Module: Introduction

Page: W0. Introduction

W0.1

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.

W0.2

Reporting year

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

Period for which data is reported
Fri 01 Jan 2016 - Sat 31 Dec 2016

W0.3

Reporting boundary

Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported

Companies, entities or groups over which operational control is exercised

W0.4

Exclusions

Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?

Yes

W0.4a

Exclusions

Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion
Small leased offices	Small leased office spaces (fewer than 50 employees) where water is provided through the lease and is managed by our landlords.
Acquisitions	Our most recent acquisitions are excluded as well as they are being integrated into the company now. We expect this to be a small fraction of our total water consumption and provide little exposure to water risk.

Further Information

Module: Current State

Page: W1. Context

W1.1

Please rate the importance (current and future) of water quality and water quantity to the success of your organization

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital for operations	Important	Good quality freshwater is vital to IFF's operations. It is a component in our fragrance and flavor ingredients and is essential to various stages of manufacturing. The primary use of water in our operations is for cleaning and cooling processes. Freshwater is of importance for indirect operations because it is used for agricultural processes.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Neutral	It is important that sufficient amounts of recycled, brackish and/or produced water be available for use across our own operations because it will help reduce the consumption of freshwater within an overall goal of improving water-efficiency. The primary use of water in our operations is for cleaning and cooling processes. Recycled, brackish, and produced water is of importance for indirect operations because it is used for agricultural processes.

W1.2

For your total operations, please detail which of the following water aspects are regularly measured and monitored and provide an explanation as to why or why not

Water aspect	% of sites/facilities/operations	Please explain
Water withdrawals- total volumes	76-100	IFF tracks water withdrawal for 100% of manufacturing facilities and larger offices. The data is collected and tracked using a global web-based software application. To manage and drive performance, we use this software to internally track and report individual facilities while we eternally report global usage. We use per metric ton of production to report the water intensity of each site.
Water withdrawals-	76-100	IFF tracks water withdrawal for 100% of manufacturing facilities and larger offices by source. The data

Water aspect	% of sites/facilities/operations	Please explain
volume by sources		is collected and tracked using a global web-based software application. To manage and drive performance, we use this software to internally track and report individual facilities while we eternally report global usage. We use per metric ton of production to report the water intensity of each site.
Water discharges- total volumes	76-100	IFF tracks water discharge for 100% of manufacturing facilities and larger offices. The data is collected and tracked using a global web-based software application. To manage and drive performance, we use this software to internally track and report individual facilities while we eternally report global usage. We use per metric ton of production to report the water intensity of each site.
Water discharges- volume by destination	76-100	IFF tracks water discharge by destination for 100% of manufacturing facilities and larger offices. The data is collected and tracked using a global web-based software application. To manage and drive performance, we use this software to internally track and report individual facilities while we eternally report global usage. We use per metric ton of production to report the water intensity of each site.
Water discharges- volume by treatment method	76-100	IFF tracks water discharge volume by treatment method for 100% of manufacturing facilities and larger offices. The data is collected and tracked using a global web-based software application. To manage and drive performance, we use this software to internally track and report individual facilities while we eternally report global usage. We use per metric ton of production to report the water intensity of each site.
Water discharge quality data- quality by standard effluent parameters	76-100	Tracked by specific facility and local parameters for 100% of manufacturing facilities.
Water consumption- total volume	76-100	IFF tracks water consumed for 100% of manufacturing facilities and larger offices. The data is collected and tracked using a global web-based software application.
Facilities providing fully-functioning WASH services for all workers	76-100	WASH services implemented and consistently maintained for 100% of manufacturing facilities and larger offices.

W1.2a

Water withdrawals: for the reporting year, please provide total water withdrawal data by source, across your operations

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
Fresh surface water	939	Much lower	The surface water is withdrawn at one site: Hangzhou, China from the Xian'nin River. Our Hangzhou facility closed in July 2017.
Brackish surface water/seawater	0	Not applicable	Not relevant.
Rainwater	0	Not applicable	Not relevant.
Groundwater - renewable	351	Lower	Ground water reduced due to overall reduction in water consumption at certain sites.
Groundwater - non-renewable	810	Higher	Groundwater – non-renewable increased due to increase in water consumption at certain sites.
Produced/process water	0	Not applicable	Not relevant.
Municipal supply	1639	Higher	Municipal water increased due to increase in water consumption at certain sites.
Wastewater from another organization	0	Not applicable	Not relevant.
Total	3739	Much lower	Overall water consumption reduced from last year due to initiatives at a majority of sites and the closure of our Hangzhou facility.

W1.2b

Water discharges: for the reporting year, please provide total water discharge data by destination, across your operations

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
Fresh surface water	961	Much lower	The surface water is discharged at one site: Hangzhou, China from the

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
			Xian'nin River. Our Hangzhou facility closed in July 2017.
Brackish surface water/seawater	0	Not applicable	Not relevant.
Groundwater	29	Lower	Ground water discharge reduced due to overall reduction in water consumption at certain sites.
Municipal/industrial wastewater treatment plant	2098	Lower	Municipal water discharge reduced due to overall reduction in water consumption at certain sites.
Wastewater for another organization	0	Not applicable	Not relevant.
Total	3088	Much lower	Overall water discharge reduced from last year due to reduction in water consumption and the closure of our Hangzhou facility.

W1.2c

Water consumption: for the reporting year, please provide total water consumption data, across your operations

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
656	Higher	Increase in water intense products in portfolio as well as increase in manufacturing techniques that evaporate water from product to create a powder.

W1.3

Do you request your suppliers to report on their water use, risks and/or management?

Yes

W1.3a

Please provide the proportion of suppliers you request to report on their water use, risks and/or management and the proportion of your procurement spend this represents

Proportion of suppliers %	Total procurement spend %	Rationale for this coverage
76-100	76-100	While IFF has more than 2,200 suppliers, we focus on the largest ones, which account for approximately 90% of our global spend. We use the Supplier Ethical Data Exchange program to ask them various questions, including reporting on their water management programs. We specifically ask if the supplier has a water management policy, trains employees on proper water and wastewater management, has set water reduction targets, and if the supplier can identify the source of water at its facilities. The overall Sedex score is used to evaluate suppliers. All major suppliers are requested to answer these questions as a part of doing business with our company. The information is used within the company to assess the suppliers. Our vendor code of conduct incentivizes suppliers by requiring them to register on Sedex or EcoVadis and them to report on this information.

W1.3b

Please choose the option that best explains why you do not request your suppliers to report on their water use, risks and/or management

Primary reason	Please explain

W1.4

Has your organization experienced any detrimental impacts related to water in the reporting year?

No

W1.4a

Please describe the detrimental impacts experienced by your organization related to water in the reporting year

Country	River basin	Impact driver	Impact	Description of impact	Length of impact	Overall financial impact	Response strategy	Description of response strategy

W1.4b

Please choose the option below that best explains why you do not know if your organization experienced any detrimental impacts related to water in the reporting year and any plans you have to investigate this in the future

Primary reason	Future plans

Further Information

Module: Risk Assessment

Page: W2. Procedures and Requirements

W2.1

Does your organization undertake a water-related risk assessment?

Water risks are assessed

W2.2

Please select the options that best describe your procedures with regard to assessing water risks

Risk assessment procedure	Coverage	Scale	Please explain
Comprehensive company-wide risk assessment	Direct operations and supply chain	All facilities and some suppliers	We use the WRI Aqueduct water evaluation tool to evaluate and assess our water footprint of our operations globally. To better understand environmental risks located within our supply chain, we engage with our suppliers and ask them to report on their water performance through SEDEX and EcoVadis which specifically ask if the supplier has a water management policy, trains employees on proper water and wastewater management, has set water reduction targets, and if the supplier can identify the source of water at its facilities. We selected the WRI Aqueduct Tool because it is a publicly available, global database that gives regional assessments on water risk using 12 indicators of physical, regulatory, and reputational risk for all of our manufacturing facilities. EcoVadis integrates data from Together for Sustainability (TfS), an industry initiative through which more than 5,000 suppliers are able to communicate their environmental and social practices. We selected Sedex and EcoVadis because they widely used and it allows us to engage with our suppliers on water and other issues. Because of our large supply chain, we are selecting our larger suppliers to assess first, which covers the majority of our spend. We are working to use Sedex and EcoVadis to address suppliers that have any spend in each of the past two years, with a total sum of $500,000 or above, and address any strategic business requirements.

W2.3

Please state how frequently you undertake water risk assessments, at what geographical scale and how far into the future you consider risks for each assessment

Frequency	Geographic scale	How far into the future are risks considered?	Comment
Annually	River basin	3 to 6 years	
Annually	Facility	3 to 6 years	

W2.4

Have you evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy?

Yes, evaluated over the next 5 years

W2.4a

Please explain how your organization evaluated the effects of water risks on the success (viability, constraints) of your organization's growth strategy?

The overall geographical water risk assessments from this tool are incorporated into the risk assessment for each facility within IFF. We selected the WRI Aqueduct Tool because it is a publicly available, global database that gives regional assessments on water risk using 12 indicators of physical, regulatory, and reputational risk and can be used to assess all of our facilities. The interactive tool also provides forecasted assessments for 2020, 2030, and 2040. The water assessment includes the regions that cover 100% of our operations. For a Cradle to Cradle certification on a fragrance, we have used WBCSD's Global Water Tool and the EPA's Surf Your Watershed tool. The Sustainability department works with the local facilities and the global Operations team to gather the necessary information for the assessments. The risk scores are then combined with local data and business insights to develop a more detailed analysis. We are in the process of incorporating Ecolab’s Water Risk Monetizer into our overall assessment and will evaluate the tool through testing and feedback. We use these tools to supplement discussions about long-term growth strategy to help identify high-risk facilities. These sites are then prioritized for capital funding for sustainability-related projects.

W2.4b

What is the main reason for not having evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy, and are there any plans in place to do so in the future?

Main reason	Current plans	Timeframe until evaluation	Comment

W2.5

Please state the methods used to assess water risks

Method	Please explain how these methods are used in your risk assessment
Ecolab Water Risk Monetizer WBCSD Global Water Tool WRI water stress definition WRI Aqueduct Other: SDG Compass Tool, ISO 14001 certification, media reviews/ social media	The overall geographical water risk assessments from this tool are incorporated into the risk assessment for each facility within IFF. We selected the WRI Aqueduct Tool because it is a publicly available, global database that gives regional assessments on water risk using 12 indicators of physical, regulatory, and reputational risk and can be used to assess all of our facilities. The interactive tool also provides forecasted assessments for 2020, 2030, and 2040. The water assessment includes the regions that cover 100% of our operations. For a Cradle to Cradle certification on a fragrance, we have used WBCSD's Global Water Tool and the EPA's Surf Your Watershed tool. The Sustainability department works with the local facilities and the global Operations team to gather the necessary information for the assessments. The risk scores are then combined with local data and business insights to develop a more detailed analysis . We are in the process of incorporating Ecolab's Water Risk Monetizer into our overall assessment and will evaluate the tool through testing and feedback. Each manufacturing facility is ISO14001 certified which helps coordinate these efforts and relationships. Site managers maintain good working relationships with local authorities to ensure they are up to date with changing legislation or licensing. Local sites also leverage media reviews and social media to assess current stakeholder conflicts at the local level. We partnered with the World Business Council for Sustainable Development to pilot the SDG Compass Tool, which provides guidance to companies on how to properly align their strategies to the SDGs, including WASH services.

W2.6

Which of the following contextual issues are always factored into your organization's water risk assessments?

Issues	Choose option	Please explain
Current water availability and quality parameters at a local level	Relevant, included	Water is vital to IFF's operations. It is a component in our fragrance and flavor ingredients and is essential to various stages of manufacturing. The current water availability and quality parameters at the local level are always factored into our water risk assessments. Globally the WRI Aqueduct Tool was used for our water risk assessment. The WRI Aqueduct Water Risk Atlas Tool is a customizable global map, based on 12 indicators of physical, regulatory, and reputational risk.
Current water regulatory frameworks and tariffs at a local level	Relevant, included	IFF manages water regulatory frameworks and tariffs at the local level. These regulations are relevant to IFF because all sites must ensure compliance. Each manufacturing facility is ISO14001 certified which helps coordinate these efforts and relationships. Site managers maintain good working relationships with local authorities to ensure they are up to date with changing legislation or licensing.
Current stakeholder conflicts concerning water resources at a local level	Relevant, included	Current stakeholder conflicts concerning water resources at a local level are relevant to IFF because we monitor stakeholder issues associated with water through media reviews and social media. Site managers maintain good working relationships with local authorities, communities and other stakeholders.
Current implications of water on your key commodities/raw materials	Relevant, included	Water is vital to IFF's operations. It is a component in our fragrance and flavor ingredients and is essential to various stages of manufacturing. Globally the WRI Aqueduct Tool was used for our water risk assessment. The WRI Aqueduct Water Risk Atlas Tool is a customizable global map, based on 12 indicators of physical, regulatory, and reputational risk.
Current status of ecosystems and habitats at a local level	Relevant, included	Water is vital to IFF's operations. It is a component in our fragrance and flavor ingredients and is essential to various stages of manufacturing. Globally the WRI Aqueduct Tool was used for our water risk assessment. The WRI Aqueduct Water Risk Atlas Tool is a customizable global map, based on 12 indicators of physical, regulatory, and reputational risk.
Current river basin management plans	Relevant, included	Water is vital to IFF's operations. It is a component in our fragrance and flavor ingredients and is essential to various stages of manufacturing. Globally the WRI Aqueduct Tool was used for our water risk assessment. The WRI Aqueduct Water Risk Atlas Tool is a customizable global map, based on 12 indicators of physical, regulatory, and reputational risk.
Current access to fully-functioning WASH services for all employees	Relevant, included	IFF has embraced and actively supports the UN Sustainable Development Goals and has worked to identify how these goals relate to our sustainability strategy and business. IFF has identified Clean Water and Sanitation as a key SDG and will work to embed it within our sustainability strategy. We partnered with the World Business Council for Sustainable Development to pilot the SDG Compass Tool, which provides guidance to companies on how to properly align their strategies to the SDGs. We have included WASH services within our vendor code of conduct as well.
Estimates of future changes in water	Relevant,	Water is vital to IFF's operations. It is a component in our fragrance and flavor ingredients and is

Issues	Choose option	Please explain
availability at a local level	included	essential to various stages of manufacturing. The WRI Aqueduct Water Risk Atlas Tool is a customizable global map, based on 12 indicators of physical, regulatory, and reputational risk.
Estimates of future potential regulatory changes at a local level	Relevant, included	Water is vital to IFF's operations. It is a component in our fragrance and flavor ingredients and is essential to various stages of manufacturing. The WRI Aqueduct Water Risk Atlas Tool is a customizable global map, based on 12 indicators of physical, regulatory, and reputational risk.
Estimates of future potential stakeholder conflicts at a local level	Relevant, included	Water is vital to IFF's operations. It is a component in our fragrance and flavor ingredients and is essential to various stages of manufacturing. Under ISO14001 our manufacturing sites are required to track changes in regulations and work with regulators and local communities to drive continuous improvement – these requirements are then evaluated on a regular basis.
Estimates of future implications of water on your key commodities/raw materials	Relevant, included	Water is vital to IFF's operations. It is a component in our fragrance and flavor ingredients and is essential to various stages of manufacturing. Globally the WRI Aqueduct Tool was used for our water risk assessment. The WRI Aqueduct Water Risk Atlas Tool is a customizable global map, based on 12 indicators of physical, regulatory, and reputational risk.
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Relevant, included	Water is vital to IFF's operations. It is a component in our fragrance and flavor ingredients and is essential to various stages of manufacturing. Globally the WRI Aqueduct Tool was used for our water risk assessment. The WRI Aqueduct Water Risk Atlas Tool is a customizable global map, based on 12 indicators of physical, regulatory, and reputational risk.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, included	Water is vital to IFF's operations. It is a component in our fragrance and flavor ingredients and is essential to various stages of manufacturing. Globally the WRI Aqueduct Tool was used for our water risk assessment. The WRI Aqueduct Water Risk Atlas Tool is a customizable global map, based on 12 indicators of physical, regulatory, and reputational risk.
Scenario analysis of regulatory and/or tariff changes at a local level	Relevant, included	We are currently in the process of using Ecolab's Water Risk Monetizer to assess regulatory and tariff changes for each manufacturing facility.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, included	Under ISO14001 our manufacturing sites are required to track changes in regulations and work with regulators and local communities to drive continuous improvement – these requirements are then evaluated on a regular basis and allow the sites to act accordingly if any issues arise.
Scenario analysis of implications of water on your key commodities/raw materials	Not evaluated	
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Not evaluated	
Other	Not evaluated	

W2.7

Which of the following stakeholders are always factored into your organization's water risk assessments?

Stakeholder	Choose option	Please explain
Customers	Relevant, included	IFF is a part in customers' supply chain and is therefore included within their own water risk assessment.
Employees	Relevant, included	IFF trains its employees on the importance of water reduction and various techniques at facilities that use the most water.
Investors	Relevant, included	IFF recognizes the importance of water stewardship as part of its reputation and so participates in CDP Water response. CDP represents more than $60 trillion in assets and helps engage companies to disclose water risks and water stewardship strategies.
Local communities	Relevant, included	IFF is committed to protecting the local environment and communities where we operate. Site managers maintain good working relationships with local communities to help include them in our water risk assessment and water stewardship program.
NGOs	Not evaluated	
Other water users at a local level	Relevant, included	IFF uses the WRI Aqueduct tool which factors other water users into the water demand and stress analysis at the local level for each facility.
Regulators	Relevant, included	IFF complies with water related regulatory frameworks at the local level and leverages ISO 14001 to help foster a working relationship with regulators to ensure they are updated with changing legislation.
River basin management authorities	Relevant, included	IFF works with river basin management authorities due to ISO 14001 requirements and fosters a working relationship where needed to ensure they are updated with changing legislation or conditions.
Statutory special interest groups at a local level	Not evaluated	
Suppliers	Relevant, included	We are working closely with our suppliers and our customers to align on sustainability requirements that benefit everyone in the value chain. We engage and assess our suppliers through Sedex and Ecovadis. We are working to use Sedex and Ecovadis to address suppliers that have any spend in each of the past two years, with a total sum of $500,000 or above, and address any strategic business requirements.
Water utilities at a local level	Relevant, included	Most of the manufacturing facilities have water treatment plants to treat the discharged water before returning to the water supply. One of our larger water users is developing a water treatment cooperative.
Other	Not	

Stakeholder	Choose option	Please explain
	evaluated	

W2.8

Please choose the option that best explains why your organisation does not undertake a water-related risk assessment

Primary reason	Please explain

Further Information

Module: Implications

Page: W3. Water Risks

W3.1

Is your organization exposed to water risks, either current and/or future, that could generate a substantive change in your business, operations, revenue or expenditure?

No

W3.2

Please provide details as to how your organization defines substantive change in your business, operations, revenue or expenditure from water risk

When prioritizing risks and opportunities our strategic pillars are the starting point. However, we do 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; as well as our expectations of the future outlook for the identified risk.

For our operations, we define water-related risks that could cause 'substantive' change in our business, operations, revenue or expenditure as those which could impact our strategic sites located in areas of "High" or "Extremely High" overall water risk as defined by WRI Aqueduct. Our strategic sites are those that are critical to operations such as our manufacturing facilities or corporate headquarters. Each site is reviewed annually through WRI Aqueduct and assessed in terms of overall water risk, business growth and strategy. To date, we have not identified a water-related risk for our strategic sites which could cause a substantive change in our business.

W3.2a

Please provide the number of facilities* per river basin exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure; and the proportion of company-widefacilities this represents

Country	River basin	Number of facilities exposed to water risk	Proportion of company-wide facilities that this represents (%)	Comment

W3.2b

For each river basin mentioned in W3.2a, please provide the proportion of the company's total financial value that could be affected by water risks

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected	Comment

W3.2c

Please list the inherent water risks that could generate a substantive change in your business, operations, revenue or expenditure, the potential impact to your direct operations and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs

W3.2d

Please list the inherent water risks that could generate a substantive change in your business operations, revenue or expenditure, the potential impact to your supply chain and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs

W3.2e

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your direct operations that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain
Risks exist, but no substantive impact anticipated	For our operations, we define water-related risks that could cause 'substantive' change in our business, operations, revenue or expenditure as those which could impact our strategic sites located in areas of "High" or "Extremely High" overall water risk as defined by WRI Aqueduct. Our strategic sites are those that are critical to operations such as our manufacturing facilities or corporate headquarters. By way of example, we use WRI Aqueduct annually to assess 'overall water risk", a metric that evaluates water quantity risks (e.g., flood occurrence, drought severity and baseline water stress), water quality risks (e.g., upstream protected land) and regulatory/ reputational risks (e.g., media coverage). Site-level WRI Aqueduct results are assessed in the context of business growth and strategy. To date, we have not identified a water-related risk for our strategic sites which could cause a substantive change in our business.

W3.2f

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your supply chain that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain
Evaluation in progress	Given IFF's global footprint, multitude of suppliers, and broad range of materials, it is difficult to determine specifically which materials come from regions subject to water-related risk that could generate substantive change in our business. To better understand environmental risks located within our supply chain, we engage with our suppliers and ask them to report on their water performance through the supplier ethical data exchange which asks if the supplier has a water management policy, trains employees on proper water and wastewater management, has set water reduction targets, and if the supplier can identify the source of water at its facilities. This assessment is conducted annually and so far we have assessed approximately 90% (representing approximately 300 suppliers) of our spend.

W3.2g

Please choose the option that best explains why you do not know if your organization is exposed to water risks that could generate a substantive change in your business operations, revenue or expenditure and discuss any future plans you have to assess this

Primary reason	Future plans

Further Information

Page: W4. Water Opportunities

W4.1

Does water present strategic, operational or market opportunities that substantively benefit/have the potential to benefit your organization?

Yes

W4.1a

Please describe the opportunities water presents to your organization and your strategies to realize them

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
Company-wide	Improved water efficiency	From research to manufacturing, we're developing new products that are green by design and require fewer resources. We're doing this by integrating green chemistry principles into product and	Current-up to 1 year	

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
		process development, installing water efficiency projects and implementing behavioral changes to reduce their overall water consumption and improve water efficiency. This strategy is being implemented to take advantage of the opportunity water presents and IFF has committed $1-2M annually for sustainability capital projects that include improve water efficiency. We are pleased to have achieved an overall year-over-year water use per ton of production reduction of approximately 31.5 percent due to the elimination of once-through cooling and several water-saving projects recently implemented at the facility level. Examples of these projects include improving cleaning processes as well as improving operational behaviors. In 2016, we surpassed our water use reduction goal by achieving a 58% reduction. We are pleased to have achieved an overall year-over-year water use per ton of production reduction of approximately 31.5 percent due to the elimination of once-through cooling and several water-saving projects recently implemented at the facility level. Examples of these projects include improving cleaning processes as well as improving operational behaviors. In 2016, we surpassed our water use reduction goal by achieving a 58% reduction.		
Company-wide	Cost savings	Reducing water use through water efficiency, recycling or re-use of wastewater, will provide operational savings by reducing water costs. This strategy is being implemented to take advantage of the opportunity water presents and IFF has committed $1-2M annually for sustainability capital projects that include reducing water consumption and its related costs and taxes. In 2016, we developed a project to reuse water for lubrication pumps at our Tlalnepantla, Mexico, compounding facility which saves over $20,000 per year.	Current-up to 1 year	

W4.1b

Please choose the option that best explains why water does not present your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain

W4.1c

Please choose the option that best explains why you do not know if water presents your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain

Further Information

Module: Accounting

Page: W5. Facility Level Water Accounting (I)

W5.1

Water withdrawals: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain

Further Information

Page: W5. Facility Level Water Accounting (II)

W5.1a

Water withdrawals: for the reporting year, please provide withdrawal data, in megaliters per year, for the water sources used for all facilities reported in W5.1

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment

W5.2

Water discharge: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain

W5.2a

Water discharge: for the reporting year, please provide water discharge data, in megaliters per year, by destination for all facilities reported in W5.2

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment

W5.3

Water consumption: for the reporting year, please provide water consumption data for all facilities reported in W3.2a

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain

W5.4

For all facilities reported in W3.2a what proportion of their water accounting data has been externally verified?

Water aspect	% verification	What standard and methodology was used?

Further Information

Module: Response

Page: W6. Governance and Strategy

W6.1

Who has the highest level of direct responsibility for water within your organization and how frequently are they briefed?

Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
Board of individuals/Sub-set of the Board or other committee appointed by the Board	Scheduled-quarterly	The highest level executive with direct responsibility for water issues is the Innovation Committee. This committee reviews the Company's policies, programs and practices on sustainability and water stewardship as they relate to R&D. The Committee consists of the following board members, David Epstein, Dr. Linda Buck and Marcello Bottoli, as well as Gregory Yep, Executive Vice President, Chief Global Scientific & Sustainability Officer. In addition, our operations team responsible for water management has implemented numerous projects to enable us to reach our 2016 water-related goals and show progress towards our 2020 water-related goals, which is a 50% reduction from a 2010 baseline, normalized per metric ton of production.

W6.2

Is water management integrated into your business strategy?

Yes

W6.2a

Please choose the option(s) below that best explains how water has positively influenced your business strategy

Influence of water on business strategy	Please explain
Establishment of sustainability goals	In 2012, we set new goals to reduce water use by 25% per metric ton of production by 2020, using a 2010 baseline. After stating this goal, sites were influenced to focus their efforts and projects on reducing water consumption. After surpassing 25% in 2015, we restated our goal to 50% by 2020. One of the outcomes from this influence is that IFF already reduced its water consumption by 58%.
Publicly demonstrated	In 2012, we set new goals to reduce water use by 25% per metric ton of production by 2020, using a 2010 baseline. After stating this

Influence of water on business strategy	Please explain
our commitment to water	goal, sites were influenced to focus their efforts and projects on reducing water consumption. After surpassing 25% in 2015, we restated our goal to 50% by 2020. One of the outcomes from this influence is that IFF already reduced its water consumption by 58%.
Tighter operational performance standards	In 2012, we set new goals to reduce water use by 25% per metric ton of production by 2020, using a 2010 baseline. After stating this goal, sites were influenced to focus their efforts and projects on reducing water consumption. After surpassing 25% in 2015, we restated our goal to 50% by 2020. One of the outcomes from this influence is that IFF already reduced its water consumption by 58%.

W6.2b

Please choose the option(s) below that best explains how water has negatively influenced your business strategy

Influence of water on business strategy	Please explain
Increased capital expenditure	Capital investments are currently underway and are expected to increase over the next few years. IFF has dedicated approximately $1-2M in capital funding for sustainability related projects, including water reduction projects and wastewater treatment upgrades. An example includes a $100,000 USD wastewater reduction project in our Benicarlo facility.

W6.2c

Please choose the option that best explains why your organization does not integrate water management into its business strategy and discuss any future plans to do so

Primary reason	Please explain

W6.3

Does your organization have a water policy that sets out clear goals and guidelines for action?

Yes

W6.3a

Please select the content that best describes your water policy (tick all that apply)

Content	Please explain why this content is included
Publicly available Company-wide Performance standards for direct operations Incorporated within group environmental, sustainability or EHS policy Acknowledges the human right to water, sanitation and hygiene	IFF has a company-wide, publicly available water strategy that includes a 2020 water use intensity target as part of its overall Sustainability Strategy. We include performance standards for direct operations to ensure we can achieve our global target, which we surpassed in 2016 by achieving a 58% reduction of water use per metric ton of production. IFF acknowledges the human right to water, sanitation and hygiene and has aligned its strategy with UN SDG 6, which addresses access to clean water. We also incorporated that acknowledgement into our Vendor Code of Conduct. Do to the complexity and magnitude of our supply chain, performance standards have not yet been included within our water policy. As a business to business company, we have not included a commitment to customer education as we strive to engage our customers on water stewardship initiatives, like CDP Supply Chain - Water.

W6.4

How does your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) during the most recent reporting year compare to the previous reporting year?

Water CAPEX (+/- % change)	Water OPEX (+/- % change)	Motivation for these changes
1	1	All water reduction projects are guided by our triple bottom line philosophy to create environmental, social, and economic benefits.

Further Information

Page: W7. Compliance

W7.1

Was your organization subject to any penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations in the reporting year?

No

W7.1a

Please describe the penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations and your plans for resolving them

Facility name	Incident	Incident description	Frequency of occurrence in reporting year	Financial impact	Currency	Incident resolution

W7.1b

What proportion of your total facilities/operations are associated with the incidents listed in W7.1a?

W7.1c

Please indicate the total financial impacts of all incidents reported in W7.1a as a proportion of total operating expenditure (OPEX) for the reporting year. Please also provide a comparison of this proportion compared to the previous reporting year

Impact as % of OPEX	Comparison to last year

Further Information

Page: W8. Targets and Initiatives

W8.1

Do you have any company wide targets (quantitative) or goals (qualitative) related to water?

Yes, targets and goals

W8.1a

Please complete the following table with information on company wide quantitative targets (ongoing or reached completion during the reporting period) and an indication of progress made

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base-line year	Target year	Proportion of target achieved, % value
Reduction in consumptive volumes	Water stewardship	In 2012, we set new goals to reduce water use by 25% per metric ton of production by 2020, using a 2010 baseline. By the end of 2014, we achieved a 35% reduction allowing us to state a more aggressive 50% reduction target by 2020. In 2016, we surpassed our water use reduction goal by achieving a 58% reduction.	% reduction per unit of production	2010	2020	100%

W8.1b

Please describe any company wide qualitative goals (ongoing or reached completion during the reporting period) and your progress in achieving these

Goal	Motivation	Description of goal	Progress

W8.1c

Please explain why you do not have any water-related targets or goals and discuss any plans to develop these in the future

Further Information

Module: Linkages/Tradeoff

Page: W9. Managing trade-offs between water and other environmental issues

W9.1

Has your organization identified any linkages or trade-offs between water and other environmental issues in its value chain?

Yes

W9.1a

Please describe the linkages or trade-offs and the related management policy or action

Environmental issues	Linkage or trade-off	Policy or action
Water and Energy	Linkage	For IFF's operations, a reduction in water use is usually followed by a reduction in energy use because there will be less water to heat, cool, pump, or treat – activities that all require energy. IFF manages the linkage through our 2020 goals of reducing energy use intensity by 20% and water use intensity by 50%. At our Spain facility, a project was developed to improve the steam piping system to reduce water leaks that ended up reducing the overall heat required to maintain the steam, which reduced the energy consumed by the boilers.

Further Information

Module: Sign Off

Page: Sign Off

W10.1

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

Name	Job title	Corresponding job category
Richard O'Leary	Executive VP & Chief Financial Officer	Chief Financial Officer (CFO)

W10.2

Please indicate that your organization agrees for CDP to transfer your publicly disclosed data regarding your response strategies to the CEO Water Mandate Water Action Hub.

Note: Only your responses to W1.4a (response to impacts) and W3.2c&d (response to risks) will be shared and then reviewed as a potential collective action project for inclusion on the WAH website.

By selecting Yes, you agree that CDP may also share the email address of your registered CDP user with the CEO Water Mandate. This will allow the Hub administrator to alert your company if its response data includes a project of potential interest to other parties using water resources in the geographies in which you operate. The Hub will publish the project with the associated contact details. Your company will be provided with a secure log-in allowing it to amend the project profile and contact details.

No

Further Information

CDP 2017 Water 2017 Information Request