assessment and audit program for responsible procurement of goods and services. As a member of the initiative, Evonik is also subject to TfS assessments. Our gold rating positioned us among the top-rated companies again in 2019. Furthermore with respect to transportation services of products and raw materials Evonik analysed waterways on their risk of low water level. Two waterways - river rhine in Germany and Yangtse in China - were classified as potentially "unnavigable" with impact on Evonik. Thus the board of Evonik decided to develope emergency strategies with alternative transportation like railroad or trucks.
Investment in R&D	Yes	According to our materiality analysis, climate change is one of the three most important sustainability issues. Around 85 percent of our R&D is performed by our manufacturing chemical segments. That includes, first and foremost, research geared specifically to their core technologies and markets and to the development of new business. An above-average proportion of our R&D funding is allocated to our growth Segments, Nutrition & Care and Resource Efficiency. The Performance Materials segment focuses on optimizing products and processes. Creavis concentrates on mid- and long-term projects that support Evonik's growth and sustainability strategy and provide access to new business options. In addition, it identifies future-oriented topics and acts as an internal incubator for Evonik. Using scenario methods, Evonik scientists have developed future visions for specialty chemicals. This is the world's biggest study of this type into the future of specialty chemicals, and Evonik intends to use the results to initiate timely and purposeful innovations. In addition, long-term strategies can be measured against the scenarios and refined. Evonik and Siemens have launched Rheticus II, a joint research project that aims to develop an efficient and powerful test facility to produce specialty chemicals with the aid of bacteria—using carbon dioxide (CO2), water, and electricity from renewable sources. In the Rheticus I project, the two companies previously worked for two years to develop the technically feasible Basis for this artificial photosynthesis process using a bioreactor and electrolyzer. Evonik and Siemens are now combining these two previously separate plants in a test facility at Evonik's site in Marl (Germany).
Operations	Yes	According to our materiality analysis, climate change is one of the three most important sustainability issues. Thus we are reducing our CO2 emissions by modernizing and renewing our energy infrastructure continuously. In 2019, we introduced carbon pricing as an additional investment criterion. Since we achieved our target for the reduction in specific greenhouse gas emissions ahead of schedule, the executive board adopted new environmental targets in February 2019. Our target of a 50 percent reduction in absolute scope 1 and 2 emissions by 2025 compared with the level in 2008—the first full year after the establishment of Evonik—affirms our commitment to the Paris Agreement on Climate Change. At present, we assume an average reduction in climate-relevant emissions of 3 percent a year. The relatively short period up to 2025 reflects our view that it is not currently possible to predict technological and regulatory developments beyond this date with sufficient certainty. In Addition to this, we intend to improve upstream scope 3 emissions by 3 percent a year. The use of of alternative technologies and efficient production processes will help us achieve our targets. We use a broad spectrum of technical and organizational measures to raise energy efficiency. Examples are co-generation plants and the expansion of integrated structures linking chemical production and energy generation. We also consider using renewable energies. Evonik is planning to build a gas and steam turbine power plant in Marl (Germany) to replace the last coal-fired power plant at this site from the end of 2022. This will reduce our CO2 emissions by up to 1 million metric tons p.a. In February 2019, we introduced country-specific carbon pricing for all investments as a basis for effective management of our new CO2 reduction target. This is unrelated to present or foreseeable regulatory requirements. It adds another relevant risk assessment indicator to the existing planning parameters for Investments worldwide. We assume that, in ten years at the latest, relevant market prices or regulatory pricing systems of at least €50 per metric ton CO2 will be established in all regions of relevance to Evonik. In view of regional differences in the starting situation, we have developed scenarios for the development of carbon pricing for the next ten years, showing the rise to the assumed final price.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets	Time horizon: Selected elements have already been influenced by climate-related risks and opportunities. The specific influence on the different elements is part of our regular financial planning and forecasting processes and approved by the board in course of the financial forecast (current year)/ mid-term planning (one to three years)/strategic planning (10 years). Capital expenditures (Case study): In 2019 our organization introduced an internal price on carbon into our capital expenditures approval process, with the aim to redirect investments towards clean technologies, lower-carbon solutions, and renewable energy projects. We conducted a benchmark study and decided on specific prices per region, to internalize the potential future cost of carbon in the long term. Returns on investments are assessed with the impact of the carbon implication. This enables management to arbitrate between different options and to choose the most virtuous and efficient ones in order to achieve our organization's strategic goals including a reduction of CO2 emissions of 50% by 2025 (compared to 2008). This is a long-term measure, and the price will be periodically reviewed and updated. Revenues This area of financial planning has already been impacted BECAUSE identified climate change related opportunities have already been realized. As preconditions for Evonik's future viability, sustainable business activities and responsible conduct are cornerstones of our business model. We drive forward our sustainability activities along the value chain in close dialogue with our stakeholders. As well as our own production processes and the products we market, we always consider the supply chain and the product benefits for our customers and their customers. We have observed rising demand for products that demonstrate a good balance of economic, ecological, and social factors. That opens up a broad spectrum of future-oriented business opportunities for Evonik in attractive markets. Sustainability has long been a growth driver in many of our business. Evonik has defined growth engines with a clear focus on. For example, the Resource Efficiency segment supplies high performance materials for environmentally friendly as well as energy-efficient systems to the automotive, paints & coatings, adhesives, construction, and several other industries. Resource efficiency is the basis for energy-efficient and environmentally compatible products and is therefore a key factor in the development of this segment's business. With the Silica/Silane-technology from Evonik in treads, gas-guzzling rolling resistance decreases while traction and wet grip are simultaneously increased. This decreases fuel consumption by up to 8% . IMPACT: Our sales in those areas of business supporting energy efficient and sustainable solutions we have seen increasing demand. For example, the revenue of Resource Efficiency increased from 4040 Mio. € in 2014 to 5685 Mio. € in 2019 by above 40%. Reasons are for instance higher standards for bio-fuel or regulations for more energy efficient tires. The magnitude of impact for opportunities from climate change related changes in customer behavior and/or regulation is assessed as very high. Direct and Indirect Costs: This area of financial planning has been impacted BECAUSE the identified regulatory risks as well as physical risks haven been considered in e.g. our forecasts for energy and transportation costs. Relevant in this topic are e.g. direct and indirect risks from current or emerging regulation deriving from discussion about rising CO2 prices especially within the EU and acute physical condition like a seasonal lower water level of the river Rhein. Regarding the first example the main regulatory framework is the EU Emissions Trading Scheme (ETS) that triggers risks for the European industry. The ETS could affect Evonik directly, through our own energy generation facilities that are part of the EUR ETS as well as indirectly, through higher costs in our supply chain. Current trends show constantly rising prices, thus risks are relevant as of today. Regarding acute physical risks our supply chain is affected by lower Rhine levels through either higher transportation costs for alternative shipping routes or freight trains as well as through a declining availability of raw materials because of production and shipping bottlenecks. Capital Allocation: In our financial planning process capital expenditure/capital allocation is impacted in all segments, BECAUSE the opportunities as well as the risks we have identified and reported in this CDP report have already been part of strategic decision making. During our yearly strategic planning processes all segments develop in cooperation with Corporate Strategy expenditure plans with main focus on the single projects. Here Evonik strategic goals such as the reduction of CO2 footprint as well as financial targets are important guidelines in decision making. The CapEx planning focuses on long-term projects with a mandatory time horizon of min. ten years. The CapEx budget is approved during the mid term planning process. Large CapEx projects are approved individually by the executive and supervisory board. Several projects have already been initiated either to mitigate risks or to foster opportunity arising from transitional as well as acute physical risks. Acquisitions/ Divestments: This area hast been impacted strongly BECAUSE climate related risks/opportunities have been a major factor influencing especially divestment decisions. After the carve-out of Madrid in 2019, Steag in 2014 and Carbon Black in 2011, our production is significantly less energy-intensive and any energy cost increase has a much less significant impact on our overall cost position. On the other hand sight acquisition decisions consider sustainability and the coherence to our sustainability strategy. Acquisitions such as the specialty additives business of Air Products and Chemicals Inc. and the silica business of J. M. Huber Corporation as well as as the recent acquisition of PeroxyChem reflect our approach. Climate change is one of many aspects influencing our decision making on acquisition/divestment projects. Overall the quota of projects affected by climate change risks and opportunities is high. Assets: This area of financial planning is impacted BECAUSE we identified climate change-related risks regarding acute and/or chronical physical risks that could impact our assets. For example acute physical risks such as hurricanes esp. affecting the gulf of Mexico could negatively affect our assets located around the coastline. Changes in precipitation patterns could lead to (seasonal) draughts affecting either transportation routes (e.g. lower Rhine level esp. affecting our site in Marl, Germany) or water availability, e.g. for production. Access to Capital: trends in green finance are being closely monitored.

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

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

Absolute target

C4.1a

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

Target reference number

Abs 1

Year target was set

2019

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2008

Covered emissions in base year (metric tons CO2e)
9519000

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2025

Targeted reduction from base year (%)
50

Covered emissions in target year (metric tons CO2e) [auto-calculated]
4759500

Covered emissions in reporting year (metric tons CO2e)
5486000

% of target achieved [auto-calculated]
84.7357915747452

Target status in reporting year
New

Is this a science-based target?
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

Please explain (including target coverage)
That target is a science-based: According to the SBT initiative a science-based target has the following definition: "Targets adopted by companies to reduce GHG emissions are considered “science-based” if they are in line with the level of decarbonization required to keep global temperature increase below 2°C compared to preindustrial temperatures, as described in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)." (SBT initiative, 2015: Sectoral Decarbonization Approach, page 7). The Evonik target of an annual reduction of 3% is even much more ambitious than described.

Target reference number
Abs 2

Year target was set
2019

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 3: Purchased goods & services

Base year
2020

Covered emissions in base year (metric tons CO2e)
9500000

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2025

Targeted reduction from base year (%)
15

Covered emissions in target year (metric tons CO2e) [auto-calculated]
8075000

Covered emissions in reporting year (metric tons CO2e)
9500000

% of target achieved [auto-calculated]
0

Target status in reporting year
New

Is this a science-based target?
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

Please explain (including target coverage)
That target is a science-based: According to the SBT initiative a science-based target has the following definition: "Targets adopted by companies to reduce GHG emissions are considered “science-based” if they are in line with the level of decarbonization required to keep global temperature increase below 2°C compared to preindustrial temperatures, as described in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)." (SBT initiative, 2015: Sectoral Decarbonization Approach, page 7). The Evonik target of an annual reduction of 3% is even much more ambitious than described.

C4.2

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

C4.2b

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

Target reference number
Oth 1

Year target was set
2019

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

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

Resource consumption or efficiency	Other, please specify (Development of emergency plans for potentially water-stressed Evonik sites within the next two decades)

Target denominator (intensity targets only)
<Not Applicable>

Base year
2019

Figure or percentage in base year
0

Target year
2025

Figure or percentage in target year
23

Figure or percentage in reporting year
1

% of target achieved [auto-calculated]
4.34782608695652

Target status in reporting year
New

Is this target part of an emissions target?
no

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

Please explain (including target coverage)
Based on a comprehensive analysis of about 96 sites in more than 20 countries Evonik identified the sites in water-scarce regions applying the water stress measurement method of the World Resources Institute (WRI) Aqueduct. Based on socio-economic scenario analysis we projected water availability and water demand site-wise for the next two decades. We analyzed all sites which are considered environmentally relevant and thus monitored in SuRe, the sustainability reporting system of Evonik in 2019 again. We mapped the total water use to each site that was located in a water-scarce region according to the Aqueduct Tool and defined those sites as “large user”, which used more than 0.1% of our total water use. In this process 23 sites were identified which are located in a potentially water-scarce region and and potentially affected by water stress within the next two decades. For all relevant sites we have put a target in place to develop a site-specific emergency plan with mitigation and adaptation measures to be considered in the case of real water stress.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	36	1014361
To be implemented*	49	29777
Implementation commenced*	131	1021444
Implemented*	92	39982
Not to be implemented	10	0

C4.3b

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

Initiative category & Initiative type

Energy efficiency in production processes	Other, please specify (84 different measures)

Estimated annual CO2e savings (metric tonnes CO2e)
58090

Scope(s)
Scope 1
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
6389202

Investment required (unit currency – as specified in C0.4)
10118848

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings	Other, please specify (Insulation, lighting)

Estimated annual CO2e savings (metric tonnes CO2e)
963

Scope(s)
Scope 1
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
119171

Investment required (unit currency – as specified in C0.4)
53379

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment
Measures implemented within the framework of our energy management system according to ISO 50001

Initiative category & Initiative type

Transportation	Other, please specify (electric fork truck)

Estimated annual CO2e savings (metric tonnes CO2e)
29

Scope(s)
Scope 1

Voluntary/Mandatory
Mandatory

Annual monetary savings (unit currency – as specified in C0.4)
4000

Investment required (unit currency – as specified in C0.4)
1307

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment
Measures implemented within the framework of our energy management system according to ISO 50001

Initiative category & Initiative type

Low-carbon energy consumption	Other, please specify (Use of processgas)

Estimated annual CO2e savings (metric tonnes CO2e)
393

Scope(s)
Scope 1

Voluntary/Mandatory
Mandatory

Annual monetary savings (unit currency – as specified in C0.4)
27073

Investment required (unit currency – as specified in C0.4)
17714

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment
Measures implemented within the framework of our energy management system according to ISO 50001

C4.3c

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

Method	Comment
Financial optimization calculations	The payback period is generally set at 1-5 years. Measures with longer payback periods are kept back and re-assessed at a later date.
Internal price on carbon	New Investments and aqusitions are calculated against a Price of carbon which depends on the global Region. Speaking generally Evonik expects a world-wide Price on carbon by about 50€ within the next 10 years. Prior to this, price development may vary Region-/Country-wise and is taken into consideration.
Internal incentives/recognition programs	Each year, Evonik Industries presents the Innovation Award, which recognizes the most successful researchers in the Company , either by recognizing the development of new products/systems or new and improved processes resulting in lowering emissions or reduced energy consumption. Recognition is an important driver of creativity. This is why working on new ideas at Evonik Industries is richly rewarded in such a variety of ways. To motivate our most creative minds in research and development, for example, we have an internal Innovation Award, which is presented annually to acknowledge outstanding research achievements worth €30.000. Evonik´s Innovation award is part of the overall incentive system impacting climate change issues, either by recognizing the development of new products/systems or new and improved processes.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation
Company-wide

Description of product/Group of products
Savings are generated over the life cycle of applications via products manufactured by Evonik. Such “avoided emissions” are e.g. enabled by the following four Evonik solutions: “green tire” technology, amino acids in animal feed, foam stabilizers for insulation materials, and additives in hydraulic oils. The percentage-based contribution of single products to the total savings in the supply chain is usually difficult to quantify and may therefore be based on assumptions. Published calculations were conducted in accordance with the WBCSD guideline “Addressing the Avoided Emissions Challenge: Guidelines from the chemical industry for accounting for and reporting greenhouse gas (GHG) emissions avoided along the value chain based on comparative studies” and reviewed externally. Note: We are currently adapting our modeling and calculation methodology and plan to communicate details about lighthouse projects again in the future.

Are these low-carbon product(s) or do they enable avoided emissions?
Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Addressing the Avoided Emissions Challenge- Chemicals sector

% revenue from low carbon product(s) in the reporting year
22

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment
Evonik's Sustainability Analysis 2.0 provides data on Evonik products with environmental or social advantages compared to existing established alternatives. 22 % of the 2018 revenues were identified as low carbon products having a significant or slight improvement regarding greenhouse gas emissions over the products' life cycle (2019 data is not yet available, because the 2019 Sustainability Analysis is still ongoing). The share of 50 % revenues reported in the previous year covered not only the low carbon products, but also sales for additional Evonik products having advantages regarding resource efficiency in terms of greenhouse gas emissions, water consumption, waste, and use of raw materials. Furthermore, Evonik has calculated and published the amount of avoided greenhouse gas emissions (108 million tons of CO2e) for the above mentioned products (green tires, amino acids, foam stabilizers, special oxides and oil additives) for 2018. Evonik will adjust the avoided emissions calculations and has therefore not published avoided emission values for the 2019 reporting year. Moreover, Evonik works on various projects with positive impacts on the amount of greenhouse gas emissions: • Biorenewable feedstock to produce amino acids for animal nutrition like lysine (Biolys®), threonine and tryptophane (ThreAMINO®, TrypAMINO®). • Bio-MTBE (methyl-tertiarybutylether) is a fuel additive. The raw material is bio-methanol made from bio-glycerin. It has been produced in relative small volume besides MTBE made from fossil methanol. • VESTAMID TERRA is a group of polyamides based on castor oil. A new polyamide 12 is currently in development where butadiene as raw material will be replaced by palm kernel oil. • We also proactive explore further replacement options of raw materials of fossil origin by fermentation of biomass derived sugars. • In addition various and project ideas e.g. acetone by ABE fermentation of sugars from empty fruit bunches of palm oil production.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2008

Base year end
December 31 2008

Base year emissions (metric tons CO2e)
9029000

Comment

Scope 2 (location-based)

Base year start
January 1 2008

Base year end
December 31 2008

Base year emissions (metric tons CO2e)
648000

Comment
Net scope 2 emissions = power and steam sourced externally less power and steam supplied to third parties. The net figure shows the position after subtracting electricity and steam supplied to third parties from total inputs. That enables us to eliminate the proportion of CO2 emissions attributable to third parties at our large multi-user sites and to generate company-specific indicators.

Scope 2 (market-based)

Base year start
January 1 2008

Base year end
December 31 2008

Base year emissions (metric tons CO2e)
489000

Comment
Net scope 2 emissions = power and steam sourced externally less power and steam supplied to third parties. The net figure shows the position after subtracting electricity and steam supplied to third parties from total inputs. That enables us to eliminate the proportion of CO2 emissions attributable to third parties at our large multi-user sites and to generate company-specific indicators.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
4929791

Start date
January 1 2019

End date
December 31 2019

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
5689000

Start date
January 1 2018

End date
December 31 2018

Comment

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)
5598708

Start date
January 1 2017

End date
December 31 2017

Comment

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)
5387220

Start date
January 1 2016

End date
December 31 2016

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
We calculated our market-based scope 2-emissions in 2015 for the first time based on information of our suppliers. The supplier based information covers > 95 % of our electricity related scope 2-emissions . All emission conversion factors have been implemented to our updated internal reporting system "SuRe2.0 System" since mid of 2016.

C6.3

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

Reporting year

Scope 2, location-based
2704091

Scope 2, market-based (if applicable)
3523419

Start date
January 1 2019

End date
December 31 2019

Comment
We calculated our market-based scope 2-emissions in 2015 for the first time based on information of our suppliers. The supplier based information covers > 95 % of our electricity related scope 2-emissions . All emission conversion factors have been implemented to our updated internal reporting system "SuRe2.0 System" since mid of 2016.

Past year 1

Scope 2, location-based
2982000

Scope 2, market-based (if applicable)
3953000

Start date
January 1 2018

End date
December 31 2018

Comment
We calculated our market-based scope 2-emissions in 2015 for the first time based on information of our suppliers. The supplier based information covers > 95 % of our electricity related scope 2-emissions . All emission conversion factors have been implemented to our updated internal reporting system "SuRe2.0 System" since mid of 2016.

Past year 2

Scope 2, location-based
3272036

Scope 2, market-based (if applicable)
4315387

Start date
January 1 2017

End date
December 31 2017

Comment
We calculated our market-based scope 2-emissions in 2015 for the first time based on information of our suppliers. The supplier based information covers > 95 % of our electricity related scope 2-emissions . All emission conversion factors have been implemented to our updated internal reporting system "SuRe2.0 System" since mid of 2016.

Past year 3

Scope 2, location-based
3070265

Scope 2, market-based (if applicable)
4088991

Start date
January 1 2016

End date
December 31 2016

Comment
We calculated our market-based scope 2-emissions in 2015 for the first time based on information of our suppliers. The supplier based information covers > 95 % of our electricity related scope 2-emissions . All emission conversion factors have been implemented to our updated internal reporting system "SuRe2.0 System" since mid of 2016.

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
Joint ventures

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

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

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
Scope 1+2 CO2 emissions considered under 6.4.a are from associated companies, joint ventures and companies whose influence on the asset, financial and earnings situation individually and as a whole is of subordinate importance. 2019 their Scope 1 and Scope 2 emissions total about 70000 t CO2equiv. representing less than 1% of Scopes 1+2 total gross emissions.

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

Metric tonnes CO2e
9500000

Emissions calculation methodology
The emissions have been calculated according to the "Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (revised edition 2004)", "Required Greenhouse Gases in Inventories, Accounting and Reporting Standard Amendment (2013)", "Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (2011)" and the WBCSD's "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)". Emissions from production of chemical raw materials, indirect purchased goods and packaging materials are reported, emissions from purchased services are not yet considered. Chemical Raw Materials: The calculation of the CO2eq burden is based on a top 100 list of most frequently purchased raw materials by volume. With the help of the Sphera Solutions GmbH (formerly thinkstep AG), current emission factors from the GaBi 9 database (as of: 2020) were identified for the raw materials. Where available, geographically representative datasets were used to determine emission factors. For rare cases, where emission factors could not be determined, values were estimated based on similar products (within the GaBi 9 database) or appropriate, average emission factors were used. An extrapolation of greenhouse gas emissions was carried out based on the quantities of raw materials. Indirect purchased goods and packaging materials: The calculation of emissions is based on a classified list of purchasing volumes of indirect procurement. The list contains both, purchases from indirect goods and from capital goods. Indirect procurement allocated all purchasing classes to the corresponding reporting categories 1 (purchased goods) and 2 (capital goods). The top 100 categories by purchase value were analyzed and an extrapolation of GHG emissions was performed on the basis of total purchase values. The top 100 purchasing classes analyzed cover more than 80% of the total purchased volume. The amounts of purchased indirect goods and packaging materials were calculated based on average prices of the corresponding materials. For these materials, current emission factors were identified from the GaBi 9 database (as of: 2020), which were then used to calculate the emissions from the production of the indirect goods.

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

Please explain
Based on the experience gained over the last years and increasing knowledge of our internal expert groups, Evonik is quite confident about the emissions calculation methodology and accuracy of the figures mentioned above. However, we started in 2019 to approach a selection of suppliers asking to provide more carbon footprint-related information for the materials delivered to Evonik. The responses are currently under review and discussed together with the suppliers. We plan to integrate more and more supplier-specific data in our own carbon footprint estimations as the number of participating suppliers increases. In addition, we are currently reviewing possibilities to extend our data basis of chemicals' emission data to enable an even more elaborate and fine-grained analysis of emissions associated with purchased goods, especially chemical feedstocks, in the future.

Capital goods

Evaluation status
Relevant, calculated

Metric tonnes CO2e
400000

Emissions calculation methodology
The emissions have been calculated according to the "Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (revised edition 2004)", "Required Greenhouse Gases in Inventories, Accounting and Reporting Standard Amendment (2013)", "Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (2011)" and the WBCSD's "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)". The calculation of emissions for capital goods is also based on data from indirect purchasing. The purchasing categories have been divided up in terms of capital goods and other indirect goods. The latter are reported in Category 1, while emissions for capital goods are reported in Category 2. The top 100 categories were once again analyzed according to purchasing volume. An extrapolation of greenhouse gas emissions was performed on the basis of purchasing volumes. The 100 categories considered meet the requirement of the WBCSD Scope 3 Chemical Sector Guidance to cover at least 80 percent of the total purchasing volume. In accordance with the guidance, a breakdown into different materials per purchasing category was carried out. Average prices for these materials were used to determine the quantities underlying the purchasing volumes. Current material-specific emission factors from the GaBi 9 database (as of: 2020) were then identified in order to calculate emissions associated with the production of capital goods.

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

Please explain
Inquiries for external input were not pursued for for this category. Based on the experience gained over the last years and increasing knowledge of our internal expert groups, Evonik is quite confident about the emissions calculation methodology.

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

Evaluation status
Relevant, calculated

Metric tonnes CO2e
600000

Emissions calculation methodology
The emissions have been calculated according to the "Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (revised edition 2004)", "Required Greenhouse Gases in Inventories, Accounting and Reporting Standard Amendment (2013)", "Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (2011)" and the WBCSD's "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)". The emissions from production of solid, liquid and gaseous fuels (not reported in Scope 1 & 2) for power plants operated by Evonik have been calculated in this category. The produced energy amount provided by the Evonik Sustainability Reporting system is the basis for the calculation. Emission factors from the GaBi 9 database (as of: 2020) were used to determine the greenhouse gas emissions related to the production of solid, liquid and gaseous energy sources.

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

Please explain
Inquiries for external input were not pursued for for this category. Based on the experience gained over the last years and increasing knowledge of our internal expert groups, Evonik is quite confident about the emissions calculation methodology.

Upstream transportation and distribution

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
300000

Emissions calculation methodology
The emissions have been calculated according to the "Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (revised edition 2004)", "Required Greenhouse Gases in Inventories, Accounting and Reporting Standard Amendment (2013)", "Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (2011)" and the WBCSD's "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)". Since Evonik does not have full knowledge of the transport distances and means of transport for incoming raw materials, an average emission factor per ton of transported product – calculated by using the data for outgoing transports – is applied to quantify emissions from incoming goods transports. This factor refers to the average distribution of different means of transport as well as distances of outgoing product transports of Evonik. The use of this average emission factor is based on the conservative assumption that the average means of transport and average distances can be applied to both Evonik's inbound and outbound transports. Starting with this reporting year, the emission factors for the various means of transport are no longer adopted from the European Chemical Industry Council (CEFIC), but are determined with the help of Sphera Solutions GmbH. In order to ensure an up-to-date, consistent and regionalized assessment basis, geographically representative emission factors relevant for the means of transport used were identified from the current GaBi 9 database (as of: 2020). The transport emissions have been calculated for the extrapolated quantities of purchased raw materials.

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

Please explain
Inquiries for external input were not pursued for for this category. Based on the experience gained over the last years and increasing knowledge of our internal expert groups, Evonik is quite confident about the emissions calculation methodology. Evonik has set the threshold for the relevance of categories from 5% to 2% of total Scope 3 emissions to provide a more holistic view of Evonik's total carbon footprint. We will nevertheless continue to conduct calculations of some categories currently classified as "not relevant" annually.

Waste generated in operations

Evaluation status
Relevant, calculated

Metric tonnes CO2e
500000

Emissions calculation methodology
Emissions have been calculated according to the "Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (revised edition 2004)", "Required Greenhouse Gases in Inventories, Accounting and Reporting Standard Amendment (2013)", "Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (2011)" and the WBCSD's "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)". The emissions resulting from the disposal of production waste were calculated based on the waste quantities for each type of disposal as recorded in the Evonik Sustainability Reporting system. The emission factors for the specific types of disposal were chosen analogously to those for the End-of-Life calculations in the category "End of life treatment of sold products". The WBCSD Scope 3 Chemical Sector Guidance stipulates that waste that has been energetically recycled is to be accounted for in Scope 1. Due to missing data separation of Evonik internally and externally recovered waste, all emissions from waste incineration are reported not only in Scope 1, but also double-counted in the category "Waste generated in operations" to the disadvantage of Evonik. The calculation also includes emissions from the disposal of construction and demolition waste.

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

Please explain
Inquiries for external input were not pursued for for this category. Based on the experience gained over the last years and increasing knowledge of our internal expert groups, Evonik is quite confident about the emissions calculation methodology.

Business travel

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
30000

Emissions calculation methodology
Emissions have been calculated according to the "Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (revised edition 2004)", "Required Greenhouse Gases in Inventories, Accounting and Reporting Standard Amendment (2013)", "Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (2011)" and the WBCSD's "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)". The CO2eq emissions generated by business trips were calculated based on the travel distances provided by Evonik Travel Management using the corresponding emission factors of the means of transport used. The calculation of greenhouse gas emissions was carried out for employees in Germany and extrapolated based on the number of employees worldwide.

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

Please explain
Inquiries for external input were not pursued for for this category. Based on the experience gained over the last years and increasing knowledge of our internal expert groups, Evonik is quite confident about the emissions calculation methodology. Evonik has set the threshold for the relevance of categories from 5% to 2% of total Scope 3 emissions to provide a more holistic view of Evonik's total carbon footprint. We will nevertheless continue to conduct calculations of some categories currently classified as "not relevant" annually.

Employee commuting

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
100000

Emissions calculation methodology
Emissions have been calculated according to the "Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (revised edition 2004)", "Required Greenhouse Gases in Inventories, Accounting and Reporting Standard Amendment (2013)", "Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (2011)" and the WBCSD's "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)". Emissions caused by employee commuting were calculated conservatively, taking into account the assumptions in the WBCSD Scope 3 Chemical Sector Guidance. It was assumed that Evonik employees commute a distance of 30 km each way (60 km total mileage per day) with their own private car on 220 working days. The emission factor per passenger kilometer was taken from the BEIS data in accordance with the WBCSD Scope 3 Chemical Sector Guidance. This factor also takes fuel supply into account.

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

Please explain
Inquiries for external input were not pursued for for this category. Based on the experience gained over the last years and increasing knowledge of our internal expert groups, Evonik is quite confident about the emissions calculation methodology. Evonik has set the threshold for the relevance of categories from 5% to 2% of total Scope 3 emissions to provide a more holistic view of Evonik's total carbon footprint. We will nevertheless continue to conduct calculations of some categories currently classified as "not relevant" annually.

Upstream leased assets

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
20000

Emissions calculation methodology
Emissions have been calculated according to the "Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (revised edition 2004)", "Required Greenhouse Gases in Inventories, Accounting and Reporting Standard Amendment (2013)", "Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (2011)" and the WBCSD's "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)". The emissions in this category contain emissions from leased company cars (w/o utility vehicles) and from electricity and heating of administrative sites. The CO2eq emissions related to Evonik's company cars were calculated by using the average number of kilometers driven, the number of company vehicles, the manufacturer's CO2eq emissions data, and considering additional emissions for fuel supply and for the production of the cars. The calculation was carried out for the employees in Germany and extrapolated using the number of employees worldwide. CO2eq emissions caused by power and heating requirements of administrative buildings are included in the Evonik Sustainability Reporting system and thus already covered in Scope 1 and Scope 2 emissions, provided that a production plant subject to official CO2eq reporting is located at the site. The greenhouse gas emissions of purely administrative locations were determined on the basis of average electricity and heating requirements per employee, which were surveyed at a number of key administrative locations. The total CO2eq emissions in this category were thus determined based on the number of Evonik employees at administrative sites.

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

Please explain
Inquiries for external input were not pursued for for this category. Based on the experience gained over the last years and increasing knowledge of our internal expert groups, Evonik is quite confident about the emissions calculation methodology. Evonik has set the threshold for the relevance of categories from 5% to 2% of total Scope 3 emissions to provide a more holistic view of Evonik's total carbon footprint. We will nevertheless continue to conduct calculations of some categories currently classified as "not relevant" annually.

Downstream transportation and distribution

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
300000

Emissions calculation methodology
Emissions have been calculated according to the "Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (revised edition 2004)", "Required Greenhouse Gases in Inventories, Accounting and Reporting Standard Amendment (2013)", "Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (2011)" and the WBCSD's "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)". The CO2eq emissions of outgoing transports of chemical products were as of this year computed by using regionalized, transport-specific emission factors from the current GaBi database (Version 9). Calculations are based on the goods issue quantities, the average transport distances and the type of selected means of transport as provided by logistics procurement.

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

Please explain
Inquiries for external input were not pursued for for this category. Based on the experience gained over the last years and increasing knowledge of our internal expert groups, Evonik is quite confident about the emissions calculation methodology. Evonik has set the threshold for the relevance of categories from 5% to 2% of total Scope 3 emissions to provide a more holistic view of Evonik's total carbon footprint. We will nevertheless continue to conduct calculations of some categories currently classified as "not relevant" annually.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes 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
Evonik sells several thousands of products which are used in countless (and partly unknown) applications. The processing of sold products can therefore not be assessed with a reasonable expenditure. This approach is aligned with the "World Business Council for Sustainable Development: Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)", which states that "Chemical companies are not required to report Scope 3, category 10 emissions, since reliable figures are difficult to obtain, due to the diverse application and customer structure".

Use of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes 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
Evonik sells several thousands of products which are used in countless (and partly unknown) applications. The use of sold products can therefore not be assessed with a reasonable expenditure. This approach is aligned with the "World Business Council for Sustainable Development: Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)". Cradle-to-grave life cycle assessments, including the "use phase", have been performed for parts of the Evonik portfolio, whereby each is highly specific for a clearly defined application. We also conduct calculations of avoided emissions for selected lighthouse products based on the WBCSD's publication "Avoiding Greenhouse Gas Emissions: Accounting for and Reporting Greenhouse Gas (GHG) Emissions Avoided along the Value Chain based on Comparative Studies, 2017". In these calculations, we compare the whole life cycle, including the use phase, of our products with a valid benchmark (often represented by the mainstream technology or technology mix).

End of life treatment of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
5900000

Emissions calculation methodology
Emissions have been calculated according to the "Greenhouse Gas Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (revised edition 2004)", "Required Greenhouse Gases in Inventories, Accounting and Reporting Standard Amendment (2013)", "Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (2011)" and the WBCSD's "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain (2013)". Emissions resulting from the disposal and recycling of Evonik products were determined using the following calculation steps: Since Evonik is often unaware of the end uses of its own products – especially intermediates – the emissions resulting from their disposal were not calculated for the applications themselves, but only for the Evonik products contained therein. Thus, only the emissions associated with the disposal of product quantities sold by Evonik were collected and not those of the end products manufactured from them with the help of third-party raw materials. The CO2eq emissions were calculated using emission factors for the following types of disposal: recycling, sealed and open landfills, and incineration with and without energy recovery. For each disposal type, continent-specific percentage averages of the respective disposal type shares were determined and weighted with the relative shares of all products sold by Evonik per continent in 2019. The CO2eq emissions for disposal were calculated using the sales volumes per product line and the corresponding emission factors. For product lines whose products are obviously not recycled via the usual disposal channels, specific calculations were made in accordance with the recommendations of the WBCSD Scope 3 Chemical Sector Guidance. For example, emissions from the incineration of certain products have been calculated based on stoichiometric ratios, while those from inert products have been computed via another approach.

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

Please explain
Inquiries for external input were not pursued for for this category. Based on the experience gained over the last years and increasing knowledge of our internal expert groups, Evonik is quite confident about the emissions calculation methodology.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes 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
Scope 3 emissions resulting from downstream leased assets are not reported because this category is not applicable to Evonik Industries.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes 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
Scope 3 emissions resulting from franchises are not reported because this category is not applicable to Evonik Industries. Evonik does not own or operate franchises.

Investments

Evaluation status
Relevant, not yet calculated

Metric tonnes 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
Emissions from investments are not calculated in detail for Evonik as a suitable data basis for the calculation is not available at the moment.

Other (upstream)

Evaluation status

Metric tonnes 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

Other (downstream)

Evaluation status

Metric tonnes 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

C6.7

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

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.000644889

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
8453210

Metric denominator
unit total revenue

Metric denominator: Unit total
13108000000

Scope 2 figure used
Market-based

% change from previous year
1.5

Direction of change
Increased

Reason for change
Divestment of methacrylates business resulted in Scope 1+2 emissions 2019 vs. 2018 = -11,4 % revenue 2019 vs. 2018 = -12,8 %

Intensity figure
0.92284

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
8453210

Metric denominator
metric ton of product

Metric denominator: Unit total
9160000

Scope 2 figure used
Market-based

% change from previous year
6.7

Direction of change
Increased

Reason for change
Divestment of methacrylates business resulted in Scope 1+2emissions 2019 vs. 2018 = -11,4 % Production volume 2019 vs. 2018 = -17,0 %

Intensity figure
261

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
8453210

Metric denominator
Other, please specify (No. of employees as of December 31)

Metric denominator: Unit total
32423

Scope 2 figure used
Market-based

% change from previous year
1.6

Direction of change
Decreased

Reason for change
Divestment of methacrylates business resulted in Scope 1+2 emissions 2019 vs. 2018 = -11,4 % employees 2019 vs. 2018 = -10,0 %

C7. Emissions breakdowns

C7.1

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

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	4863554	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	41206	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	11882	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	13150	IPCC Fourth Assessment Report (AR4 - 100 year)
PFCs	0	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	0	IPCC Fourth Assessment Report (AR4 - 100 year)
NF3	0	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Austria	52728
Belgium	565671
Brazil	95937
Canada	22627
China	157842
France	10274
Germany	2933857
India	25462
Indonesia	17965
Italy	973
Japan	8692
Netherlands	36156
New Zealand	14402
Singapore	88626
Slovakia	23634
South Africa	8716
Republic of Korea	188
Spain	11183
Taiwan, Greater China	23923
Thailand	18711
Turkey	21280
United Kingdom of Great Britain and Northern Ireland	2562
United States of America	767194
Finland	21179
Argentina	8.6

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)
Services	2625696
Nutrition & Care	1098201
Resource Efficiency	944436
Performance Materials	261460

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	4929791	<Not Applicable>	Evonik´s Scope 1 emissions do reflect emissions from combustion processes that were carried out to generate steam and electricity for third parties that do not belong to the Group as well as emissions from chemical processes.
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)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Argentina	22665	24272	106103	0
Austria	5702	4108	37069	11.37
Brazil	28959	26420	192657	0
Canada	17445	19352	109408	0
China	174915	191715	345514	0
France	7939	8505	50643	0
Germany	1525333	2173728	3120286	280645
India	13236	14891	18201	0
Indonesia	15179	15629	27227	0
Italy	19994	19785	65096	0
Japan	24869	23220	81057	0
Netherlands	15350	18324	33052	0
New Zealand	1002	1485	13028	0
Singapore	109311	104503	261472	0
Slovakia	3193	6604	20157	0
South Africa	18164	17903	31357	0
Republic of Korea	57942	54761	193842	0
Spain	18127	18161	72202	0
Taiwan, Greater China	16565	16076	44042	0
Thailand	5716	5716	12728	0
Turkey	24928	25872	94174	0
United Kingdom of Great Britain and Northern Ireland	953	1732	3436	0
United States of America	570303	722103	1343279	0
Finland	1696	2691	10241	0
Belgium	3507	3959	18591	0
Norway	129	0.9	256	0

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)
Services	1549167	2212005
Performance Materials	158513	166319
Nutrition & Care	484096	618683
Resource Efficiency	512315	526412

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	2704091	3523419	Evonik is a Company focussed on specialty chemicals
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
Other (please specify) (Inorganics)	25	Details about the calculation of emissions are explained in CDP question C6.5. Following the calculation, the top 100 raw materials purchased were categorized into three groups: "Base Chemicals", "Specialty Chemicals", and "Inorganics".
Other (please specify) (Base Chemicals)	58	Details about the calculation of emissions are explained in CDP question C6.5. Following the calculation, the top 100 raw materials purchased were categorized into three groups: "Base Chemicals", "Specialty Chemicals", and "Inorganics".
Other (please specify) (Specialty Chemicals)	17	Details about the calculation of emissions are explained in CDP question C6.5. Following the calculation, the top 100 raw materials purchased were categorized into three groups: "Base Chemicals", "Specialty Chemicals", and "Inorganics".

C-CH7.8a

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

	Sales, metric tons	Comment
Carbon dioxide (CO2)	0	Evonik does not sell carbon dioxide
Methane (CH4)	0	Evonik does not sell methane
Nitrous oxide (N2O)	0	Evonik does not sell nitrous oxide
Hydrofluorocarbons (HFC)	0	Evonik does not sell hydrofluorocarbons
Perfluorocarbons (PFC)	0	Evonik does not sell perfluorocarbons
Sulphur hexafluoride (SF6)	0	Evonik does not sell sulphur hexafluoride
Nitrogen trifluoride (NF3)	0	Evonik does not sell nitrogen trifluoride

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	7885	Increased	5.6	2019 vs 2018 increased purchase of green certificates
Other emissions reduction activities	59475	Decreased	0.62	115 CO2-reduction measures to increase energy efficiency in production and heating gross Scope 1+2 2018 = 9542871 t CO2e Calculation: -59475tCO2/9542871tCO2*100%= - 0.62 %
Divestment	878370	Decreased	9.2	To sharpen our focus on specialty chemicals we divested the methacrylates business on August 1st,2019. The methacrylates business, comprising large-volume monomers such as methylmethacrylate, various specialty monomers and the PLEXIGLAS brand of PMMA molding compounds and semi-finished products, constituted a major line of business. From an environmental perspective too, the impact of the divestment is significant and had a major influence on the development of our environmental indicators in 2019. Overall, it affected 15 production sites. Since separate management of this business was no longer undertaken in 2019 the presentation of the environmental data and the status of environmental targets in the reporting period only coversthe continuing operations. As a result the specific data for 2019 are no longer comparable with the data for 2018. Gross Scope 1+2 2018 = 9542871 t CO2e Calculation: -878370tCO2/9542871tCO2*100%= - 9.2 %
Acquisitions	0	No change		no substantive acquisitions regarding CO2-balance in 2019
Mergers	0	No change		no substantive mergers regarding CO2-balance in 2019
Change in output	194964	Decreased	2	Out total Scope 1 and Scope 2 emissions in the previous year were 9,542,871 Million t CO2, therefore we calculate our reduction of CO2-emissions of 2.0 % (-195964/9542871*100% = -2.0%) Explanation: Evonik operates production facilities at 96 sites globally. Depending on demand and strategic planning, on the one hand and significant variation of CO2-intensity of different businesses on the other hand the production portfolio and volumes at these sites vary from year to year, which has an influence on total emissions. Due to minor changes at a large number of sites, total emissions decreased in 2019 compared to 2018.
Change in methodology	0	No change		never touch a running system
Change in boundary	0	No change		never touch a running system
Change in physical operating conditions	0	No change		no
Unidentified	0	No change		no
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 5% but less than or equal to 10%

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)	0	16386944	16386944
Consumption of purchased or acquired electricity	<Not Applicable>	0	1501481	1501481
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	1987724	1987724
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	102022	<Not Applicable>	102022
Total energy consumption	<Not Applicable>	102022	19876149	19978171

C-CH8.2a

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

	Heating value	Total MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	16386944
Consumption of purchased or acquired electricity	<Not Applicable>	1501481
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	1987724
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	102022
Total energy consumption	<Not Applicable>	19978171

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	Yes
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.

Fuels (excluding feedstocks)
Coal

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
4426427

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
428856

MWh fuel consumed for self-generation of cooling
0

MWh fuel consumed for self-cogeneration or self-trigeneration
3997571

Emission factor
0.341

Unit
metric tons CO2 per MWh

Emissions factor source
Our sites use individual emission factors to calculate the emissions released through the burning of fuels. If specific emissions factors are not available, sites use the standard emission factor reported here. All emission factors applied in Europe are verified externally according to EU-ETS (European Union-Emissions Trading Scheme)

Comment

Fuels (excluding feedstocks)
Natural Gas

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
10320592

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
5577869

MWh fuel consumed for self-generation of cooling
0

MWh fuel consumed for self-cogeneration or self-trigeneration
4742723

Emission factor
0.214

Unit
metric tons CO2 per MWh

Emissions factor source
Our sites use individual emission factors to calculate the emissions released through the burning of fuels. If specific emissions factors are not available, sites use the standard emission factor reported here. All emission factors applied in Europe are verified externally according to EU-ETS (European Union-Emissions Trading Scheme)

Comment

Fuels (excluding feedstocks)
Crude Oil

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
55877

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
55877

MWh fuel consumed for self-generation of cooling
0

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

Emission factor
0.272

Unit
metric tons CO2 per MWh

Emissions factor source
Our sites use individual emission factors to calculate the emissions released through the burning of fuels. If specific emissions factors are not available, sites use the standard emission factor reported here. All emission factors applied in Europe are verified externally according to EU-ETS (European Union-Emissions Trading Scheme)

Comment

Fuels (excluding feedstocks)
Other, please specify (Residual fuels)

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
1584048

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam

533668

MWh fuel consumed for self-generation of cooling
0

MWh fuel consumed for self-cogeneration or self-trigeneration
1050380

Emission factor
0.43

Unit
metric tons CO2 per MWh

Emissions factor source
Our sites use individual emission factors to calculate the emissions released through the burning of fuels. If specific emissions factors are not available, sites use the standard emission factor reported here. All emission factors applied in Europe are verified externally according to EU-ETS (European Union-Emissions Trading Scheme)

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	2423625	2423625	102022	102022
Heat	0	0	0	0
Steam	11648136	9161975	0	0
Cooling	654134	485147	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.

	Total gross generation (MWh) inside chemicals sector boundary	Generation that is consumed (MWh) inside chemicals sector boundary
Electricity	2423625	2423625
Heat	0	0
Steam	9161975	9161975
Cooling	485147	485147

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method
Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type
Hydropower

Country/region of consumption of low-carbon electricity, heat, steam or cooling
Germany

MWh consumed accounted for at a zero emission factor
190000

Comment

C-CH8.3

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

C-CH8.3a

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

Fuels used as feedstocks
Natural gas

Total consumption
228433

Total consumption unit
metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit
2.58

Heating value of feedstock, MWh per consumption unit
12.7

Heating value
LHV

Comment
Mainly for HCN, H2O2, H2 production

C-CH8.3b

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

	Percentage of total chemical feedstock (%)
Oil	0
Natural Gas	2.6
Coal	0
Biomass	0
Waste (non-biomass)	0
Fossil fuel (where coal, gas, oil cannot be distinguished)	0
Unknown source or unable to disaggregate	0

C9. Additional metrics

C9.1

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

Description
Waste

Metric value
204000

Metric numerator
tons

Metric denominator (intensity metric only)

% change from previous year
16.7

Direction of change
Decreased

Please explain
Divestment of methacrylates business resulted in reduction of waste

C-CH9.3a

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

Output product
Specialty chemicals

Production (metric tons)
9160000

Capacity (metric tons)
9160000

Direct emissions intensity (metric tons CO2e per metric ton of product)
0.54

Electricity intensity (MWh per metric ton of product)
0.43

Steam intensity (MWh per metric ton of product)
1.22

Steam/ heat recovered (MWh per metric ton of product)
0.44

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	

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
Unable to disaggregate by technology area	<Not Applicable>	41 - 60%	428000000	Contribution to the Sustainability Development goals incl. Climate change is one of many aspects influencing our decision making on R&D projects. Equal attention is paid to product and process innovations, business model and systems innovations, and environmental and climate protection. Overall the quota of projects contributing to mitigation and /or adaptation of climate change high.

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
evonik_sustainability_report_2019.pdf

Page/ section reference
Independent Practitioner's Report on a Limited Assurance Engagement on Greenhouse Gas Emission Data on pages 97 and 98. All relevant information on Scope 1 emissions on page 54, Table 10.

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 location-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
evonik_sustainability_report_2019.pdf

Page/ section reference
Independent Practitioner's Report on a Limited Assurance Engagement on Greenhouse Gas Emission Data on pages 97 and 98. All relevant information on Scope 2 emissions (location-based) on page 54, Table 10.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

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
evonik_sustainability_report_2019.pdf

Page/ section reference
Independent Practitioner's Report on a Limited Assurance Engagement on Greenhouse Gas Emission Data on pages 97 and 98. All relevant information on Scope 2 emissions (market-based) on page 54, Table 10.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3 (upstream & downstream)

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
CDP Verification Template_Evonik_PwC_FY2019_as-sent.pdf
EVONIK_2020_ECF_2019_EN.pdf

Page/section reference
Independent Practitioner's Report on a Limited Assurance Engagement on Greenhouse Gas Emission Data on pages 20-21. All relevant categories of scope 3 emissions on page 5, Table 2.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C5. Emissions performance	Year on year change in emissions (Scope 1 and 2)	ISAE 3000	Year on year changes in Scope 1 and 2 emissions are described within Evonik´s annual sustainability Report (P.54, T10), which is verified by PricewaterhouseCoopers certified on pages 97 and 98 evonik_sustainability_report_2019.pdf
C4. Targets and performance	Year on year emissions intensity figure	ISAE 3000	Year on year emissions intensity figure are described within Evonik´s annual sustainability Report (P.51; T07), which is verified by PricewaterhouseCoopers GmbH. Thus they are included in the verification process. See pages 97/98 1 evonik_sustainability_report_2019.pdf
C5. Emissions performance	Year on year change in emissions (Scope 3)	ISAE 3000	Year on year changes in Scope 3 emissions are described within Evonik´s annual Evonik Carbon Footprint Report (P. 18; T4), which is verified by PricewaterhouseCoopers GmbH certified on pages 20/21 . Thus they are included in the verification process CDP Verification Template_Evonik_PwC_FY2019_as-sent.pdf EVONIK_2020_ECF_2019_EN.pdf
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	ISAE 3000	Year on year changes in Scope 1 and 2 emissions are described within Evonik´s annual sustainability report(P. 54; T10), which is verified by PricewaterhouseCoopers GmbH certified on pages97/98 . Thus they are included in the verification process evonik_sustainability_report_2019.pdf

evonik_sustainability_report_2019.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.

Alberta Carbon Competitive Incentive Regulation (CCIR) – ETS
EU ETS
Korea ETS
New Zealand ETS
Shanghai pilot ETS
Singapore carbon tax

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

Alberta Carbon Competitive Incentive Regulation (CCIR) – ETS

% of Scope 1 emissions covered by the ETS
85.5

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2019

Period end date
December 31 2019

Allowances allocated
12006

Allowances purchased
7297

Verified Scope 1 emissions in metric tons CO2e
19303

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

EU ETS

% of Scope 1 emissions covered by the ETS
90.1

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2019

Period end date
December 31 2019

Allowances allocated
1884821

Allowances purchased
490811

Verified Scope 1 emissions in metric tons CO2e
3316948

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

Korea ETS

% of Scope 1 emissions covered by the ETS
100

% of Scope 2 emissions covered by the ETS
100

Period start date
January 1 2019

Period end date
December 31 2019

Allowances allocated
56697

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
188

Verified Scope 2 emissions in metric tons CO2e
54761

Details of ownership
Facilities we own and operate

Comment

New Zealand ETS

% of Scope 1 emissions covered by the ETS
100

% of Scope 2 emissions covered by the ETS
100

Period start date
January 1 2019

Period end date
December 31 2019

Allowances allocated
22645

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
14402

Verified Scope 2 emissions in metric tons CO2e
1485

Details of ownership
Facilities we own and operate

Comment

Shanghai pilot ETS

% of Scope 1 emissions covered by the ETS
23.5

% of Scope 2 emissions covered by the ETS
44.6

Period start date
January 1 2019

Period end date
December 31 2019

Allowances allocated
142057

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
37027

Verified Scope 2 emissions in metric tons CO2e
85598

Details of ownership
Facilities we own and operate

Comment
Values are estimates, since "allowances allocated" not confirmed from national authority and "verified scope 1 and 2 emissions" not verified yet.

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

Singapore carbon tax

Period start date
January 1 2019

Period end date
December 31 2019

% of total Scope 1 emissions covered by tax
100

Total cost of tax paid
535413181

Comment
Total cost of tax paid is in Singapore Dollar (SGD). Please note that the emission data only count from ME5 production line. The emissions from ME6 production line have been exempted because it was in the commissioning phase in 2019.

C11.1d

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

The Energy Management department (Evonik centre of competence for all relevant topics about energy economy) serves as central interface not only for the purchase of allowances and supporting the operational units when designing a purchasing strategy but also for monitoring the real emissions and the available allowances. Energy Management also supports the operational units in complying with the regulations. Among others, Energy Management is the central information hub within Evonik for emissions trading and taxation systems.

The strategy of Evonik around the world includes the consultation of the operational units and monitoring the regulatory developments. In consultation with the operational units and under consideration of the available certificates and the planned emissions, the needed allowances for the compliance will be purchased successively within the third and fourth trading period of the EU ETS.

For the Shanghai ETS, Evonik owns also a specialized department for supporting the operational units in this matter. An exchange between the EU and the Chinese department takes place, since both departments are being functionally steered by the same management. Same applies for the Korea ETS.

Besides complying with the Shanghai, EU, New Zealand and Korea ETS by purchasing certificates as well as the carbon taxation in Alberta and Singapore, Evonik is promoting internal energy efficiency measures via ISO 50001 (energy management system including energy policy, energy targets, energy performance indicators etc.), an internal service department improving the value chain globally (SEEC) and site-driven activities to reduce the need for certificates. Lately, an internal carbon price for investments was introduced within Evonik (ref. chapter C11.3).

Further more Evonik developed a new ambitious GHG emission reduction strategy based on absolute reduction targets effective 2019. This will help us to manage risks arising from the several global pricing regimes.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
No

C11.3

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

C11.3a

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

Objective for implementing an internal carbon price
Stakeholder expectations
Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities

GHG Scope
Scope 1
Scope 2

Application
Our internal carbon price is being applied onto all our investment calculations with GHG emissions > 1,000 t CO2e/y. By this measure we want to promote low-carbon technologies within Evonik to improve our carbon footprint and take into account future carbon price risks.

Actual price(s) used (Currency /metric ton)
19.06

Variance of price(s) used
Prices vary regionally. So we apply different prices for different regions, Evonik is active in. The price forecasts ranges more than ten years from now. The mentioned price in this survey applies for the EU ETS in 2020.

Type of internal carbon price
Shadow price

Impact & implication
Our internal carbon price is an integral part of our corporate controlling manual for investment calculations. It is being frequently updated.

C12. Engagement

C12.1

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

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
70

% total procurement spend (direct and indirect)
80

% of supplier-related Scope 3 emissions as reported in C6.5
0

Rationale for the coverage of your engagement
Evonik cannot evaluate all suppliers, thus a selection based on a combination of country, raw material supplied to Evonik and procurement spent to individual suppliers is made. The online assessments are carried out on Evonik's behalf by the service provider EcoVadis. More than 500 suppliers have been evaluated by end of 2019. The audit criteria include both the specifications of our code of conduct and industry-specific requirements that we have jointly laid out in the industry initiative Together for Sustainability (TfS). The initiative is intended to help standardize the sustainability requirements of suppliers in the chemical industry. In 2019 Evonik intensified collaboration with suppliers by selected top 30 raw materials based on purchase spent and carbon footprint of individual raw materials. For Evonik's Scope 3 emission reduction target of minus 3% per year, starting in 2020, a detailed knowledge of suppliers' raw material information is essential. Suppliers are informed accordingly and asked to provide relevant information by Q3 2020. This request of carbon footprints and its potential reduction by our suppliers is sent out regularly (starting a regularity of once a year). Both engagements will help us to achieve our target effective 2020 to reduce our raw material backpack by 3% annually within the next years.

Impact of engagement, including measures of success
The online assessments by EcoVadis are analyzed and documented in order to define specific improvement measures in case of unsatisfactory results, Evonik requests the suppliers to rectify the identified weaknesses within an appropriate period of time based on specific action plans. By requesting carbon and climate change information from our suppliers, suppliers become more aware of sustainability topics. Regarding the carbon footprint request of Evonik's suppliers, the dialogue to several suppliers has been intensified distinctly. Regular follow-ups were initiated to have a consequent exchange on sustainability information and potential carbon footprint reduction leverages with several suppliers.

Comment
Supplier specific information (instead of database information) on product carbon footprints will be reflected for the first time in the Scope 3 emissions category 1 purchased goods and services in the Evonik Carbon Footprint 2020.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Trade associations

Funding research organizations

Other

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

VCI (German Chemical Association)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Raise awareness for the specific ways in which the chemical industry can support GHG emissions mitigation and adaptation to climate change and to advocate for realization of a business environment in which the chemical industry can realize this potential best. Furthermore, the VCI is committed to international standards for sustainability and works closely with global organizations for the promotion of sustainable development, climate mitigation and resource efficiency.

How have you influenced, or are you attempting to influence their position?

Evonik is involved with the VCI regarding important issues related to the German chemical industry, including climate change, and is influencing the association through active involvement in relevant committees and working groups.

Trade association

International Council of Chemical associations (ICCA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Raise awareness for the specific ways in which the chemical industry can support GHG emissions mitigation and adaptation to climate change and to advocate for realization of a business environment in which the chemical industry can realize this potential best. Furthermore, the ICCA is committed to international standards for sustainability and works closely with global organizations for the promotion of sustainable development, climate mitigation and resource efficiency.

How have you influenced, or are you attempting to influence their position?

Evonik is involved with the ICCA regarding important issues related to the Global chemical industry, including climate change, and is influencing the association through active involvement in relevant committees and working Groups, e.g. Energy and climate Change leadership group

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

No

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

econsense - a German business network founded on the initiative of the Federation of German Industries with the goal to provide a dialogue platform and think tank to advance sustainable development in business. Among other econsense has been in discourse with policymakers regarding the implementation of the EU Directive on disclosure of non-financial information, the recommendat ions of the TCFD and the Circular Economy legislation e.g., Ecodesign Directive of the European Commission. Furthermore, econsense contributed with side events t o COP23 in Bonn. Evonik actively contributes to the work in several econsense gro ups e.g. Environmental & Climate Issues, Reporting & Rating, SDGs & Digital Tran sformation and Sustainability in the Supply Chain.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Evonik`s organizational processes are designed to ensure a common approach for all direct and indirect engagement activities, consistent with our strategy on climat e change - across divisions and geographies. Head of Corporate ESHQ, reports directly to the Chief Human Resource Officer of Evonik Industries. In addition both positions are members of the Corporate Responsibility Steering Committee and the Corporate ESHQ Steering Committee, both chaired by CHRO. Relevant topics in the field of sustainability, environment, safety, health and quality including the status and progress of various programs are discussed between CHRO, Head of Corporate ESHQ and the Heads of Evonik´s segments on a quaterly base. The involvement of these representatives in the Committee mentioned ensures the consideration of our overall climate change strategy in all political activities and the alignment of the activities with our strategy.

C12.4

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

Publication
In mainstream reports, incorporating the TCFD recommendations

Status
Complete

Attach the document
Evonik_Financial_Report_2019.pdf

Page/Section reference
pages 180, 50 and 62

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

Publication
In voluntary sustainability report

Status
Complete

Attach the document
evonik_sustainability_report_2019.pdf

Page/Section reference
The Environment pages 49-60

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication
In voluntary communications

Status
Complete

Attach the document
EVONIK_2020_ECF_2019_EN.pdf

Page/Section reference
Annual publication - Evonik Carbon Footprint

Content elements
Emissions figures
Emission targets

Comment
Protecting the climate and the environment represents a major global challenge. Evonik Industries (referred to below as Evonik) takes climate and environmental protection extremely seriously as a key element of its corporate responsibility. The company has therefore been compiling data not only on direct greenhouse gas emissions but also on indirect greenhouse gas emissions for selected relevant categories since 2008. Allocating emissions to their various sources along the value chain is of particular importance. Analyzing the full range of emissions, from the company's own production facilities, through various categories such as purchased energy and raw materials, transports, business travel, and production waste, to the ultimate disposal of products sold, creates a comprehensive greenhouse gas balance for the company.

C15. 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.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	The highest level of direct responsibility for climate change lies with the member of the Board of Management responsible for Human Resources, Sustainabilty and HSE (Health, Safety and Environment)	Director on board

SC. Supply chain module

SC0.0

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

Nothing additional to add

SC0.1

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

	Annual Revenue
Row 1	13108000000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	DE	000EVNK013

SC1.1

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

Requesting member

Braskem S/A

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e

1480

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Colgate Palmolive Company

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
29540

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
490

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Johnson & Johnson

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
9850

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
L'Oréal

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
14770

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Michelin

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
39380

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Pirelli

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
14770

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
SABIC

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
29540

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Symrise AG

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1480

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Unilever plc

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
19700

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Volkswagen AG

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
490

Uncertainty (±%)
3

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Electrolux

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Signify NV

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
ARKEMA

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
25520

Uncertainty (±%)
1

Major sources of emissions
Energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
ARKEMA

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Braskem S/A

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
170

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Colgate Palmolive Company

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
3400

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Electrolux

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
56

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Johnson & Johnson

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1130

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
L'Oréal

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1690

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Michelin

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
4500

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Pirelli

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1690

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3

emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
SABIC

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
3378

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Signify NV

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0

Uncertainty (±%)
1

Major sources of emissions
energy conversion and production processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Stearinerie Dubois

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
22

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified

Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Stearinerie Dubois

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
197

Uncertainty (±%)
1

Major sources of emissions
energy conversion and chemical processes

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Symrise AG

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
170

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Unilever plc

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2250

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Volkswagen AG

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
56

Uncertainty (±%)
1

Major sources of emissions
purchased electricity and heat

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
ARKEMA

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
96600

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Please select

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Braskem S/A

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
6300

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Colgate Palmolive Company

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
126000

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Electrolux

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2100

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Johnson & Johnson

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
42000

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
L'Oréal

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
63000

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3

emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Michelin

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
168000

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Pirelli

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
63000

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
SABIC

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
126000

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified

Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Signify NV

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Stearinerie Dubois

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
840

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Symrise AG

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
6300

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Unilever plc

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
84000

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

Requesting member
Volkswagen AG

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2100

Uncertainty (±%)
1

Major sources of emissions
purchased raw materials and end-of-life treatment

Verified
Yes

Allocation method
Allocation based on the market value of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Based on the analysis and reporting of the Evonik Carbon Footprint allocation of Scope 1 Scope 2 and Scope 3 emissions and its sources is quite easy. Especially Scope 3 emissions upstream show the outstanding position of Category 1 relevance i.e. purchased goods and services as well as Category 12 Scope 3 emissions (end of life treatment) (publication Evonik Carbon Footprint is attached)

SC1.2

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

Annual publication on Evonik Carbon Footprint shows unique relevance of Category 1 and Category 12 for Scope 3 emissions allocation resp. sources.

Details and explanations on Scope 1 and Scope 2 emissions are available in the Chapter environment of the annual Sustainability report, also attached.

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	focussing on main products of customers
Doing so would require we disclose business sensitive/proprietary information	individual working Groups on Business line level

SC1.4

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

SC1.4a

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

capabilities have already been developed and are available. More important will be the direct contact on expert level.

SC2.1

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

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
No

SC3.1

(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?
No

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?
No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
No, I am not providing data

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors Customers	Public	Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms