

Module: Introduction

Page: Introduction

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CC0.1

**Introduction**

Please 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.

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CC0.2

**Reporting Year**

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

**Enter Periods that will be disclosed**

Thu 01 Jan 2015 - Thu 31 Dec 2015

**Enter Periods that will be disclosed**

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**CC0.3**

**Country list configuration**

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

**Select country**

United States of America

Rest of world

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**CC0.4**

**Currency selection**

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

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**CC0.6**

**Modules**

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.

If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email [respond@cdp.net](mailto:respond@cdp.net).

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

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## Further Information

**Module: Management**

**Page: CC1. Governance**

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### CC1.1

**Where is the highest level of direct responsibility for climate change within your organization?**

Senior Manager/Officer

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### CC1.1a

**Please identify the position of the individual or name of the committee with this responsibility**

The Senior Manager/Officer with direct responsibility for climate change is IFF's Group President, Fragrances as well as our EVP of Operations. The EVP and Group President report directly to the Chairman and CEO. Our Vice President of Global Sustainability, and the Sustainability Business Council, which is a cross-functional team of business leaders from throughout the company, including R&D, Human Resources, Procurement, Operations, Communications, and Regulatory Affairs, support the Group President, Fragrances to drive climate change throughout the organization. Our Eco-efficiency Pillar Team, composed of Operations representatives from each of our regions, is responsible for climate change management in Operations and has implemented numerous projects to enable us to reach our 2015 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.
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### CC1.2

**Do you provide incentives for the management of climate change issues, including the attainment of targets?**

Yes

**CC1.2a**

**Please provide further details on the incentives provided for the management of climate change issues**

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Facility managers	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Behaviour change related indicator	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.
Environment/Sustainability managers	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target	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.
All employees	Recognition (non-monetary)	Emissions reduction project Emissions reduction target	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

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
		Energy reduction project Energy reduction target Behaviour change related indicator	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.
Chief Operating Officer (COO)	Monetary reward	Emissions reduction target Energy reduction target	IFF does not have the title of COO. The Executive Vice President (EVP) of Operations is the highest level executive responsible for oversight of operations globally. This role reports to the 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.

**Further Information**

**Page: CC2. Strategy**

**CC2.1**

**Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities**

Integrated into multi-disciplinary company wide risk management processes

**CC2.1a**

**Please provide further details on your risk management procedures with regard to climate change risks and opportunities**

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Annually	Board or individual/sub-set of the Board or committee appointed by the Board	As a company engaged in development, manufacturing and distribution on a global scale, we consider IFF to be exposed to global risk and opportunities related to regulatory changes, customer behavior changes, reputation and weather.	> 6 years	We routinely encounter and address risks in conducting our business. Some of these risks may cause our future results to be different than we presently anticipate. 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 2015 Annual Report and SEC Form 10-K.

#### CC2.1b

##### Please describe how your risk and opportunity identification processes are applied at both company and asset level

a. How risks/opportunities are assessed at a company level: IFF's general approach for identifying 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 annually assesses risks, including sustainability issues and climate change, on our business and the business of our customers.

b. How risks/opportunities are assessed at an 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.

#### CC2.1c

##### How do you prioritize the risks and opportunities identified?

We 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.

In addition, we conducted a structured materiality analysis to identify the issues of most importance to our company and our stakeholders. 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 Business Council (SBC), 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.

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**CC2.1d**

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment
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**CC2.2**

**Is climate change integrated into your business strategy?**

Yes

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**CC2.2a**

**Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process**

a. How the business strategy has been influenced: Sustainability and climate change management have strong and direct implications for our financial competitiveness and success. Sustainability is an enabler of our Vision 2020 corporate 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 2015, 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.

b. 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.

c. The most important components of the short-term strategy that have been influenced by climate change: 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 2015 as a result of this process include optimizing the steam system in New Jersey that will save approximately 950,000 M3 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.

d. The most important components of the long-term strategy that have been influenced by climate change: 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 2015, 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.

e. How this is gaining you strategic advantage: Sustainability and climate change management have strong and direct implications for our financial competitiveness and success. Sustainability is an enabler of IFF's Vision 2020 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.

f. The most substantial business decisions made with climate change as a factor during 2015 were:

- Many business decisions were made this year, including the allocation of funds for specific climate change projects, 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 27 projects to reduce greenhouse gas emissions by over 13,200 metric tons of CO<sub>2</sub>e.

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**CC2.2b**

Please explain why climate change is not integrated into your business strategy

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**CC2.2c**

**Does your company use an internal price of carbon?**

No, and we currently don't anticipate doing so in the next 2 years

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**CC2.2d**

Please provide details and examples of how your company uses an internal price of carbon

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**CC2.3**

**Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)**

Trade associations

Other

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**CC2.3a**

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
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CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
International Fragrance Association (IFRA)	Consistent	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.	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.
Natural Resources Stewardship Circle (NRSC)	Consistent	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.	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

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
			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.

**CC2.3d**

Do you publicly disclose a list of all the research organizations that you fund?

**CC2.3e**

**Please 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 is a member of the U.S. Green Building Council, which is a non-profit organization, dedicated to sustainable building design and developed the widely accepted Leadership in Energy and Environmental Design (LEED) high-performance building standard.

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.

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### CC2.3f

**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.

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### CC2.3g

Please explain why you do not engage with policy makers

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**Further Information**

**Page: CC3. Targets and Initiatives**

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**CC3.1**

**Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?**

Intensity target

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**CC3.1a**

**Please provide details of your absolute target**

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO <sub>2</sub> e)	Target year	Is this a science-based target?	Comment
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**CC3.1b**

**Please provide details of your intensity target**

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
Int1	Scope 1+2 (market-based)	100%	25%	Metric tonnes CO2e per metric tonne of product	2010	0.98	2020	No, but we anticipate setting one in the next 2 years	We plan to achieve this 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. We are currently evaluating the science-based target methodology and are considering it for our next generation of goals.

### CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	19			

### CC3.1d

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
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**CC3.1e**

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Int1	50%	65%	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. In 2015, IFF achieved an 16.3% reduction in GHG emissions when compared to 2010; resulting in $(16.3/25)*100 = 65\%$ completion. We expect to achieve our 2020 goal.

**CC3.1f**

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

**CC3.2**

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?

No

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CC3.2a

Please 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	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
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CC3.3

**Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)**

Yes

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CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	7	1840



Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
To be implemented*	2	50
Implementation commenced*	15	2830
Implemented*	27	13200
Not to be implemented	0	0

### CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	We have many voluntary energy and GHG emission reduction (Scope 1 & 2) initiatives that help achieve our energy targets based on our HVAC systems. One example is optimizing the steam system in our Flavors facility in South Brunswick, NJ that will save approximately \$13,000 USD and 950,000 M3 in natural gas annually. The project was	2980	Scope 1	Voluntary	199000	523000	1-3 years	11-15 years	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	implemented in 2015 and is expected to reduce Scope 1 natural gas emissions for a project lifetime of greater than 5 years. This project was completed voluntarily as financial optimization calculations satisfied investment requirements.								
Energy efficiency: Processes	We have many voluntary energy and GHG emission reduction (Scope 1 & 2) initiatives that help achieve our energy targets that deal with the manufacturing processes. One example is improving the clean-in-place process in our Tilburg, Netherlands flavors facility, which will save over 11,000 M3 in natural gas annually. This project was completed in 2015 and is expected to reduce Scope 1 & 2 electricity emissions for a project lifetime of greater than 5 years. This project was completed voluntarily as financial optimization calculations satisfied investment requirements.	470	Scope 1 Scope 2 (location-based) Scope 2 (market-based)	Voluntary	88000	917000	4-10 years	11-15 years	
Energy efficiency: Building services	We have many voluntary energy and GHG emission reduction (Scope 2) initiatives that help achieve our energy targets. One example is installing high-	2710	Scope 2 (location-based) Scope 2 (market-	Voluntary	387000	574000	1-3 years	11-15 years	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	efficiency lighting in our Zhejiang, China facility, which will save over 165,000 kWh of electricity annually. This project was implemented in 2015 and is expected to reduce Scope 2 emissions for a project lifetime of greater than 5 years. This project was completed voluntarily as financial optimization calculations satisfied investment requirements.		based)						
Low carbon energy purchase	IFF implemented 3 projects to acquire more than 9,600 MWh of RECs in USA, and over 24,000 MWh of Guarantees of Origin (GO) in Spain and 11,000 MWh GO in Netherlands were retired by our company to reduce scope 2 emissions. In the US, Green-e certified RECS are generated from wind. In Spain and Netherlands, GOs were acquired from purchasing wind generated electricity. The CO2e savings that we have taken credit for are the incremental increase from last year.	7040	Scope 2 (market-based)	Voluntary				1-2 years	This is the 2nd year that IFF has acquired RECs and Guarantees of Origin (GO) with plans to acquire more in the future.

**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 2015, these goals were cascaded to each of our facilities and included in the performance management goals of plant managers.

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

**Further Information**

**Page: CC4. Communication**

CC4.1

**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	Status	Page/Section reference	Attach the document	Comment
In voluntary communications	Complete	Performance Highlights, pp II; Emissions, pp 26-27; About this Report, pp 15-16	<a href="https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/CC4.1/iff_gri_report_053116_v1.pdf">https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/CC4.1/iff_gri_report_053116_v1.pdf</a>	

Publication	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	Sustainability, pg 14 and 28	<a href="https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/CC4.1/IFF Annual Report 2015-Full FINAL V2 (1).pdf">https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/CC4.1/IFF Annual Report 2015-Full FINAL V2 (1).pdf</a>	

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#### Further Information

### Module: Risks and Opportunities

#### Page: CC5. Climate Change Risks

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##### CC5.1

**Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply**

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

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##### CC5.1a

**Please describe your inherent risks that are driven by changes in regulation**

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Cap and trade schemes	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. Our operations may be affected by greenhouse emissions and climate change and related regulations. There are various regulatory efforts relating to climate change, such as the European Union Emissions Trading Scheme and the U.S. Clean Air Act that may increase the cost of raw materials, particularly energy used to operate our facilities that could materially impact our financial condition, results of operations and cash flows. These regulations	Increased operational cost	3 to 6 years	Indirect (Supply chain)	More likely than not	Low-medium	Increased regulatory requirements and energy efficiency standards that require reduced GHG emissions could result in increased operating costs for IFF. Using the European Union as a proxy, some studies indicate that carbon cost impact to electricity prices is approximately 5 to 10%. Using this proxy, even a 1% to 3% increase in annual utility costs, could result in more than \$500,000 USD in additional costs.	IFF has implemented the following initiatives to help manage potential climate change regulatory risks: • IFF stays abreast of regulatory changes and complies with all applicable regulatory requirements. IFF belongs to and actively participates in the activities of the key organizations that regulate our business in the regions and countries in which we operate. IFF also enrolls in early adoption schemes, such as the United Kingdom's Climate Change Agreements (UK CCA). • IFF has corporate goals to reduce energy use by 20% and GHG emissions by 25% by 2020, normalized to	IFF has made and will continue to make capital and operational investments to mitigate costs and reduce GHG emissions. IFF annually invests \$50,000 USD to maintain our GHG data collection systems. Examples of GHG reduction projects IFF invested in 2015 include approximately \$90,000 USD on high efficiency motors in Spain; and approximately \$80,000 USD on a steam system optimization in the USA. IFF made minimal investments on the solar power system as it is part of a power purchase agreement.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>however, are targeted towards large emitters, such as utilities or large production sites and our operations may not be significantly influenced, hence the "low" magnitude of impact to IFF.</p>							<p>production. In 2015, these goals were cascaded to each of our facilities and included in the performance management goals of plant managers.</p> <ul style="list-style-type: none"> <li>• IFF tracks our energy use and GHG emissions annually.</li> <li>• Our global procurement department partners with manufacturing to optimize the purchase cost of energy.</li> <li>• IFF invests in energy efficiency, green chemistry, and carbon reduction initiatives. During 2015, we enhanced our governance model to manage eco-efficiency. Some projects approved in 2015 as a result of this process include optimizing the steam system in New Jersey that</li> </ul>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								will save approximately 950,000 M3 in natural gas annually; and installing high efficiency motors in Benicarlo, Spain saving over 290,000 kWh annually. Through these actions, we seek to reduce the risk's likelihood and magnitude as well as the timeframe from 3 to 6 years to > 6 years.	

**CC5.1b**

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in precipitation	The availability of raw materials	Increased operational	3 to 6 years	Indirect (Supply)	Very likely	Medium	We have experienced	In order to mitigate the risk of	In 2015, IFF spent approximately: •



Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
extremes and droughts	fluctuates in markets throughout the world. Although raw material cost increases moderated in 2013, they remain at elevated levels. Historically, we have experienced the greatest amount of price volatility in natural products that represent approximately half of our raw material purchases. Availability and pricing of these natural products, such as citrus and vanilla, can be impacted by crop size and quality, weather, alternative land use, and other factors which we cannot control. Climate change may also affect the availability and price of key raw materials, including natural	cost		chain)			increasing volatility in the cost of natural ingredients. This could lead to higher operational and procurement costs. For example, droughts and precipitation extremes have affected the price of vanilla (from \$40 to \$420 USD/kg) and orange oil (from \$1,500 to \$8,000 USD/tonne), from 2005 to 2015. The volatility of natural ingredients may have a moderate impact as these types of price swings could result in more than +/- \$1,000,000 USD increase in costs.	price increases and shortages, our purchasers have developed various sourcing strategies, including maintaining strategic stock levels for critical items, multiple suppliers, inventory management systems, various geographic suppliers and long-term agreements to mitigate risk. IFF also evaluates the use of green chemistry and biotechnology as an alternative to natural raw materials. We are also members of the Natural Resources Stewardship Circle (NRSC), an organization that works to promote the responsible and ethical management of	\$242 USD million or approximately 8% of our sales in research and product development activities, which includes green chemistry and biotechnology initiatives; • \$50,000 USD in Natural Ethics™ administrative costs, Natural Resources Stewardship Circle (NRSC) membership fees and natural raw materials risk assessment.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>products used in the manufacture of our products. IFF sources from 9,000 raw materials, with over 50% from naturals and crop-related. For example, 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.</p>							<p>natural resources used in the beauty, cosmetics, fragrance, and flavors industries. During 2015, we conducted the following initiatives to help create a more stable supply chain: • We entered partnerships to leverage biotech pathways to produce cost effective materials through renewable, botanically derived feedstock process. • We identified our top 20 most vulnerable natural raw materials and began a process of in-depth risk assessment. • We expanded our first Natural Ethics™ product, bourbon vanilla from Madagascar, which partners</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								with local suppliers to support sustainable farming of vanilla and increase supply chain resiliency. Through these actions we seek to reduce the risk's likelihood and magnitude as well as the timeframe from 3 to 6 years to > 6 years.	

**CC5.1c**

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behaviour	There is a global trend towards an increasing demand for sustainable, climate-friendly products and	Reduced demand for goods/services	1 to 3 years	Indirect (Client)	Likely	Medium	Recently, demand for sustainable products has increased. We see this as a global trend, but	From research to manufacturing, we're developing new products that are green by design. Through re-engineering, many	In 2015, IFF spent approximately: • \$242 USD million or approximately 8% of our sales in research and

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>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. IFF customers are also increasingly demanding transparency regarding our climate change policies. For instance, during 2015, eight of our major customers, requested we respond to the CDP supply chain questionnaire. Potential loss in business can come from reduced demand for products and</p>						<p>more prevalent in the EU and NA. As a result certain customers and consumers are more likely to require these types of products. Based on 2015 sales of \$3.0B, even a 0.5% decrease could represent approximately \$15 M USD. However, it is difficult to determine the exact implications as these customers and consumers require criteria aside from climate change performance, including price, quality and other sustainability indicators.</p>	<p>existing products now use fewer resources and deliver more value for our customers. We're doing this by integrating green chemistry principles into product and process development to reduce their overall carbon demand. During 2015, we continued the following initiatives to help us create more climate-friendly products:</p> <ul style="list-style-type: none"> <li>We conducted a lifecycle assessment (LCA) of fragrances and flavors ingredients, to better understand and respond to product carbon footprint requests of our customers.</li> <li>We created a tool to evaluate our products using the 12 Principles of Green Chemistry and embed these principles in our processes from concept to</li> </ul>	<p>product development activities, which include green chemistry and biotechnology.</p> <ul style="list-style-type: none"> <li>\$50,000 USD to maintain GHG data collection systems, respond to the CDP and conduct a LCA .</li> <li>Examples of GHG reduction projects IFF invested in 2015 include approximately \$90,000 USD on high efficiency motors in Spain; and approximately \$80,000 USD on a steam system optimization in the USA.</li> </ul>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>loss of customers if IFF is not able to meet customer expectations related to sustainability and climate change. Not responding could affect our business with these customers. These customers however, judge us on a number of indicators aside from climate change performance, including price, quality and other factors; making it difficult to determine the exact financial implication of this risk.</p>							<p>commercialization. • We entered partnerships to leverage biotech pathways to produce cost effective materials through renewable, botanically derived feedstock. • We invest in energy efficiency, green chemistry, and carbon reduction initiatives. During 2015, we enhanced our governance model to manage eco-efficiency. Some projects approved in 2015 as a result of this process include optimizing the steam system in New Jersey that will save approximately 950,000 M3 in natural gas annually; and installing high efficiency motors in Benicarlo, Spain saving over 290,000 kWh annually. Through these actions we seek to reduce the risk's likelihood, magnitude</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								and timeframe.	

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CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

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CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

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CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

**Further Information**

**Page: CC6. Climate Change Opportunities**

**CC6.1**

**Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply**

- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

**CC6.1a**

**Please describe your inherent opportunities that are driven by changes in regulation**

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Emission reporting obligations	IFF has identified that emission reporting requirements and obligations will continue to increase and is taking advantage of it throughout our operations. We are currently working to collect and	Reduced operational costs	3 to 6 years	Direct	Very likely	Low	The installation of emissions reducing activities across our operations is estimated to save approximately 0.5M USD to 1.5M USD in operating costs annually. For example, some projects approved in 2015	Each site measures and reports their energy and emissions on a monthly basis. From this data collection, we can analyze and prioritize sites that have the largest impact on our emissions inventory to increase our	During 2015, IFF invested approximately \$50k-\$100k USD to manage data reporting and verification, as well as \$1M USD to \$2M USD on energy efficiency projects.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	report data so we will be better positioned as these obligations evolve. IFF publicly reports its emissions data and has public reduction targets. With public reduction targets, IFF will work to reduce emissions by reducing energy consumption, which will drive reduced operational costs.						include optimizing the steam system in New Jersey that will save approximately 950,000 M3 in natural gas annually; and installing high efficiency motors in Benicarlo, Spain, saving over 290,000 kWh annually.	energy efficiency and lower our carbon emissions. This data is externally verified and included in our annual sustainability report. Furthermore, we have joined organizations like RE100 and committed to 100% renewable electricity.	

CC6.1b

Please describe the inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Induced changes in	The availability of	New products/business	>6 years	Direct	More likely than not	Low	Induced changes in	IFF creates innovative products	In 2015, IFF spent



Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
natural resources	raw materials fluctuates in markets throughout the world. Studies have shown that induced changes in natural resources caused by physical risks from climate change (droughts, hurricanes, tornadoes, etc.) may also affect the availability and price of key raw materials, including natural products used in the manufacture of our products. This creates an opportunity for IFF to create new processes and products	services					natural resources drive innovation at IFF. For example, we may develop new processes or products that more efficiently utilize or are less dependent on natural resources. Based on 2015 sales of \$3.0B, even a 0.5% increase could represent approximately \$15M USD. However, it is difficult to determine the exact implication of this opportunity.	and processes that enhance our customers' brands and consumers' experiences. From research to manufacturing, we're developing new products that are green by design. IFF incorporates green chemistry principles in our operations and development of new products. Through re-engineering, many existing products now use fewer resources, consume less energy and deliver more value for our customers. During 2015, we conducted the following initiatives to maximize opportunities driven by physical climate parameters: <ul style="list-style-type: none"> <li>• Further developed Rose Water Essential™ product that is more stable and eco-friendly. Specifically</li> </ul>	approximately: <ul style="list-style-type: none"> <li>• \$242 USD million or approximately 8% of our sales in research and product development activities, which includes green chemistry and biotechnology initiatives;</li> <li>• \$50,000 USD to develop our Green Chemistry Product Evaluation Tool, conduct the natural raw materials risk assessment and to conduct the lifecycle assessment.</li> </ul>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>that more efficiently utilize or are less dependent on natural resources. For example, droughts and precipitation extremes have affected the price of vanilla (from \$40 to \$420 USD/kg) and orange oil (from \$1,500 to \$8,000 USD/tonne), from 2005 to 2015.</p>							<p>it is compacted and reduces water, energy in carbon in each step of the process both at IFF and within the customer companies that will use it.</p> <ul style="list-style-type: none"> <li>• We developed our first Natural Ethics™ product, bourbon vanilla from Madagascar, which partners with local suppliers to support sustainable farming of vanilla and increase supply chain resiliency.</li> <li>• We trained the majority our U.S. R&amp;D team on the 12 Principles of Green Chemistry and Lifecycle Assessments.</li> <li>• We created a tool to evaluate our products using the 12 Principles of Green Chemistry and embed these principles in our processes from concept to commercialization.</li> </ul>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<ul style="list-style-type: none"> <li>We conducted a lifecycle assessment of fragrances and flavors ingredients. Through these actions we hope to enhance this opportunity's likelihood and magnitude as well as time frame from &gt; 6 years to 3 to 6 years.</li> </ul>	

CC6.1c

Please describe the inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behaviour	The availability and price of raw materials fluctuate in markets throughout the world. Studies have shown that induced	New products/business services	>6 years	Direct	More likely than not	Medium	Price fluctuations of natural resources may lead to changing consumer consumption patterns. By meeting these demands IFF	IFF uses the following methods to maximize opportunities driven by changing consumer behavior: • IFF	In 2015, IFF spent approximately: \$242 USD million, or approximately 8% of our sales, in research and product

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>changes in natural resources caused by physical risks from climate change (droughts, hurricanes, tornados, etc.) may also affect the availability and price of key raw materials, including natural products used in the manufacture of our products. As availability decreases, the price will increase, driving up the price of the end product. This creates an opportunity for IFF to create new processes and products that more efficiently utilize or are less dependent</p>						<p>could develop new products which could lead to increased current and future business. Based on 2015 sales of \$3.0B, even a 0.5% increase could represent approximately \$15M USD. However, it is difficult to determine the exact implication of this opportunity, as consumer behavior is ever changing and is subject to many factors aside from climate change, such as performance, price, quality and other sustainability factors.</p>	<p>incorporates green chemistry principles and lifecycle assessments (LCA) in our operations. In 2015, we continued to train our scientists on our tool to evaluate our products using the 12 Principles of Green Chemistry and embed these principles in our processes. IFF also embarked on a LCA project of some of our key flavors and fragrances. • IFF invests in energy efficiency, green chemistry and carbon reduction initiatives. As an example of a new product, Rose Water Essential™ is our award-winning product that contains all of the scented</p>	<p>development activities, which includes green chemistry and biotechnology initiatives.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	on natural resources. For example, droughts and precipitation extremes have affected the price of vanilla (from \$40 to \$420 USD/kg) and orange oil (from \$1,500 to \$8,000 USD/tonne), from 2005 to 2015. Vanilla, and products like it can make up more than 5 % of our raw materials.							molecules from the rose petal but without the water. The concentrated form helps mitigate climate change because it features energy efficient production and transportation. This is the perfect example of a sustainable product that is natural, organically certifiable, and eco-efficient.	

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CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

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CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

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CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

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**Further Information**

**Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading**

**Page: CC7. Emissions Methodology**

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CC7.1

**Please provide your base year and base year emissions (Scopes 1 and 2)**

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Fri 01 Jan 2010 - Fri 31 Dec 2010	135417
Scope 2 (location-based)	Fri 01 Jan 2010 - Fri 31 Dec 2010	141042

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 2 (market-based)	Fri 01 Jan 2010 - Fri 01 Jan 2010	141042

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**CC7.2**

**Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions**

**Please select the published methodologies that you use**

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

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**CC7.2a**

**If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions**

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**CC7.3**

**Please give the source for the global warming potentials you have used**

Gas	Reference
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	IPCC Fourth Assessment Report (AR4 - 100 year)

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#### CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Other:		Other:	See "IFF CDP 2016 Questions 7.4 Emission Factors.xlsx" for emission factors we have applied and their origin.

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#### Further Information

##### Attachments

[https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/ClimateChange2016/CC7.EmissionsMethodology/IFF CDP 2016 Question 7.4 Emission Factors.xlsx](https://www.cdp.net/sites/2016/36/9336/Climate%20Change%202016/Shared%20Documents/Attachments/ClimateChange2016/CC7.EmissionsMethodology/IFF%20CDP%202016%20Question%207.4%20Emission%20Factors.xlsx)

**Page: CC8. Emissions Data - (1 Jan 2015 - 31 Dec 2015)**

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#### CC8.1



**Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory**

Operational control

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**CC8.2**

**Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e**

118984

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**CC8.3**

**Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?**

Yes

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**CC8.3a**

**Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e**

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
138574	127777	

**CC8.4**

**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

**CC8.4a**

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded

**CC8.5**

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Assumptions Metering/ Measurement Constraints	Emissions from natural gas combustion comprise the majority (>59%) of Scope 1 emissions in 2015. 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%.
Scope 2	More than 2% but	Assumptions	Emissions from electricity production comprise the majority (>68%) of Scope 2 emissions in 2015.

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
(location-based)	less than or equal to 5%	Metering/ Measurement Constraints	Because readings are obtained from monthly bills and "revenue meters," which are typically subject to stringent calibration requirements by local governments, uncertainty level for electricity quantities and GHG emissions can be assumed as <5%. Though there is some uncertainty over the production method of steam purchased by a specific site in China, these steam emissions account for only 32% of our Scope 2 inventory.
Scope 2 (market-based)	More than 2% but less than or equal to 5%	Assumptions Metering/ Measurement Constraints	Emissions from electricity production comprise the majority (>68%) of Scope 2 emissions in 2015. Because readings are obtained from monthly bills and "revenue meters," which are typically subject to stringent calibration requirements by local governments, uncertainty level for electricity quantities and GHG emissions can be assumed as <5%. Though there is some uncertainty over the production method of steam purchased by a specific site in China, these steam emissions account for only 32% of our Scope 2 inventory.

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**CC8.6**

**Please indicate the verification/assurance status that applies to your reported Scope 1 emissions**

Third party verification or assurance process in place

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**CC8.6a**

**Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements**

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Limited assurance	<a href="https://www.cdp.net/sites/2016/36/9336/Climate%20Change%202016/Shared%20Documents/Attachments/CC8.6a/CDP%20Verification%20Statement%20IFF2016_FINAL.pdf">https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/CC8.6a/CDP Verification Statement IFF2016_FINAL.pdf</a>	1-2	ISO14064-3	100

#### CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission

#### CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

#### CC8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Limited assurance	<a href="https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/CC8.7a/CDP Verification Statement IFF2016_FINAL.pdf">https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/CC8.7a/CDP Verification Statement IFF2016_FINAL.pdf</a>	1-2	ISO14064-3	100
Market-based	Annual process	Complete	Limited assurance	<a href="https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/CC8.7a/CDP Verification Statement IFF2016_FINAL.pdf">https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/CC8.7a/CDP Verification Statement IFF2016_FINAL.pdf</a>	1-2	ISO14064-3	100

#### CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
No additional data verified	

#### CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

#### CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

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**Further Information**

**Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)**

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**CC9.1**

**Do you have Scope 1 emissions sources in more than one country?**

Yes

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**CC9.1a**

**Please break down your total gross global Scope 1 emissions by country/region**

Country/Region	Scope 1 metric tonnes CO2e
United States of America	57422
Rest of world	61562

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**CC9.2**

**Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)**

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**CC9.2a**

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
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**CC9.2b**

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
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**CC9.2c**

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
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**CC9.2d**

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
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**Further Information**

**Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)**

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**CC10.1**

**Do you have Scope 2 emissions sources in more than one country?**

Yes

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**CC10.1a**

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes 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	24099	22390	60815	8732



Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes 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)
America				
Rest of world	114475	105387	224435	35186

**CC10.2**

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

**CC10.2a**

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)

**CC10.2b**

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
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**CC10.2c**

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
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**Further Information**

**Page: CC11. Energy**

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**CC11.1**

**What percentage of your total operational spend in the reporting year was on energy?**

More than 5% but less than or equal to 10%

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**CC11.2**

**Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year**

Energy type	Energy purchased and consumed (MWh)
Heat	0
Steam	81896
Cooling	0

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**CC11.3**

**Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year**

591155

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**CC11.3a**

**Please complete the table by breaking down the total "Fuel" figure entered above by fuel type**

Fuels	MWh
Natural gas	419715
Distillate fuel oil No 2	18340
Liquefied petroleum gas (LPG)	8015
Other: Process Derived	141735
Motor gasoline	3350

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**CC11.4**

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Comment
Energy attribute certificates, Renewable Energy Certificates (RECs)	8732	RECs acquired for Hazlet, NJ facility from Green-e certified sources. Classified in 10.1a as "United States of America".
Energy attribute certificates, Guarantees of Origin	35186	Acquired through purchased electricity for Benicarlo, Spain and Tilburg, Netherlands. The energy is generated through wind power. Classified in 10.1a as "Rest of world".

#### CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
203353	198987	4366	4366	0	Electricity generation for the purpose of backup power is not included as it is not tracked independently and is de minimis.

#### Further Information

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

CC12.1a

Please 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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	5.1	Decrease	This figure represents the decrease in emissions from 2014 to 2015 that can be attributed to our emissions reductions activities as highlighted in CC3.3a and b. In 2015, 13,200 metric tons of CO2e were reduced from our emissions reductions projects, and the total S1 and S2 emissions for 2014 totaled 260,572 metric tons of CO2e. The percentage change in emissions due to emission reduction activities: $(13,200/260,572)*100 = 5.1\%$ . 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		No change	
Acquisitions	2.8	Increase	In 2015, IFF acquired both Ottens and Aromor. Both companies historic emissions have been incorporated into our GHG inventory, adding approximately 2.8% to our carbon footprint.
Mergers		No change	
Change in output	2.5	Increase	This represents the increase in production from 2014 to 2015.
Change in methodology		No change	
Change in boundary		No change	
Change in physical operating conditions		No change	

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Unidentified		No change	
Other		No change	

#### CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

#### CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.0000844	metric tonnes CO2e	3023189000	Market-based	3.3	Decrease	We have provided the standard total revenue intensity measurement. This metric indicates a 3.3% decrease based on a 2.1% decrease in revenue and 5.3% overall decrease in emissions. It is difficult to verify

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
						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 CC3.3b, including building energy efficiency projects, boiler upgrades, and improved energy management plans at several of our sites.

**CC12.3**

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.82	metric tonnes CO2e	metric tonne of product	301842	Market-based	7.6	Decrease	We have provided a unit of production intensity measurement. This metric indicates a 7.6% reduction based on a 2.5% increase in production and a 5.3% overall decrease in emissions. 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 CC3.3b including building energy efficiency projects, boiler

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
							upgrades, and improved energy management plans at several of our sites.

**Further Information**

**Page: CC13. Emissions Trading**

**CC13.1**

**Do you participate in any emissions trading schemes?**

No, and we do not currently anticipate doing so in the next 2 years

**CC13.1a**

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership

**CC13.1b**

What is your strategy for complying with the schemes in which you participate or anticipate participating?



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**CC13.2**

**Has your organization originated any project-based carbon credits or purchased any within the reporting period?**

No

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**CC13.2a**

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
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**Further Information**

**Page: CC14. Scope 3 Emissions**

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**CC14.1**

**Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions**

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	800000	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 - 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 Fourth Assessment Report, 100 year average.	0.00%	
Capital goods	Relevant, calculated	30000	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 - 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 Fourth Assessment Report, 100 year average.	0.00%	
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	34800	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	0.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			<p>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.</p>		
Upstream transportation and distribution	Relevant, calculated	150000	<p>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. 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</p>	0.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			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 Fourth Assessment Report.		
Waste generated in operations	Relevant, calculated	3500	Calculations were only performed on emissions 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. Waste emissions are calculated using the methodologies and emissions factors from the EPA's Waste Reduction Model (WARM) version 13, which calculates emissions based on a life cycle approach. In this way, US emission factors are assumed to be applicable across the rest of the world. However, avoided emissions due to incineration and recycling are not included in this emissions reporting. Global warming potentials come from the IPCC's Second Assessment Report, 100 year average.	0.00%	
Business travel	Relevant, calculated	2200	The value calculated for this category only includes business air 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. For air travel, each cabin class / distance threshold pairing is multiplied by the appropriate emission factor from the UK's DEFRA 2015 emission factor release. GWPs come from the IPCC Fourth Assessment Report.	0.00%	
Employee commuting	Not relevant, explanation provided				Not relevant as it has been determined that the emissions with this category would be insignificant compared to other Scope 3

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					categories.
Upstream leased assets	Not relevant, explanation provided				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	Not relevant, explanation provided				Not relevant as it has been determined that the emissions with this category would be insignificant compared to other Scope 3 categories.
Processing of sold products	Not relevant, explanation provided				Not relevant as the majority of products are not for direct consumer use and this would be insignificant compared to other scope 3 categories since IFF's products make up an insignificant portion of the final sold product by volume.
Use of sold products	Not relevant, explanation provided				Not relevant as the majority of products are not for direct consumer use and this would be insignificant compared to other Scope 3 categories.
End of life treatment of sold products	Not relevant, explanation provided				Not relevant as it has been determined that the emissions with this category would be insignificant compared to other Scope 3 categories.
Downstream leased assets	Not relevant, explanation				This category is not relevant because we have no downstream

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
	provided				leased assets.
Franchises	Not relevant, explanation provided				This category is not relevant because we do not have any franchises.
Investments	Not relevant, explanation provided				This category is not relevant because we do not invest in other companies for profit.
Other (upstream)	Not relevant, explanation provided				No additional upstream Scope 3 emissions
Other (downstream)	Not relevant, explanation provided				No additional downstream Scope 3 emissions

**CC14.2**

**Please indicate the verification/assurance status that applies to your reported Scope 3 emissions**

Third party verification or assurance process in place

**CC14.2a**

**Please provide further details of the verification/assurance undertaken, and attach the relevant statements**

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Limited assurance	<a href="https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/CC14.2a/CDP Verification Statement IFF2016_FINAL.pdf">https://www.cdp.net/sites/2016/36/9336/Climate Change 2016/Shared Documents/Attachments/CC14.2a/CDP Verification Statement IFF2016_FINAL.pdf</a>	1-2	ISO14064-3	4

### CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

### CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Change in methodology	9.8	Decrease	The decrease in upstream fuel- and energy- related activities from 2014 to 2015 is a result of an overall decrease in the emissions intensity of electricity production resulting in lower upstream electricity emission factors.
Fuel- and energy-	Emissions	1.9	Decrease	This decrease is the result of our emissions reductions activities, whose emissions

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
related activities (not included in Scopes 1 or 2)	reduction activities			savings propagate up the supply chain to reduce the upstream impacts of fuel and energy purchases. Emissions reduction projects include building energy efficiency projects, boiler upgrades, and LED lighting upgrades at several of our sites.

#### CC14.4

**Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)**

Yes, our suppliers  
Yes, our customers

#### CC14.4a

**Please give details of methods of engagement, your strategy for prioritizing engagement and measures of success**

IFF Suppliers

I. Methods of engagement: IFF engages with our suppliers on GHG emissions and climate strategies through our vendor quality management process. This process begins with communicating our expectations through our Vendor Code of Conduct. IFF also asks vendors to report on their environmental performance. We encourage them to reduce their carbon emissions, water consumption and energy use, and to increase process efficiencies.

II. Strategy for prioritizing engagement and measures of success: Our vendor quality management process begins with communicating our expectations through our Vendor Code of Conduct, which outlines IFF's expectations for suppliers' labor standards, health and safety, environmental and business practices,. IFF is working with our largest suppliers to complete their registration with SEDEX. While IFF has more than 2,200 suppliers, these largest ones account for 90 percent of our global spend. We are focusing on this 90 percent to achieve maximum impact. In 2015, IFF increased the number of vendors registered with SEDEX and continued to work with them on Self-Assessment Questionnaires and associated audits. We are also requesting additional information about environmental and social practices and performance, such as suppliers' status with the Supplier Ethical Data Exchange (SEDEX) and energy, carbon, waste and water data. We measure success by the number of vendors registered on Sedex, the percent of spend registered, the number of completed SAQs, and number of audits.

IFF Customers

I. Methods of engagement: Our customers are intensifying their carbon reduction efforts, and we are also escalating our energy efficiency and carbon reduction



measures. IFF regularly provides our greenhouse gas emissions and performance data to our customers as part of their overall supply chain analysis, e.g. CDP Supply Chain Questionnaire. IFF collaborates with our customers and other industry members on climate-related issues through industry working groups. For instance, in 2015, we participated in the American Cleaning Institute's (ACI) Sustainability Metrics Program, an industry-wide initiative to collect and analyze energy, carbon, waste and water data.

II. Strategy for prioritizing engagement and measures of success: 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.

**CC14.4b**

**To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent**

Number of suppliers	% of total spend (direct and indirect)	Comment
300	90%	Approximately 90% (representing approximately 300 suppliers) of our spending is with suppliers that have been assessed through SEDEX.

**CC14.4c**

**If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data**

How you make use of the data	Please give details
Managing physical risks in the supply chain	In 2015, IFF identified our top 20 most vulnerable natural raw materials and began a process of in-depth risk assessment. This risk assessment has given us a better understanding of the physical and social risks in our supply chain. IFF's enterprise risk management program evaluates risks at least annually and we routinely encounter and address risks in conducting our business. We also use this information to identify GHG sources to prioritize for reduction actions. IFF has worked with several suppliers and customers to conduct lifecycle assessments of flavors and fragrances ingredients. This has given us a better understanding of our carbon footprint.

**CC14.4d**

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

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**Further Information**

**Module: Sign Off**

**Page: CC15. Sign Off**

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**CC15.1**

**Please provide the following information for the person that has signed off (approved) your CDP climate change response**

Name	Job title	Corresponding job category
Alison A. Cornell	Executive VP & Chief Financial Officer	Chief Financial Officer (CFO)

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**Further Information**

**CDP**