

C0. Introduction

C0.1

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

International Flavors & Fragrances Inc. is a leading global creator of flavors and fragrances for consumer products.

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
Row 1	January 1 2017	December 31 2017	No	<Not Applicable>
Row 2	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 3	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 4	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

C0.3

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

- Australia
- China
- Colombia
- Egypt
- France
- India
- Indonesia
- Israel
- Japan
- Mexico
- Netherlands
- Republic of Korea
- Russian Federation
- Singapore
- South Africa
- Spain
- Thailand
- Turkey
- United Kingdom of Great Britain and Northern Ireland
- United States of America
- Viet Nam

C0.4

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

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas 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

Aromatics

Bulk inorganic chemicals

Please select

Other chemicals

Specialty chemicals

Specialty organic 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) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board Chair	Our Chairman of the Board and CEO chairs the Sustainability Business Council (SBC), which consists of cross-functional committees (Responsible Sourcing, Eco-Effectiveness, Corporate Sustainability and Product Design) which are in turn led by the appropriate Executive Committee member and supported by a member of the Global Sustainability team. Each of these committees drives sustainability throughout that function, raises potential issues and provides regular updates to the SBC on progress. Our Chairman of the Board and CEO has oversight over climate-related issues via the SBC because our governance model relies on functional integration of our sustainability strategy, which includes climate-related issues, across IFF, including goal development, implementation and progress toward goals. Additionally, our Chief Scientific and Sustainability Officer and VP of Global Sustainability report annually to the Board on progress against our goals and targets and seek guidance on strategy.

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	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Setting performance objectives Monitoring implementation and performance of objectives	Our Chairman of the Board and CEO chairs the Sustainability Business Council (SBC), and cross-functional committees – Responsible Sourcing, Eco-Effectiveness, Corporate Sustainability and Product Design – are each led by the appropriate Executive Committee (EC) member and supported by a member of the Global Sustainability team. Each of these committees drives sustainability throughout that function, raises potential issues and provides regular updates to the SBC on progress. This governance model relies on functional integration of our sustainability strategy, which includes climate-related issues, across IFF, including goal development, implementation and progress toward goals. Additionally, our Chief Scientific and Sustainability Officer and VP of Global Sustainability report annually to the board on progress against our climate related goals and targets and seek guidance on strategy.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Operating Officer (COO)	Both assessing and managing climate-related risks and opportunities	Annually
Chief Sustainability Officer (CSO)	Both assessing and managing climate-related risks and opportunities	Annually
Risk committee	Assessing climate-related risks and opportunities	Half-yearly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored.

The Executive Vice President (EVP) of Operations is the highest level Executive responsible for oversight of operations globally (note IFF does not have the title of COO). This role reports directly to the Chairman and CEO. This position is responsible for climate change issues, risks and opportunities in operations and at our facilities. He manages these issues by overseeing the Eco-Effectiveness Leadership Team. The EVP of Operations has responsibility for climate-related issues because of his management of the Eco-Effective Leadership Team, which has direct oversight for the achievement of our climate-change related goals.

The Chief Sustainability Officer (CSO) is a key leader of the Sustainable Business Council (SBC), which reviews targets and metrics quarterly. The SBC consists of cross-functional committees (Responsible Sourcing, Eco-Effectiveness, Corporate Sustainability and Product Design) which are in turn led by the appropriate Executive Committee (EC) member and supported by a member of the Global Sustainability team. The CSO has responsibility for climate-related issues because each of these committees drives sustainability throughout that function, raises potential issues and provides regular updates to the SBC on progress. The CSO position is also charged with driving low-carbon and circular-economy solutions into the R&D process.

These positions and our organization more broadly monitor climate-related issues through engagement with the World Business Council for Sustainable Development (WBCSD). Our Chairman and CEO, VP of Global Sustainability, and CSO each participate in WBCSD. Our Chairman and CEO was elected to the EC. Our engagement with the WBCSD, which holds forums and climate policy groups that provide information and trends on climate-related issues, is an opportunity to work with influential leaders to monitor these issues and make positive, lasting changes in society. Additionally, these positions also attend other forums, such as CDP events, to stay abreast of changes on key climate-related issues.

Our Eco-Effectiveness Leadership Team, which is composed of the VP's of Operations Globally as well as subject matter experts and operations representatives from each of our regions, drives climate change management in Operations and has implemented numerous projects to enable us to reach our 2017 climate change-related goals and achieve progress towards our 2020 climate-change related goals, which are (normalized per metric ton of production):

- reduce energy use by 20% by 2020 from a 2010 baseline;
- reduce carbon emissions by 25% by 2020 from a 2010 baseline.

In addition, the Global Risk Committee is a management risk committee made up of key members of the Company's management to integrate global risk activities (including climate-related issues) and to ensure appropriate prioritization of resources and alignment across the Company. The Global Risk Committee is co-chaired by our CFO and EVP General Counsel and Corporate Secretary. The Global Risk Committee meets approximately six times per year to discuss critical risks, critique mitigation plans and review the gap analyses. The Global Risk Committee has responsibility over climate-related issues because ESG risks are also included in this program based on input from our Global Sustainability Team. The team evaluates for "Failure of climate change mitigation or adoption" and "Facility loss due to extreme weather event".

C1.3

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

Yes

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.

Who is entitled to benefit from these incentives?

Chief Operating Officer (COO)

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

The Executive Vice President (EVP) of Operations is the highest level Executive responsible for oversight of operations globally (note IFF does not have the title of COO). This role reports directly to the Chairman and CEO. The EVP of Operations, who is ultimately responsible for our eco efficiency initiatives, has performance based objectives that are aligned with organizational energy and GHG emissions reduction goals of 20% and 25% per metric ton of production, respectively, by 2020.

Who is entitled to benefit from these incentives?

Facilities manager

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

Facility managers have performance based objectives that are aligned with our organizational energy and GHG emissions reduction goals of respective 20% and 25% per metric ton of production by 2020. Performance on these goals is assessed annually during performance reviews and salary determination.

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

Environment/Sustainability managers have performance based objectives that are aligned with our organizational energy and GHG emissions reduction goals of respective 20% and 25% per metric ton of production by 2020. Performance on these goals is assessed annually during performance reviews and salary determination.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Emissions reduction project

Comment

Employees are internally recognized locally and corporately for achieving results from energy and carbon reducing projects on the company intranet's Top Story, which recognizes employees for exemplary performance. Employees are internally recognized locally and corporately for achieving results from energy and carbon reducing projects on the company intranet's Top Story, which recognizes employees for exemplary performance. In 2015, we launched an eco-efficiency awards program to formally recognize facilities that have been the most effective at implementing a culture of sustainability and improving performance related to sustainability standards.

Who is entitled to benefit from these incentives?

Facilities manager

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

Facility managers have performance based objectives that are aligned with our organizational energy and GHG emissions reduction goals of respective 20% and 25% per metric ton of production by 2020. Performance on these goals is assessed annually during performance reviews and salary determination.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	1	3	
Medium-term	3	6	
Long-term	6	10	

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	To enhance our risk management practices, we recently established a Global Risk Committee made up of key members of management to integrate global risk activities and to ensure appropriate prioritization of resources and alignment across IFF. The Global Risk Committee meets approximately six times per year to discuss critical risks, critique mitigation plans and review the gap analyses. ESG risks are also included in this program based on input from our Global Sustainability Team. The team evaluates for "Failure of climate change mitigation or adoption" and "Facility loss due to extreme weather event". Certain important operational and strategic risks that could adversely affect our business, including the effect of greenhouse gas emissions and climate change-related regulations on our operations, are outlined in our 2017 Annual Report and SEC Form 10-K.

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

At the corporate level, IFF's general approach for identifying and assessing significant risks and opportunities relies on our management's evaluation of current events and its expectations regarding future developments. We have a multidisciplinary company-wide enterprise risk management program that assesses risks, including sustainability issues and climate change, on our business and the business of our customers. The Global Risk Committee made up of key members of management oversees this program and integrates global risk activities to ensure appropriate prioritization of resources and alignment across IFF. We semi-annually prepare and review a risk dashboard with senior management and the Board of Directors. When prioritizing risks and opportunities, our strategic pillars are the starting point. However, we also identify natural disasters and other climate-related exposures as part of our process. As it relates to prioritization, consideration is also given to the following items: impact; both internal and external influences; our current capability and prior experience in mitigating such risks; and our expectations of the future outlook for the identified risk. Risks beyond 6 years are considered.

We define 'substantive financial impact' when identifying or assessing climate-related risks as any change that would significantly affect our business, operations, revenue or expenditure.

In addition, we conducted a structured materiality analysis to identify the issues of most importance to our company and our stakeholders, including size, scope and significance of identified risks. The materiality analysis identified several issues that are relevant to IFF, have global impact and influence product and facility energy and carbon management. We first assessed the materiality of conventional and emerging sustainability and carbon management issues in 2010. We evaluated these issues for their importance to our stakeholders, their potential impact on our business and the degree of influence that we had on each issue. We continue to engage with stakeholders, solicit feedback and refine our focus and approach. In 2014, we formally updated our materiality work by soliciting feedback from IFF employees, including our Sustainability Steering Team, key customers, academics and NGOs. This input helped us further refine IFF's sustainability strategy and reporting. At IFF, we know that our approach to sustainability and carbon management must continually evolve, and we will continue to engage with stakeholders through dialogue on sustainability and materiality.

At the asset level, we have global and regional crisis-management plans and procedures, and we conduct training for members of our cross-functional global and regional crisis teams. In addition, each IFF facility assesses local risks and has a crisis management plan. Our regional and site level Eco-efficiency champions also play the role of conveying risks detected on the ground up through to corporate executives, who review risks annually. We also conducted a formalized materiality analysis to identify the issues of most importance to our company and our stakeholders.

C2.2c

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	We operate on a global basis, with manufacturing and sales facilities in the United States, Europe, Africa, the Middle East, Latin America and Greater Asia. Any regulation that increases the cost of raw materials or commodities, particularly energy used to operate our facilities, has the potential to impact our profit margins and operations. In particular, various current regulatory efforts in environmental (including climate change), health and safety regulations and similar regulations could impact costs for our operations or supply chain. As a result, current regulations are always included in our climate-related risk assessments. To enhance our risk management practices, we recently established a Global Risk Committee made up of key members of management to integrate global risk activities (including cybersecurity, compliance, business and crisis management) and to ensure appropriate prioritization of resources and alignment across IFF. The Global Risk Committee meets approximately six times per year to discuss critical risks, including current regulation, and then critique mitigation plans and review the gap analyses. ESG risks are also included in this program based on input from our Global Sustainability Team. One example of a considered potential risk from current regulation specific to IFF is compliance with environmental regulations for our Tilburg facility in the Netherlands, which requires annual reporting of energy and carbon emissions. To address this, we developed a plan for reducing energy at this facility. The result of this process was that the risk was determined to not be a substantive risk for the business. However, new or changes to other environmental regulations could have a material impact on our business. For additional information, please see our 2017 Annual Report.

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, always included	We operate on a global basis, with manufacturing and sales facilities in the United States, Europe, Africa, the Middle East, Latin America and Greater Asia. Any regulation that increases the cost of raw materials or commodities, particularly energy used to operate our facilities, has the potential to impact our profit margins and operations. In particular, various emerging regulatory efforts in environmental (including climate change), health and safety regulations and similar regulations could impact costs for our operations or supply chain. As a result, emerging regulations are always included in our climate-related risk assessments. To enhance our risk management practices, we recently established a Global Risk Committee made up of key members of management to integrate global risk activities (including cybersecurity, compliance, business and crisis management) and to ensure appropriate prioritization of resources and alignment across IFF. The Global Risk Committee meets approximately six times per year to discuss critical risks, including emerging regulation, and then critique mitigation plans and review the gap analyses. ESG risks are also included in this program based on input from our Global Sustainability Team. One example of a considered potential risk from emerging regulation specific to IFF identified and evaluated by the Global Risk Committee in 2017 is the failure of climate change mitigation or adoption caused by increasing carbon taxes in regions in which we operate. The result of this process was that the climate-related risk was determined to not be a substantive risk for the business. However, new or changes to other environmental regulations could have a material impact on our business. For additional information, please see our 2017 Annual Report.
Technology	Relevant, always included	To enhance our risk management practices, we recently established a Global Risk Committee made up of key members of management to integrate global risk activities (including cybersecurity, compliance, business and crisis management) and to ensure appropriate prioritization of resources and alignment across IFF. The Global Risk Committee meets approximately six times per year to discuss critical risks, including technology risks, critique mitigation plans and review the gap analyses. ESG risks are also included in this program based on input from our Global Sustainability Team. One example of a potential risk from technology specific to IFF considered in 2017 is that development of new energy technologies could cause currently utilized technology to be outdated. The result of this process was that the risk was determined to not be a substantive risk for the business.
Legal	Relevant, always included	Our business operations and properties are subject to extensive and increasingly stringent federal, state, local and foreign laws and regulations pertaining to protection of the environment, including air emissions, sewage discharges, the use of hazardous materials, waste disposal practices and clean-up of existing environmental contamination. Failure to comply with these laws and regulations or any future changes to them may result in significant consequences to us, including the need to close or relocate one or more of our production facilities, administrative, civil and criminal penalties, liability for damages and negative publicity. As a result, legal risks are always included in our climate-related risk assessments. To enhance our risk management practices, we recently established a Global Risk Committee made up of key members of management to integrate global risk activities (including cybersecurity, compliance, business and crisis management) and to ensure appropriate prioritization of resources and alignment across IFF. The Global Risk Committee meets approximately six times per year to discuss critical risks, including legal risks, critique mitigation plans and review the gap analyses. ESG risks are also included in this program based on input from our Global Sustainability Team. One example of a potential climate-related legal or regulatory risk specific to IFF considered in 2017 is that noncompliance with regional carbon emissions regulations could impact our license to operate in these areas. The result of this process was that the climate-related risk was determined to not be a substantive risk for the business. However, noncompliance with other environmental laws and regulations may result in significant consequences to us. For additional information, please see our 2017 Annual Report.
Market	Relevant, always included	To enhance our risk management practices, we recently established a Global Risk Committee made up of key members of management to integrate global risk activities (including cybersecurity, compliance, business and crisis management) and to ensure appropriate prioritization of resources and alignment across IFF. The Global Risk Committee meets approximately six times per year to discuss critical risks, including market risks, and then critique mitigation plans and review the gap analyses. ESG risks are also included in this program based on input from our Global Sustainability Team. Our purchases of raw materials are subject to fluctuations in market price and availability caused by weather, growing and harvesting conditions, market conditions, governmental actions and other factors beyond our control. In addition, our ingredient suppliers, similar to us, are subject to the risks inherent in manufacturing and distribution on a global scale, including industrial accidents, environmental events, strikes and other labor disputes, disruptions in supply chain or information systems, disruption or loss of key research or manufacturing sites, product quality control, safety and environmental compliance issues, licensing requirements and other regulatory issues, as well as natural disasters, international conflicts, terrorist acts and other external factors over which they have no control. These suppliers also could become insolvent or experience other financial distress. As a result, market risks are always included in our climate-related risk assessments. A potential climate-related market risk evaluated in 2017 is the risk of reduced raw material availability caused by precipitation extremes and droughts. Over the past several years, changes in precipitation extremes and droughts in Brazil, Madagascar, and Florida, USA, have affected the availability and cost of our key natural ingredients, such as orange oil and vanilla. This risk was identified and evaluated via the ERM process. The result of this process was that the risk was determined to not be a substantive climate-related risk for the business. However, other disruptions in our supply chain could adversely affect our business and financial results. For additional information, please see our 2017 Annual Report.
Reputation	Relevant, always included	There is a global trend towards an increasing demand for sustainable, climate-friendly products and technologies. IFF sells its products primarily to consumer facing companies and our customers are increasingly challenged to find sustainable, reliable sources of ingredients to make products consumers have come to expect or demand. Potential loss in business can come from reduced demand for products and loss of customers if IFF's reputation is harmed by not meeting customer expectations related to sustainability and climate change. As a result, reputational risks are always included in our climate-related risk assessments. To enhance our risk management practices, we recently established a Global Risk Committee made up of key members of management to integrate global risk activities (including cybersecurity, compliance, business and crisis management) and to ensure appropriate prioritization of resources and alignment across IFF. The Global Risk Committee meets approximately six times per year to discuss critical risks, including reputational risks, and then critique mitigation plans and review the gap analyses. ESG risks are also included in this program based on input from our Global Sustainability Team. One example of a considered potential climate-related reputational risk specific to IFF is that our customers are increasingly demanding transparency regarding our climate change policies. For instance, during 2017, twelve of our major customers, representing approximately 25% of our business, requested we respond to the CDP supply chain questionnaire. Some customer specifically use CDP as a grade for an annual supplier performance evaluation and use this information to help generate their core lists, where not being included can significantly reduce the number of future projects and sales. This risk was identified and evaluated via the ERM process. The result of this process was that the climate-related risk was determined to not be a substantive risk for the business. However, other adverse publicity about our products, or our customers' products that contain our ingredients, including concerns about product safety or similar issues, whether real or perceived, could harm our reputation and result in an immediate adverse effect on our sales and customer relationships. For additional information, please see our 2017 Annual Report.

	Relevance & inclusion	Please explain
Acute physical	Relevant, always included	To enhance our risk management practices, we recently established a Global Risk Committee made up of key members of management to integrate global risk activities (including cybersecurity, compliance, business and crisis management) and to ensure appropriate prioritization of resources and alignment across IFF. The Global Risk Committee meets approximately six times per year to discuss critical risks, including acute physical risks, critique mitigation plans and review the gap analyses. ESG risks are also included in this program based on input from our Global Sustainability Team. Furthermore, each business unit has an ERM Team Lead that serves as the single point of contact for all aspects of the risk process related to the business function. The team leads engage other personnel from the organization in order to gather the information needed, provide status and lead the project in a manner that conforms to the timelines as agreed upon in the initiation phase, and escalate any issues that may come up related to the ERM process. The following key artifacts are used to facilitate the ERM process and training: - A guidelines document describing how the process works; - Info-packs customized for each business function that provide the templates to be populated in order to outline and add detail for each of the risks. As a result, acute physical risks are always included in our climate-related risk assessments. One example of a potential climate-related acute physical risk specific to IFF identified and evaluated by the Global Risk Committee in 2017 was the facility loss due to an extreme weather event. Specifically, our Union Beach facility incurred damage during Superstorm Sandy. Following the storm, we undertook mitigation processes and renovated these facilities to withstand flood events. During our ERM process, the likelihood of occurrence for climate related extreme weather events at key facilities was deemed low. The result of the risk evaluation process was that it was determined not a substantive risk for the business. However, other disruptions in our operations could adversely affect our business and financial results. For additional information, please see our 2017 Annual Report.
Chronic physical	Relevant, always included	Our purchases of raw materials are subject to fluctuations in market price and availability caused by weather, growing and harvesting conditions, market conditions, governmental actions and other factors beyond our control. In addition, our ingredient suppliers, similar to us, are subject to the chronic physical risks inherent in manufacturing and distribution on a global scale over which they have no control. These suppliers also could become insolvent or experience other financial distress. We purchase approximately 11,000 different raw materials from about 3,000 suppliers and distributors. Approximately half of the materials we purchase are naturals or crop-related items. As a result, chronic physical risks are always included in our climate-related risk assessments. To enhance our risk management practices, we recently established a Global Risk Committee made up of key members of management to integrate global risk activities (including cybersecurity, compliance, business and crisis management) and to ensure appropriate prioritization of resources and alignment across IFF. The Global Risk Committee meets approximately six times per year to discuss critical risks, including chronic physical risks, critique mitigation plans and review the gap analyses. ESG risks are also included in this program based on input from our Global Sustainability Team. Furthermore, each business unit has an ERM Team Lead that serves as the single point of contact for all aspects of the risk process related to the business function. The team leads engage other personnel from the organization in order to gather the information needed, provide status and lead the project in a manner that conforms to the timelines as agreed upon in the initiation phase, and escalate any issues that may come up related to the ERM process. One example of a potential chronic physical risk evaluated in 2017 is the risk of reduced raw material availability caused by precipitation extremes and droughts. Over the past several years, changes in precipitation extremes and droughts in Brazil, Madagascar, and Florida, USA, have affected the availability and cost of our key natural ingredients, such as orange oil and vanilla. This risk was identified and evaluated via the ERM process. The result of this process was that the risk was determined to not be a substantive risk for the business.
Upstream	Relevant, always included	Our purchases of raw materials are subject to fluctuations in market price and availability caused by weather, growing and harvesting conditions, market conditions, governmental actions and other factors beyond our control. In addition, our ingredient suppliers, similar to us, are subject to the risks inherent in manufacturing and distribution on a global scale over which they have no control. These suppliers also could become insolvent or experience other financial distress. We purchase approximately 11,000 different raw materials from about 3,000 domestic and international suppliers and distributors. Approximately half of the materials we purchase are naturals or crop-related items and the other half are synthetics and chemicals. As a result, upstream risks are always included in our climate-related risk assessments. To enhance our risk management practices, we recently established a Global Risk Committee made up of key members of management to integrate global risk activities (including cybersecurity, compliance, business and crisis management) and to ensure appropriate prioritization of resources and alignment across IFF. The Global Risk Committee meets approximately six times per year to discuss critical risks, including upstream risks, critique mitigation plans and review the gap analyses. ESG risks are also included in this program based on input from our Global Sustainability Team. One example of a potential upstream climate-related risk evaluated in 2017 is the risk of reduced raw material availability caused by precipitation extremes and droughts. Over the past several years, changes in precipitation extremes and droughts in Brazil, Madagascar, and Florida, USA, have affected the availability and cost of our key natural ingredients, such as orange oil and vanilla. This risk was identified and evaluated via the ERM process. The result of this process was that the risk was determined to not be a substantive risk for the business. However, other disruptions in our supply chain could adversely affect our business and financial results. For additional information, please see our 2017 Annual Report.
Downstream	Relevant, always included	There is a global trend towards an increasing demand for sustainable, climate-friendly products and technologies. IFF sells its products primarily to consumer facing companies and our customers. Customers are limiting the number of their suppliers to increase their margins and profitability. These customers are creating "core lists" of suppliers and giving these "core lists" suppliers priority for new or modified products. These and other profitability initiatives being pursued by our customers reduce the market opportunity for which we compete and subject the volume and pricing of the remaining suppliers to downward pressure. To be successful in this competitive environment, we must continue to anticipate customers' needs, deliver products that contribute to our customers' profitability, provide effective customer service and offer competitive cost-in-use solutions to secure and maintain inclusion on certain "core lists" and our share of our customers' purchases. If we are unable to do so, it could adversely impact our future results of operations. As a result, downstream risks are always included in our climate-related risk assessments. To enhance our risk management practices, we recently established a Global Risk Committee made up of key members of management to integrate global risk activities. The Global Risk Committee meets approximately six times per year to discuss critical risks, including downstream risks, critique mitigation plans and review the gap analyses. ESG risks are also included in this program based on input from our Global Sustainability Team. For example, a considered potential climate-related downstream risk specific to IFF is that our customers are increasingly demanding transparency regarding our climate change policies. For instance, during 2017, twelve of our major customers requested we respond to the CDP supply chain questionnaire. Some customers specifically use CDP as a grade to help generate their core lists, where not being included can significantly reduce the number of future projects and sales. This risk was identified and evaluated via the ERM process. The result of this process was that the climate-related risk was determined to not be a substantive risk for the business.

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

At the corporate level, IFF's general approach for identifying and managing significant risks and opportunities relies on our management's evaluation of current events and its expectations regarding future developments. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We have a multidisciplinary company-wide enterprise risk management program that annually assesses risks, including sustainability issues and climate change, on our business and the business of our customers.

Our CEO and other senior management oversee the day-to-day execution of the risk management process, including decisions to mitigate, transfer, accept or control climate-related risks. The Board receives regular reports on IFF's ERM process and oversees and reviews with management the company's enterprise-wide risks and the policies and practices established to manage such risks. Management maintains the ERM program, which is designed to identify and assess our global risks and to develop steps to mitigate and manage risks. The Global Risk Committee, composed of key members of management, meets approximately six times per year to discuss critical risks, critique mitigation plans and review the gap analyses. The Global Risk Committee reviews and evaluates each risk for impact and vulnerability. Each risk is identified as Low, Moderate, High or Critical based on its impact and vulnerability.

We semi-annually prepare and review a risk dashboard with senior management and the Board of Directors. When prioritizing risks and opportunities, our strategic pillars are the starting point. However, we also identify natural disasters and other climate related exposures as part of our process. As it relates to prioritization, consideration is also given to the following items: impact; both internal and external influences; our current capability and prior experience in mitigating such risks; and our expectations of the future outlook for the identified risk or opportunity.

At the asset level, we have global and regional crisis-management plans and procedures, and we conduct training for members of our cross-functional global and regional crisis teams. In addition, each IFF facility assesses local risks and has a crisis management plan. Our regional and site level Eco-efficiency champions also play the role of conveying risks detected on the ground up through to corporate executives, who review risks annually. We also conducted a formalized materiality analysis to identify the issues of most importance to our company and our stakeholders.

At the corporate level, day-to-day management of sustainability and climate-related opportunities is under the purview of the Sustainability Business Council (SBC), chaired by our Chairman of the Board and CEO. The SBC consists of cross-functional committees (Responsible Sourcing, Eco-Effectiveness, Corporate Sustainability and Product Design) which are in turn led by the appropriate EC member and supported by a member of the Global Sustainability team. Each of these committees drives sustainability throughout that function, raises potential issues and provides regular updates to the SBC on progress. As relevant opportunities are identified, they are also reviewed with our R&D and Commercial teams. At the asset level, opportunities we pursue are implemented by our Eco-Effectiveness Leadership Team.

One example of a climate-related physical risk that was managed through this process is facility loss due to an extreme weather event. Specifically, our Union Beach facility incurred damage during Superstorm Sandy. Following the storm, we undertook mitigation processes and renovated these facilities to withstand flood events. During our ERM process, the likelihood of occurrence for climate related extreme weather events at key facilities was deemed low. The result of the risk evaluation process was that it was determined not a substantive risk for the business.

One example of a climate-related transitional risk that was managed through this process is reputational impacts tied to the fact that our customers are increasingly demanding transparency regarding our climate change policies. For instance, during 2017, twelve of our major customers, representing approximately 25% of our business, requested we respond to the CDP supply chain questionnaire. Some customers specifically use CDP as a grade for an annual supplier performance evaluation and use this information to help generate their core lists, where not being included can significantly reduce the number of future projects and sales. The result of the risk evaluation process was that it was determined not a critical risk for the business.

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?

No

C2.3b

(C2.3b) Why do you not consider your organization to be exposed to climate-related risks with the potential to have a substantive financial or strategic impact on your business?

	Primary reason	Please explain
Row 1	Risks exist, but none with potential to have a substantive financial or strategic impact on business	We have a multidisciplinary company-wide enterprise risk management program that annually assesses risks, including sustainability issues and climate change, on our business and the business of our customers. The Global Risk Committee made up of key members of management oversees this program and integrates global risk activities to ensure appropriate prioritization of resources and alignment across IFF. An ERM Team Lead at each business unit complements this program by serving as a single point of contact for all aspects of the risk process related to the business function. Through these processes we have determined that although we are exposed to climate-related risks none of the identified risks have the potential to have a substantive financial or strategic impact on our business. We define 'substantive impact' associated with risk from climate change as any change that would significantly affect our business, operations, revenue or expenditure. For example, a significant physical risk is change in precipitation patterns because this could result in price volatility and supply shortages in natural products that represent approximately half of our raw material purchases. However, this was determined not to be a substantive risk because we work with our purchasers to develop various sourcing strategies, including maintaining strategic stock levels for critical items, multiple suppliers, inventory management systems, various geographic suppliers and long-term agreements. IFF also evaluates the use of green chemistry and biotechnology as an alternative to natural raw materials. We have identified other risks associated with climate change such as facility loss due to extreme weather events and the failure to address climate change in corporate planning (e.g. carbon taxes, disclosure, reputational or other consequences). The Global Risk Committee discusses critical risks, critiques mitigation plans, and reviews the gap analyses. After consideration of these risks, we do not consider them as substantive to our business. We continue to monitor these risks on an ongoing basis.

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?

No

C2.4b

(C2.4b) Why do you not consider your organization to have climate-related opportunities?

	Primary reason	Please explain
Row 1	Opportunities exist, but none with potential to have a substantive financial or strategic impact on business	At the corporate level, IFF's general approach for identifying significant opportunities relies on our management's evaluation of current events and its expectations regarding future developments. Sustainability and climate-related topics are under the purview of the Sustainability Business Council (SBC), chaired by our Chairman of the Board and CEO. The SBC consists of cross-functional committees (Responsible Sourcing, Eco-Effectiveness, Corporate Sustainability and Product Design) which are in turn led by the appropriate EC member and supported by a member of the Global Sustainability team. Each of these committees drives sustainability throughout that function, raises potential issues and provides regular updates to the SBC on progress. As relevant opportunities are identified, they are also reviewed with our R and D and Commercial teams. At the asset level, opportunities we pursue are implemented by our Eco-Effectiveness Leadership Team. Through these processes we have determined that although we have numerous climate-related opportunities none of the identified opportunities have the potential to have a substantive financial or strategic impact on our business. We define substantive impact related to climate change as any change that would significantly affect our business, operations, revenue or expenditure. We have identified climate-related opportunities for our business such as the reduction of costs via resource efficiency projects, the development of new products in line with green chemistry to be more resource efficient, and the creation of innovative renewable or repurposed products. These types of opportunities are reviewed with our R and D and Commercial teams via the process described above as well as with our end customers. Although there is an interest from some customers this is not currently a large part of the requests we receive or of our portfolio. For these reasons, although we see increasing trends for these types of products, for the current year we do not see these opportunities as having the potential to have substantive impact on our business. We will continue to develop these products in anticipation that they will grow in the future.

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risk from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Supply chain and/or value chain	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risk from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Adaptation and mitigation activities	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risk from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Investment in R&D	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risk from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Operations	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risk from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Other, please specify	Please select	

C2.6

(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

	Relevance	Description
Revenues	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risks or opportunities from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Operating costs	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risks or opportunities from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Capital expenditures / capital allocation	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risks or opportunities from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Acquisitions and divestments	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risks or opportunities from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Access to capital	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risks or opportunities from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Assets	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risks or opportunities from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Liabilities	We have not identified any risks or opportunities	As explained in C2.3 and C2.4, although we are exposed to climate-related risks and have numerous climate-related opportunities, none of the identified risks or opportunities have the potential to have a substantive financial or strategic impact on our business based on our current evaluations. Climate risks and opportunities are assessed based on the magnitude and likelihood of impact, potential financial impact, return on investment, scale of capital costs or operational expenditures, and potential for disruption or delays in production. We define substantive risks or opportunities from climate change as any change that would significantly affect our business, operations, revenue or expenditure.
Other	Please select	

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

Yes, qualitative and quantitative

(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b)
Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.

Yes

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

i. How the business strategy has been influenced: Sustainability and climate change management is an enabler of our Vision 2020 corporate business strategy. As we strengthen our innovation platform, we continuously work to design high quality and sustainable products that our customers trust. We do this through green chemistry and with a secure and ethical supply chain. Climate change-related issues such as energy efficiency influence our decisions regarding the design, building, operation and maintenance of our facilities and equipment. Our Sustainability Business Council and Eco-efficiency Team meet at regular intervals throughout the year regarding IFF's Sustainability Strategy, to define objectives, assess risks, and perform reviews of our performance against our 2020 GHG emissions and energy reduction targets of 25% and 20%, normalized to production. Our Eco-efficiency Team meets with our manufacturing facilities several times a year to drive GHG emissions and energy reduction and to review the site's performance against our targets. To meet these goals, IFF invests in energy efficiency, green chemistry, and carbon reduction initiatives. During 2017, we continued to enhance our governance model to manage eco-efficiency. This includes institutionalizing a method by which facilities can propose improvement projects to reduce waste, water use, and energy consumption.

ii. Our new sustainability strategy focuses on using circular economy to address climate change. For us, the strategy shows that increasing eco-effectiveness in carbon is as fundamental to being Earth-friendly as it is to reducing costs. The grand opening of our on-site wind turbine in Tilburg— the first in the industry—is a working example of how our positive principles support those goals.

The strategy is incorporated into the overall business strategy, which is linked to and exemplified by our SBTi approved emissions reduction target of 30% absolute scope 1 and 2 emissions by 2025.

iii. The most substantial business decisions made with climate change as a factor during 2017 were:

- the allocation of funds for specific climate change projects to reduce emissions, corporate tracking of those projects for progress, increased purchases of renewable energy credits (RECs), as well as Guarantees of Origin (GO) green electricity in Europe.
- Climate change was included in the decision to fund 23 projects to reduce greenhouse gas emissions by over 6,000 metric tons of CO₂e.

The decision to support these solutions was influenced by our commitment to transition to a low-carbon economy.

iv. Climate change aspects that have influenced the strategy: Climate change-related issues such as energy efficiency influence our decisions regarding the design, building, operation and maintenance of our facilities and equipment. We recognize that regulatory efforts related to climate change may increase the cost of raw materials as well as energy used. Induced changes in natural resources due to climate change may also affect the availability and price of ingredients used in the manufacture of our products. To lessen the impact of energy costs, we are pursuing energy efficiency and reduction programs as well as increasing our use of renewable energy. To mitigate sourcing-related risks, we are diversifying our sourcing strategy, maintaining strategic stock levels, and developing flavors and fragrances using biotechnology. In addition to responding to potential risks, IFF is seeking opportunities in market shifts created by climate change. We find that climate change response is driving innovation, efficiency improvements and the development of new products, such as concentrated laundry detergent, to meet changing consumer needs.

v. IFF's short-term strategy includes a 1-2 year outlook. The most important changes which have occurred include:

- Enhancements were made of our global web-based software application to track energy use and cost and to measure operational improvements on a more granular level. Reporting was enhanced to pinpoint areas of opportunity for climate-related projects.
- Implementation of energy efficiency initiatives to enable us to meet our corporate goals to reduce energy use by 20% and GHG emissions by 25% by 2020 from a 2010 baseline, normalized to production. For example, funds were allocated specifically for carbon reduction. Major projects approved in 2016 as a result of this process include a boiler efficiency upgrade in New Jersey that will save

approximately 3600 GJ in natural gas.

- Formalization of our climate change governance structure and the Eco-efficiency Team through the appointment of Regional Eco-Efficiency Champions and a Lead Eco-efficiency Champion. They will drive progress on climate change goals at the regional level and help facilities create action plans to achieve GHG emissions and energy reduction goals.

vi. IFF's long-term strategy includes a 5-10 year outlook. The most important changes which have occurred include: Through increased awareness of climate change megatrends within our customers and supply chain, this subject has risen in awareness and has been dovetailed into the IFF business strategy. We have integrated climate change thinking and actions into key carbon intensive parts of our business, thereby influencing the execution of these strategies. In 2016, a prime example of how this thinking was institutionalized into our strategy and actions was the increase of purchased Green-e certified renewable energy credits (RECs) as well as Guarantees of Origin (GO) green electricity in Europe.

vii. How this is gaining you strategic advantage: Sustainability and climate change management is an enabler of IFF's Vision 2020 corporate business strategy, We continuously work to design innovative, high-quality and sustainable products that enhance our customers' brands. We do this through green chemistry and with a secure and ethical supply chain. We have incorporated the principles of green design, construction and manufacturing processes at our new facilities. Our mission to maximize our portfolio has us working to increase eco-efficiency today by creating less waste and using less water and energy, and in the future as we create new products. All of these actions increase our efficiency and improve our products in pursuit of a strategic advantage.

viii. We formally support the climate change agreement that emerged from the UN Climate Change Conference (COP21) in Paris as well as the 10 Principles of the UN Global Compact. The agreement is further evidence that consumers are increasingly calling for products that are environmentally and socially responsible, with health and well-being as central elements.

C3.1d

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

Climate-related scenarios	Details
RCP 2.6	<p>Several years ago, IFF launched an enterprise-wide risk management (ERM) effort designed to provide the ability to pro-actively manage business risks. The current ERM does not include 2°C scenario analysis, but we used climate-related scenario analysis to determine our science-based target (SBT) that was approved by the Science-Based Targets initiative (SBTi) and a pathway for achieving the target. This scenario analysis utilized the Representative Concentration Pathway (RCP) 2.6, which is the low emissions scenario pathway from the IPCC Fifth Assessment Report. We identified this scenario via the SBTi guidance and Science-based Target Setting Manual, which lists the scenario as appropriate for setting SBT. For our analysis, we used the RCP2.6 subcategory that keeps overshoot to under 0.4W/m2, and which requires a 49% to 72% absolute emissions reduction by 2050 from 2010 levels to stay under 2°C. For our modeling, we used the high-end input of 72% reduction. We considered the timeline through 2050 but focused our goal-setting analysis on the period of 2025 to 2030. These timelines are relevant to our organization because IFF has a 129-year history and we plan to support the wellbeing of our consumers, the health of our planet and the integrity of our business well into the future. Since RCP 2.6 considers all global anthropogenic emissions, we considered all areas of our business covering our total Scope 1 and 2 emissions from global operations as part of the analysis. We assumed a compound year-on-year reduction pathway of 2.3% and performed a sensitivity analysis on the effectiveness and impacts of different routes to target achievement. The primary result of the scenario analysis was the setting of our SBT commitment to reduce absolute Scope 1 and 2 GHG emissions 30% across all operations globally by 2025 based on a 2015 base year. IFF additionally committed to working with our suppliers (representing 70% of its supply chain emissions) so that they set their own science-based reduction targets and report annual emissions by 2025. The target will be reported and publicized externally via a press release, social media posts, as well as included on the SBTi website. The results of the scenario analysis and our resulting SBT influence our business objectives and strategy through our decisions regarding renewable energy procurement and the design, building, operation and maintenance of our facilities and equipment to achieve greater energy efficiency. We recognize that regulatory efforts related to climate change may increase the cost of raw materials as well as energy used. Induced changes in natural resources due to climate change may also affect the availability and price of ingredients used in the manufacture of our products. To lessen the impact of energy costs, we are pursuing energy efficiency and reduction programs as well as increasing our use of renewable energy. To mitigate sourcing-related risks, we are diversifying our sourcing strategy, maintaining strategic stock levels, and developing flavors and fragrances using biotechnology. In 2017, a prime example of how the results of the scenario analysis and this thinking directly influenced our business objectives and strategy was the increase of purchased renewable electricity at key sites in the US and Europe. We recognize that renewable energy will play a key role in both achieving our SBT and a sustainable future, and we are continually working to purchase greater amounts of renewable electricity for our operations. Through increased awareness of climate change megatrends within our customers and supply chain, this subject has risen in awareness and has been dovetailed into the IFF business strategy. We have integrated climate change thinking and actions into key carbon-intensive parts of our business, thereby influencing the execution of these strategies.</p>

C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e

(C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e)
Disclose details of your organization's low-carbon transition plan.

Climate change-related issues such as energy efficiency influence our decisions regarding the design, building, operation and maintenance of our facilities and equipment. We recognize that regulatory efforts related to climate change may increase the cost of raw materials as well as energy used. Induced changes in natural resources due to climate change may also affect the availability and price of ingredients used in the manufacture of our products. To lessen the impact of energy costs, we are pursuing energy efficiency and reduction programs as well as increasing our use of renewable energy. To mitigate sourcing-related risks, we are diversifying our sourcing strategy, maintaining strategic stock levels, and developing flavors and fragrances using biotechnology. In addition to responding to potential risks, IFF is seeking opportunities in market shifts created by climate change. We find that climate change response is driving innovation, efficiency improvements and the development of new products, such as concentrated laundry detergent, to meet changing consumer needs.

Through increased awareness of climate change megatrends within our customers and supply chain, this subject has risen in awareness and has been dovetailed into the IFF business strategy. We have integrated climate change thinking and actions into key carbon-intensive parts of our business, thereby influencing the execution of these strategies. In 2017, a prime example of how this thinking was institutionalized into our strategy and actions was the increase of purchased Green-e certified renewable energy credits (RECs) as well as Guarantees of Origin (GO) green electricity in Europe.

International Flavors & Fragrances, Inc. has committed to reduce absolute scope 1 and 2 GHG emissions 30% by 2025, from a 2015 base-year. This is an approved Science-Based Target. International Flavors & Fragrances, Inc. In support of this emissions target, as a member of RE100 we will target 100% renewable electricity and will have 75% renewable electricity by 2025. The major challenge for us in achieving these targets will be market maturity for some of our facilities

C4. Targets and performance

C4.1

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

Both absolute and intensity targets

C4.1a

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

Target reference number

Abs 1

Scope

Scope 1 +2 (market-based)

% emissions in Scope

100

% reduction from base year

30

Base year

2015

Start year

2017

Base year emissions covered by target (metric tons CO2e)

246761

Target year

2025

Is this a science-based target?

Yes, this target has been approved as science-based by the Science-Based Targets initiative

% achieved (emissions)

16

Target status

Underway

Please explain

The Science Based Target initiative (SBTi) independently assesses and approves companies' targets to help determine a pathway for reducing companies' emissions in line with the Paris Climate Agreement's goal of limiting global warming to well below 2°C above pre-industrial levels. By 2025, IFF will strive to reduce absolute GHG emissions by 30% and encourage suppliers to set their own science-based reduction targets and report annual emissions. IFF also commits to working with its suppliers (representing 70% of its supply chain emissions) so that they set their own science-based reduction targets and report annual emissions by 2025.

C4.1b

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

Target reference number

Int 1

Scope

Scope 1 +2 (market-based)

% emissions in Scope

100

% reduction from baseline year

33.8

Metric

Metric tons CO2e per metric ton of product

Base year

2010

Start year

2012

Normalized baseline year emissions covered by target (metric tons CO2e)

0.976

Target year

2020

Is this a science-based target?

No, but we are reporting another target that is science-based

% achieved (emissions)

100

Target status

Underway

Please explain

The target year for GHG emissions and energy reduction goals is 2020 and the baseline year is 2010. The intensity GHG emissions reduction goal is 25% normalized to production. We achieved our 2020 goal by continuously reducing overall energy use, enhancing our energy efficiency efforts, moving to lower greenhouse gas-emitting fuels, and increasing our use of renewable energy.

% change anticipated in absolute Scope 1+2 emissions

-25

% change anticipated in absolute Scope 3 emissions

0

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

Target

Renewable energy consumption

KPI – Metric numerator

MWh of renewable electricity

KPI – Metric denominator (intensity targets only)

MWh of total electricity consumed

Base year

2010

Start year

2015

Target year

2025

KPI in baseline year

0

KPI in target year

75

% achieved in reporting year

33

Target Status

Underway

Please explain

In 2015, we joined RE100, a global initiative of businesses that are committed to the goal of procuring 100% of their electricity from renewable sources. We are targeting 75% of our portfolio to help achieve our science-based target.

Part of emissions target

Abs 1

Is this target part of an overarching initiative?

RE100

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 projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	7	1840
To be implemented*	2	50
Implementation commenced*	15	2830
Implemented*	27	13650
Not to be implemented	0	0

C4.3b

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

Activity type

Energy efficiency: Building services

Description of activity

HVAC

Estimated annual CO2e savings (metric tonnes CO2e)

800

Scope

Scope 1

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

68000

Investment required (unit currency – as specified in CC0.4)

426000

Payback period

4 - 10 years

Estimated lifetime of the initiative

6-10 years

Comment

Implemented 4 projects focused on HVAC globally. Average payback period and lifetime were used to calculate the ranges in these columns.

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

2470

Scope

Scope 1

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

173000

Investment required (unit currency – as specified in CC0.4)

442000

Payback period

4 - 10 years

Estimated lifetime of the initiative

6-10 years

Comment

Implemented 8 projects focused on process optimization globally. Average payback period and lifetime were used to calculate the

ranges in these columns.

Activity type

Energy efficiency: Building services

Description of activity

Motors and drives

Estimated annual CO2e savings (metric tonnes CO2e)

2790

Scope

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

265000

Investment required (unit currency – as specified in CC0.4)

441000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Implemented 11 projects focused on motors and drives globally. Average payback period and lifetime were used to calculate the ranges in these columns.

Activity type

Low-carbon energy purchase

Description of activity

Other, please specify (Wind)

Estimated annual CO2e savings (metric tonnes CO2e)

7590

Scope

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

0

Investment required (unit currency – as specified in CC0.4)

0

Payback period

Please select

Estimated lifetime of the initiative

Ongoing

Comment

Several of our facilities increased their renewable electricity (solar and wind) purchasing for production in 2017: Benicarolo, Hazlet, Jacksonville, Tilburg.

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

Method	Comment
Financial optimization calculations	IFF requires that energy reduction projects have a clear return on investment and also takes into consideration the environmental and social benefits of these projects, ensuring projects adhere to the triple bottom line of sustainability.
Internal incentives/recognition programs	IFF has corporate goals to reduce energy use by 20% and GHG emissions by 25% by 2020, normalized to production. In 2016, these goals were cascaded to each of our facilities and included in the performance management goals of plant manager. These goals were achieved in 2017, and looking forward IFF has set an approved Science-Based Target. For its SBTi-approved Science-Based Target, IFF commits to reduce absolute scope 1 and 2 GHG emissions 30% by 2025, from a 2015 base-year. IFF also commits to working with its suppliers (representing 70% of its supply chain emissions) so that they set their own science-based reduction targets and report annual emissions by 2025.

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

Group of products

Description of product/Group of products

Several of our facilities use renewable electricity (solar and wind) for production: Benicarolo, Hazlet, Jacksonville, Tilburg. All of the products made at these facilities are considered low-carbon products and contribute to the transition to a low carbon economy.

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

Low-carbon product

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Evaluating the carbon-reducing impacts of ICT

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

36

Comment

Several of our facilities use 100% renewable electricity (solar and wind) for production: Benicarolo, Hazlet, Jacksonville, Tilburg. All of the products made at these facilities are made with renewable electricity and are thus considered low-carbon products; as such, these contribute to the transition to a low carbon economy.

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 2010

Base year end

December 31 2010

Base year emissions (metric tons CO2e)

135417

Comment

Scope 2 (location-based)

Base year start

January 1 2010

Base year end

December 31 2010

Base year emissions (metric tons CO2e)

141042

Comment

Scope 2 (market-based)

Base year start

January 1 2010

Base year end

December 31 2010

Base year emissions (metric tons CO2e)

141042

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 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?

Row 1

Gross global Scope 1 emissions (metric tons CO2e)

113944

End-year of reporting period

<Not Applicable>

Comment

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

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

Row 1

Scope 2, location-based

118458

Scope 2, market-based (if applicable)

92639

End-year of reporting period

<Not Applicable>

Comment

C6.4

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

No

C6.5

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

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

800000

Emissions calculation methodology

Corporate-wide global expense data was obtained from finance. Data was not available for 2017, so 2016 data was used as a proxy. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13 - updated per the latest inflation and currency conversion rates. Sectors already included in Scopes 1 and 2 (such as electricity purchases) and other Scope 3 categories (such as capital goods) were removed to prevent double counting. Global warming potentials (GWPs) are from the IPCC Second Assessment Report, 100 year average

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

0

Explanation

Capital goods

Evaluation status

Relevant, calculated

Metric tonnes CO2e

30000

Emissions calculation methodology

Corporate-wide global expense data was obtained from finance. Data was not available for 2017, so 2016 data was used as a proxy. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13 - updated per the latest inflation and currency conversion rates. Sectors already included in Scopes 1 and 2 (such as electricity purchases) and other Scope 3 categories (such as purchased goods and services) were removed to prevent double counting. Global warming potentials (GWPs) are from the IPCC Second Assessment Report, 100 year average.

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

0

Explanation

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

Evaluation status

Relevant, calculated

Metric tonnes CO2e

39835

Emissions calculation methodology

Total global electricity and fuel use derived from our Scope 1 & 2 inventory are used as activity data in this category. Upstream emissions from fuel use are quantified by applied emissions factors based on life cycle assessment of fuels in various countries derived from lifecycle assessment tools. Upstream emissions from electricity purchases in the US are quantified using life cycle emissions factors from Argonne National Lab's GREET 2015 Life Cycle Emissions model. Upstream emissions from electricity purchases internationally are quantified using the multipliers in the UK DEFRA's 2015 Guidelines. Emissions due to losses from transmission and distribution in the US are calculated using loss factors from the EPA's 2012 eGRID emission factors, Oct 2015. Emissions due to losses from transmission and distribution internationally are quantified using the loss factors in the UK DEFRA's 2015 Guidelines. Global warming potentials come from the IPCC's Fourth Assessment Report, 100 year average.

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

100

Explanation

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

150000

Emissions calculation methodology

This category includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Data was not available for 2017, so 2014 data was used as a proxy. For each of these categories, total mass, distance shipped, and method of shipping were collected on a per-shipment basis. Emission factors per ton-mile for cargo shipments via air, ocean, and rail were taken from Table A-116 of the U.S. Greenhouse Gas Emissions and Sinks: 1990-2012. The emission factor for highway shipment was taken from Table 2-15 of the same source. Also included in this category is warehousing. For all warehoused material, approximate area of storage space and time spent in storage was determined. Average electricity use per sqft*yr for warehouses was taken from CBECs Table C15A: Electricity Consumption and Conditional Energy Intensity by Census Region for All Buildings, 2003. It was assumed that the average electricity emission factor is approximately equal to the U.S. eGRID's RFCE region, where many warehouses are located. GWPs were taken from the IPCC Second Assessment Report, 100 year avg.

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

0

Explanation

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

13497

Emissions calculation methodology

Total weight of hazardous and non-hazardous waste generated from IFF's total global production are used as activity data for this calculation. Waste is categorized by type of material and diversion method, including recycling, composting, incineration, and landfilling. The waste-type-specific method, described in "Technical Guidance for Calculating Scope 3 Emissions," is then applied. Waste emissions factors are consistent with the GHG Protocol Scope 3 guidance, and include the voluntary transportation emissions, with an assumed average distance traveled to the processing facility. Recycling emissions include transport to recycling facility and sorting of recycled materials at material recovery facility. Landfill emissions include transport to landfill, equipment use at landfill and landfill CH4. Landfill CH4 is based on typical landfill gas collection practices, average landfill moisture conditions, and U.S.-average non-baseload electricity grid mix. Combustion emissions include transport to waste-to-energy facility and combustion-related non-biogenic CO2 and N2O. Compost emissions include transport to compost, equipment use at compost facility and CH4 and N2O emissions during composting. Factors are from the EPA, Office of Resource Conservation and Recovery (February 2016) Documentation for Greenhouse Gas Emission and Energy Factors used in the Waste Reduction Model (WARM). Factors from tables provided in the Management Practices Chapters and Background Chapters. WARM Version 14. Additional data provided from EPA. These US emission factors are assumed to be applicable across the rest of the world. Avoided emissions due to waste to energy and recycling are not included in this emissions reporting. Global warming potentials come from the IPCC's Fourth Assessment Report, 100 year average, and are used to convert all waste emission factors into CO2e.

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

100

Explanation

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

2750

Emissions calculation methodology

Travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. For air travel, each cabin class / distance threshold pairing is multiplied by the appropriate emission factor from the UK's DEFRA 2016 emission factor release. The emission factor for intercity rail travel is taken from Tables A.14 to A.16 and 9.10 to 9.12 of the Transportation Energy Data Book: Edition 32. GWPs come from the IPCC Fourth Assessment Report.

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

100

Explanation

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

12580

Emissions calculation methodology

Screening done for SBTi using Quantis Scope 3 Evaluator tool.

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

0

Explanation

This category was found to be relevant after our 2017 sustainability report was published and was determined during the SBTi approval process.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

This category is not relevant because we do not lease any assets that are not already included in our Scope 1 and 2 inventories.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

27136

Emissions calculation methodology

Screening done for SBTi using Quantis Scope 3 Evaluator tool and sales invoicing. Data was not available for 2017, so 2016 data was used as a proxy.

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

0

Explanation

This category was found to be relevant after our 2017 sustainability report was published and was determined during the SBTi approval process.

Processing of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

31092

Emissions calculation methodology

Screening done for SBTi using average of multiple estimates including Quantis tool and Scope 3 Calculation Guidance average method. Data was not available for 2017, so 2016 data was used as a proxy.

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

0

Explanation

This category was found to be relevant after our 2017 sustainability report was published and was determined during the SBTi approval process.

Use of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

We participated and conducted several lifecycle assessments (LCA) of some of our flavors and fragrances products using the PAS2050 (2011) and ISO 14001 methodologies, and because of this we have an idea of the GHG emissions associated with our purchased goods and services. In most of our assessments, we found that for each ingredient, product manufacturing produced the fewest carbon emissions compared with raw materials and transport, which contributed higher percentages of emissions. We are working towards better understanding the Scope 3 GHG emissions of our use of sold products.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

731

Emissions calculation methodology

Screening done for SBTi using Quantis Scope 3 Evaluator tool.

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

0

Explanation

This category was found to be relevant after our 2017 sustainability report was published and was determined during the SBTi approval process.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

This category is not relevant because we have no downstream leased assets.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

This category is not relevant because we do not have any franchises.

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

IFF does not provide capital or financing as a service and, as a result, any emissions associated with investments are already included in scope 1 and 2.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

No additional upstream Scope 3 emissions

Other (downstream)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

No additional downstream Scope 3 emissions

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered 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

0.0000608

Metric numerator (Gross global combined Scope 1 and 2 emissions)

206583

Metric denominator

unit total revenue

Metric denominator: Unit total

3398719000

Scope 2 figure used

Market-based

% change from previous year

17.7

Direction of change

Decreased

Reason for change

We have provided the standard total revenue intensity measurement. This metric indicates a 17.7% decrease based on a 9.1% increase in revenue and 10.2% overall decrease in emissions. It is difficult to verify that emissions are related to revenue, except indirectly through production. Use of a carbon accounting software system has standardized comparisons and enable evaluation of additional metrics moving forward. This decrease is due to our ongoing emissions reductions activities as highlighted in CC4.3b including building energy efficiency projects, boiler upgrades, and improved energy management plans at several of our sites.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?

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	113288	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	84	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	257	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	315	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)
United States of America	52173
Other, please specify (Rest of World)	61771

C7.3

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

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Chemicals production activities	111378
Rest of organization	2566

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	111378	<Not Applicable>	Chemical product activities for this question are defined as manufacturing sites.
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility generation 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 (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 in market-based approach (MWh)
United States of America	25700	13863	59950	26357
Other, please specify (Rest of world)	92758	78776	206571	44750

C7.6

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

By activity

C7.6c

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

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Chemicals production activities	109294	84313
Rest of organization	9164	8326

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	109294	84313	Chemical product activities for this question are defined as manufacturing sites.
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 (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
Specialty chemicals	15.5	Corporate-wide global expense data was obtained from finance. The feedstock spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra’s “2012 Guidelines to Defra / DECC’s GHG Conversion Factors for Company Reporting”, Annex 13 - updated per the latest inflation and currency conversion rates. Sectors already included in Scopes 1 and 2 (such as electricity purchases) and other Scope 3 categories (such as capital goods) were removed to prevent double counting. Global warming potentials (GWPs) are from the IPCC Second Assessment Report, 100 year average.

C-CH7.8a

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

	Sales, metric tons	Comment
Carbon dioxide (CO2)	0	IFF does not sell CO2 gas.
Methane (CH4)	0	IFF does not sell CH4 gas.
Nitrous oxide (N2O)	0	IFF does not sell N2O gas.
Hydrofluorocarbons (HFC)	0	IFF does not sell HFC gas.
Perfluorocarbons (PFC)	0	IFF does not sell PFC gas.
Sulphur hexafluoride (SF6)	0	IFF does not sell SF6 gas.
Nitrogen trifluoride (NF3)	0	IFF does not sell NF3 gas.

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	7588	Decreased	3.3	This figure represents the decrease in emissions from 2016 to 2017 that can be attributed to our increase in renewable energy consumption. In 2017, 7,588 CO2e were reduced from renewable energy projects, and the total S1 and S2 market-based emissions for 2016 totaled 230,052 t CO2e. The percentage change in emissions due to emission reduction activities: $(7588/230,052)*100 = 3.3\%$. IFF has made and will continue to make capital and operational investments to mitigate costs and reduce GHG emissions, such as building energy efficiency projects, boiler upgrades, and improved energy management plans at several of our sites.
Other emissions reduction activities	6054	Decreased	2.6	This figure represents the decrease in emissions from 2016 to 2017 that can be attributed to our Scope 1 and Scope 2 market-based emissions reductions activities as highlighted in CC4.3a and b. In 2017, 6,054 t CO2e were reduced from our emissions reductions projects, and the total S1 and S2 market-based emissions for 2016 totaled 230,052 t CO2e. The percentage change in emissions due to emission reduction activities: $(6,054 / 230,052)*100 = 2.6\%$. IFF has made and will continue to make capital and operational investments to mitigate costs and reduce GHG emissions, such as building energy efficiency projects, boiler upgrades, and improved energy management plans at several of our sites. IFF has made and will continue to make capital and operational investments to mitigate costs and reduce GHG emissions, such as building energy efficiency projects, boiler upgrades, and improved energy management plans at several of our sites.
Divestment	0	No change		
Acquisitions	0	No change		
Mergers	0	No change		
Change in output	16168	Increased	5.3	This represents the increase in production from 2016 to 2017 from 303,278 to 319,446 metric tons. In 2017, this increase in production resulted in an additional 16,168 t CO2e, and the total S1 and S2 market-based emissions for 2016 totaled 230,052 t CO2e. The percentage change in emissions due to change in output: $(16,168 / 230,052)*100 = 5.3\%$.
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

C7.9b

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

Market-based

C8. Energy

C8.1

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

More than 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 undertakes this energy-related activity
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 MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	535939	535939
Consumption of purchased or acquired electricity	<Not Applicable>	65811	142899	208710
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	52515	52515
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	5296	<Not Applicable>	5296
Total energy consumption	<Not Applicable>	71107	731353	802460

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)	HHV (higher heating value)	535939
Consumption of purchased or acquired electricity	<Not Applicable>	208710
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	52515
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	5296
Total energy consumption	<Not Applicable>	802460

C8.2b

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

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

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

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

393278

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

361294

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

31984

Fuels (excluding feedstocks)

Fuel Oil Number 2

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

3975

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

3975

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

13349

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

13349

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Fuels (excluding feedstocks)

Other, please specify (Process Derived)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

119738

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

119738

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Fuels (excluding feedstocks)

Motor Gasoline

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

2910

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

2910

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

2689

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

2689

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

0

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Diesel

Emission factor

0.25381

Unit

metric tons CO2e per MWh

Emission factor source

U.S. EPA Center for Corporate Climate Leadership. Center for Corporate Climate Leadership GHG Emission Factors Hub. November 2015, v2.

Comment

Factor is weighted average of different vehicle types incorporating assumptions of 5 miles per gallon for fork-lifts, 10 mpg for heavy duty vehicles and medium trucks, and 15 mpg for light trucks

Fuel Oil Number 2

Emission factor

0.25886

Unit

metric tons CO2e per MWh

Emission factor source

U.S. EPA Center for Corporate Climate Leadership. Center for Corporate Climate Leadership GHG Emission Factors Hub. November 2015, v2. Table 1.

Comment

Liquefied Petroleum Gas (LPG)

Emission factor

0.21141

Unit

metric tons CO2e per MWh

Emission factor source

U.S. EPA Center for Corporate Climate Leadership. Center for Corporate Climate Leadership GHG Emission Factors Hub. November 2015, v2. Table 1.

Comment

Motor Gasoline

Emission factor

0.23967

Unit

metric tons CO2e per MWh

Emission factor source

U.S. EPA Center for Corporate Climate Leadership. Center for Corporate Climate Leadership GHG Emission Factors Hub. November 2015, v2. Tables 2 and 3.

Comment

CH4 and N2O components of factor assume gasoline passenger cars from 2009-present achieving 25 miles per gallon.

Natural Gas

Emission factor

0.1808

Unit

metric tons CO2e per MWh

Emission factor source

U.S. EPA Center for Corporate Climate Leadership. Center for Corporate Climate Leadership GHG Emission Factors Hub. November 2015, v2. Table 1.

Comment

Other

Emission factor

0.3112

Unit

metric tons CO2e per MWh

Emission factor source

Calculated based on mass balance and chemical composition of process derived fuels at each of the sites using process derived energy.

Comment

Process Derived Fuels

C8.2e

(C8.2e) 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	5296	5296	5296	5296
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C-CH8.2e

(C-CH8.2e) 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	5296	5296
Heat	0	0
Steam	0	0
Cooling	0	0

C8.2f

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

Basis for applying a low-carbon emission factor

Energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Wind

MWh consumed associated with low-carbon electricity, heat, steam or cooling

11107

Emission factor (in units of metric tons CO2e per MWh)

0

Comment

At our Hazlet and Ottens sites in the US, we are supplied with 100% renewable green power through the purchase of Renewable Energy Credits.

Basis for applying a low-carbon emission factor

Energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Solar PV

MWh consumed associated with low-carbon electricity, heat, steam or cooling

15250

Emission factor (in units of metric tons CO2e per MWh)

0

Comment

At our Jacksonville site in the US, we are supplied with renewable green power through the purchase of Renewable Energy Credits.

Basis for applying a low-carbon emission factor

Energy attribute certificates, Guarantees of Origin

Low-carbon technology type

Wind

MWh consumed associated with low-carbon electricity, heat, steam or cooling

13056

Emission factor (in units of metric tons CO2e per MWh)

0

Comment

At our Tilburg and Hilversum sites in the Netherlands, we are supplied with 100% renewable green power through the purchase of Guarantees of Origin.

Basis for applying a low-carbon emission factor

Energy attribute certificates, Guarantees of Origin

Low-carbon technology type

Wind

MWh consumed associated with low-carbon electricity, heat, steam or cooling

26398

Emission factor (in units of metric tons CO2e per MWh)

0

Comment

At our Benicarlo site in Spain, we are supplied with 100% renewable green power through the purchase of Guarantees of Origin

Basis for applying a low-carbon emission factor

Power Purchase Agreement (PPA) without energy attribute certificates

Low-carbon technology type

Wind

MWh consumed associated with low-carbon electricity, heat, steam or cooling

5296

Emission factor (in units of metric tons CO2e per MWh)

0

Comment

Our Tilburg site in the Netherlands is partially supplied with renewable electricity via an onsite windmill. Direct procurement contract with a grid-connected generator or Power Purchase Agreement (PPA), where electricity attribute certificates do not exist or are not required for a usage claim.

C-CH8.3

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

Feedstocks

Solid biomass

Total consumption

76000

Total consumption unit

metric tons

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

0

Heating value of feedstock, MWh per consumption unit

5.65

Heating value

HHV

Comment

This includes all plant-based feedstocks used in our manufacturing.

C-CH8.3a

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

	Percentage of total chemical feedstock (%)
Oil	0
Natural Gas	0
Coal	0
Biomass	39
Waste	0
Fossil fuel (where coal, gas, oil cannot be distinguished)	61
Unknown source or unable to disaggregate	0

C9. Additional metrics

C9.1

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

C-CH9.3a

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

Output product

Specialty chemicals

Production (metric tons)

300000

Capacity (metric tons)

300000

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

0.357

Electricity intensity (MWh per metric ton of product)

0.669

Steam intensity (MWh per metric ton of product)

0.164

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

0

Comment

This intensity metric is tracked at a site-level and aggregated for a corporate total. The intensity value is tracked annually and part of our emissions and energy reduction targets. This intensity covers all products and reflects energy and emissions reduction efforts.

C-CH9.6

(C-CH9.6) Disclose your organization's low-carbon investments for chemical production activities.

Investment start date

January 1 2017

Investment end date

December 31 2017

Investment area

Products

Technology area

Other, please specify (Renewable Energy: Wind)

Investment maturity

Large scale commercial deployment

Investment figure

0

Low-carbon investment percentage

81 - 100%

Please explain

Several of our facilities use renewable electricity (wind) for production: Benicarolo, Hazlet, Jacksonville, Tilburg. The renewable energy is acquired through RECs and GoOs. All of the products made at these facilities are considered low-carbon products and contribute to the transition to a low carbon economy.

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 and/or Scope 2 emissions and attach the relevant statements.

Scope

Scope 1

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

ERM CVS 2017 CDP Assurance Statement IFF_FINAL31Jul2018.pdf

Page/ section reference

1

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope

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

ERM CVS 2017 CDP Assurance Statement IFF_FINAL31Jul2018.pdf

Page/ section reference

1

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope

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

ERM CVS 2017 CDP Assurance Statement IFF_FINAL31Jul2018.pdf

Page/ section reference

1

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1b

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

Scope

Scope 3- at least one applicable category

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Attach the statement

ERM CVS 2017 CDP Assurance Statement IFF_FINAL31Jul2018.pdf

Page/section reference

1

Relevant standard

ISAE3000

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
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	ISAE3000	IFF verifies its emissions data annually for year on year change in emissions (both scope 1 and scope 2). This is an organization wide verification and is part of our sustainability reporting process. The verification also helps IFF monitor and report on progress towards our SBTi approved emissions reduction target.

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)?

No, and we do not anticipate being regulated in the next three years

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

- Drive energy efficiency
- Drive low-carbon investment
- Identify and seize low-carbon opportunities

GHG Scope

- Scope 1
- Scope 2

Application

IFF has a formalized capital project approval process to promote energy efficiency projects and low-carbon solutions. If a project can claim environmental benefits in terms of energy, water, and hazardous waste, this is taken into consideration along with traditional ROI calculations. By integrating sustainability criteria into project evaluation frameworks, we can show additional environmental value from investments which are then taken into consideration for internal hurdle rates. This process helps us to value and implement carbon-reducing solutions. This process is applied at the corporate level and is applicable to all regions and business units. Based on 2017 projects, we calculated that the shadow price was equivalent to approximately \$30 per metric ton of CO₂e. We will explore framing this internally as an "internal carbon price" going forward, including applying the ICP to the ROI for each project.

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

30

Variance of price(s) used

Uniform pricing that is applied throughout the company independent of geography, business unit, or type of decision. It will be updated annually as proposed projects will change each year.

Type of internal carbon price

Shadow price

Impact & implication

The carbon price will help IFF transition to low-carbon economy by emphasizing the need for a proper carbon management strategy. We expect it to help drive energy efficiency, drive low-carbon investment, and identify and seize low-carbon opportunities. Using the shadow carbon price, IFF approved 7 additional projects in 2017 to save an additional 2,911 metric tons of CO₂e per year.

C12. Engagement

C12.1

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

- Yes, our suppliers
- Yes, our customers

C12.1a

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

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

% of suppliers by number

1.2

% total procurement spend (direct and indirect)

48

% Scope 3 emissions as reported in C6.5

60

Rationale for the coverage of your engagement

Our supplier engagement strategy is based around the Scope 3 component of our SBTi-approved science-based target, which committed to working with our suppliers (representing 70% of its supply chain emissions) so that they set their own science-based reduction targets and report annual emissions by 2025. The coverage of this target prioritizes IFF's engagement not on a vaguely defined list of "key suppliers" but rather on the absolute emissions of all suppliers, which will maximize the science-based target's impact. The target's requirement of suppliers to report emission reduction progress will not only encourage progress on GHG emissions management but also allow measurement of absolute emissions reductions.

Impact of engagement, including measures of success

IFF's science-based target was recently approved by SBTi. As we move toward our target, the impact of engagement will include supplier GHG emissions reductions and/or improved climate change strategies including target setting. Based on an estimated average absolute emissions reduction of 15% per supplier involved in achieving the goal, we anticipate the absolute emissions impact will be 100,000 tCO₂e per year (a 10.5% reduction in IFF's total scope 3 emissions). Success will be measured by percent of suppliers engaged, with a target to have 70% of supply chain emissions set their own science-based reduction targets and report annual emissions by 2025.

Comment

Our engagement of suppliers for our approved science-based target will primarily be through CDP Supply Chain.

C12.1b

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

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to education customers about your climate change performance and strategy

Size of engagement

25

% Scope 3 emissions as reported in C6.5

1

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

The sustainability of our customers, their brands and their products is key to our strategy. Our customers are increasingly challenged to find sustainable, reliable sources of ingredients to make products consumers have come to expect or demand. With so many pressing needs, we prioritize and adopt only those initiatives that are right for us, our customers and our communities. We engage with our customers both proactively and on an as needed basis. The measure of success is the customer scorecard. For instance, during 2017, twelve of our major customers, representing approximately 25% of our business, requested we respond to the CDP supply chain questionnaire. Our rationale for the scope of this engagement is that focusing on our largest customers provides the largest opportunity for impact and engaging through CDP Supply Chain is an established mechanism for education and information sharing.

Impact of engagement, including measures of success

IFF engages its customers through CDP supply chain, which is included on customers' scorecards evaluating IFF's sustainability strategy and performance. The impact of engagement via CDP supply chain could include customers reducing use-phase GHG

emissions, increasing renewable energy procurement, or selecting our low carbon products because of the focus on these in our disclosure process. We conduct customer-specific monitoring to measure success, which we measure by monitoring our rating in performance scorecards of our customers and our presence on their core lists. Our CDP Climate Change score is often factored into these scorecards. Some customers specifically use CDP as a grade for an annual supplier performance evaluation and use this information to help generate their core lists, where not being included can significantly reduce the number of future projects and sales. A positive score on customer scorecards and our inclusion on their core lists are our key measures of success. In 2017, all performance ratings received were positive (100% satisfied customers among those providing performance ratings).

Type of engagement

Collaboration & innovation

Details of engagement

Run a campaign to encourage innovation to reduce climate change impacts

Size of engagement

25

% Scope 3 emissions as reported in C6.5

1

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

The sustainability of our customers, their brands and their products is key to our strategy. Our customers are increasingly challenged to find sustainable, reliable sources of ingredients to make products consumers have come to expect or demand. With so many pressing needs, we prioritize and adopt only those initiatives that are right for us, our customers and our communities. We engage with our customers both proactively and on an as needed basis. The measure of success is the customer scorecard. For instance, during 2017, twelve of our major customers, representing approximately 25% of our business, requested we respond to the CDP supply chain questionnaire. Our rationale for the scope of this engagement is that focusing on our largest customers provides the largest opportunity for impact and engaging through CDP Supply Chain is an established mechanism for education and information sharing.

Impact of engagement, including measures of success

IFF engages its customers through CDP supply chain, which is included on customers' scorecards evaluating IFF's sustainability strategy and performance. The impact of engagement via CDP supply chain could include customers reducing use-phase GHG emissions, increasing renewable energy procurement, or selecting our low carbon products because of the focus on these in our disclosure process. We conduct customer-specific monitoring to measure success, which we measure by monitoring our rating in performance scorecards of our customers and our presence on their core lists. Our CDP Climate Change score is often factored into these scorecards. Some customers specifically use CDP as a grade for an annual supplier performance evaluation and use this information to help generate their core lists, where not being included can significantly reduce the number of future projects and sales. A positive score on customer scorecards and our inclusion on their core lists are our key measures of success. In 2017, all performance ratings received were positive (100% satisfied customers among those providing performance ratings).

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

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

International Fragrance Association (IFRA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The fragrance industry's creativity is built on a sound understanding of human behavior and attitudes. In common purpose with its customers and consumers the industry seeks to be at the forefront of what is environmentally sound, socially acceptable and economically viable, including climate change. Through initiatives in energy and water conservation, emission and waste reduction and education and community relations projects it continues to invest in improving the sustainability of its harvest of raw materials, its processing of essential oils and its manufacture of fragrance blends.

How have you, or are you attempting to, influence the position?

IFF is on the board of and supports IFRA's sustainability policies. International Fragrance Association (IFRA) works closely with the Research Institute for Fragrance Materials (RIFM) to develop standards on fragrance material usage. In 2011, IFF partnered with the Research Institute for Fragrance Materials (RIFM) to develop a lifecycle assessment methodology for measuring and communicating product sustainability.

Trade association

Natural Resources Stewardship Circle (NRSC)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The NRSC works to promote the responsible and ethical management of natural resources used in the beauty, cosmetics, fragrance, and flavor industries. NRSC members have pledged their personal commitment to creating a positive impact on the sourcing of natural ingredients.

How have you, or are you attempting to, influence the position?

IFF also serves on the board of the Natural Resources Stewardship Circle, where it supports the NRSC's sustainability initiatives, such as the vetiver root oil project in Haiti. IFF is working with the NRSC and other members to preserve the biodiversity of the vetiver supply chain and to develop cooperative, sustainable fair-trade projects with the local communities and farmers who grow this crop. Vetiver farmers in Haiti are encouraged through the program to take necessary steps to fight erosion to ensure soil fertility is preserved by implementing erosion control structures or by using sustainable harvesting techniques.

Trade association

WBCSD

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The WBCSD is a CEO-led organization of forward-thinking companies that galvanizes the global business community to create a sustainable future for business, society and the environment.

How have you, or are you attempting to, influence the position?

Our Chairman and CEO was elected to the Executive Committee of the World Business Council for Sustainable Development (WBCSD). This is an opportunity to work with influential leaders to make positive, lasting changes in society. IFF's participation in this organization is another way we can help leave the world a better place for generations to come.

C12.3e

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

IFF recently became a member of the World Business Council for Sustainable Development (WBCSD), which is a CEO-led organization of companies that galvanize the global business community to create a sustainable future for business, society, and the environment; a triple bottom approach that aligns with IFF's sustainability strategy. We specifically engaged as both a company and individual. Our Vice President of Global Sustainability is the liaison delegate to our CEO within the organization. He personally attends and participates in climate change workgroups on both policy and climate mitigation measures. We participate in and advocate the low carbon technologies partnership initiative of the WBCSD and support their position on COP 21 as well as the position of the CDP on the Road to Paris.

IFF also serves on the board of the Natural Resources Stewardship Circle, which is a non-profit organization that works to promote the responsible and ethical management of natural resources used in the beauty, cosmetics, fragrance, and flavor industries. NRSC members have pledged their personal commitment to creating a positive impact on the sourcing of natural ingredients. For example, vetiver farmers in Haiti are encouraged through the program to take necessary steps to fight erosion to ensure soil fertility is preserved by implementing erosion control structures or by using sustainable harvesting techniques.

IFF is a founding member of the International Fragrance Association (IFRA), the official representative body of the fragrances industry worldwide, with the main purpose of ensuring the safety of fragrance materials. IFF participated in an IFRA working group to develop sector-specific approach to GHG emissions calculation for the fragrances and flavors industry.

IFF has a long association with the Research Institute for Fragrance Materials and partnered with them to conduct a life-cycle analysis of popular fragrance materials to determine their overall sustainability. RIFM's purpose is to gather and analyze scientific data, engage in testing and evaluation, distribute information, cooperate with official agencies and to encourage uniform safety standards related to the use of fragrance ingredients. The RIFM Database of flavor and fragrance materials is the largest available worldwide, classifying more than 5000 materials. The database is available online, 24/7, by subscription. RIFM's Database also houses an online collection of Flavor/Fragrance Ingredient Data Sheets (FFIDS) from 1985-present. FFIDSs are issued to assist with compliance for U.S. OSHA's Hazard Communication Standards and the European Commission's Dangerous Substances Directives.

IFF is also a member of the American Cleaning Institute (ACI), the Home of the U.S. Cleaning Products Industry™, representing producers of household, industrial, and institutional cleaning products, their ingredients and finished packaging; oleochemical producers; and chemical distributors to the cleaning product industry. IFF annually participates in the ACI's Sustainability Metrics Program. IFF also joined the ACI's Charter for Sustainable Cleaning, a voluntary lifecycle-based framework that promotes a common industry approach to sharing and reporting best practices for sustainability. Companies participating in the Charter demonstrate their commitment to continuous improvement of key aspects of sustainability across all stages of the cleaning product supply chain.

IFF is a member of the International Organization of the Flavor Industry (IOFI), which is a non-profit organization that represents the interest of the global flavor industry and its partners by providing leadership in safety, scientific and regulatory matters. One of IOFI's key objectives is "Organizational Sustainability and Growth: Increase IOFI's global representation and, in partnership with member associations, prepare the association for future challenges with adequate resources and reserves."

IFF is also a member of the Flavor and Extract Manufacturers Association (FEMA), the oldest and largest national association of the flavor industry and is engaged principally in activities which ensure a substantial supply of safe flavor materials.

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?

By supporting the works of external entities, such as industry associations and other organizations, we are able to monitor current and/or pending climate change legislation that may impact our business globally. IFF's Vice President of Global Sustainability along with the Sustainability Business Council, which is comprised of cross-functional business leaders, review all policies related to climate change to provide consistent alignment with our sustainability and business strategies.

Our process for ensuring engagement is consistent across different geographies and markets starts with the Sustainability Business Council. In addition to reviewing policies with the VP of Global Sustainability to ensure alignment with our sustainability principles and business objectives, members of this council are also frequently our representatives on or liaisons with trade organizations. They engage policymakers directly at a high level and relay information back to the VP of Global Sustainability to ensure consistency.

At the local level, Green Team core members interact with local officials to comply with regulatory frameworks and leverage ISO 14001 to help foster a working relationship with regulators to ensure they are updated with changing legislation. ISO 14001 is recertified every 3 years. The Green Team members report back to the Eco-Effectiveness Leadership Team, who report to the VP of Global Sustainability to maintain consistency and alignment with corporate policy engagement and 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

Status

Complete

Attach the document

IFF Annual Report 2017.pdf

Content elements

Governance

Strategy

Risks & opportunities

Publication

In voluntary sustainability report

Status

Complete

Attach the document

FINAL 2017 IFF Sustainability Report.pdf

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

C14. 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.

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Executive VP and Chief Financial Officer	Chief Financial Officer (CFO)

SC. Supply chain module

SC0.0

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

SC0.1

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

	Annual Revenue
Row 1	3398719000

SC0.2

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

No

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

Abbott Laboratories

Scope of emissions

Scope 1

Emissions in metric tonnes of CO₂e

134

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 1 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Abbott Laboratories

Scope of emissions

Scope 2

Emissions in metric tonnes of CO₂e

109

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 2 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going

forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Abbott Laboratories

Scope of emissions

Scope 3

Emissions in metric tonnes of CO₂e

1305

Uncertainty (±%)

5

Major sources of emissions

GHG emissions for scope 3 include upstream emissions from purchased goods and services, capital goods, purchased fuels and electricity, transmission and distribution losses of purchased electricity and steam, transportation and distribution, as well as from business travel and the waste generated within our operations. IFF obtained verification for absolute Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Ambev S.A

Scope of emissions

Scope 1

Emissions in metric tonnes of CO₂e

436

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 1 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Ambev S.A

Scope of emissions

Scope 2

Emissions in metric tonnes of CO2e

354

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 2 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were

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Requesting member

Ambev S.A

Scope of emissions

Scope 3

Emissions in metric tonnes of CO₂e

4240

Uncertainty (±%)

5

Major sources of emissions

GHG emissions for scope 3 include upstream emissions from purchased goods and services, capital goods, purchased fuels and electricity, transmission and distribution losses of purchased electricity and steam, transportation and distribution, as well as from business travel and the waste generated within our operations. IFF obtained verification for absolute Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Colgate Palmolive Company

Scope of emissions

Scope 1

Emissions in metric tonnes of CO₂e

3151

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 1 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Colgate Palmolive Company

Scope of emissions

Scope 2

Emissions in metric tonnes of CO₂e

2562

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 2 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Colgate Palmolive Company

Scope of emissions

Scope 3

Emissions in metric tonnes of CO₂e

30656

Uncertainty (±%)

5

Major sources of emissions

GHG emissions for scope 3 include upstream emissions from purchased goods and services, capital goods, purchased fuels and electricity, transmission and distribution losses of purchased electricity and steam, transportation and distribution, as well as from business travel and the waste generated within our operations. IFF obtained verification for absolute Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines

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Requesting member

Diageo Plc

Scope of emissions

Scope 1

Emissions in metric tonnes of CO₂e

436

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 1 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Diageo Plc

Scope of emissions

Scope 2

Emissions in metric tonnes of CO₂e

354

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process

operations and cleaning. IFF obtained verification for absolute global Scope 2 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Diageo Plc

Scope of emissions

Scope 3

Emissions in metric tonnes of CO2e

4240

Uncertainty (±%)

5

Major sources of emissions

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going

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Requesting member

KAO Corporation

Scope of emissions

Scope 1

Emissions in metric tonnes of CO2e

570

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 1 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

KAO Corporation

Scope of emissions

Scope 2

Emissions in metric tonnes of CO2e

463

Uncertainty (±%)

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 2 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

KAO Corporation

Scope of emissions

Scope 3

Emissions in metric tonnes of CO₂e

5544

Uncertainty (±%)

5

Major sources of emissions

GHG emissions for scope 3 include upstream emissions from purchased goods and services, capital goods, purchased fuels and electricity, transmission and distribution losses of purchased electricity and steam, transportation and distribution, as well as from business travel and the waste generated within our operations. IFF obtained verification for absolute Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been

externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Kellogg Company

Scope of emissions

Scope 1

Emissions in metric tonnes of CO₂e

603

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 1 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Kellogg Company

Scope of emissions

Scope 2

Emissions in metric tonnes of CO₂e

491

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 2 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Kellogg Company

Scope of emissions

Scope 3

Emissions in metric tonnes of CO₂e

5870

Uncertainty (±%)

5

Major sources of emissions

GHG emissions for scope 3 include upstream emissions from purchased goods and services, capital goods, purchased fuels and electricity, transmission and distribution losses of purchased electricity and steam, transportation and distribution, as well as from business travel and the waste generated within our operations. IFF obtained verification for absolute Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

L'Oréal

Scope of emissions

Scope 1

Emissions in metric tonnes of CO₂e

2112

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 1 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our

facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

L'Oréal

Scope of emissions

Scope 2

Emissions in metric tonnes of CO₂e

1717

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 2 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

L'Oréal

Scope of emissions

Scope 3

Emissions in metric tonnes of CO₂e

20546

Uncertainty (±%)

5

Major sources of emissions

GHG emissions for scope 3 include upstream emissions from purchased goods and services, capital goods, purchased fuels and electricity, transmission and distribution losses of purchased electricity and steam, transportation and distribution, as well as from business travel and the waste generated within our operations. IFF obtained verification for absolute Scope 3, Fuel- and energy-

related activities (not included in Scopes 1 or 2) GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

PepsiCo, Inc.

Scope of emissions

Scope 1

Emissions in metric tonnes of CO2e

6638

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 1 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and

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Requesting member

PepsiCo, Inc.

Scope of emissions

Scope 2

Emissions in metric tonnes of CO₂e

5397

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 2 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

PepsiCo, Inc.

Scope of emissions

Scope 3

Emissions in metric tonnes of CO₂e

64574

Uncertainty (±%)

5

Major sources of emissions

GHG emissions for scope 3 include upstream emissions from purchased goods and services, capital goods, purchased fuels and electricity, transmission and distribution losses of purchased electricity and steam, transportation and distribution, as well as from business travel and the waste generated within our operations. IFF obtained verification for absolute Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

S.C. Johnson & Son, Inc.

Scope of emissions

Scope 1

Emissions in metric tonnes of CO₂e

235

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 1 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions.

Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

S.C. Johnson & Son, Inc.

Scope of emissions

Scope 2

Emissions in metric tonnes of CO2e

191

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 2 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Scope of emissions

Scope 3

Emissions in metric tonnes of CO₂e

2283

Uncertainty (±%)

5

Major sources of emissions

GHG emissions for scope 3 include upstream emissions from purchased goods and services, capital goods, purchased fuels and electricity, transmission and distribution losses of purchased electricity and steam, transportation and distribution, as well as from business travel and the waste generated within our operations. IFF obtained verification for absolute Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Unilever plc

Scope of emissions

Scope 1

Emissions in metric tonnes of CO₂e

12036

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 1 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Unilever plc

Scope of emissions

Scope 2

Emissions in metric tonnes of CO2e

9785

Uncertainty (±%)

5

Major sources of emissions

IFF operations use energy for heating and cooling of buildings, lighting, refrigeration, generating hot water and steam, process operations and cleaning. IFF obtained verification for absolute global Scope 2 GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our

facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

Requesting member

Unilever plc

Scope of emissions

Scope 3

Emissions in metric tonnes of CO₂e

11701

Uncertainty (±%)

5

Major sources of emissions

GHG emissions for scope 3 include upstream emissions from purchased goods and services, capital goods, purchased fuels and electricity, transmission and distribution losses of purchased electricity and steam, transportation and distribution, as well as from business travel and the waste generated within our operations. IFF obtained verification for absolute Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) GHG emissions.

Verified

No

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

Energy sources were identified according to the global infrastructure and operational systems. Natural gas, purchased electricity, process derived fuels, and purchased steam accounted for more than 90% of our global energy consumption in 2017. These are the main energy sources we use to heat and cool our buildings, to generate hot water and steam; and for refrigeration, process operations and cleaning. Data is collected globally via an internet based system for capturing and calculating GHG emissions. Uncertainty could be due to human error, unit conversions, and estimation methodology. Our Scope 1, 2 and 3 data have been externally verified by the ERM CVS. Our Scope 3, Fuel- and energy-related activities (not included in Scopes 1 or 2) were calculated based on 100% primary data. The quantity of energy consumed for each energy type, such as electricity or natural gas, is used as activity data to calculate emissions. Consumption by fuel type is multiplied by emission factors for each of the three activities included in this category. Emission factors for upstream emissions of purchased fuels are based on life-cycle analysis software. Emission factors for upstream emissions of purchased electricity are based on life-cycle analysis software for the US, and on UK Defra 2013 Guidelines for other countries. Emission factors for T&D losses are based on EPA's eGRID database for the US, and on UK Defra 2013 Guidelines for other countries. GWPs are IPCC Second Assessment Report (SAR - 100 year). Going forward we will be evaluating data collection methods for other categories of Scope 3 emissions. For emissions from purchased goods and services and capital goods, corporate-wide global expense data was obtained from finance. The spend was mapped to corresponding industry sectors and then multiplied by cradle-to-gate emission factors by sector from UK Defra's "2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting", Annex 13. Upstream transportation and distribution includes emissions associated with inbound shipments to our facilities, shipments between our facilities, and outbound shipments from our facilities that we pay for. Emissions generated by waste was calculated from the landfilling of hazardous waste generated from IFF's total global production. It is assumed that 20% of the waste is landfilled, while the other 80% is incinerated. For emissions from business travel, travel data is provided by our travel agency and includes global air and rail travel by cabin class and distance threshold for each trip. All scope 3 emissions were calculated based on 100% primary data.

SC1.2

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

Total Global Emissions are calculated using the Greenhouse Gas Protocol. Customer emissions are allocated based on the market value of products purchased.

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	Given IFF's global footprint, multitude of suppliers, and broad range of natural and synthetic raw materials that are sourced from around the world, providing GHG emissions data per finished product is a complex process. That said, we have allocated our global GHG emissions data to our customers according to volume of products purchased and developed models to estimate GHG emissions on a per category and per product basis. This year we also gained better insight into our Scope 3 emissions and can estimate emissions throughout the product life cycle. We have insight from our library of lifecycle assessments of fragrance and flavor ingredients and partnered with industry and LCA experts on product specific initiatives. Note that the conclusion from our lifecycle assessments is that our product manufacturing processes produced the fewest carbon emissions compared with raw materials and transport, which contributed the highest percentage emissions.

SC1.4

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

Yes

SC1.4a

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

We have made great advancements over the past few years regarding product specific data, and would be happy to share and partner with you our customers to enhance our mutual understanding and reduce of GHG emissions throughout the product life cycle. We welcome the opportunity to partner with our customers and share product level data throughout the lifecycle, as indicated in SM 4.

SC2.1

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

Requesting member

Abbott Laboratories

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Emissions targeted

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

Estimated timeframe for carbon reductions to be realized

1-3 years

Estimated lifetime CO2e savings

Estimated payback

Cost/saving neutral

Details of proposal

IFF is a leader in circular design and renewable energy. We have the largest solar field and the first and only Wind Turbine in our industry. We also have an in-depth view of our own footprint as well as the value chain. From renewable and Natural feedstocks to carbon reducing products, we can partner to help you to achieve your goals. Some opportunities that we presented this year for collaboration on climate change include products manufactured with 100 % renewable electricity, partnering on local renewable energy projects, fully traceable and For Life certified Naturals and Renewable and / or Cradle to Cradle certified fragrances. We welcome the opportunity to partner with you on initiatives that will help to support and advance your sustainability goals. And we look forward to our continued partnership to promote more sustainable products throughout your supply chain. Please contact Kip.Cleverley@iff.com, VP Global Sustainability to advance these opportunities. For an in-depth overview of our capabilities see <http://www.iff.com/sustain>.

Requesting member

Ambev S.A

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Emissions targeted

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

Estimated timeframe for carbon reductions to be realized

1-3 years

Estimated lifetime CO2e savings

Estimated payback

Cost/saving neutral

Details of proposal

IFF is a leader in circular design and renewable energy. We have the largest solar field and the first and only Wind Turbine in our industry. We also have an in-depth view of our own footprint as well as the value chain. From renewable and Natural feedstocks to carbon reducing products, we can partner to help you to achieve your goals. Some opportunities that we presented this year for collaboration on climate change include products manufactured with 100 % renewable electricity, partnering on local renewable energy projects, fully traceable and For Life certified Naturals and Renewable and / or Cradle to Cradle certified fragrances. We welcome the opportunity to partner with you on initiatives that will help to support and advance your sustainability goals. And we look forward to our continued partnership to promote more sustainable products throughout your supply chain. Please contact Kip.Cleverley@iff.com, VP Global Sustainability to advance these opportunities. For an in-depth overview of our capabilities see <http://www.iff.com/sustain>.

Requesting member

Colgate Palmolive Company

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Emissions targeted

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

Estimated timeframe for carbon reductions to be realized

1-3 years

Estimated lifetime CO2e savings

Estimated payback

Cost/saving neutral

Details of proposal

IFF is a leader in circular design and renewable energy. We have the largest solar field and the first and only Wind Turbine in our industry. We also have an in-depth view of our own footprint as well as the value chain. From renewable and Natural feedstocks to carbon reducing products, we can partner to help you to achieve your goals. Some opportunities that we presented this year for collaboration on climate change include products manufactured with 100 % renewable electricity, partnering on local renewable energy projects, fully traceable and For Life certified Naturals and Renewable and / or Cradle to Cradle certified fragrances. We

welcome the opportunity to partner with you on initiatives that will help to support and advance your sustainability goals. And we look forward to our continued partnership to promote more sustainable products throughout your supply chain. Please contact Kip.Cleverley@iff.com, VP Global Sustainability to advance these opportunities. For an in-depth overview of our capabilities see <http://www.iff.com/sustain>.

Requesting member

Diageo Plc

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Emissions targeted

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

Estimated timeframe for carbon reductions to be realized

1-3 years

Estimated lifetime CO2e savings

Estimated payback

Cost/saving neutral

Details of proposal

IFF is a leader in circular design and renewable energy. We have the largest solar field and the first and only Wind Turbine in our industry. We also have an in-depth view of our own footprint as well as the value chain. From renewable and Natural feedstocks to carbon reducing products, we can partner to help you to achieve your goals. Some opportunities that we presented this year for collaboration on climate change include products manufactured with 100 % renewable electricity, partnering on local renewable energy projects, fully traceable and For Life certified Naturals and Renewable and / or Cradle to Cradle certified fragrances. We welcome the opportunity to partner with you on initiatives that will help to support and advance your sustainability goals. And we look forward to our continued partnership to promote more sustainable products throughout your supply chain. Please contact Kip.Cleverley@iff.com, VP Global Sustainability to advance these opportunities. For an in-depth overview of our capabilities see <http://www.iff.com/sustain>.

Requesting member

KAO Corporation

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Emissions targeted

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

Estimated timeframe for carbon reductions to be realized

1-3 years

Estimated lifetime CO2e savings

Estimated payback

Cost/saving neutral

Details of proposal

IFF is a leader in circular design and renewable energy. We have the largest solar field and the first and only Wind Turbine in our industry. We also have an in-depth view of our own footprint as well as the value chain. From renewable and Natural feedstocks to carbon reducing products, we can partner to help you to achieve your goals. Some opportunities that we presented this year for collaboration on climate change include products manufactured with 100 % renewable electricity, partnering on local renewable energy projects, fully traceable and For Life certified Naturals and Renewable and / or Cradle to Cradle certified fragrances. We welcome the opportunity to partner with you on initiatives that will help to support and advance your sustainability goals. And we look forward to our continued partnership to promote more sustainable products throughout your supply chain. Please contact Kip.Cleverley@iff.com, VP Global Sustainability to advance these opportunities. For an in-depth overview of our capabilities see <http://www.iff.com/sustain>.

Requesting member

Kellogg Company

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Emissions targeted

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

Estimated timeframe for carbon reductions to be realized

1-3 years

Estimated lifetime CO2e savings**Estimated payback**

Cost/saving neutral

Details of proposal

IFF is a leader in circular design and renewable energy. We have the largest solar field and the first and only Wind Turbine in our industry. We also have an in-depth view of our own footprint as well as the value chain. From renewable and Natural feedstocks to carbon reducing products, we can partner to help you to achieve your goals. Some opportunities that we presented this year for collaboration on climate change include products manufactured with 100 % renewable electricity, partnering on local renewable energy projects, fully traceable and For Life certified Naturals and Renewable and / or Cradle to Cradle certified fragrances. We welcome the opportunity to partner with you on initiatives that will help to support and advance your sustainability goals. And we look forward to our continued partnership to promote more sustainable products throughout your supply chain. Please contact Kip.Cleverley@iff.com, VP Global Sustainability to advance these opportunities. For an in-depth overview of our capabilities see <http://www.iff.com/sustain>.

Requesting member

L'Oréal

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Emissions targeted

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

Estimated timeframe for carbon reductions to be realized

1-3 years

Estimated lifetime CO2e savings**Estimated payback**

3-5 years

Details of proposal

IFF is a leader in circular design and renewable energy. We have the largest solar field and the first and only Wind Turbine in our industry. We also have an in-depth view of our own footprint as well as the value chain. From renewable and Natural feedstocks to carbon reducing products, we can partner to help you to achieve your goals. Some opportunities that we presented this year for collaboration on climate change include products manufactured with 100 % renewable electricity, partnering on local renewable energy projects, fully traceable and For Life certified Naturals and Renewable and / or Cradle to Cradle certified fragrances. We welcome the opportunity to partner with you on initiatives that will help to support and advance your sustainability goals. And we look forward to our continued partnership to promote more sustainable products throughout your supply chain. Please contact Kip.Cleverley@iff.com, VP Global Sustainability to advance these opportunities. For an in-depth overview of our capabilities see <http://www.iff.com/sustain>.

Requesting member

PepsiCo, Inc.

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Emissions targeted

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

Estimated timeframe for carbon reductions to be realized

1-3 years

Estimated lifetime CO2e savings**Estimated payback**

Cost/saving neutral

Details of proposal

IFF is a leader in circular design and renewable energy. We have the largest solar field and the first and only Wind Turbine in our industry. We also have an in-depth view of our own footprint as well as the value chain. From renewable and Natural feedstocks to carbon reducing products, we can partner to help you to achieve your goals. Some opportunities that we presented this year for collaboration on climate change include products manufactured with 100 % renewable electricity, partnering on local renewable energy projects, fully traceable and For Life certified Naturals and Renewable and / or Cradle to Cradle certified fragrances. We welcome the opportunity to partner with you on initiatives that will help to support and advance your sustainability goals. And we look forward to our continued partnership to promote more sustainable products throughout your supply chain. Please contact Kip.Cleverley@iff.com, VP Global Sustainability to advance these opportunities. For an in-depth overview of our capabilities see <http://www.iff.com/sustain>.

Requesting member

S.C. Johnson & Son, Inc.

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Emissions targeted

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

Estimated timeframe for carbon reductions to be realized

1-3 years

Estimated lifetime CO2e savings**Estimated payback**

Cost/saving neutral

Details of proposal

IFF is a leader in circular design and renewable energy. We have the largest solar field and the first and only Wind Turbine in our industry. We also have an in-depth view of our own footprint as well as the value chain. From renewable and Natural feedstocks to carbon reducing products, we can partner to help you to achieve your goals. Some opportunities that we presented this year for collaboration on climate change include products manufactured with 100 % renewable electricity, partnering on local renewable energy projects, fully traceable and For Life certified Naturals and Renewable and / or Cradle to Cradle certified fragrances. We welcome the opportunity to partner with you on initiatives that will help to support and advance your sustainability goals. And we look forward to our continued partnership to promote more sustainable products throughout your supply chain. Please contact Kip.Cleverley@iff.com, VP Global Sustainability to advance these opportunities. For an in-depth overview of our capabilities see <http://www.iff.com/sustain>.

Requesting member

Unilever plc

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Emissions targeted

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

Estimated timeframe for carbon reductions to be realized

1-3 years

Estimated lifetime CO2e savings**Estimated payback**

Cost/saving neutral

Details of proposal

IFF is a leader in circular design and renewable energy. We have the largest solar field and the first and only Wind Turbine in our industry. We also have an in-depth view of our own footprint as well as the value chain. From renewable and Natural feedstocks to carbon reducing products, we can partner to help you to achieve your goals. Some opportunities that we presented this year for collaboration on climate change include products manufactured with 100 % renewable electricity, partnering on local renewable energy projects, fully traceable and For Life certified Naturals and Renewable and / or Cradle to Cradle certified fragrances. We welcome the opportunity to partner with you on initiatives that will help to support and advance your sustainability goals. And we look forward to our continued partnership to promote more sustainable products throughout your supply chain. Please contact Kip.Cleverley@iff.com, VP Global Sustainability to advance these opportunities. For an in-depth overview of our capabilities see <http://www.iff.com/sustain>.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

Yes

SC2.2a

(SC2.2a) Specify the requesting member(s) that have driven organizational-level emissions reduction initiatives, and provide information on the initiatives.**Requesting member**

Abbott Laboratories

Initiative ID

2017-ID1

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Description of the reduction initiative

Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Abbott's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are working towards better understanding of specific product level emissions reductions and can now allocate a percentage of our overall emissions reductions to your supply chain.

Emissions reduction for the reporting year in metric tons of CO2e

16

Did you identify this opportunity as part of the CDP supply chain Action Exchange?

No

Would you be happy for CDP supply chain members to highlight this work in their external communication?

Yes

Requesting member

Ambev S.A

Initiative ID

2017-ID2

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Description of the reduction initiative

Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Ambev's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are working towards better understanding of specific product level emissions reductions and can now allocate a percentage of our overall emissions reductions to your supply chain.

Emissions reduction for the reporting year in metric tons of CO2e

52

Did you identify this opportunity as part of the CDP supply chain Action Exchange?

No

Would you be happy for CDP supply chain members to highlight this work in their external communication?

Yes

Requesting member

Colgate Palmolive Company

Initiative ID

2017-ID3

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Description of the reduction initiative

Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Colgate Palmolive's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are working towards better understanding of specific product level emissions reductions and can now allocate a percentage of our overall emissions reductions to your supply chain.

Emissions reduction for the reporting year in metric tons of CO2e

378

Did you identify this opportunity as part of the CDP supply chain Action Exchange?

No

Would you be happy for CDP supply chain members to highlight this work in their external communication?

Yes

Requesting member

Diageo Plc

Initiative ID

2017-ID4

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Description of the reduction initiative

Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Diageo's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are working towards better understanding of specific product level emissions reductions and can now allocate a percentage of our overall emissions reductions to your supply

chain.

Emissions reduction for the reporting year in metric tons of CO2e

52

Did you identify this opportunity as part of the CDP supply chain Action Exchange?

No

Would you be happy for CDP supply chain members to highlight this work in their external communication?

Yes

Requesting member

KAO Corporation

Initiative ID

2017-ID5

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Description of the reduction initiative

Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Kao's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are working towards better understanding of specific product level emissions reductions and can now allocate a percentage of our overall emissions reductions to your supply chain.

Emissions reduction for the reporting year in metric tons of CO2e

68

Did you identify this opportunity as part of the CDP supply chain Action Exchange?

No

Would you be happy for CDP supply chain members to highlight this work in their external communication?

Yes

Requesting member

Kellogg Company

Initiative ID

2017-ID6

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Description of the reduction initiative

Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Kellogg's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are working towards better understanding of specific product level emissions reductions and can now allocate a percentage of our overall emissions reductions to your supply chain.

Emissions reduction for the reporting year in metric tons of CO2e

72

Did you identify this opportunity as part of the CDP supply chain Action Exchange?

No

Would you be happy for CDP supply chain members to highlight this work in their external communication?

Yes

Requesting member

L'Oréal

Initiative ID

2017-ID7

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Description of the reduction initiative

Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of L'Oreals supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are working towards better understanding of specific product level emissions reductions and can now allocate a percentage of our overall emissions reductions to your supply chain.

Emissions reduction for the reporting year in metric tons of CO2e

253

Did you identify this opportunity as part of the CDP supply chain Action Exchange?

No

Would you be happy for CDP supply chain members to highlight this work in their external communication?

Yes

Requesting member

PepsiCo, Inc.

Initiative ID

2017-ID8

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Description of the reduction initiative

Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of PepsiCo's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are working towards better understanding of specific product level emissions reductions and can now allocate a percentage of our overall emissions reductions to your supply chain.

Emissions reduction for the reporting year in metric tons of CO2e

795

Did you identify this opportunity as part of the CDP supply chain Action Exchange?

No

Would you be happy for CDP supply chain members to highlight this work in their external communication?

Yes

Requesting member

S.C. Johnson & Son, Inc.

Initiative ID

2017-ID9

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Description of the reduction initiative

Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our

commitment to being a responsible member of S.C. Johnson & Son's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are working towards better understanding of specific product level emissions reductions and can now allocate a percentage of our overall emissions reductions to your supply chain.

Emissions reduction for the reporting year in metric tons of CO2e

28

Did you identify this opportunity as part of the CDP supply chain Action Exchange?

No

Would you be happy for CDP supply chain members to highlight this work in their external communication?

Yes

Requesting member

Unilever plc

Initiative ID

2017-ID10

Group type of project

Relationship sustainability assessment

Type of project

Aligning goals to feed into customers targets and ambitions

Description of the reduction initiative

Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Unilever's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are working towards better understanding of specific product level emissions reductions and can now allocate a percentage of our overall emissions reductions to your supply chain.

Emissions reduction for the reporting year in metric tons of CO2e

1442

Did you identify this opportunity as part of the CDP supply chain Action Exchange?

No

Would you be happy for CDP supply chain members to highlight this work in their external communication?

Yes

SC3.1

(SC3.1) Do you want to enroll in the 2018-2019 CDP Action Exchange initiative?

Yes

SC3.1a

(SC3.1a) Identify which member(s), if any, have motivated you to take part in Action Exchange this year.

Please select

SC3.1b

(SC3.1b) Select the types of emissions reduction activities that your company would like support in analyzing or in implementing in the next reporting year.

Energy efficiency: Processes
Low-carbon energy purchase
Low-carbon energy installation
Process emissions reductions
Product design
Behavioral change
Waste recovery
Green project finance

SC3.1c

(SC3.1c) As part of Action Exchange, would you like facility level analysis?

Yes

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2017-2018 Action Exchange initiative?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services, if so, what functionality will you be using?

Yes, I will provide data

SC4.1a

(SC4.1a) Give the overall percentage of total emissions, for all Scopes, that are covered by these products.

90

SC4.2a

(SC4.2a) Complete the following table for the goods/services for which you want to provide data.

Response CDP Climate Change Questionnaire 2018 2018-08-14.xlsx

Name of good/ service

Product 1: Standard Compounded Fine Fragrance

Description of good/ service

Compounded Fine Fragrance

Type of product

Final

SKU (Stock Keeping Unit)

Confidential

Total emissions in kg CO2e per unit

107

±% change from previous figure supplied

-14.7

Date of previous figure supplied

July 31 2017

Explanation of change

Global reduction of emissions per metric ton of production.

Methods used to estimate lifecycle emissions

GHG Protocol Product Accounting & Reporting Standard

Name of good/ service

Product 2: Standard Compounded Flavor

Description of good/ service

Compounded Flavor

Type of product

Final

SKU (Stock Keeping Unit)

Confidential

Total emissions in kg CO2e per unit

22

±% change from previous figure supplied

-14.7

Date of previous figure supplied

July 31 2017

Explanation of change

Global reduction of emissions per metric ton of production..

Methods used to estimate lifecycle emissions

PAS 2050

Name of good/ service

Product 3: Standard Compounded Consumer Fragrance

Description of good/ service

Compounded Consumer Fragrance

Type of product

Final

SKU (Stock Keeping Unit)

Confidential

Total emissions in kg CO2e per unit

92

±% change from previous figure supplied

-14.7

Date of previous figure supplied

July 31 2017

Explanation of change

Global reduction of emissions per metric ton of production..

Methods used to estimate lifecycle emissions

GHG Protocol Product Accounting & Reporting Standard

(SC4.2b) Complete the following table with data for lifecycle stages of your goods and/or services.

Name of good/ service

Product 1: Standard Compounded Fragrance

Please select the scope

Scope 1 & 2

Please select the lifecycle stage

Production

Emissions at the lifecycle stage in kg CO2e per unit

107

Is this stage under your ownership or control?

Yes

Type of data used

Primary and secondary

Data quality

Primary data used include natural gas combustion and electricity production. Because readings are obtained from monthly bills and "revenue meters," which are typically subject to stringent calibration requirements by local governments, uncertainty level for natural gas quantities and GHG emissions can be assumed as <5%. Emissions reported as per metric ton of production.

If you are verifying/assuring this product emission data, please tell us how

It hasn't been verified at the product level yet, but we are taking steps toward it.

Name of good/ service

Product 2: Standard Compounded Flavor

Please select the scope

Scope 1 & 2

Please select the lifecycle stage

Production

Emissions at the lifecycle stage in kg CO2e per unit

22

Is this stage under your ownership or control?

Yes

Type of data used

Primary and secondary

Data quality

The PAS 2050 guide states that the product carbon footprint can only be regarded as an estimate. Inevitably, there will be inaccuracies in standard emission factors used, data collected, knowledge gaps filled by assumptions and global warming potentials used. The uncertainty levels can be assumed to be <5%. Emissions reported as per metric ton of production.

If you are verifying/assuring this product emission data, please tell us how

It hasn't been verified at the product level yet, but we are taking steps toward it.

Name of good/ service

Product 3: Standard Compounded Consumer Fragrance

Please select the scope

Scope 1 & 2

Please select the lifecycle stage

Production

Emissions at the lifecycle stage in kg CO2e per unit

92

Is this stage under your ownership or control?

Yes

Type of data used

Primary and secondary

Data quality

Primary data used include natural gas combustion and electricity production. Because readings are obtained from monthly bills and "revenue meters," which are typically subject to stringent calibration requirements by local governments, uncertainty level for natural gas quantities and GHG emissions can be assumed as <5%. Emissions reported as per metric ton of production.

If you are verifying/assuring this product emission data, please tell us how

It hasn't been verified at the product level yet, but we are taking steps toward it.

SC4.2c

(SC4.2c) Please detail emissions reduction initiatives completed or planned for this product.

Name of good/service	Initiative ID	Description of initiative	Completed or planned	Emission reductions in kg CO2e per unit
All IFF Products	Initiative 1	We have many voluntary energy and GHG emission reduction (Scope 1 & 2) initiatives that help reduce the carbon footprint of our products and achieve our energy targets. Examples include installing an energy recovery system at our R&D facility in Union Beach, NJ that will save over 11M cubic ft of natural gas annually; and improving the CIP process in our Dandenong, Australia flavors facility, which will save over 430,000 kWh annually. In addition to reducing energy consumption, we also are focusing on powering our facilities with more renewable energy. In 2016, Tilburg, Netherlands, became the first in the industry to generate wind power on-site. Installation of a 2.4 megawatt turbine began in late 2015, and it was completed and operational by July 2016. We have found that reducing our overall facility level emissions has a great impact on product level emissions reductions and will continue to work toward product specific allocation. The emission reductions provided are in kg CO2e per unit kg of product.	Ongoing	43

SC4.2d

(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?

Yes

SC4.2e

(SC4.2e) Explain which initiatives have been driven by requesting members.

Requesting member(s)	Name of good/service	Initiative ID
Abbott Laboratories	Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Abbott's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are continuously improving our understanding of specific product level emissions reductions and can currently allocate a percentage of our overall emissions reductions to your supply chain.	Initiative 1
Ambev S.A	Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Abbott's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are continuously improving our understanding of specific product level emissions reductions and can currently allocate a percentage of our overall emissions reductions to your supply chain.	Initiative 1
Colgate Palmolive Company	Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Abbott's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are continuously improving our understanding of specific product level emissions reductions and can currently allocate a percentage of our overall emissions reductions to your supply chain.	Initiative 1
Diageo Plc	Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Abbott's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are continuously improving our understanding of specific product level emissions reductions and can currently allocate a percentage of our overall emissions reductions to your supply chain.	Initiative 1
KAO Corporation	Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Abbott's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are continuously improving our understanding of specific product level emissions reductions and can currently allocate a percentage of our overall emissions reductions to your supply chain.	Initiative 1
Kellogg Company	Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Abbott's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are continuously improving our understanding of specific product level emissions reductions and can currently allocate a percentage of our overall emissions reductions to your supply chain.	Initiative 1
L'Oréal	Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Abbott's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are continuously improving our understanding of specific product level emissions reductions and can currently allocate a percentage of our overall emissions reductions to your supply chain.	Initiative 1
PepsiCo, Inc.	Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Abbott's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are continuously improving our understanding of specific product level emissions reductions and can currently allocate a percentage of our overall emissions reductions to your supply chain.	Initiative 1
S.C. Johnson & Son, Inc.	Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Abbott's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are continuously improving our understanding of specific product level emissions reductions and can currently allocate a percentage of our overall emissions reductions to your supply chain.	Initiative 1
Unilever plc	Organizational emissions reductions are being driven by our desire to be more sustainable in this area as well as by our commitment to being a responsible member of Abbott's supply chain. Multiple energy efficiency and renewable energy reduction initiatives are underway specifically at the locations that provide your products. We are continuously improving our understanding of specific product level emissions reductions and can currently allocate a percentage of our overall emissions reductions to your supply chain.	Initiative 1

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms