

W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your organization.

Associated British Foods is a diversified international food, ingredients and retail group with sales of £15.6bn, 137,000 employees and operations in 50 countries across Europe, southern Africa, the Americas, Asia and Australia. Our purpose is to provide safe, nutritious, affordable food and clothing that is great value for money. The group operates through five strategic business segments: Grocery, Sugar, Agriculture, Ingredients and Retail. We aim to achieve strong, sustainable leadership positions in markets that offer potential for profitable growth and deliver quality products and services that are central to people's lives.

Each business in the group enjoys a high degree of autonomy in the running of their operations, but at the heart of the way we operate is a principle of 'value together' – the benefit the group gains from each business being part of the larger organisation.

Grocery comprises consumer-facing businesses that manufacture and market a variety of well-known food brands both nationally and internationally. Some of its best-known household brands include Twinings, Ovaltine, Ryvita, Kingsmill, Silver Spoon, Tip Top, Mazola and Spice Islands. George Weston Foods in Australia enjoys a 75% penetration of Australian households.

AB Sugar - The heart of our business is making and selling sugar, but we do much more than that. As well as 'core products', made from sugar beet and sugar cane, we also make 'co-products', which can include anything one or two 'steps' away from the sugar-making process: animal feed, soil conditioners, electricity, bioethanol and seed enhancements. Our operations are in the UK, Spain, southern Africa and north China. In the EU, Azucarera is the major producer in Iberia and British Sugar is the sole processor of the UK sugar beet crop and is one of Europe's most efficient processors. Illovo Sugar is the biggest sugar processor in Africa and is one of the world's foremost low-cost producers. We also have a beet sugar business in north China. The group currently operates in ten countries and has 24 factories with the capacity to produce some 4.5 million tonnes of sugar. We also have the capacity to generate power sufficient to meet most of our internal needs and, in a number of locations, we export power to the national grid.

AB Agri operates at the heart of the agricultural industry. Its unique breadth and experience enable us to add value all along the food, drink and biofuel industry supply chains. AB Agri supplies products and services to farmers, feed and food manufacturers, processors and retailers. We also buy grain from farmers and supply crop inputs through our joint venture arable operation, Frontier Agriculture.

Ingredients comprises a number of businesses that supply a range of ingredients to food and non-food manufacturers. AB Mauri has a global presence in bakers' yeast with significant market positions in The Americas, Europe and Asia, and is a technology leader in, and supplier of, bread improvers, dough conditioners and bakery mixes. ABF Ingredients comprises businesses focusing on high-value ingredients for food, feed, pharmaceutical and industrial applications.

Primark is one of the largest clothing retailers in Europe. Primark employs more than 75,000 people across eleven countries across Europe and the US. Primark offers customers value for money clothing in more than 360 stores and 14.8 million square feet of retail selling space.

We have always had a decentralised approach to doing business. Operational decisions are made locally because, in our

experience, they are most successful when made by the people who have the best understanding of their markets and who have to implement them. This culture of setting strategy and priorities locally gives our businesses an advantage in being able to swiftly respond to local market, environmental and people issues. The corporate centre aims to provide a framework in which our business leaders have the freedom and decision-making authority to pursue opportunities. The centre is small and uses short lines of communication to ensure prompt, incisive and unambiguous decision-making. It seeks to ensure that business activities are appropriately monitored and supported.

We believe we have a duty of care in the way we do business, including; how we employ people and develop careers, ethical and environmental standards in our many supply chains, health and safety, appropriate funding of pensions and to conserve, and where possible, enhance the environments in which we operate.

W-FB0.1a

(W-FB0.1a) Which activities in the food, beverage, and tobacco sector does your organization engage in?

Agriculture
Processing/Manufacturing
Distribution

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	August 1 2017	July 31 2018

W0.3

(W0.3) Select the countries/regions for which you will be supplying data.

Argentina
Australia
Austria
Belgium
Brazil
Canada
Chile
China
Colombia
Czechia
Denmark
Ecuador
Finland
France
Germany
India
Ireland
Italy
Malawi
Malaysia
Mexico
Mozambique
Netherlands
New Zealand
Pakistan
Peru
Philippines
Poland
Portugal
Singapore
South Africa
Spain
Sri Lanka
Swaziland
Switzerland
Thailand
Turkey
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United Republic of Tanzania
United States of America
Uruguay
Venezuela (Bolivarian Republic of)
Viet Nam
Zambia

W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

GBP

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Other, please specify (Operational entities where we have 40% + ownership)

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

No

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	Sufficient, secure amounts of good quality freshwater are required by ABF businesses especially those in agriculture and manufacturing. Water quality is critical as many sites rely on pure fresh or potable water for their food related operations. Water is used throughout ABF's value chain e.g. by independent farmers or within suppliers' wet processing facilities. A reduction in either raw material supply or finished goods from our suppliers could impact the output of our business. For example, Westmill and PGP depend on reliable sources of water for a consistent supply of rice. Illovo's main water use is for irrigating the sugar cane in operations outside of South Africa. Insufficient water supply would specifically impact yield, cane quality and production facilities in our end to end supply chain. Over half of the sugarcane processed by Illovo is cultivated by independent farmers or outgrowers. A reduction in outgrower sugarcane supply could significantly impact Illovo's capacity.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Sufficient and secure amounts of recycled water are used by a large proportion of ABF companies especially those in agriculture and manufacturing and most significantly across our sugar business. Illovo's mills operate primarily with recycled water generated from the sugar milling process. Water is recycled extensively through the mill in an 'open-loop' system, after which it is discharged to supplement irrigation water. Water is used throughout ABF's value chain e.g. by independent farmers or within suppliers wet processing facilities. A reduction in either raw material supply or finished goods from our suppliers could significantly impact the output of our business. Over half of the sugarcane processed by Illovo is cultivated by independent farmers or 'outgrowers'. A reduction in outgrower sugarcane supply could significantly impact Illovo's production. Illovo leads with the requirement that all outgrowers should have water supply agreements with the relevant national authorities.

W-FB1.1a

(W-FB1.1a) Which water-intensive agricultural commodities that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodities	% of revenue dependent on these agricultural commodities	Produced and/or sourced	Please explain
Sugar	10-20	Both	AB Sugar, a subsidiary division of ABF, operates sugar beet factories in the UK, Spain and northern China and operates sugar cane plantations and mills in six African countries. Sugar represents the largest water user in the group with Illovo alone accounting for 96% of the group's total water in the reporting year. Unlike the other ABF business segments, AB Sugar uses water in both agriculture and factory facilities.
Other, please specify (Cotton)	41-60	Sourced	Primark has a commitment to work with its supply chain to improve water efficiency in agricultural and manufacturing processes as well as operating efficiently in its own business operations. A secure supply of water for cotton production and wet processes, such as dyeing and washing, within Primark's supply chain, are key to maintaining supply of product. Equally important is the management of wastewater and as such, Primark is committed to the adoption of ZDHC's Wastewater Guidelines (2016) and have communicated their expectations regarding wastewater to their suppliers.
Soy	Less than 10%	Sourced	Soy is an ingredient used primarily by AB Agri as a key component in animal feed. AB Agri has been instrumental in the publication of the Soy Sourcing Guidelines by European Feed Compounders Association (FEFAC) as an important first step in encouraging the use of responsibly produced soy in mainstream European supply chains. AB Agri's ambition is to source 100% of soy from certified responsible sources by 2024. Other business segments sourcing soy include our Ingredients and Grocery divisions. For example, within Ingredients, PGP International has responded to an increased market interest in consuming plant-based protein by introducing a soy ingredient that can be used to bake high-protein snacks, cookies and energy bars. AB Mauri UK has maintained its 'BM Trada Responsibly Sourced' accreditation which means there is a direct link between the soy or soy cognate they source and place of origin, which should be an internationally certified farm dedicated to soy production.
Rice	Less than 10%	Sourced	Within our Grocery segment, Westmill Foods sources rice from a range of countries including Pakistan, Cambodia and Italy. California based PGP International, a business within ABF Ingredients, is a leading manufacturer of extruded protein and grain crisps, and of rice and rice flour products.
Other, please specify (Tea)	Less than 10%	Sourced	Within our Grocery segment, Twinings Ovaltine sells premium teas and malted beverages in more than 100 countries. Tea is sourced from 160 tea gardens; a mix of large plantations and smallholder farms and Twinings has full traceability for the tea they source. For more information about Twinings' approach to sourcing tea, see their Social Impact report at www.sourcedwithcare.com .

W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	All ABF companies are responsible for reporting their individual site data for water withdrawal on an annual basis to ABF. This data is verified by ABF and independently assured Ernst & Young. This data is used to evaluate operational performance and helps with activities such as water conservation, legal compliance and agricultural management. For example, British Sugar uses different processes to monitor water abstraction depending on sources. Environmental specialists monitor groundwater pump records, meter calibration and abstraction licenses. This is reviewed monthly by the site specialist and a formal review takes place at year-end. Municipal water is measured using water meters and reconciled with invoice data by Finance. For surface water, cooling water and effluent data is input into the site's data system which is reviewed by the wastewater specialist. At year end, sites report water data into ABF's reporting system where it is approved by the company Environment Manager.
Water withdrawals – volumes from water stressed areas	76-99	Towards the end of 2017, ABF applied the WWF Water Risk Filter Tool assessment to our sites to identify those operating in water stress basins. Sites excluded from this exercise included offices. This assessment supplemented the range of tools and methodologies already used by our businesses to understand their operational water risks and the stress levels of the basins in which they operate. Use of the Tool enabled ABF to list the sites ranging from those operating in basins with negligible stress to those operating in high stress basins as per the outcomes of the WWF Tool. Further work is being conducted with sites to apply operational knowledge to the Tool's outcomes.
Water withdrawals – volumes by source	100%	All sites and businesses are required to report to ABF each year their data for their health, safety and environment (HSE) performance. Each year, sites are required to provide data against a number of HSE Key Performance Indicators (KPIs) to ABF which is to measure and report the group's safety and environmental performance. In the 2016/17 reporting year, ABF expanded the reporting requirements within water in line with good practice for water stewardship and CDP / external stakeholder reporting requirements. Each site now provides the volume of water abstracted by source. This reporting development enables ABF to report volumes by source more accurately this year rather than estimating the proportions. A significant proportion of our facilities monitor this data for their own management decisions. For example, AB Sugar businesses all monitor 100% of their water sources to evaluate the sustainability of their supply and ensure legal compliance.

	% of sites/facilities/operations	Please explain
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sectors]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	For the majority of our factories, offices and stores, water quality is paramount for use within our operations and for potable use. For other uses, the quality of sourced water is less paramount as it will not be directly consumed. For example, it will be used for irrigation or as a coolant within our factories. However, the quality is still monitored and managed as constraints on the quality of water impacts our ability to operate efficiently and may have associated costs.
Water discharges – total volumes	100%	ABF facilities report volume of water discharge to regulators as part of their water discharge permits. All ABF businesses are required to report annually to ABF the volume of effluent discharged over the course of the reporting year. This data is verified by ABF. Some businesses have a current objective to decrease wastewater discharged. For example, Illovo's approach to water includes an aim to decrease wastewater discharge by increasing water reuse and recycling. Water discharge is therefore monitored at 100% of Illovo's operations to identify recycling opportunities and inform the development of the operations' water footprint.
Water discharges – volumes by destination	100%	ABF facilities report volume of water discharge and destination to regulators as part of their water discharge permits. As well as legal compliance, our facilities use this information to monitor and ensure minimal impact on surrounding natural and social environments. In 2014 and 2017, ABF supported our material water users with the WWF Water Risk Filter Tool to identify the destination of their water discharges. We use information provided in 2014 to estimate the volumes by destination for our businesses; checking with them if operational or other local changes may have altered to where they discharge their wastewater.
Water discharges – volumes by treatment method	100%	ABF businesses measure, monitor and maintain records for water discharges by treatment method for their own operational reasons and for regulatory purposes. ABF does not require our businesses to report this information to the group. However, if the data were required, ABF can obtain it from the individual business records. For Illovo, the monitoring of water discharged from industrial operations by treatment method is important as this water is either recycled back into the mill or reused for irrigation, consequently this aspect is monitored at 100% of Illovo's facilities.
Water discharge quality – by standard effluent parameters	100%	All ABF's businesses operate within and comply with a regulatory water and wastewater framework. As such, our sites regularly measure and monitor the quality of their water discharges to ensure legal compliance and minimal impact on the surrounding natural and social environments.
Water discharge quality – temperature	100%	All ABF's businesses operate within and comply with a regulatory water and wastewater framework. As such, certain sites will regularly measure and monitor the temperature of their water discharges to ensure legal compliance and minimal impact on the surrounding natural and social environments.
Water consumption – total volume	76-99	For the reporting year, ABF did not require our businesses to report to group their water consumption. However, a large proportion of our businesses collect this data to assist with their own management decisions. For example, monitoring water consumption is material for sugar businesses as, crop dependent, a large percentage of water entering the site comes from the raw material and used in the processes in our factories in preference to using fresh water. Therefore, AB Sugar facilities monitor their total water footprints.
Water recycled/reused	26-50	27% of our group's total water was recycled or reused this year within our organisational boundary for activities such as irrigation, machinery cooling and horticultural use. Across the group, recycled or reused water is mainly utilised by Illovo, George Weston Foods and AB Mauri due to their operating and natural environments, availability of water and volumes required.
The provision of fully-functioning, safely managed WASH services to all workers	100%	All ABF companies provide appropriate water and sanitation facilities for our workers and contractors. As part of our publicly available Supplier Code of Conduct, we have a commitment that 'workers shall...be given access to clean toilet facilities and potable water.' In Illovo's Code of Conduct and Business Ethics under "Safe Working Conditions" it is stated that "Accommodation, where provided, should be clean, safe, and meet the basic needs of the workers." In Africa, all our Sugar operations supply workers with basic amenities, such as water and electricity, and also to some of the communities in which Illovo is situated. This water is consequently monitored at all operations.

W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	837499	About the same	With improved weather conditions this year for most of our agricultural sites, increased levels of water were available to irrigate crops. However, some of our businesses have again experienced water challenges during the year including continued drought, floods and irregular rainfall.
Total discharges	40320	Much lower	As ABF's water reporting requirements develop in line with good practice and external stakeholder requests, in recent years we introduced a reused / recycled wastewater KPI. Our businesses reporting against this are increasingly improving their levels of accuracy which is also having an impact on the reported total water discharged. In the reporting year, a small number of sites with significant water use have reclassified their data to report discharged water as recycled / reused water which has contributed to a lower discharge figure for the group. This has been for irrigation purposes.
Total consumption	797179	This is our first year of measurement	Our water consumption figure is based on the group level calculation of water withdrawn subtracting water discharged.

W1.2d

(W1.2d) Provide the proportion of your total withdrawals sourced from water stressed areas.

	% withdrawn from stressed areas	Comparison with previous reporting year	Identification tool	Please explain
Row 1	62	About the same	WWF Water Risk Filter	In 2014, we first conducted a groupwide water stress assessment for the sites withdrawing a material amount of water. We piloted the internationally recognised WWF Water Risk Filter Tool and asked our sites to validate the findings. We repeated this assessment towards the end of 2017 and continue to work with our sites to confirm the output from using the tool. In most cases, using their operational and local knowledge, our environmental and operational teams at the sites confirm that the basins from which they access water are experiencing some level of stress. Offices were excluded from this assessment this year. This assessment supplemented the range of tools and methodologies already used by our businesses to understand their operational water risks and the stress levels of the basins in which they operate. Use of the Tool enabled ABF to list the sites ranging from those operating in basins with negligible stress to those operating in high stress basins as per the outcomes of the WWF Tool. We have adopted the WWF's 'total basin score' as to whether a basin is considered to be stressed. Using WWF's guidance for its individual risk indicators, we have applied the same parameters for the total basin score, splitting the score of 1 to 5 into: 1 - 1.9 = No or very limited stress 2 - 2.9 = Limited stress 3 - 3.9 = Some stress 4 - 5 = High stress. In order to determine where we prioritise resources, we are using the score of 3 to 5 as our group of water stressed basins. This parameter means we include sites determined by the WWF Tool as experiencing some or high levels of stress. We continue to work with our businesses operating in other water basins on their approach to water risk management. For the reporting year, we are applying the same calculation as used in 2016.

W-FB1.2e

(W-FB1.2e) For each commodity reported in question W-FB1.1a, do you know the proportion that is produced/sourced from water stressed areas?

Agricultural commodities	The proportion of this commodity produced in water stressed basins is known	The proportion of this commodity sourced from water stressed basins is known	Please explain
Sugar	Yes	Yes	All of AB Sugar's facilities monitor the status of the basins in which they operate and when required, respond to changes in the stress levels. In response to water scarcity issues, many of Illovo's operations invest in projects designed to increase water efficiency. Illovo Malawi has made significant investments in irrigation infrastructure over the last four years. Projects to convert existing irrigation systems to drip irrigation, which is more effective and efficient in terms of water use, are underway in Malawi, Zambia and eSwatini.
Other commodities from W-FB1.1a, please specify (Cotton)	No, not currently but we intend to obtain this data within the next two years	No, not currently but we intend to collect this data within the next two years	Over the next two years we will identify the proportion of cotton sourced from water stressed areas.
Soy	Not applicable	No, we do not have this data and have no plans to obtain it	
Rice	Not applicable	No, we do not have this data and have no plans to obtain it	Rice is sourced by different businesses in ABF and each has their own approach to working with their supply chain on water issues. Therefore we do not have a groupwide figure for the proportion of rice originating from water stressed areas but our relevant businesses are aware of the water risks in their supply chain and addressing these through tailored approaches. As an example, Westmill Foods has identified that rice sourced from Pakistan is vulnerable to the impact of water stress. Pakistan is predicted to be chronically short of water by 2025 and the area of cultivated rice land has already dramatically reduced in recent years due to water shortages. As such, Westmill has recently launched a project which aims to improve water efficiency by 30% by training farmers in water saving techniques such as laser levelling, alternative wetting and drying and direct seeding. Wider dissemination of advice at village level to encourage water saving beyond direct project beneficiaries is also a key activity.
Other commodities from W-FB1.1a, please specify (Tea)	Not applicable	No, we do not have this data and have no plans to obtain it	

W-FB1.2f

(W-FB1.2f) What proportion of the produced agricultural commodities reported in W-FB1.1a originate from water stressed areas?

Agricultural commodities	% of total agricultural commodity produced in water stressed areas	Please explain
<Not Applicable>	52	To obtain this figure, we have used data supplied by our AB Sugar sites for their total product tonnage (which also includes co-products). We also used the output from the WWF Water Risk Filter Tool assessment conducted towards the end of 2017. Therefore this figure is the outcome of one tool and a range of data sets. Other methodologies and internationally recognised water stress tools are used internally which provide more detailed results.

W-FB1.2g

(W-FB1.2g) What proportion of the sourced agricultural commodities reported in W-FB1.1a originate from water stressed areas?

Agricultural commodities	% of total agricultural commodity sourced in water stressed areas	Please explain
<Not Applicable>		Our sugar businesses work closely with their own grown and sugar suppliers and therefore they know the basins from which their suppliers source water for irrigation. At an AB Sugar level, we are working with our individual businesses to consolidate and harmonise this information, noting that various tools are used to identify water stress basins, and then validate the findings. We will be able to report via CDP the percentage of sugar sourced from water stressed areas in future years.

W1.2h

(W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	805152	About the same	Fresh surface water is the group's most significant source of water. This is a 4% increase this year which is aligned with the group's total water abstracted of 3% increase from the prior year.
Brackish surface water/Seawater	Relevant but volume unknown	<Not Applicable>	<Not Applicable>	The volume of brackish surface water used by the group is less than 1% of the total water withdrawn at group level and by a very limited number of sites.
Groundwater – renewable	Relevant	14824	Much lower	This is a 46% decrease compared with last year's reported renewable groundwater. Following a review by one of our businesses of their sources of water data, there was a reclassification of groundwater to municipal or third party sourced water which has impacted the group's total groundwater figure. It is noted that the businesses started to supply ABF with source of water data in 2016 and therefore we expect changes in the first few years of reporting as the sites improve accuracy and reporting processes.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	
Produced/Entrained water	Relevant	1043	About the same	As this is a 1% increase on the figure reported last year, our businesses have used about the same amount of produced or process water.
Third party sources	Relevant	16479	Much higher	We are reporting a 50% increase in the amount of water from third party sources or from the municipality. This is because following a review by one of our businesses, they reclassified the sources of their water between groundwater and third party. It is noted that the businesses started to supply ABF with source of water data in 2016 and therefore we expect changes in the first few years of reporting as the sites improve accuracy and reporting processes.

W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	24595	Much lower	Our businesses continue to invest in initiatives to reuse water in our operations and to monitor this process and data with more accuracy. In 2018, our operations increased the water they reused by 13% compared with last year which means that 27% of the total water abstracted was used more than once in our operations before it was returned to the waterways. The destination of our water discharge is estimated based on findings from the WWF Water Risk Filter Tool. Therefore while we have accurately reported data for the group's total discharged water, the proportion by destination is estimated.
Brackish surface water/seawater	Relevant	3185	Much lower	Our businesses continue to invest in initiatives to reuse water in our operations and to monitor this process and data with more accuracy. In 2018, our operations increased the water they reused by 13% compared with last year which means that 27% of the total water abstracted was used more than once in our operations before it was returned to the waterways. The destination of our water discharge is estimated based on findings from the WWF Water Risk Filter Tool. Therefore while we have accurately reported data for the group's total discharged water, the proportion by destination is estimated.
Groundwater	Relevant	40	Much lower	Our businesses continue to invest in initiatives to reuse water in our operations and to monitor this process and data with more accuracy. In 2018, our operations increased the water they reused by 13% compared with last year which means that 27% of the total water abstracted was used more than once in our operations before it was returned to the waterways. The destination of our water discharge is estimated based on findings from the WWF Water Risk Filter Tool. Therefore while we have accurately reported data for the group's total discharged water, the proportion by destination is estimated.
Third-party destinations	Relevant	12500	Much lower	Our businesses continue to invest in initiatives to reuse water in our operations and to monitor this process and data with more accuracy. In 2018, our operations increased the water they reused by 13% compared with last year which means that 27% of the total water abstracted was used more than once in our operations before it was returned to the waterways. The destination of our water discharge is estimated based on findings from the WWF Water Risk Filter Tool. Therefore while we have accurately reported data for the group's total discharged water, the proportion by destination is estimated.

W1.2j

(W1.2j) What proportion of your total water use do you recycle or reuse?

	% recycled and reused	Comparison with previous reporting year	Please explain
Row 1	26-50	Higher	This year 27% of the water withdrawn across the group was used more than once in our operations before it was returned to the waterways. This is a cost and resource-efficient way of using a key resource multiple times. The water is treated before using it mainly for irrigation, land-spreading or vehicle washing. This is a 13% increase on the amount reported in the prior year which highlights that our businesses are increasingly looking for ways of using resources more efficiently as well as recognising the importance of monitoring and measuring this activity. For example, at British Sugar's four UK sites, management have implemented water reduction initiatives to better monitor water usage. Specifically at British Sugar's Cantley site, a reverse osmosis plant was installed to reduce water consumption and staff were trained on ways to recycle water.

W-FB1.3

(W-FB1.3) Do you collect/calculate water intensity for each commodity reported in question W-FB1.1a?

Agricultural commodities	Water intensity information for this produced commodity is collected/calculated	Water intensity information for this sourced commodity is collected/calculated	Please explain
Sugar	No, not currently but we intend to collect/calculate this data within the next two years	No, not currently but we intend to collect/calculate this data within the next two years	We collect and calculate the water intensity of our sugar at an individual business level. For example, British Sugar which sources sugar beet, is a signatory to the voluntary Food and Drink Federation (FDF) which is helping UK food and drink manufacturers to improve their environmental sustainability by reducing water use by 20% by 2020 (baseline 2011/12). We are not in a position this year to disclose our consolidated sugar/water intensity figure.
Other commodities from W-FB1.1a, please specify (Cotton)	Not applicable	No, not currently but we intend to collect/calculate this data within the next two years	Over the next two years we will calculate the water intensity of sourced cotton.
Soy	Not applicable	No, not currently and we have no plans to collect/calculate this data within the next two years	
Rice	Not applicable	No, not currently and we have no plans to collect/calculate this data within the next two years	
Other commodities from W-FB1.1a, please specify (Tea)	Not applicable	No, not currently and we have no plans to collect/calculate this data within the next two years	For Twinings, responsible sourcing begins with ensuring that safe and decent working conditions in factories, gardens or farms are achieved, and that people in its supply chain are treated well, in line with international labour requirements. Therefore Twinings has prioritised activity within these areas. Water issues are addressed through tailored interventions to address specific community needs. These are identified through The Twinings Community Needs Assessment (TCNA) which is designed to help Twinings understand the needs of farmers, workers and communities in its supply chains. It is a participatory framework, developed in consultation with expert organisations including WaterAid. TCNAs include water and sanitation assessments with a focus on access to clean water and sanitation facilities. Please see page 22 of Twinings 2018 Sourced With Care report at www.sourcedwithcare.com .

W1.4

(W1.4) Do you engage with your value chain on water-related issues?

- Yes, our suppliers
- Yes, our customers or other value chain partners

W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Row 1

% of suppliers by number

76-100%

% of total procurement spend

Unknown

Rationale for this coverage

Our Supplier Code of Conduct sets out the standards we expect of our suppliers, including our requirement that they continually strive towards improving the efficiency and sustainability of their operations. Where identified as material, our businesses engage with suppliers on water issues and monitor progress. E.g. Primark works closely with suppliers and the facilities that manufacture Primark branded products, giving guidance and support around the management and monitoring of incoming water and wastewater discharge. Primark operates an international Chemicals and Pollution Management Programme that works to continuously improve efficiency and sustainability of manufacturing operations, with a specific focus in China where government reporting of incoming water use and discharge is a priority. Azucarera has an Agronomic Improvement Plan which aims to improve the efficient use of water by their beet growers via training, regular communications, and irrigation system demonstrations.

Impact of the engagement and measures of success

Primark is committed to the adoption of ZDHC's Wastewater Guidelines and has communicated expectations regarding wastewater to its product suppliers. The ZDHC Gateway–Wastewater module has been operational since July 2017. During this reporting period, Primark's Sustainable Cotton programme had 28,000 cotton farmers enrolled across India and Pakistan. The programme saw a 16.4% decrease in water use, a 30.35% reduction in chemical pesticide use and a 22.99% reduction in fertiliser use. Through its Agronomic Improvement Plan and in collaboration with AIMCRA, Azucarera has delivered training attended by 3500 beet growers to learn the benefits of irrigation powered by solar energy; demonstrated irrigation systems to show savings of up to 30% of the water needed to irrigate and shared benefits of low-pressure irrigation systems. Via an app, weekly water consumption updates are provided. Azucarera has a 2019 target of 100% sustainable suppliers of sugar beet and raw cane.

Comment

W1.4b

(W1.4b) Provide details of any other water-related supplier engagement activity.

Type of engagement

Incentivizing for improved water management and stewardship

Details of engagement

<Not Applicable>

% of suppliers by number

<Not Applicable>

% of total procurement spend

<Not Applicable>

Rationale for the coverage of your engagement

Water is a vital resource to AB Sugar and it is increasingly under risk due to climate change, population rises and other constraints. Growing sugar is water-intensive so AB Sugar focuses on reducing, reusing, recycling and efficiently storing the required volumes of water. Over 50% of sugar cane processed by Illovo is cultivated by out-growers; this is a strong business case to work with growers to ensure a secure supply of raw materials. As part of AB Sugar's plan to reduce their end-to-end water footprint by 30% by 2030, it is are focused on ensuring as much water in its production processes is reused or returned to source. In 2016, AB Sugar became a member of the Sustainable Agriculture Initiative (SAI) Platform. Within SAI, AB Sugar has joined the Sugar Beet Working Group and Farm Assessment Group. British Sugar and Azucarera's beet farmers are benefiting from this engagement with practical solutions for them to benchmark, assess and communicate their water activities.

Impact of the engagement and measures of success

<Not Applicable>

Comment

<Not Applicable>

Type of engagement

Incentivizing for improved water management and stewardship

Details of engagement

<Not Applicable>

% of suppliers by number

<Not Applicable>

% of total procurement spend

<Not Applicable>

Rationale for the coverage of your engagement

Primark engages with suppliers around Primark's Chemicals & Pollution Management programme requirements, for the safe storage, use and disposal of chemicals used in manufacturing processes (aligned to ZDHC programme guidance and tools).

Impact of the engagement and measures of success

<Not Applicable>

Comment

<Not Applicable>

Type of engagement

Other

Details of engagement

<Not Applicable>

% of suppliers by number

<Not Applicable>

% of total procurement spend

<Not Applicable>

Rationale for the coverage of your engagement

As Africa's largest sugar producer with a supply chain of over 14,700 growers, Illovo significantly invests in working closely with cane suppliers to ensure a sustainable supply. Over 50% of sugar cane processed by Illovo is cultivated by out-growers; this is a strong business case to work with growers to ensure a secure supply of raw materials. As an example, Illovo's site in Mozambique receives 34% of its cane supply from surrounding grower communities. This supply is required to increase by 76% by 2021/22 in order for the business to meet its sugar production target. The suppliers are made up of predominantly small scale growers producing rain-fed cane with 24% under sprinkler systems. A study undertaken by CRIDF identified the key risks to this supply being: - Higher and more irregular rainfall events - Flooding - Shorter rainy season - Increased temperatures

Impact of the engagement and measures of success

<Not Applicable>

Comment

<Not Applicable>

W1.4c

(W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

Maintaining brand reputation and value for our customers are of primary importance and therefore, included in our water management, we manage water risks which may impact reputation and / or have an impact on costs.

On a business to business commercial basis, our businesses respond to customer requests to collaborate on a range of environmental management projects including water reporting and considering ways to implement water efficiencies. For certain products, customers have been consulted on their use of water with the product to provide us with insights into potential water reduction strategies in our value chain.

Primark believes the most effective way to improve environmental management in its supply chain and across the wider industry is through industry-wide monitoring and performance improvement initiatives. For example, Primark takes the lead in developing monitoring tools and standards with ZDHC and the Sustainable Apparel Coalition (SAC), to maximise leverage and prevent duplication.

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

Yes

W2.1a

(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and total financial impact.

Country/Region

South Africa

River basin

Other, please specify (The basins in which we operate)

Type of impact driver

Physical

Primary impact driver

Seasonal supply variability/inter annual variability

Primary impact

Reduction or disruption in production capacity

Description of impact

Throughout ABF we utilise natural resources in our production processes. In some places and for some crops, such as sugar beet and cane, these are already being affected by changing weather patterns. For example, water and energy availability impacts production capabilities. For Illovo, the average downtime through non-availability of imported or co-generated electricity was 6.5%. This was driven mainly by low water levels affecting hydro-power supply.

Primary response

Other, please specify (Implementation of risk management identification and reporting systems)

Total financial impact

Description of response

Our businesses monitor and measure the risks and opportunities facing them at site and business level. The magnitude of the impact could be significant at business level but as our group consists of five segments, a substantive risk to ABF as a whole is rare. If something impacts one segment, the other four will continue and it will unlikely lead to a move in the group's share price. As part of their risk management, our businesses consider material impacts from climate change. Each business considers how to

minimise the impact of climate change on their processes and supply chain, by adapting processes or mitigating the emissions they produce. Our businesses also consider the R&D programmes in which they should focus investment to ensure they reduce the impact of climate change on their operations. ABF has a major technical centre in the UK at the Allied Technical Centre. Facilities also exist at ACH Food Companies in the US, Weston Technologies in Australia and AB Enzymes in Germany. These centres support the technical resources of the businesses in the search for new technology and in monitoring and maintaining high standards. For example, the frequency of severe weather events affects normal annual rainfall distribution; recently impacting Illovo's operations in Mozambique, Malawi and South Africa. Mitigating initiatives include investment in the water infrastructure, pumps and pump stations as well as creating flexible milling capacity and power generation.

Country/Region

South Africa

River basin

Other, please specify (The basins in which we operate)

Type of impact driver

Physical

Primary impact driver

Drought

Primary impact

Supply chain disruption

Description of impact

Throughout ABF our supply and value chain depend on our ability to purchase and then produce goods for sale. These relationships can be, and in some places are already being, impacted by climate change such as through the supply of sugar beet and cane. For example, Illovo's sugar cane suppliers experienced a significant reduction in cane production due to climate variability and drought, with Malawi and ESwatini experiencing the largest impacts.

Primary response

Other, please specify (Implementation of risk management identification and reporting systems)

Total financial impact

Description of response

Our businesses monitor and measure the risks and opportunities facing them due to climate change. This local approach allows each business to respond in the most appropriate manner for their operations. The magnitude of the impact could be significant at a business level but as our group consists of five segments, a substantive risk to ABF as a whole is very rare. If something impacts one business or segment, the other four will continue and it will unlikely lead to a move in the share price of the group.

Country/Region

Malawi

River basin

Zambezi

Type of impact driver

Physical

Primary impact driver

Increased water scarcity

Primary impact

Reduction or disruption in production capacity

Description of impact

During the 2016/17 season, Illovo's Nchalo operation in Malawi experienced a reduction in sugar production of 11% due to poor rainfall, low river, and lake levels and multiple power interruptions. This increased pump lost time analysis (LTA) and reduced effective water supplied to crops by 350mm (20% less than the long term mean of 1,765mm).

Primary response

Infrastructure maintenance

Total financial impact

Description of response

In response to unreliable water and energy supply, Nchalo Sugar has embarked on several mitigation actions including: - Irrigation

conversion – in the process of converting 2280 ha (17% of the estate) to more efficient drip irrigation systems - Improved pump and electricity infrastructure reliability – pump replacement (15% of the estate) and improved maintenance systems - Increased water storage capacity – installation of water for storage dams aimed at mitigating short power outages, river fluctuations and optimising on and off-peak power use - Irrigation management – improved management of the current system - Alternative energy – investigating options for alternative energy sources such as solar, diesel and factory cogeneration Engagement – Nchalo continues to support the High Level Canal initiative - Technology – the adoption of new technology where applicable e.g. RCM eeaf, Biometrics and CanePro Mobile. The financial impact is calculated based on the reduction in sugar production against the site's five year production average.

Country/Region

Malawi

River basin

Zambezi

Type of impact driver

Physical

Primary impact driver

Increased water scarcity

Primary impact

Reduction or disruption in production capacity

Description of impact

Illovo's Dwangwa operation has suffered power outages linked to national grid instability. This has resulted in an increase in pump lost time analysis (LTA) and reduced effective water supply to crops.

Primary response

Infrastructure maintenance

Total financial impact

Description of response

The site's response has been to plan for the installation of two new diesel generators with modern control systems. These generators will improve power supply reliability and enhance factory capability to recover quicker from national grid outage in order to continue power exports to agriculture.

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

Yes, fines, enforcement orders or other penalties but none that are considered as significant

W2.2a

(W2.2a) Provide the total number and financial value of all water-related fines.

Row 1

Total number of fines

1

Total value of fines

4317

% of total facilities/operations associated

1

Number of fines compared to previous reporting year

Lower

Comment

In the previous year, four fines were received. This year, a site received a fine for exceeding its discharge limits which was rectified by the site.

W3. Procedures

W-FB3.1

(W-FB3.1) How does your organization identify and classify potential water pollutants associated with its food, beverage, and tobacco sector activities that could have a detrimental impact on water ecosystems or human health?

Most ABF factories discharge their industrial wastewater into municipal treatment systems under strict discharge limits including total volume, BOD, COD, suspended solids, grease/oil/fats, pH levels and sometimes other specialist determinants. The municipal treatment systems use bacteria to 'digest' the pollutants and bring them down to concentrations which do not, when added to the discharges from other industrial, commercial and domestic premises, cause harm to aquatic ecosystems and cause loss of animals, flora and local amenities. Anything which would compromise the treatment systems is heavily controlled and strictly enforced. The wastewater from our food factories such as bakeries is mostly biologically degradable as the ingredients are mostly natural substances such as wheat, sugar and yeast which break down naturally. To speed up the process the sewage systems introduce selected bacteria to ensure adequate treatment for the large volume of wastewaters.

Our typical food factories will have a two-pronged approach to preventing pollution i.e. not exceeding their permitted discharge concentrations. They minimise any polluting materials entering their wastewater. Secondly, they ensure that there is sufficient monitoring, quality controls and pre-treatment on site so that whatever is eventually discharged complies with the terms of its discharge permit. Some factories, particularly our yeast factories, install buffer tanks to allow an aggregation of discharge liquids to allow it to balance out peaks of concentrated potential pollutants and ensure all discharges meet their limits or have on-site treatment systems before discharging. They usually have a combination of different treatment techniques according to the local ecological and health risks.

Our food factories need to rely on the expertise of the regulatory bodies to determine what is safe to be discharged. The role of the factories is therefore to ensure that those discharge limits are not exceeded.

There are some hazardous substances which some of our factories may discharge into the rivers which, unless strictly limited, could cause damage. These include non-natural chemicals, oils/greases and other eco-toxic substances such as heavy metals and paints which are sometimes used in the analytical quality control laboratories or by the engineers for special purposes. These substances require a higher level of control and our factories comply with the strict legislation placed on the discharge of such materials.

W-FB3.1a

(W-FB3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your food, beverage, and tobacco sector activities.

Potential water pollutant

Fertilizers

Activity/value chain stage

Agriculture – direct operations

Description of water pollutant and potential impacts

Nitrates, ammonia and phosphates from fertiliser into surface and ground water have the potential to negatively impact aquatic life and environmental habitats by causing potential algal blooms and resultant oxygen depletion.

Management procedures

Fertilizer management

Calculation of fertilizer intensity data

Please explain

To manage our fertiliser related risks, we follow the recommendations of soil and leaf samples analysed by reputable laboratories and use enhanced nitrogen carriers where necessary. There is no advantage for us in applying excess fertilisers as the costs would outweigh the yield benefit and would incur needless cost. In British Sugar, since 2001 incremental rate of growth has increased to 3% annually. Yield increases have been achieved with significantly lower inputs of fertiliser and herbicides per hectare.

Potential water pollutant

Pesticides and other agrochemical products

Activity/value chain stage

Agriculture – direct operations

Description of water pollutant and potential impacts

Insecticides utilised as insect control for our sugar cane crops. Pesticides have toxic properties and have the potential to contaminate ground and surface water sources, negatively affecting ecosystems and biodiversity.

Management procedures

Pesticide management

Please explain

We promote sustainable agricultural practices across all of our operations. We promote the use of the best available registered and recommended insecticides and apply these according to the manufacturer standards.

Potential water pollutant

Manure and slurries

Activity/value chain stage

Agriculture – direct operations

Description of water pollutant and potential impacts

A potential impact of mismanagement of manure and slurries is leaching through the soil and creating high concentrations of matter and bacteria in the water bodies.

Management procedures

Animal waste management

Waste water management

Please explain

The manure from our pig farming operations is collected and sent for aerobic and / or anaerobic digestion before disposal.

Potential water pollutant

Other, please specify (Discharges from food factories)

Activity/value chain stage

Agriculture – direct operations

Description of water pollutant and potential impacts

Lack of or ineffective wastewater treatment could lead to exceeding limits applied to volume, chemicals, solids, pH levels and other determinants impacting the balance of the receiving water course.

Management procedures

Waste water management

Please explain

Most of our food factories discharge industrial wastewater into municipal treatment systems under strict discharge limits including

total volume, BOD, COD, suspended solids, grease/oil/fats and pH levels. The wastewater from our food factories such as bakeries is mostly biologically degradable as the ingredients are mostly natural substances such as wheat, sugar and yeast which break down naturally. To speed up the process the sewage systems introduce selected bacteria to ensure adequate treatment for the large volume of wastewaters. Therefore, the concentrations limits applied to these factors are there to protect the digesting bacteria so that they operate to the desired level of efficacy. Our typical food factories will have a two-pronged approach to preventing pollution i.e. not exceeding their permitted discharge concentrations. They minimise any polluting materials entering their wastewater. Secondly, they ensure that there is sufficient monitoring, quality controls and pre-treatment on site so that whatever is eventually discharged complies with the terms of its discharge permit. Some factories, particularly our yeast factories, install buffer tanks to allow an aggregation of discharge liquids to allow it to balance out peaks of concentrated potential pollutants and ensure all discharges meet their limits or have on-site treatment systems before discharging. They usually have a combination of different treatment technologies according to the local ecological and health risks.

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed in an environmental risk assessment

Frequency of assessment

Six-monthly or more frequently

How far into the future are risks considered?

>6 years

Type of tools and methods used

Enterprise Risk Management

International methodologies

Other

Tools and methods used

Environmental Impact Assessment

IPCC Climate Change Projections

Internal company methods

External consultants

Other, please specify (Independent river basin studies)

Comment

Our decentralised model empowers our businesses to identify and manage risks on a timely basis to ensure compliance with legislation, our business principles and group policies. The risk assessments consider materiality, risk controls and likely impact against a range of criteria such as objectives, HSE, financial performance and reputation. ABF: An aggregated summary of risks including water is reviewed by the Chief Risk Officer, Group Finance Director, Chief Executive and the board at least annually. Division: Each division collates risks biannually from their businesses. This is shared with the Chief Risk Officer who reviews and challenges them with the Group Finance Director and divisional CEOs. Business: Each business completes a risk assessment biannually in a format prescribed by the board. It is submitted to the divisional CEO who presents these to the group executive. Asset: Risk assessments start at the site level with consideration for immediate environmental risks.

Supply chain

Coverage

Partial

Risk assessment procedure

Water risks are assessed in an environmental risk assessment

Frequency of assessment

Not defined

How far into the future are risks considered?

>6 years

Type of tools and methods used

Tools on the market
Enterprise Risk Management
International methodologies
Other

Tools and methods used

Environmental Impact Assessment
IPCC Climate Change Projections
Other, please specify (Engage with management catchment agencies)

Comment

Engagement with suppliers will be directed by each business if they have identified this as a material issue through their risk and opportunity assessments and other methodologies applied depending on the nature of the raw material, security of supply and geography.

Other stages of the value chain

Coverage

Partial

Risk assessment procedure

Water risks are assessed as a standalone issue

Frequency of assessment

Not defined

How far into the future are risks considered?

>6 years

Type of tools and methods used

Tools on the market
Enterprise Risk Management
Databases

Tools and methods used

WWF-DEG Water Risk Filter
Other, please specify (SMETA Audits)

Comment

For example, Illovo has benefitted from independent external third-party sustainability assessments conducted on behalf of their customers. Illovo operations have been assessed against the Pro Terra standard on behalf of American Sugar Refining Inc (ASR). Illovo facilities were also assessed by Partner Africa who conducted an audit on behalf of the Coca Cola Company using the Coca Cola Company's Supplier Guiding Principles (SGP).

W3.3b

(W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	Water is a primary resource for the majority of our businesses particularly those in the sugar, yeast, baking and pharmaceutical industries. Consequently understanding quality and quantity risks associated with current and future water supply at the local level is critical. Water availability and quality parameters are included in ABF's assessment of water risk using GPS co-ordinates of the facility and best available peer reviewed data sets via the WWF Water Risk Filter Tool. In addition, individual businesses conduct local level availability and quality checks to help ensure supply meets demand and quality requirements. For example, Illovo supplies surrounding mill estates and third party users with potable water that needs to meet consumer standards. Over the past few years a number of Illovo's operations have experienced issues with water supply not meeting demand or quality requirements. Internal company knowledge, water footprinting, river basin studies and catchment management agency engagement are all means through which Illovo assesses this risk and ensures standards are upheld.
Water quality at a basin/catchment level	Relevant, always included	Water is a primary resource for the majority of our businesses particularly those in the sugar, yeast, baking and pharmaceutical industries. Consequently understanding quality and quantity risks associated with current and future water supply at the local level is critical. Water availability and quality parameters are included in ABF's assessment of water risk using GPS co-ordinates of the facility and best available peer reviewed data sets via the WWF Water Risk Filter Tool. In addition, individual businesses conduct local level availability and quality checks to help ensure supply meets demand and quality requirements. For example, Illovo supplies surrounding mill estates and 3rd party users with potable water that needs to meet consumer standards. Over the past few years a number of Illovo's operations have experienced issues with water supply not meeting demand or quality requirements. Internal company knowledge, water footprinting, river basin studies and catchment management agency engagement are all means through which Illovo assesses this risk.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Competition for water is an issue for a number of basins in which we operate. Where affected our businesses are represented in catchment bodies or basin management agencies and work with others to address concerns. As a means of understanding and responding to other stakeholder needs, Illovo are members of local catchment organisations for all their operations and actively work to improve the effectiveness of water use across their operations. Each operation has a dedicated Senior Manager to represent Illovo in the catchment related forums. As examples, Illovo plays a key role in collaboration with WWF to undertake catchment research in Zambia. In South Africa, the eThekweni municipality has embarked on a 2020 vision to have zero waste to sea. This has an impact on Illovo's Merebank and Sezela operations and has led to the commercial department of eThekweni recommending that Merebank enter into a 'public private partnership' (PPP) with the municipality to investigate all options. For Sezela, the intent is to reuse sea outfall within the site.
Implications of water on your key commodities/raw materials	Relevant, always included	The availability of water has a direct bearing on the production of some of our key commodities such as sugar, tea, wheat and other grocery ingredients. For example, sugar beet in the UK is rain fed with little reliance on irrigation and therefore the crop may be affected by drought conditions. Approximately half of the sugar cane processed by Illovo is received from third party sugarcane providers. The impact of water supply issues on these operations has a significant impact on our key raw material. Illovo undertake extensive engagement with their outgrowers to identify and manage this risk. Some of our other businesses also work with the most vulnerable raw material suppliers to ensure their sustainable water supply.
Water-related regulatory frameworks	Relevant, always included	All of our businesses operate within a water and wastewater regulatory framework and tariff system. Some of our operations are also regulated by trans-boundary water agreements. As such, monitoring changes and engaging with national and local regulators is important to anticipate potential impacts to our operations. As an example, George Weston Foods' Western Australia sites are part of the mandatory Water Efficiency Management Plan (WEMP). Water Supply Authorities have taken proactive steps to encourage a reduction in the quantity of water used by large water using businesses. These programmes are supported by local regulation and heavily influenced by dam levels within the water supply grid and seasonal conditions. Currently GWF's Perth WA facilities are subject to these WEMPs. The Perth WA WEMP Waterwise Business Programme is a mandatory scheme which requires annual reporting on targets, actions and plans by GWF's Canningvale and Bentley sites. Annual progress reports are a requirement under the Western Australia Water Agencies (Water-Use) By-laws of 2010. Activities by the sites have included redirecting wash water to a holding tank for reuse, use of trigger nozzles on hoses and restrictions on the hosing of hard surfaces. ZDHC's Wastewater Guidelines (2016) set an aligned expectation on wastewater quality for the entire textile and footwear industry. This standard in wastewater release goes beyond regulatory compliance to ensure wastewater from manufacturing sites does not adversely affect the environment and surrounding communities. As a member of ZDHC, Primark has adopted the ZDHC Wastewater Guidelines and asks suppliers to use these parameters.
Status of ecosystems and habitats	Relevant, always included	ABF's water risk assessment reviews ecosystems at facility level. Some businesses rely on ecosystem services such as water purification, flood defence and pollination. The loss or degradation of these may have an impact on production efficacy and operating costs. Some businesses support ecosystem conservation such as Jordans Ryvita Dorset which supports an award-winning farming model which pays British farmers a premium for their crop in return for enhancing wildlife biodiversity on their land. Azucarera has an agreement with the Environment Department of the government of Andalusia for managing La Laguna de Las Quinientas near the Guadalete factory in Jerez de la Frontera, as an industrial pond and wetland. Some years ago, the lagoon received water from the factory's production process and served as the habitat for protected species of birds. Even though the factory is not currently sending water to the lagoon, Azucarera is maintaining the site as a wetland for the species. Illovo sites are located next to resources of conservation importance including the Selous National Park, Tanzania, Kafue Flats Wetland, Zambia and the Incomati Estuary, Mozambique. Important to Illovo's risk assessment process is to ensure that operations do not negatively impact the surrounding natural environment.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	ABF businesses provide fully-functioning WASH services for all employees and contractors and these will be assessed by many of our businesses as part of their internal risk assessments Most of Illovo's operations also supply workers with basic amenities, such as water and electricity and in addition, supply some of the communities in which they are located. During the reporting year, Illovo's operations in Mozambique installed a water supply system to the surrounding community's market to help with washing of fresh produce and hands and access to toilets with water.
Other contextual issues, please specify	Relevant, sometimes included	River basin management plans – Many of our facilities participate in their local basin management planning or take them into account when making operational decisions which may involve water as changes in the management of the basins on which they rely can have a significant impact on the productivity of their business. Consequently, our onsite risk managers keep abreast of all proposed and planned changes to river basin management through river basin publication and studies and catchment agency engagement.

(W3.3c) Which of the following stakeholders are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Customers	Relevant, always included	Maintaining brand reputation and value for our customers are of primary importance and therefore, included in our water management, we manage water risks which may impact reputation and / or have an impact on costs. On a business to business commercial basis, a number of our businesses share information about operational water use with their customers. For certain products, customers have been consulted on their use of water with the product in order to provide us with insights into potential water reduction strategies in our value chain. For example, AB Sustain's think.water programme is designed to highlight the sourcing and effectiveness of water use within a dairy enterprise. By enabling dairy farmers to benchmark their performance against other farms, the system can help to identify areas for improvements in water efficiency. Working with Dairy Crest, AB Sustain has assessed and benchmarked over 250 UK farms' water use, water sourcing and associated costs. Illovo benefits from independent external third-party sustainability assessments conducted on behalf of their customers. Illovo operations have been assessed against the Pro Terra standard on behalf American Sugar Refining Inc (ASR). Illovo facilities were also assessed by Partner Africa who conducted an audit on behalf of the Coca Cola Company using the Coca Cola Company's Supplier Guiding Principles (SGP).
Employees	Relevant, always included	ABF's first priority is to keep our people safe at work. Businesses using for example large volumes of water, water which requires intensive cleaning or heating incorporate employee safety into their water management. Employees are also briefed on water activities. For example, George Weston Foods incorporates water saving initiatives and water scarcity in its mandatory employee training. Across Illovo, several operations are responsible for the supply of essential services, including potable water, to their employees and their families.
Investors	Relevant, always included	Maintaining brand reputation and value for our customers are of primary importance and therefore, included in our water management, we manage water risks which may impact reputation and / or have an impact on costs. Increasingly investors and other shareholders ask for our water data and management approach at a group and individual business level and as such, investor concerns are increasingly included in water risk assessments. For example, sharing with investors how we are managing our impact on water resources and addressing their key concerns such as assessing our exposure to water stressed areas, supports our brand reputation and approach to responsible business practices.
Local communities	Relevant, always included	For most of our businesses, we share water with others in the local community. Their needs and impacts on the water sources are vital to our long-term assessments of water availability and quality for all. We are also cognisant of social flow requirements downstream of our operations. For example, as part of Illovo's purpose to contribute to a 'Thriving African Community', the Maragra operations in Mozambique installed a water supply system to the surrounding community's market. Partnering with the local municipality, Illovo drilled an electric borehole and built a water tower, to the value of 1m Meticais, while the municipality built public toilets. The aim is that having clean water at the local market will contribute to the reduction of waterborne diseases; fresh produce and hands can be washed on site and the community will have access to toilets with water all day. The Twinings Community Needs Assessment (TCNA) is designed to help Twinings understand the needs of farmers, workers and communities in its supply chains. It is a holistic participatory framework, developed in consultation with expert organisations including UNICEF, WaterAid, Solidaridad and GAIN. Of the 10 topics covered Water and Sanitation; Natural Resources and Farming Practices are included. To date, assessments have been conducted in China, India, Indonesia, Sri Lanka, Kenya, Malawi, Sudan, Chile, South Africa and Egypt. The assessments provide the basis for an action plan with producers to address human rights issues and community needs. Twinings believe that having a deeper, first-hand understanding of the issues will help them decide how best to address them through appropriate interventions, and support producers to have the greatest impact on tea communities. Please refer to Twinings Progress Report 2018 at www.sourcedwithcare.com .
NGOs	Relevant, always included	We engage with NGOs on a range of environmental issues including water use and quality. We benefit from their local knowledge and networks as well as sharing with them our own water performance to help us with our continuous improvements in water activities. For example, Primark has an ambitious Chemicals & Pollution Management Programme incorporating requirements from their commitment to the Greenpeace DETOX campaign (2014) and clean chemical use, storage and release, in collaboration with the ZDHC (Zero Discharge of Hazardous Chemicals Foundation) industry brand collaboration group. Primark is also an active member of the Sustainable Apparel Coalition (SAC) which covers water issues from an industry wide perspective. Illovo engages with NGOs such as the Climate Resilient Infrastructure Development Facility (CRIDF), the German Deutsche Gesellschaft für International Zusammenarbeit (GIZ) and local stakeholders to improve access to safe drinking water by the communities surrounding their operations.
Other water users at a basin/catchment level	Relevant, sometimes included	Competition for water is an issue within a number of basins in which we operate. As a means of understanding and responding to the risks associated with water, many of our sites are represented within the local catchment organisations. We work in partnership with other local users to improve the long-term sustainability of the local water resources. Primark is working closely with the Institute of Public and Environmental Affairs (IPE) China to target supplier violations relating to environmental discharge and to improve environmental management in factories.
Regulators	Relevant, always included	All our businesses operate within a water and wastewater regulatory framework, including permits and licenses for water abstraction and discharge allowances, and so the concerns and plans of local regulators are critical within our water risk assessments. Certain jurisdictions where we operate require water management plans, outcomes of water use audits and monitoring data on water use and outputs. For example, George Weston Foods' Western Australian sites adhere to state-based water efficiency programmes which require selected facilities to have Water Efficiency Management Plans (WEMPs) in place.
River basin management authorities	Relevant, sometimes included	Changes in the management of the basins in which we operate can have a significant impact on the productivity of our businesses. This is for upstream activity which may impact water quality and quantity and downstream which may have repercussions for our wastewater treatment. For most of our businesses, our onsite risk or operational managers kept abreast of all proposed and planned changes to river basin management through river basin studies and catchment agency engagement. The complexity of engagement with basin authorities is heightened in Illovo's operations in eSwatini and Mozambique which are regulated by trans-boundary water agreements

	Relevance & inclusion	Please explain
Statutory special interest groups at a local level	Relevant, always included	The needs and concerns of local interest groups are important in terms of brand reputation and our licence to operate. For example, George Weston Foods participates in the local activities of industry bodies such as the Australian Food and Grocery Council including making submissions and presentations on site level water performance. In China, the Institute of Public and Environmental Affairs (IPE) promotes the public disclosure of environmental information by local government and businesses. IPE's work has led to manufacturing sites in China remedying environmental issues. Primark continues to work with IPE to ensure that sites making products and materials for Primark are acting to address such issues through training and on-site remediation. Primark strongly supports the IPE approach which encourages supplier sites to take ownership of their environmental performance. In 2017, Primark supported supplier sites in China to disclose their environmental performance data including water consumption and wastewater discharge and emissions.
Suppliers	Relevant, always included	Our businesses engage with their suppliers on water issues where it is fundamental for growth of raw materials or production. For example, Azucarera has been building information on the water irrigation practices of their main beet growers to ensure water is used at the right time and quantity. Primark's programme with CottonConnect has reduced the environmental impact of cotton production through a reduction in the amount of water, chemical fertilisers and pesticides used. During this reporting period, Primark's programme with CottonConnect has reduced the environmental impact of cotton production through a reduction in the amount of water, chemical fertilisers and pesticides used. During this reporting period, the programme had 28,000 cotton farmers enrolled across India and Pakistan. The programme saw a 16.4% decrease in water usage, a 30.35% reduction in chemical pesticide use and a 22.99% reduction in fertiliser use.
Water utilities at a local level	Relevant, always included	Engagement with local water utilities and suppliers is critical for our licence to operate. Understanding their plans for short and long-term water management are vital for our access to clean and sustainable water.
Other stakeholder, please specify	Relevant, always included	Regional and national governments - Some of our businesses engage directly with governments on water issues. E.g. British Sugar engages with UK and EU Trade Associations and directly with the UK Government. Voluntary special interest groups - British Sugar is a signatory to the voluntary Food and Drink Federation (FDF) which is helping UK food and drink manufacturers to improve their environmental sustainability by reducing water use by 20% by 2020 (2011/12 baseline). Water and industry experts - Azucarera takes its water responsibility very seriously and took the step to join the pioneering network Esagua, an industry partnership which brings together more than 25 innovative companies to promote their shared commitment to reduce their water footprint and achieve a more sustainable use of fresh water. AB Sugar China has been running the Sugar Beet Academy for nine years; a partnership between academics, industry professionals and scientists to address sustainable beet production which includes effective use of water.

W3.3d

(W3.3d) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

ABF is a company which thinks long term, invests consistently in its assets and finances itself conservatively. Our decentralised model empowers the management of our businesses to identify and manage their risks on a timely basis to ensure compliance with legislation, our business principles and group policies.

1) Scope of risk management

ABF's board has ownership for the management of risks such as the environment and climate, energy and water. The board reviews the material risks and opportunities facing our businesses and reviews the effectiveness of the risk management process, control procedures and resources devoted to them. Detailed risk assessments are managed by businesses across all their sites. Environmental risks with a high and immediate likelihood are reported to the Group CEO via the Group HR Director (day to day responsibility for environmental issues) and the Group Company Secretary (overall responsibility for ABF's approach to corporate responsibility). Otherwise, water-related risks are incorporated into the standard risk processes.

2) Business and divisional level

Internal Audit reports to the board and maintains regular liaison with businesses and divisions. It identifies the risks arising from business activities and confirms the measures to deal with major risks by averting, minimising, transferring or retaining them. Risks are assessed on a short, medium and long-term basis (10+ years). The frequency of assessment of identified risks takes place biannually. Each business completes its assessment which is signed by their CEO and submitted to ABF. It highlights their main business risks and includes water-related risks where relevant. These assessments are reviewed by ABF's board at least once a year.

3) Asset level

Risk assessments start at the asset level with each site assessing their immediate environmental sensitivities and risks, usually related to effluent, water extraction, energy use, all emissions and odours. These assessments are reported to the business CEO and onto to the Group CEO via the Group's Director of Financial Control (equivalent role to Group Risk Officer).

4) Assessing risk relativity

Our businesses complete risk assessments using site level assessments and considering longer-term business objectives. Criteria for determining priorities include:

- a. Risk of legal non-compliance/H&S/physical environmental damage/reputation;
- b. Pollution or nuisance to neighbours;
- c. Opportunity for enhanced financial return/client acquisition/revenue streams;
- d. Ease of achievement.

5. Terminology

ABF has a Risk Assessment Policy and process; risks are quantified at site level, collated at business level and then raised to ABF on a 6-monthly basis. Contributing to the risk assessments, each is required to complete an annual return on environmental performance and provide evidence that all significant issues have been reviewed at board level. Non-financial risks are mapped on a risk impact matrix which considers stakeholder concern and assesses likely level of impact. They are classified into business, operational, financial and project risks. It is the responsibility of the business CEOs to embed assessments and implement necessary response strategies.

6. Substantive impact

ABF defines substantive change in our business as a change which could result in a financial impact on the group e.g. affecting our ability to generate profit or through movements in our share price. A material change could also impact our ability to continue supplying our customers. An event that may receive media attention may be considered material. If ABF was stopped from being a socially useful business or conducting our activities in a socially responsible way, that would be classified as substantive. ABF consists of five segments or divisions; a substantive risk to ABF as a whole is rare because if something impacts one segment, the other four will continue and it is unlikely to move the group's share price. However, if water is not managed effectively, operating costs relating to volume, quality management and discharge can be substantive especially in our water intensive operations such as sugar and yeast. As such there is a strong focus on using water efficiently. This is part of our ethos that less water used equates to less wastewater to treat, lowering business costs and reducing business risk.

Response to water-related risks

Adaptation: The success of our operations reliant on agriculture is intrinsically linked to climate; changes in precipitation, the frequency of extreme weather events and temperature is impacting our businesses. They are working on improving their resilience to projected changes and that prospective opportunities are realised. In the short-term, this involves identifying operations with the greatest susceptibility to climate change and developing responses. In the long term, we aim to gain competitive advantage through resilient and resource efficient operations.

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes, both in direct operations and the rest of our value chain

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

ABF defines substantive change in our business, operations, revenue or expenditure as change which could eventually result in a financial impact on the group such as affecting our group's ability to generate profit or through movements in our share price.

A material change could also be one that impacts our ability to continue supplying our valuable customers. An event that may receive attention from national or international media may also be considered as potentially material to the group.

If a change stopped ABF from being a socially useful business or conducting our activities in a socially responsible way, that would be classified as substantive change.

ABF consists of five divisions or segments. A substantive risk to ABF as a whole is very rare because if something impacts one business or segment, the other four will continue to operate and it is unlikely to move the group's share price.

W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	19	1-25	The sites identified this year include all Illovo sites, AB Sugar China's two sites and five George Weston Foods (GWF) sites situated in the drought-affected Murray Darling Basin in Australia. Illovo sites are included as, as a business, Illovo accounted for 96% of the group's total water use in the reporting year and several of the sites are exposed to water related risk to varying degrees of significance ranging from impacting hydro-electric supply to drought. AB Sugar China's sites account for less than 1% of ABF's total water abstraction but it is recognised that they are operating in high water stress basins. For the 2018 sugar beet crop, 84% of the total crop was irrigated, with drip irrigation accounting for 46% of this; representing an average increase of 8% year-on-year. As a result, the business has found drip irrigation contributing towards enhanced crop growth as it uses 40-50% less water than conventional watering methods such as sprinklers. Additional benefits include preventing soil erosion and nutrient runoff as the water penetrates deeply into the soil around the root zone. Alongside the current Government support, AB Sugar China continues to promote drip irrigation in both of its operating regions in the north. Parts of Australia have experienced prolonged drought and again, while the collective GWF sites account for less than 1% of ABF's total water abstraction, we have included them here because of the high stress in the water basin and risk associated with secure supply of key materials, and potential regulatory and reputational risks. As the identified risks for these sites are not common across them all, and they are sites operating across two ABF business segments of Sugar and Grocery, we do not believe that all these sites being impacted by water risk and creating a substantive change at group level is likely. However, we recognise they have experienced water risks in the year and are therefore reporting them here. The term 'facility' covers all of ABF's direct operations which includes factories, offices, warehouses and retail space.

W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive impact on your business, and what is the potential business impact associated with those facilities?

Country/Region

South Africa

River basin

Pongola-Uzimkulu

Number of facilities exposed to water risk

6

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

1-25

Comment

Illovo accounts for 96% of the group's total water use.

Country/Region

Malawi

River basin

Zambezi

Number of facilities exposed to water risk

2

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Less than 1%

Comment

Illovo accounts for 96% of the group's total water use.

Country/Region

Zambia

River basin

Zambezi

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Less than 1%

Comment

Illovo accounts for 96% of the group's total water use.

Country/Region

United Republic of Tanzania

River basin

Rufiji

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Less than 1%

Comment

Illovo accounts for 96% of the group's total water use.

Country/Region

Mozambique

River basin

Incomati

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Less than 1%

Comment

Illovo accounts for 96% of the group's total water use.

Country/Region

Swaziland

River basin

Maputo

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Less than 1%

Comment

Illovo accounts for 96% of the group's total water use.

Country/Region

China

River basin

Yongding He

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Less than 1%

Comment

Our sugar sites in China account for less than 1% of the group's total water use.

Country/Region

China

River basin

Luan He

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Less than 1%

Comment

Our sugar sites in China account for less than 1% of the group's total water use.

Country/Region

Australia

River basin

Murray - Darling

Number of facilities exposed to water risk

5

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

1-25

Comment

These sites account for less than 1% of the group's total water use.

W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Region

Malawi

River basin

Zambezi

Type of risk

Physical

Primary risk driver

Drought

Primary potential impact

Reduced revenues from lower sales/output

Company-specific description

Increased pressure on water supply, drought, revoking of permits, and poor maintenance of irrigation infrastructure result in water supply disruptions at Illovo's operations.

Timeframe

4 - 6 years

Magnitude of potential impact

High

Likelihood

Very likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

The financial impact has been quantified and is not disclosed. It is based on the potential impact of drought on yield over six years for Illovo's irrigated sites.

Primary response to risk

Infrastructure maintenance

Description of response

1. Planned and focused maintenance/replacement of infrastructure 2. Irrigation scheduling and drought mitigating strategies 3. Abstraction permits and entrenchment of water rights 4. Construction of additional water storage dams 5. Investment in more efficient irrigation systems 6. Engagement with stakeholders 7. Water Footprint exercise leading to a better understanding of our water use in order to reduce our risk exposure by increasing water efficiency (yield per unit of water) 8. Wastewater recovery from mills to irrigation.

Cost of response**Explanation of cost of response**

The cost of response is derived from an estimation of management of the above activities, capital investment in new infrastructure and investment in the new systems.

Country/Region

Mozambique

River basin

Incomati

Type of risk

Physical

Primary risk driver

Declining water quality

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Increased salinity of river water due to salt water intrusion has resulted in reduced irrigation volumes to prevent a negative impact of saline water on cane quality.

Timeframe

1 - 3 years

Magnitude of potential impact

High

Likelihood

Very likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Not quantified

Primary response to risk

Water-related capital expenditure

Description of response

Improved pumping and drainage control, increased replant and gapping, harvesting improvements, and improved varieties, fertiliser and pesticide practices were included in the site's strategic plan

Cost of response

Explanation of cost of response

The impact on water and energy use of these initiatives has not been fully quantified.

Country/Region

United Republic of Tanzania

River basin

Rufiji

Type of risk

Physical

Primary risk driver

Severe weather events

Primary potential impact

Impact on company assets

Company-specific description

Climate change projections for the Rufiji River Basin predict an increase in temperature and an increase in rainfall variation with more volatile intensity resulting in both flooding and droughts. This could result in reduced cane production and crop damage at Kilombero. MCP yields have decreased due to precipitation variability.

Timeframe

1 - 3 years

Magnitude of potential impact

Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

The financial impact has been estimated within the business. It reflects the estimated lost opportunity for not implementing measures to mitigate against severe weather conditions versus the potential revenue generated from cane production by the year 2023.

Primary response to risk

Water-related capital expenditure

Description of response

Plans include vertical expansion comprising conversion of 1,548 ha of rain-fed cane to drip irrigation using groundwater. This irrigation conversion should result in an increase in production.

Cost of response

Explanation of cost of response

The costs of managing this risk cover projects for improved irrigation efficiency, scheduling improvements, reduced reliance on river water by supplementing with ground water, improved monitoring, and improved dam management.

Country/Region

South Africa

River basin

Pongola-Uzimkulu

Type of risk

Physical

Primary risk driver

Other, please specify (Changes in precipitation patterns and extreme variability in weather patterns)

Primary potential impact

Constraint to growth

Company-specific description

As described in our response to 3.3d, it is unlikely that one extreme weather event will create a substantive change to the ABF group. However, we recognise that continued changes in precipitation patterns and extreme variability in weather patterns could impact a number of our businesses and, at a consolidated level, start to generate a group risk. Increased severity of extreme weather events such as cyclones and floods and changes in precipitation and temperatures may damage infrastructure and impact availability of key agricultural raw materials and commodities. These weather event can contribute to lower harvests, infestations, and constraints on water supply. These types of risk have the potential to increase operational cost, disrupt the value chain and impact our ability to do business.

Timeframe

4 - 6 years

Magnitude of potential impact

Medium

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Potential increase in costs arising from lack of access to raw materials of sufficient quality could impact revenues significantly depending on the severity and the location of the change in climate. Due to ABF's decentralised structure we do not have a consolidated impact figure however, each business manages this risk and related costs.

Primary response to risk

Other, please specify (Site specific responses)

Description of response

Measures used to manage the risk include: - Conducting risk assessments - Devising procurement strategies to spread risk - Analysing water risk at country level and investing in water efficiency programmes at local level - Investing in programmes to help farmers respond to climate change e.g. Twinings support the Ethical Tea Partnership which has specific programmes for climate change adaptation and mitigation. - Investing in new water-related technologies and irrigation techniques - Investing in water efficiencies across our operations As demonstrated with these examples, multiple initiatives are run at operating company level to identify and mitigate these risks. This approach is in line with the group management philosophy of our businesses making decisions locally. We recognise that we operate in a number of geographies already experiencing changes to their micro-climate, with experiences of flooding, drought and seasonal weather variations. These physical risks are making energy efficiency, water conservation and other climate adaptation and mitigation activities priorities for those affected businesses.

Cost of response

Explanation of cost of response

Managing these costs is best devolved to our businesses that are closest to their supply chains and / or have their own land to manage. Given the materiality of the risk, management is an ongoing requirement with costs embedded into business as usual activities. Additional costs do arise as and when the corporate centre conducts strategic and tactical analysis to support our businesses. For example, Illovo's operations in Malawi and Mozambique have historically been prone to flooding. This can result in damage to infrastructure and loss in productivity. At these operations, Illovo is working on re-delineating flood risk zones and

implementing and improving flood protection mechanisms. Illovo's flood mitigation measures at their operations in Malawi and Mozambique have demonstrated improved resilience and yielded improved results.

Country/Region

Australia

River basin

Murray - Darling

Type of risk

Reputation & Markets

Primary risk driver

Other, please specify (Reputation: Increased stakeholder concern or negative stakeholder feedback)

Primary potential impact

Other, please specify (Reduced revenue from decreased demand for goods/services)

Company-specific description

With increased scrutiny of climate change and sustainability performance by investors such as Legal and General Investment Management, NGOs and others across our value chain including customers, we recognise there is a risk that our performance is not communicated effectively or valued sufficiently thereby impacting our reputation. In turn, this could negatively impact the demand for goods and services across our businesses. There is also increasing and varying certification or standards required or favoured by different markets for different product lines. To ensure reputation is maintained and demand for our goods, it is necessary to respond to these requirements while balancing operational needs.

Timeframe

Current up to 1 year

Magnitude of potential impact

Low

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

The costs associated with reputational damage are likely to vary subject to the nature of the issue and the number of our businesses impacted. Consolidated at the ABF group level, the magnitude of the impact is likely to be low however, we recognise this is a growing risk that our businesses are actively managing to ensure that ABF can respond to external stakeholder disclosure expectations. For example, ABF has introduced a new internal annual reporting process for our businesses to share their policies, strategies, activities, and impacts across a range of sustainability issues with climate action featuring heavily to reflect the investor and NGO requests for greater detail in this area.

Primary response to risk

Other, please specify (Site or business specific responses)

Description of response

This is managed in a variety of ways: 1. Compliance with ABF's Environment Policy and annual reporting of environmental performance; 2. Supplier support to help with water stewardship; 3. Substantial investment to improve environmental risk management with a focus on water; 4. Engagement with governments and NGOs to ensure the views of our stakeholders are represented; 5. We have specific roles within the businesses with responsibility for keeping the boards informed of developments in sustainability. These roles also help represent ABF and its businesses when contributing to the development of national and international policy and the thought leadership of organisational bodies. For example, AB Sugar contributed to the OECD FAO's Guidance for Responsible Agricultural Supply Chains. 6. A risk and opportunity management process which incorporates risks from site level up to group level. Along with other non-financial risks, water risks are classified into business, operational, financial and projects risks. Water risks may also be classified by our businesses into physical (scarcity, quality, pollution, quality), regulatory and

reputational as per the WWF Water Risk Filter Tool; 7. Compliance with water regulations and engagement with regulators to monitor any changes in available water quality and quantity.

Cost of response

Explanation of cost of response

The costs associated with managing this risk are ever-increasing as we continually improve our footprints in our own operations, aspire to do so throughout our supply chains and focus resource on monitoring and reporting our progress. The requirement to monitor climate action and related water stewardship with increasing requests to disclose further details on our approach has contributed to some additional costs. We are investing time and resources in our assessment of climate-related and water risks and considering the potential financial exposure across our portfolio with a roadmap for future disclosure of our work in this area.

Country/Region

Australia

River basin

Murray - Darling

Type of risk

Physical

Primary risk driver

Drought

Primary potential impact

Supply chain disruption

Company-specific description

Areas of the Murray-Darling Basin are regularly impacted by drought and water scarcity remains an issue. Water used by the GWF business is sourced almost entirely from mains supply for the manufacturing sites. The sites are therefore subject to the requirements of the Water Authority and have developed Water Efficiency Management Plans (WEMPs) during times of water scarcity. Permanent water saving rules are in place in most local government areas in Australia. GWF applies the 'common sense' water saving rules at all times to avoid water wastage; these include activities such as restrictions on hosing of hard surfaces and use of trigger nozzles. GWF also has a water efficiency performance metric and reduction target which is aligned to the Australian Food and Grocery Council's Sustainability Commitment to reduce water consumption per tonne of production by 20% by 2020. Each site has specific targets and monitored projects to achieve their water savings which are communicated to all employees on-site to maintain employee ownership. Due to operating within the parameters set by the Water Authority and local regulation, scarcity of water presents a greater risk to GWF's upstream supply chain, than in direct operations, in the form of increased prices and / or reduced availability of key ingredients during times of drought. GWF works closely with its suppliers to minimise disruption of supply.

Timeframe

More than 6 years

Magnitude of potential impact

Medium

Likelihood

Virtually certain

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

The financial impact is calculated by the business but not disclosed here. Costs are associated with potential disruption to the supply of key ingredients and engaging with suppliers to address water issues, cost of water supplied and related cost factors such as chemical treatment and wastewater handling, implementation of water efficiency programmes and adapting the business model to respond to prolonged drought.

Primary response to risk

Engage with suppliers

Description of response

Engaging with key suppliers to address upstream water issues.

Cost of response

Explanation of cost of response

Country/Region

Malawi

River basin

Zambezi

Type of risk

Physical

Primary risk driver

Other, please specify (Changes in precipitation patterns and extreme variability in weather patterns)

Primary potential impact

Constraint to growth

Company-specific description

As described in our response to 3.3d, it is unlikely that one extreme weather event will create a substantive change to the ABF group. However, we recognise that continued changes in precipitation patterns and extreme variability in weather patterns could impact a number of our businesses and, at a consolidated level, start to generate a group risk. Increased severity of extreme weather events such as cyclones and floods and changes in precipitation and temperatures may damage infrastructure and impact availability of key agricultural raw materials and commodities. These weather event can contribute to lower harvests, infestations, and constraints on water supply. These types of risk have the potential to increase operational cost, disrupt the value chain and impact our ability to do business.

Timeframe

4 - 6 years

Magnitude of potential impact

Medium

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Potential increase in costs arising from lack of access to raw materials of sufficient quality could impact revenues significantly depending on the severity and the location of the change in climate. Due to ABF's decentralised structure we do not have a consolidated impact figure however, each business manages this risk and related costs.

Primary response to risk

Other, please specify (Site specific responses)

Description of response

Measures used to manage the risk include: - Conducting risk assessments - Devising procurement strategies to spread risk - Analysing water risk at country level and investing in water efficiency programmes at local level - Investing in programmes to help farmers respond to climate change e.g. Twinings support the Ethical Tea Partnership which has specific programmes for climate change adaptation and mitigation. - Investing in new water-related technologies and irrigation techniques - Investing in water efficiencies across our operations As demonstrated with these examples, multiple initiatives are run at operating company level to identify and mitigate these risks. This approach is in line with the group management philosophy of our businesses making

decisions locally. We recognise that we operate in a number of geographies already experiencing changes to their micro-climate, with experiences of flooding, drought and seasonal weather variations. These physical risks are making energy efficiency, water conservation and other climate adaptation and mitigation activities priorities for those affected businesses.

Cost of response

Explanation of cost of response

Managing these costs is best devolved to our businesses that are closest to their supply chains and / or have their own land to manage. Given the materiality of the risk, management is an ongoing requirement with costs embedded into business as usual activities. Additional costs do arise as and when the corporate centre conducts strategic and tactical analysis to support our businesses. For example, Illovo's operations in Malawi and Mozambique have historically been prone to flooding. This can result in damage to infrastructure and loss in productivity. At these operations, Illovo is working on re-delineating flood risk zones and implementing and improving flood protection mechanisms. Illovo's flood mitigation measures at their operations in Malawi and Mozambique have demonstrated improved resilience and yielded improved results.

Country/Region

Mozambique

River basin

Inkomati-Usuthu

Type of risk

Physical

Primary risk driver

Other, please specify (Changes in precipitation patterns and extreme variability in weather patterns)

Primary potential impact

Constraint to growth

Company-specific description

As described in our response to 3.3d, it is unlikely that one extreme weather event will create a substantive change to the ABF group. However, we recognise that continued changes in precipitation patterns and extreme variability in weather patterns could impact a number of our businesses and, at a consolidated level, start to generate a group risk. Increased severity of extreme weather events such as cyclones and floods and changes in precipitation and temperatures may damage infrastructure and impact availability of key agricultural raw materials and commodities. These weather event can contribute to lower harvests, infestations, and constraints on water supply. These types of risk have the potential to increase operational cost, disrupt the value chain and impact our ability to do business.

Timeframe

4 - 6 years

Magnitude of potential impact

Medium

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Potential increase in costs arising from lack of access to raw materials of sufficient quality could impact revenues significantly depending on the severity and the location of the change in climate. Due to ABF's decentralised structure we do not have a consolidated impact figure however, each business manages this risk and related costs.

Primary response to risk

Other, please specify (Site specific responses)

Description of response

Measures used to manage the risk include: - Conducting risk assessments - Devising procurement strategies to spread risk - Analysing water risk at country level and investing in water efficiency programmes at local level - Investing in programmes to help farmers respond to climate change e.g. Twinings support the Ethical Tea Partnership which has specific programmes for climate change adaptation and mitigation. - Investing in new water-related technologies and irrigation techniques - Investing in water efficiencies across our operations As demonstrated with these examples, multiple initiatives are run at operating company level to identify and mitigate these risks. This approach is in line with the group management philosophy of our businesses making decisions locally. We recognise that we operate in a number of geographies already experiencing changes to their micro-climate, with experiences of flooding, drought and seasonal weather variations. These physical risks are making energy efficiency, water conservation and other climate adaptation and mitigation activities priorities for those affected businesses.

Cost of response

Explanation of cost of response

Managing these costs is best devolved to our businesses that are closest to their supply chains and / or have their own land to manage. Given the materiality of the risk, management is an ongoing requirement with costs embedded into business as usual activities. Additional costs do arise as and when the corporate centre conducts strategic and tactical analysis to support our businesses. For example, Illovo's operations in Malawi and Mozambique have historically been prone to flooding. This can result in damage to infrastructure and loss in productivity. At these operations, Illovo is working on re-delineating flood risk zones and implementing and improving flood protection mechanisms. Illovo's flood mitigation measures at their operations in Malawi and Mozambique have demonstrated improved resilience and yielded improved results.

W4.2a

(W4.2a) Provide details of risks identified within your value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Region

Mozambique

River basin

Incomati

Stage of value chain

Supply chain

Type of risk

Physical

Primary risk driver

Seasonal supply variability/inter annual variability

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

The site's supply chain is largely made up of small scale growers producing rain-fed cane with 24% under sprinkler systems. A recent study undertaken by CRIDF (Climate Resilient Infrastructure Development Facility) identified the key risks to this supply being: 1. Higher and more irregular rainfall events 2. Flooding 3. Shorter rainy season 4. Increased temperatures

Timeframe

4 - 6 years

Magnitude of potential financial impact

Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

The financial impact of this risk has been quantified but not disclosed. It is based on lost opportunity between 16/17 and 21/22 from potential revenue generated through the processing of grower cane supplies.

Primary response to risk

Water-related capital expenditure

Description of response

The site's strategic plan includes horizontal grower expansion of 1 540 ha of sprinkler systems as part of a project sponsored by the EU.

Cost of response

Explanation of cost of response

Not quantified

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

Water demand and scarcity is increasing, to varying degrees, within most of the basins in which Illovo operates. This is projected to impact availability as well as abstraction permit allocations. By working to improve the effective use of water within operations Illovo aims to increase production without significantly altering overall consumption. Illovo identified the greatest water supply risk as well as the greatest water efficiency opportunities at each operation and has developed water strategies specific to each operation focused on improving water monitoring and management.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

Projects include the upgrading of irrigation systems, infrastructure and water storage capacity.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

Agricultural operations require significant energy to pump water for abstraction and irrigation, which entails significant cost. Illovo has identified three primary opportunities to reduce this energy requirement and improve water use efficiency: 1. Improving the efficiency of conveyance systems to minimise losses. 2. Improving irrigation efficiency to reduce the quantity of water required to grow a stick of sugarcane. 3. Improving the accuracy of irrigation scheduling to ensure the crop is irrigated effectively.

Estimated timeframe for realization

>6 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

In 2013, Illovo developed water footprints for each of their operations. The assessment modelled each agricultural systems in terms of precipitation (green water) and irrigation (blue water) requirements. This analysis enabled Illovo to identify and quantify losses within each operation which were correlated to potential cost savings. Today Illovo is using this information as part of their cost planning and forecasting within the company's water strategy. The financial impact of this opportunity is based on the assumed cane production improvements associated with the implementation of drip irrigation technologies across 6 370 ha.

Type of opportunity

Markets

Primary water-related opportunity

Increased brand value

Company-specific description & strategy to realize opportunity

Within direct operations, Illovo has committed to the effective use of water and has undertaken to significantly increase the number of farms which comply with best practice outlined in the Sustainable Sugarcane Farm Management System (SUSFARMS®).

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

The avoided loss of sales resulting from the non-implementation of SUSFARMS® has been estimated but is not disclosed.

Type of opportunity

Resilience

Primary water-related opportunity

Increased resilience to impacts of climate change

Company-specific description & strategy to realize opportunity

Increased water storage capacity has been identified as an operational opportunity at Illovo's Nakambala and Nchalo sites. The implications of this includes improved water availability during dry seasons and power savings during peak times due to reduced pumping requirements. 1. L3 dam increase in capacity (Nchalo) resulting in: • Power saving during peak periods; • Cane produced with water during times when water was usually not available; • Extra area irrigated during peak periods with saved power. 2. Split dam 7 (Nchalo) • Increased cane yield (2-5tcha) and reduce crop risk over 6000 ha of cane area and improve water application. 3. Dam 10 – Increase capacity (Nakambala)

Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

The financial impact in capital costs and additional returns has been estimated and includes power savings and additional cane production.

Type of opportunity

Resilience

Primary water-related opportunity

Other, please specify (Resource substitutes / diversification)

Company-specific description & strategy to realize opportunity

Changes to weather and precipitation patterns have the potential to impact the availability and cost of water in our supply chain and to our operations. By working with our agricultural supply chain as well as managing our water use and identifying effective mitigation and adaptation activities, we can potentially control costs and create competitive advantage in comparison to our competitors. Our companies have or are creating programmes such as water recycling to address their particular water issues and increase water efficiency. Recent and current activities include: • developing our understanding of global water stress through the use of a water risk management tool; • publicly disclosing information on our water use and how we are addressing water scarcity; • maintaining our focus on sugar production, our largest user of water, and developing more efficient ways to reduce water consumption; • completing water footprints on all sugar processing facilities in Africa, China, the UK and Spain; • improving how we collect data on water usage and increasing our knowledge of water throughout a product lifecycle; and • engaging with external stakeholders within the river catchments where we operate. For example, all AB Sugar businesses work with regional catchment councils where they operate in the UK, Africa, China and Spain.

Estimated timeframe for realization

>6 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

By managing scarce resources, ABF's businesses are able to manage supply and access to key raw materials as well as reduce water-related costs. Either of the above will enable ABF to manage operational costs and may provide a competitive advantage. Due to ABF's decentralised structure this figure is not consolidated. In line with our approach of making decisions locally, costs associated with this opportunity are mainly borne at business level and embedded as business as usual costs. At group level, management costs are also embedded into business as usual costs. However, additional costs arise when conducting strategic/tactical analysis to support the operating companies.

W5. Facility-level water accounting

W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, total water accounting data and comparisons with the previous reporting year.

Facility reference number

Facility 1

Facility name (optional)

Nakambala

Country/Region

Zambia

River basin

Zambezi

Latitude

-15.82325

Longitude

27.77548

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

217216

Comparison of withdrawals with previous reporting year

Much higher

Total water discharges at this facility (megaliters/year)

3803

Comparison of discharges with previous reporting year

Much lower

Total water consumption at this facility (megaliters/year)**Comparison of consumption with previous reporting year**

Please select

Please explain

At this site, 60% of factory effluent is sent to irrigation and reported as reused wastewater. There is an overall decrease of water out when compared to the previous reporting period due to monitoring and control of factory incoming water.

Facility reference number

Facility 2

Facility name (optional)

Maragra

Country/Region

Mozambique

River basin

Incomati

Latitude

-25.703413

Longitude

32.357483

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

14438

Comparison of withdrawals with previous reporting year

Higher

Total water discharges at this facility (megaliters/year)

254

Comparison of discharges with previous reporting year

Much lower

Total water consumption at this facility (megaliters/year)**Comparison of consumption with previous reporting year**

Please select

Please explain

The significant reduction in the effluent figure is a result of a new effluent pump that was installed at the site during the offcrop to reduce discharge into the Incomati River, resulting in the effluent water being discharged at ash dam. With the help of the new effluent pump, the water is being recycled within the factory. These figures are reported under reused wastewater and are not included in the discharge totals.

Facility reference number

Facility 3

Facility name (optional)

Ubombo

Country/Region

Swaziland

River basin

Maputo

Latitude

-26.797636

Longitude

31.935026

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

172291

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

548

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)**Comparison of consumption with previous reporting year**

Please select

Please explain

The reduction in water abstraction is due to slightly improved rainfall distribution over the peak growing months between November 2017 and March 2018 when compared with the previous year.

Facility reference number

Facility 4

Facility name (optional)

Kilombero

Country/Region

United Republic of Tanzania

River basin

Rufiji

Latitude

-7.8118

Longitude

36.89767

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

70173

Comparison of withdrawals with previous reporting year

Much lower

Total water discharges at this facility (megaliters/year)

21

Comparison of discharges with previous reporting year

Much higher

Total water consumption at this facility (megaliters/year)**Comparison of consumption with previous reporting year**

Please select

Please explain

Less water was pumped due to heavy rains and improved water conservation measures. However, there is an increase in the effluent as more water was used as a result of improved factory performance resulting in more cane requiring crushing.

Facility reference number

Facility 5

Facility name (optional)

Dwangwa

Country/Region

Malawi

River basin

Zambezi

Latitude

-12.56667

Longitude

34.15

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

85128

Comparison of withdrawals with previous reporting year

Much lower

Total water discharges at this facility (megaliters/year)

0

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

Comparison of consumption with previous reporting year

Please select

Please explain

There is zero effluent at this site as it is all reused within the site. Water data is captured into Credit 360, an online management information system, on a quarterly basis. The data is captured at a site level and evidence is required to be submitted as evidence for the figures provided, to ensure an accurate audit trail for assurance purposes. Any variance of greater or lesser than 5%, when compared with the prior year will raise a flag in the system which requires a specific reason to be given to explain the variance. The data is reviewed and then either approved or rejected. A final approval of the data takes place at year-end as part of the operational approval of non-financial data. Once approved, the data is transferred to ABF's HSE annual data reporting system (CloudApps) to cater for reporting at a group level.

Facility reference number

Facility 6

Facility name (optional)

Nchalo

Country/Region

Malawi

River basin

Zambezi

Latitude

-16.195845

Longitude

34.774079

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

233491

Comparison of withdrawals with previous reporting year

Much higher

Total water discharges at this facility (megaliters/year)

1743

Comparison of discharges with previous reporting year

Much higher

Total water consumption at this facility (megaliters/year)

Comparison of consumption with previous reporting year

Please select

Please explain

Water data is captured into Credit 360, an online management information system, on a quarterly basis. The data is captured at a site level and evidence is required to be submitted as evidence for the figures provided, to ensure an accurate audit trail for assurance purposes. Any variance of greater or lesser than 5%, when compared with the prior year will raise a flag in the system which requires a specific reason to be given to explain the variance. The data is reviewed and then either approved or rejected. A final approval of the data takes place at year-end as part of the operational approval of non-financial data. Once approved, the data is transferred to ABF's HSE annual data reporting system (CloudApps) to cater for reporting at a group level.

Facility reference number

Facility 7

Facility name (optional)

Umzimkulu

Country/Region

South Africa

River basin

Pongola-Uzimkulu

Latitude

-30.275858

Longitude

30.754607

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

340

Comparison of withdrawals with previous reporting year

Much higher

Total water discharges at this facility (megaliters/year)

0

Comparison of discharges with previous reporting year

Much lower

Total water consumption at this facility (megaliters/year)**Comparison of consumption with previous reporting year**

Please select

Please explain

Less municipal water was used during the reporting period as the mill crushed more cane during the 17/18 season. There was however an increase in surface water due to the commissioning of the water plant in the 17/18 season during high salinity in the river. Effluent water is recycled and it is recorded under ash water overflow (reused wastewater). Water data is captured into Credit 360, an online management information system, on a quarterly basis. The data is captured at a site level and evidence is required to be submitted as evidence for the figures provided, to ensure an accurate audit trail for assurance purposes. Any variance of greater or lesser than 5%, when compared with the prior year will raise a flag in the system which requires a specific reason to be given to explain the variance. The data is reviewed and then either approved or rejected. A final approval of the data takes place at year-end as part of the operational approval of non-financial data. Once approved, the data is transferred to ABF's HSE annual data reporting system (CloudApps) to cater for reporting at a group level.

Facility reference number

Facility 8

Facility name (optional)

Sezela

Country/Region

South Africa

River basin

Pongola-Uzimkulu

Latitude

-30.275858

Longitude

30.754607

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

4845

Comparison of withdrawals with previous reporting year

Much lower

Total water discharges at this facility (megaliters/year)

1215

Comparison of discharges with previous reporting year

Much higher

Total water consumption at this facility (megaliters/year)**Comparison of consumption with previous reporting year**

Please select

Please explain

Improvement in controls led to a significant reduction in the use of municipal water (monitoring from meter readings and invoices). The decrease in the amount of municipal water is also related to the availability of surface water as a result of better rainfall. Water data is captured into Credit 360, an online management information system, on a quarterly basis. The data is captured at a site level and evidence is required to be submitted as evidence for the figures provided, to ensure an accurate audit trail for assurance purposes. Any variance of greater or lesser than 5%, when compared with the prior year will raise a flag in the system which requires a specific reason to be given to explain the variance. The data is reviewed and then either approved or rejected. A final approval of the data takes place at year-end as part of the operational approval of non-financial data. Once approved, the data is transferred to ABF's HSE annual data reporting system (CloudApps) to cater for reporting at a group level.

Facility reference number

Facility 9

Facility name (optional)

Noodsberg

Country/Region

South Africa

River basin

Pongola-Uzimkulu

Latitude

-29.342117

Longitude

30.630057

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

336

Comparison of withdrawals with previous reporting year

Much lower

Total water discharges at this facility (megaliters/year)

50

Comparison of discharges with previous reporting year

Much lower

Total water consumption at this facility (megaliters/year)**Comparison of consumption with previous reporting year**

Please select

Please explain

There was a reduction in the groundwater entering the site in the reporting year. The site launched an awareness campaign to reduce excessive hosepipe use. As a result hosepipe usage for floor washing has been reduced to once per day during one shift. Due to better reporting procedures, there is less effluent reported and more reused wastewater reported. Water data is captured into Credit 360, an online management information system, on a quarterly basis. The data is captured at a site level and evidence is required to be submitted as evidence for the figures provided, to ensure an accurate audit trail for assurance purposes. Any variance of greater or lesser than 5%, when compared with the prior year will raise a flag in the system which requires a specific reason to be given to explain the variance. The data is reviewed and then either approved or rejected. A final approval of the data takes place at year-end as part of the operational approval of non-financial data. Once approved, the data is transferred to ABF's HSE annual data reporting system (CloudApps) to cater for reporting at a group level.

Facility reference number

Facility 10

Facility name (optional)

Eston

Country/Region

South Africa

River basin

Pongola-Uzimkulu

Latitude

-30.42973

Longitude

30.563965

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

298

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

0

Comparison of discharges with previous reporting year

Much lower

Total water consumption at this facility (megaliters/year)**Comparison of consumption with previous reporting year**

Please select

Please explain

Previously data was captured incorrectly under effluent but it is now being reported as reused wastewater. The effluent discharge leaves the factory but is recovered at the ponds back for reuse at the mill. There is no discharge to the watercourse. Water data is captured into Credit 360, an online management information system, on a quarterly basis. The data is captured at a site level and evidence is required to be submitted as evidence for the figures provided, to ensure an accurate audit trail for assurance purposes. Any variance of greater or lesser than 5%, when compared with the prior year will raise a flag in the system which requires a specific reason to be given to explain the variance. The data is reviewed and then either approved or rejected. A final approval of the data takes place at year-end as part of the operational approval of non-financial data. Once approved, the data is transferred to ABF's HSE annual data reporting system (CloudApps) to cater for reporting at a group level.

Facility reference number

Facility 11

Facility name (optional)

Glendale

Country/Region

South Africa

River basin

Pongola-Uzimkulu

Latitude

-30.70843

Longitude

30.34915

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

286

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

0

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)**Comparison of consumption with previous reporting year**

Please select

Please explain

There was an increase in municipal water used primarily due to an increase in production demand. Water data is captured into Credit 360, an online management information system, on a quarterly basis. The data is captured at a site level and evidence is required to be submitted as evidence for the figures provided, to ensure an accurate audit trail for assurance purposes. Any variance of greater or lesser than 5%, when compared with the prior year will raise a flag in the system which requires a specific reason to be given to explain the variance. The data is reviewed and then either approved or rejected. A final approval of the data takes place at year-end as part of the operational approval of non-financial data. Once approved, the data is transferred to ABF's HSE annual data reporting system (CloudApps) to cater for reporting at a group level.

Facility reference number

Facility 12

Facility name (optional)

Merebank

Country/Region

South Africa

River basin

Pongola-Uzimkulu

Latitude

-29.944058

Longitude

30.959172

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

760

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

1041

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)**Comparison of consumption with previous reporting year**

Please select

Please explain

Water savings projects have been implemented for the site to reduce municipal water consumption. Furthermore, there is a reduction in effluent volume due to the water savings initiatives and improved plant efficiencies. Water data is captured into Credit 360, an online management information system, on a quarterly basis. The data is captured at a site level and evidence is required to be submitted as evidence for the figures provided, to ensure an accurate audit trail for assurance purposes. Any variance of greater or lesser than 5%, when compared with the prior year will raise a flag in the system which requires a specific reason to be given to explain the variance. The data is reviewed and then either approved or rejected. A final approval of the data takes place at year-end as part of the operational approval of non-financial data. Once approved, the data is transferred to ABF's HSE annual data reporting system (CloudApps) to cater for reporting at a group level.

Facility reference number

Facility 13

Facility name (optional)

AB Sugar Qianqi

Country/Region

China

River basin

Yongding He

Latitude

40

Longitude

113

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

501

Comparison of withdrawals with previous reporting year

Much lower

Total water discharges at this facility (megaliters/year)

615

Comparison of discharges with previous reporting year

Much lower

Total water consumption at this facility (megaliters/year)**Comparison of consumption with previous reporting year**

Please select

Please explain

The reduction in the water withdrawal and discharge figures are as a result of a shorter campaign with lower beet volumes during the reporting period.

Facility reference number

Facility 14

Facility name (optional)

AB Sugar Zhangbei

Country/Region

China

River basin

Luan He

Latitude

41

Longitude

114

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

693

Comparison of withdrawals with previous reporting year

Much lower

Total water discharges at this facility (megaliters/year)

738

Comparison of discharges with previous reporting year

Much lower

Total water consumption at this facility (megaliters/year)

Comparison of consumption with previous reporting year

Please select

Please explain

The reduction in the water withdrawal and discharge figures are as a result of a shorter campaign with lower beet volumes during the reporting period.

Facility reference number

Facility 15

Facility name (optional)

GWF Don KRC Castlemaine

Country/Region

Australia

River basin

Murray - Darling

Latitude

-37

Longitude

144

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

464

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

390

Comparison of discharges with previous reporting year

Higher

Total water consumption at this facility (megaliters/year)

Comparison of consumption with previous reporting year

Please select

Please explain

Facility reference number

Facility 16

Facility name (optional)

GWF Toowoomba

Country/Region

Australia

River basin

Murray - Darling

Latitude

-27

Longitude

151

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

132

Comparison of withdrawals with previous reporting year

Lower

Total water discharges at this facility (megaliters/year)

114

Comparison of discharges with previous reporting year

Lower

Total water consumption at this facility (megaliters/year)

Comparison of consumption with previous reporting year

Please select

Please explain

Facility reference number

Facility 17

Facility name (optional)

GWF TT Bendigo

Country/Region

Australia

River basin

Murray - Darling

Latitude

-36

Longitude

144

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

5

Comparison of withdrawals with previous reporting year

Much lower

Total water discharges at this facility (megaliters/year)

1

Comparison of discharges with previous reporting year

Much lower

Total water consumption at this facility (megaliters/year)

Comparison of consumption with previous reporting year

Please select

Please explain

Facility reference number

Facility 18

Facility name (optional)

GWF Don KRC Bears Lagoon

Country/Region

Australia

River basin

Murray - Darling

Latitude

-36

Longitude

143

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

388

Comparison of withdrawals with previous reporting year

Much higher

Total water discharges at this facility (megaliters/year)

0

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

Comparison of consumption with previous reporting year

Please select

Please explain

The increase in water use during the reporting year was due to more water required for cropping (i.e. wheat & barley & canola) irrigation as a result of less rain during the year.

Facility reference number

Facility 19

Facility name (optional)

GWF Don KRC Girgarre

Country/Region

Australia

River basin

Murray - Darling

Latitude

-36

Longitude

145

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

107

Comparison of withdrawals with previous reporting year

Higher

Total water discharges at this facility (megaliters/year)

0

Comparison of discharges with previous reporting year

Please select

Total water consumption at this facility (megaliters/year)

Comparison of consumption with previous reporting year

Please select

Please explain

W5.1a

(W5.1a) For each facility referenced in W5.1, provide withdrawal data by water source.

Facility reference number

Facility 1

Facility name

Nakambala

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

217216

Brackish surface water/seawater

Groundwater - renewable

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment

This site derives all its water as surface water.

Facility reference number

Facility 2

Facility name

Maragra

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

13684

Brackish surface water/seawater

Groundwater - renewable

754

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment

Facility reference number

Facility 3

Facility name

Ubombo

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

172291

Brackish surface water/seawater

Groundwater - renewable

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment

Facility reference number

Facility 4

Facility name

Kilombero

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

70173

Brackish surface water/seawater

Groundwater - renewable

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment

Facility reference number

Facility 5

Facility name

Dwangwa

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

85128

Brackish surface water/seawater

Groundwater - renewable

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment

Facility reference number

Facility 6

Facility name

Nchalo

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

233491

Brackish surface water/seawater

Groundwater - renewable

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment

Facility reference number

Facility 7

Facility name

Umzimkulu

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

254

Brackish surface water/seawater

Groundwater - renewable

Groundwater - non-renewable

Produced/Entrained water

Third party sources

86

Comment

Facility reference number

Facility 8

Facility name

Sezela

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

4703

Brackish surface water/seawater

Groundwater - renewable

Groundwater - non-renewable

Produced/Entrained water

Third party sources

143

Comment

Facility reference number

Facility 9

Facility name

Noodsberg

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

Brackish surface water/seawater

Groundwater - renewable

336

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment

Facility reference number

Facility 10

Facility name

Eston

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

Brackish surface water/seawater

Groundwater - renewable

35

Groundwater - non-renewable

Produced/Entrained water

Third party sources

262

Comment

Facility reference number

Facility 11

Facility name

Glendale

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

Brackish surface water/seawater

Groundwater - renewable

Groundwater - non-renewable

Produced/Entrained water

Third party sources

286

Comment

Facility reference number

Facility 12

Facility name

Merebank

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

Brackish surface water/seawater

Groundwater - renewable

Groundwater - non-renewable

Produced/Entrained water

Third party sources

760

Comment

Facility reference number

Facility 13

Facility name

AB Sugar Qianqi

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

Brackish surface water/seawater

Groundwater - renewable

501

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment

Facility reference number

Facility 14

Facility name

AB Sugar Zhangbei

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

Brackish surface water/seawater

Groundwater - renewable

693

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment

Facility reference number

Facility 15

Facility name

GWF Don KRC Castlemaine

[Fresh surface water, including rainwater, water from wetlands, rivers and lakes](#)

[Brackish surface water/seawater](#)

[Groundwater - renewable](#)

[Groundwater - non-renewable](#)

[Produced/Entrained water](#)

[Third party sources](#)

464

Comment

The site derives all its water from a municipal supply.

Facility reference number

Facility 16

Facility name

GWF Toowoomba

[Fresh surface water, including rainwater, water from wetlands, rivers and lakes](#)

[Brackish surface water/seawater](#)

[Groundwater - renewable](#)

132

[Groundwater - non-renewable](#)

[Produced/Entrained water](#)

[Third party sources](#)

Comment

This site's water source is currently primarily from bore water (groundwater - renewable) with a smaller amount coming from mains for pump seals, amenities etc.

Facility reference number

Facility 17

Facility name

GWF TT Bendigo

[Fresh surface water, including rainwater, water from wetlands, rivers and lakes](#)

[Brackish surface water/seawater](#)

[Groundwater - renewable](#)

[Groundwater - non-renewable](#)

[Produced/Entrained water](#)

[Third party sources](#)

5

Comment

The site derives all its water from a municipal supply.

Facility reference number

Facility 18

Facility name

GWF Don KRC Bears Lagoon

[Fresh surface water, including rainwater, water from wetlands, rivers and lakes](#)

153

[Brackish surface water/seawater](#)

Groundwater - renewable

235

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment

Facility reference number

Facility 19

Facility name

GWF Don KRC Girgarre

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

54

Brackish surface water/seawater

Groundwater - renewable

53

Groundwater - non-renewable

Produced/Entrained water

Third party sources

Comment

W5.1b

(W5.1b) For each facility referenced in W5.1, provide discharge data by destination.

Facility reference number

Facility 1

Facility name

Nakambala

Fresh surface water

3803

Brackish surface water/Seawater

Groundwater

Third party destinations

Comment

Facility reference number

Facility 2

Facility name

Maragra

Fresh surface water

254

Brackish surface water/Seawater

Groundwater

Third party destinations

Comment

Facility reference number

Facility 3

Facility name

Ubombo

Fresh surface water

548

Brackish surface water/Seawater

Groundwater

Third party destinations

Comment

Facility reference number

Facility 4

Facility name

Kilombero

Fresh surface water

21

Brackish surface water/Seawater

Groundwater

Third party destinations

Comment

Facility reference number

Facility 5

Facility name

Dwangwa

Fresh surface water

Brackish surface water/Seawater

Groundwater

Third party destinations

Comment

Zero effluent discharge

Facility reference number

Facility 6

Facility name

Nchalo

Fresh surface water

1743

Brackish surface water/Seawater

Groundwater

Third party destinations

Comment

Facility reference number

Facility 7

Facility name

Umzimkulu

Fresh surface water

Brackish surface water/Seawater

Groundwater

Third party destinations

Comment

Zero effluent discharge

Facility reference number

Facility 8

Facility name

Sezela

Fresh surface water

Brackish surface water/Seawater

1215

Groundwater

Third party destinations

Comment

Facility reference number

Facility 9

Facility name

Noodsberg

Fresh surface water

50

Brackish surface water/Seawater

Groundwater

Third party destinations

Comment

Facility reference number

Facility 10

Facility name

Eston

Fresh surface water

Brackish surface water/Seawater

Groundwater

Third party destinations

Comment

Zero effluent discharge

Facility reference number

Facility 11

Facility name

Glendale

Fresh surface water**Brackish surface water/Seawater****Groundwater****Third party destinations****Comment**

Zero effluent discharge

Facility reference number

Facility 12

Facility name

Merebank

Fresh surface water**Brackish surface water/Seawater****Groundwater****Third party destinations**

1041

Comment

Facility reference number

Facility 13

Facility name

AB Sugar Qianqi

Fresh surface water

615

Brackish surface water/Seawater**Groundwater****Third party destinations****Comment**

Facility reference number

Facility 14

Facility name

AB Sugar Zhangbei

Fresh surface water

738

Brackish surface water/Seawater**Groundwater****Third party destinations****Comment**

Facility reference number

Facility 15

Facility name

GWF Don KRC Castlemaine

Fresh surface water

Brackish surface water/Seawater

Groundwater

Third party destinations

390

Comment

Discharges are irrigated/land applied for beneficial reuse (e.g. piggeries) or are otherwise pre-treated and then discharged to sewer for further treatment by third-party (i.e. local water authority or council).

Facility reference number

Facility 16

Facility name

GWF Toowoomba

Fresh surface water

Brackish surface water/Seawater

Groundwater

Third party destinations

114

Comment

Discharges are irrigated/land applied for beneficial reuse (e.g. piggeries) or are otherwise pre-treated and then discharged to sewer for further treatment by third-party (i.e. local water authority or council).

Facility reference number

Facility 17

Facility name

GWF TT Bendigo

Fresh surface water

Brackish surface water/Seawater

Groundwater

Third party destinations

1

Comment

Discharges are irrigated/land applied for beneficial reuse (e.g. piggeries) or are otherwise pre-treated and then discharged to sewer for further treatment by third-party (i.e. local water authority or council).

Facility reference number

Facility 18

Facility name

GWF Don KRC Bears Lagoon

Fresh surface water

Brackish surface water/Seawater

Groundwater

Third party destinations

Comment

The site has zero water discharge.

Facility reference number

Facility 19

Facility name

GWF Don KRC Girgarre

Fresh surface water**Brackish surface water/Seawater****Groundwater****Third party destinations****Comment**

The site has zero water discharge.

W5.1c

(W5.1c) For each facility referenced in W5.1, provide the proportion of your total water use that is recycled or reused, and give the comparison with the previous reporting year.

Facility reference number

Facility 1

Facility name

Nakambala

% recycled or reused

11-25%

Comparison with previous reporting year

<Not Applicable>

Please explain

Ejection cooling water and cooling water is reused for irrigation. This amounts to 60% of the effluent water being reused for irrigation.

Facility reference number

Facility 2

Facility name

Maragra

% recycled or reused

51-75%

Comparison with previous reporting year

<Not Applicable>

Please explain

The large reduction in the effluent figures are as a result of a new effluent pump that was installed during the offcrop to reduce discharge into the Incomati River. With the new effluent pump the water is being recycled within the estate.

Facility reference number

Facility 3

Facility name

Ubombo

% recycled or reused

26-50%

Comparison with previous reporting year

<Not Applicable>

Please explain

Factory effluent water, once treated, is used for irrigation and domestic use downstream. There is an increase in the amount of available water to reuse due to an increase in the amount of cane crushed and therefore water extracted from the cane.

Facility reference number

Facility 4

Facility name

Kilombero

% recycled or reused

76-99%

Comparison with previous reporting year

<Not Applicable>

Please explain

More wastewater produced in the reporting year due to more cane being crushed and therefore available water extracted from the cane.

Facility reference number

Facility 5

Facility name

Dwangwa

% recycled or reused

11-25%

Comparison with previous reporting year

<Not Applicable>

Please explain

Facility reference number

Facility 6

Facility name

Nchalo

% recycled or reused

1-10%

Comparison with previous reporting year

<Not Applicable>

Please explain

Facility reference number

Facility 7

Facility name

Umzimkulu

% recycled or reused

26-50%

Comparison with previous reporting year

<Not Applicable>

Please explain

Improvements were made this year in recording water entering and leaving the site.

Facility reference number

Facility 8

Facility name

Sezela

% recycled or reused

None

Comparison with previous reporting year

<Not Applicable>

Please explain

Facility reference number

Facility 9

Facility name

Noodsberg

% recycled or reused

26-50%

Comparison with previous reporting year

<Not Applicable>

Please explain

Due to better reporting procedures and classification, less effluent has been reported and more reused wastewater reported.

Facility reference number

Facility 10

Facility name

Eston

% recycled or reused

11-25%

Comparison with previous reporting year

<Not Applicable>

Please explain

Previously data was captured incorrectly under effluent but it is now being reported as reused wastewater. The effluent discharge leaves the factory but is recovered at the ponds back for reuse at the mill. There is no discharge to the watercourse.

Facility reference number

Facility 11

Facility name

Glendale

% recycled or reused

26-50%

Comparison with previous reporting year

<Not Applicable>

Please explain

The slight reduction in reused wastewater figures are a result of reduced production volumes.

Facility reference number

Facility 12

Facility name

Merebank

% recycled or reused

1-10%

Comparison with previous reporting year

<Not Applicable>

Please explain

The increase in the amount of reused wastewater figures is due to production requirements as well as more accurate reporting of the data.

Facility reference number

Facility 13

Facility name

AB Sugar Qianqi

% recycled or reused

None

Comparison with previous reporting year

<Not Applicable>

Please explain

Facility reference number

Facility 14

Facility name

AB Sugar Zhangbei

% recycled or reused

None

Comparison with previous reporting year

<Not Applicable>

Please explain

Facility reference number

Facility 15

Facility name

GWF Don KRC Castlemaine

% recycled or reused

Please select

Comparison with previous reporting year

<Not Applicable>

Please explain

Facility reference number

Facility 16

Facility name

GWF Toowoomba

% recycled or reused

1-10%

Comparison with previous reporting year

<Not Applicable>

Please explain

This is the first year the site reused wastewater and recorded the relevant data.

Facility reference number

Facility 17

Facility name

GWF TT Bendigo

% recycled or reused

None

Comparison with previous reporting year

<Not Applicable>

Please explain

Facility reference number

Facility 18

Facility name

GWF Don KRC Bears Lagoon

% recycled or reused

51-75%

Comparison with previous reporting year

<Not Applicable>

Please explain

Facility reference number

Facility 19

Facility name

GWF Don KRC Girgarre

% recycled or reused

26-50%

Comparison with previous reporting year

<Not Applicable>

Please explain

W5.1d

(W5.1d) For the facilities referenced in W5.1, what proportion of water accounting data has been externally verified?**Water withdrawals – total volumes****% verified**

76-100

What standard and methodology was used?

ABF's water abstraction data is verified in alignment with AA1000AS Type II (Moderate) assurance standard, provided by Ernst & Young. For details of the Assurance Statement, see pages 78 and 79 of ABF's Corporate Responsibility Update 2018 available at www.abf.co.uk/documents/pdfs/2018/ec1040090_abf_cr18_web.pdf

Water withdrawals – volume by source**% verified**

76-100

What standard and methodology was used?

ABF's water abstraction data is verified in alignment with AA1000AS Type II (Moderate) assurance standard, provided by Ernst & Young. For details of the Assurance Statement, see pages 78 and 79 of ABF's Corporate Responsibility Update 2018 available at www.abf.co.uk/documents/pdfs/2018/ec1040090_abf_cr18_web.pdf

Water withdrawals – quality**% verified**

1-25

What standard and methodology was used?

While ABF does not seek independent verification of this data at the group level nor require confirmation from the businesses when they seek verification, individual businesses do engage independent verifiers to provide them with assurance over their water and/or wastewater data and management processes. We, therefore, estimate that 1 - 25% of water withdrawals - quality data is assured. A range of methodologies is adopted by the businesses.

Water discharges – total volumes

% verified

1-25

What standard and methodology was used?

While ABF does not seek independent verification of this data at the group level nor require confirmation from the businesses when they seek verification, individual businesses do engage independent verifiers to provide them with assurance over their water and/or wastewater data and management processes. We, therefore, estimate that 1 - 25% of water discharges - total volumes data is assured. A range of methodologies is adopted by the businesses.

Water discharges – volume by destination

% verified

1-25

What standard and methodology was used?

While ABF does not seek independent verification of this data at the group level nor require confirmation from the businesses when they seek verification, individual businesses do engage independent verifiers to provide them with assurance over their water and/or wastewater data and management processes. We, therefore, estimate that 1 - 25% of water discharges - volume by destination data is assured. A range of methodologies is adopted by the businesses.

Water discharges – volume by treatment method

% verified

1-25

What standard and methodology was used?

While ABF does not seek independent verification of this data at the group level nor require confirmation from the businesses when they seek verification, individual businesses do engage independent verifiers to provide them with assurance over their water and/or wastewater data and management processes. We, therefore, estimate that 1 - 25% of water discharges - volume by treatment method data is assured. A range of methodologies is adopted by the businesses.

Water discharge quality – quality by standard effluent parameters

% verified

1-25

What standard and methodology was used?

While ABF does not seek independent verification of this data at the group level nor require confirmation from the businesses when they seek verification, individual businesses do engage independent verifiers to provide them with assurance over their water and/or wastewater data and management processes. We, therefore, estimate that 1 - 25% of water discharge quality - quality by standard effluent parameters data is assured. A range of methodologies is adopted by the businesses.

Water discharge quality – temperature

% verified

1-25

What standard and methodology was used?

While ABF does not seek independent verification of this data at the group level nor require confirmation from the businesses when they seek verification, individual businesses do engage independent verifiers to provide them with assurance over their water and/or wastewater data and management processes. We, therefore, estimate that 1 - 25% of water discharge quality - temperature data is assured. A range of methodologies is adopted by the businesses.

Water consumption – total volume

% verified

1-25

What standard and methodology was used?

While ABF does not seek independent verification of this data at the group level nor require confirmation from the businesses when they seek verification, individual businesses do engage independent verifiers to provide them with assurance over their water and/or wastewater data and management processes. We, therefore, estimate that 1 - 25% of water consumption data is assured. A range of methodologies is adopted by the businesses.

Water recycled/reused

% verified

Not verified

What standard and methodology was used?

ABF does not seek independent verification of this data at the group level nor require confirmation from the businesses when they seek verification for water recycled/reused.

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Commitments beyond regulatory compliance	ABF's environment policy states that "...as a minimum, we comply with current applicable legislation in the countries in which we operate and our operations are conducted with a view to ensuring that...releases to water...do not have an unacceptable environmental impact and do not offend the surrounding community...and that natural resources are used efficiently." The responsibility for compliance with our Environment Policy is devolved to the chief executive or managing director of our businesses. Read the full policy at http://www.abf.co.uk/responsibility/our_policies_and_appendices . ABF's Supplier Code of Conduct stipulates sound environmental management should be followed by suppliers; this includes "improving efficiency and sustainability of...operations which will include water conservation programmes." Suppliers are also expected to provide their workers with "access to clean toilet facilities and to potable water...". ABF_cr_policies_environment.pdf

W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes

W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Chief Financial Officer (CFO)	The Chief Financial Officer (equivalent title to Chief Risk Officer and termed Group Finance Director within ABF) is accountable at board level for matters relating to risk and opportunity management, of which water management is included. The Chief Financial Officer is a member of the Executive Board. Responsibility for risk management lies with the Chief Financial Officer, reporting to the Audit Committee, and therefore has the ability to review, influence and monitor changes at a group level.
Other C-Suite Officer	The Group Company Secretary is accountable at board level for matters relating to corporate responsibility, including water management. The Company Secretary position reports into the Chief Executive Officer and is a board member, and therefore has the ability to review, influence and monitor changes at a group level. Any environmental risks that have a high and immediate likelihood are reported to the Group CEO via the Group HR Director and the Group Company Secretary.
Chief Executive Officer (CEO)	The Group CEO receives and reviews a summary of risks, including environmental and climate risk, from each business at least annually. In addition, environmental risks that have a high and immediate likelihood are reported to the Group CEO via the Group HR Director, and the Group Company Secretary. Otherwise, environmental risks including water and climate change risks are incorporated into the group's standard risk processes.
Board-level committee	The board as a whole is responsible for overall risk management for ABF. As water management is integrated into groupwide risk assessments, the board has ultimate responsibility for all risk related to water.

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Reviewing and guiding business plans Reviewing and guiding risk management policies Reviewing and guiding corporate responsibility strategy	Our decentralised business model empowers the management of our businesses to identify, evaluate and manage the risks they face, on a timely basis, to ensure compliance with relevant legislation, our business principles and group policies. The risk assessments consider materiality, risk controls and the likely impact against a range of criteria such as business objectives, health and safety, financial performance, the environment, climate change, local communities, regulation and reputation. The collated risks from each business are shared with the respective divisional chief executives who present their divisional risks to the group executive. The group's Director of Financial Control (equivalent title to Chief Risk Officer and Chief Financial Officer) receives the risk assessments twice a year and, with the Group Finance Director, reviews and challenges them with the divisional chief executives. These risks and their impact on business performance are considered as part of the divisional performance updates to the board conducted at each meeting. In parallel, a summary of divisional risks is shared and discussed between the Group Finance Director and Chief Executive at least annually and shared with the board twice a year as part of the formal risk assessment process.

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)

Chief Sustainability Officer (CSO)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Half-yearly

Please explain

The CSO reports to the Company Secretary who in turn reports to the CEO. The responsibility lies here because the CSO has this direct link to the board by reporting into the Company Secretary. The board is accountable for ensuring that risk is successfully managed; water-related issues are integrated into the group's risk assessment process. The CSO is part of the legal compliance team but with a broad remit to cover all aspects of environment, social and governance (ESG) issues. These include: - Reporting ABF's water-related disclosures: working with the CR Leaders, Risk and HSE to obtain data and examples for reporting purposes to investors, benchmarks and other external stakeholders; - Facilitating change and supporting the businesses with their corporate responsibility (CR) by sharing good practice, providing tools and resources and being a central point for CR issues including water risks and opportunities; - Chairing the CR Leaders Group which considers water stewardship.

Name of the position(s) and/or committee(s)

Other committee, please specify (Illovo's Social and Ethics Committee (SEC))

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

As important matters arise

Please explain

Illovo subscribes to the principles set out in the King IV Code on Corporate Governance. The Social and Ethics Committee meets regularly and is responsible for the oversight and reporting on organisational ethics, responsible corporate citizenship, sustainable development and stakeholder relationships. The members of the SEC comprise both executive and non-executive members and include senior management representing AB Sugar to ensure "line of sight" into these strategic imperatives. Environmental sustainability including identifying various climate change and water risk and opportunities are standing agenda items of the SEC.

W-FB6.4/W-CH6.4/W-EU6.4/W-OG6.4/W-MM6.4

(W-FB6.4/W-CH6.4/W-EU6.4/W-OG6.4/W-MM6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

No, and we do not plan to introduce them in the next two years

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, trade associations

Yes, funding research organizations

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

ABF is both diversified and decentralised. We are successful because we trust the people who run our businesses. Close to their markets, they use their knowledge, skills and judgement to serve their customers. The group centre engages with leaders across our portfolio of businesses, but it doesn't dictate the agendas or methods used by individual businesses.

Our Group Company Secretary acts as a focal point for corporate governance and corporate responsibility communications. This role regularly liaises with Corporate Responsibility, Public Relations and other advocacy-related roles within the businesses to ensure alignment. This is carried out on an ad-hoc basis when required and through a formal annual reporting process whereby the businesses provide information on their internal activities, work with their value chain and any public policy activities related to a range of corporate responsibility issues including climate change and water stewardship. Any public policy engagement conducted by the businesses must be approved at a senior level.

The businesses review engagement activities to ensure they are aware of current and future legislation that will impact their value chains. Accordingly, policy engagement will cover energy, waste, water and other activities that each business, and the group as a whole, consider to represent a risk or an opportunity.

Engagement activities are reviewed at least annually to ensure alignment with business strategy and the policy landscape.

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Yes (you may attach the report - this is optional)

ABF_CR Update 18_web.pdf

W7. Business strategy

W7.1

W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	5-10	Integrated into ABF's long-term business objectives is to remain a socially useful company where we remain vigilant of, and consider, the needs of others around us. Therefore, when we review our business strategy, we consider the environmental impacts of our plans. When our businesses are considering their growth or divestment plans, they conduct risk assessments which incorporate environmental risks including water management and the requirements of others around our operations. In AB Sugar our businesses integrate water related themes into their plans – considering opportunities to use water more efficiently and invest in performance improvement and CAPEX across the supply chain. In the reporting year, AB Sugar published its 2030 global commitments which includes reducing its end-to-end supply chain water footprint by 30%.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Our businesses are responsible for their environmental impact. Where water risks and opportunities are most prevalent, particularly in our direct and upstream agricultural activities, they form part of regular decision-making, are integrated into strategy development and are part of the group's risk management. All businesses are responsible for annually reporting to ABF their water performance (abstraction, reuse and discharge) using KPIs determined by ABF. Physical climatic changes impacting the supply of sugar cane, beet and other commodities have placed pressures on our supply chains. In some cases, we have had to source raw materials from new regions or change our strategy around current supply. Our businesses continuously adapt to this new environment and engage with key suppliers to address climate and water issues. For example, Westmill Foods has developed a project with UNEP's Sustainable Rice Platform, International Rice Research Institute and a key basmati rice supplier in Pakistan. Due to climate change, Pakistan is predicted to be chronically short of water by 2025 and the area of cultivated rice land has already reduced in recent years due to water shortages. The project aims to build resilience in the supply chain by improving water efficiency. Competition for water is an issue for a number of basins in which we operate. Where affected our businesses are represented in catchment bodies or basin management agencies and work with others to address concerns.
Financial planning	Yes, water-related issues are integrated	5-10	Revenues - Our businesses consider risks and opportunities in their financial planning and risk management processes. If water stress impacts our ability to produce or source raw materials, there will be a direct influence on our ability to generate revenue. However, as our group consists of five segments, a substantive risk to ABF as a whole is rare because if something impacts one segment, the other four will continue and it will unlikely lead to a move in the share price of the group. Operating costs - When existing approaches to production and supply costs increase due to water stress, this could become an issue to the sustainability of our business model. There are also reductions in operating costs as we invest in water efficiency projects. Capital expenditures – Our businesses invested substantially in environmental risk management of which significant amounts are spent on water efficiency projects. Capital funding is made available to our businesses where returns meet or exceed clearly defined criteria. Investment into the management of water stress is managed at the local level. E.g., capital has been allocated for the installation of drip irrigation projects at Illovo's Nchalo and Ubombo sites. AB Sugar businesses generate performance improvement programmes and CAPEX proposals to address water related issues with the objective of using less resource, improving efficiency and improving yield.

W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)

Anticipated forward trend for CAPEX (+/- % change)

Water-related OPEX (+/- % change)

Anticipated forward trend for OPEX (+/- % change)

Please explain

W7.3

(W7.3) Does your organization use climate-related scenario analysis to inform its business strategy?

	Use of climate-related scenario analysis	Comment
Row 1	No plans for the next two years	During the year, we explored a number of the publicly available climate-related scenario analyses to build an understanding as to which approach may be suitable for ABF. Further work will be carried out to help inform decisions around climate-related scenario analysis. We also conducted a high level assessment of our businesses against a 2°C and 4°C temperature increase and the potential impact on sourcing, manufacturing, packaging and distribution and customers and communities, considering physical and transition risks. This was shared with the Chief Risk Officer and other senior executives to help inform their thinking and build knowledge. It included suggestions for next steps including more work on identifying the best-fit scenario analyses, considering the decentralised structure of ABF and diversity of our business activities. We propose to explore this approach more over the coming years in parallel with the work being conducted by individual businesses in the group.

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

No, and we do not anticipate doing so within the next two years

Please explain

The structure of our decentralised, diversified and the geographic reach of our group means that an internal price on water would not provide value to our operations or in how they manage water. Instead, our businesses manage their operations in the most efficient manner which includes the efficient use of water. For many of our businesses, using water requires energy which has a cost; efficiently using water results in lower energy costs.

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Business level specific targets and/or goals Site/facility specific targets and/or goals	Targets are monitored at the corporate level	Our decentralised business model empowers the management of our businesses to identify, evaluate and manage the risks they face, on a timely basis, to ensure compliance with relevant legislation, our business principles and group policies. Our businesses set their own environmental targets if it is an issue against which they choose to monitor their performance such as water use. ABF does not require the businesses to report their environmental performance against targets they have set to group level although absolute performance data is required on an annual basis. Nonetheless, sharing of good practice is encouraged and through the Corporate Responsibility and HSE Leaders Groups, the setting of water targets and performance against these are shared with colleagues. Some examples of business level targets are: - George Weston Foods is aligned to the Australian Food & Grocery Council's (AFGC) Sustainability Commitment. This incorporates the target to reduce water consumption per tonne of production by 20% by 2020 (2010/2011 baseline). - British Sugar has a target for Direct Water Consumption: achieve a 20% reduction by 2020 (measured against 2011/2012 baseline). Furthermore, British Sugar joined the 2020 Federation House Commitment in 2015 which requires it to reduce its water usage 5% year on year. - Azucarera has a target to reduce water consumption on sites by 5%. In April 2018, AB Sugar set a commitment to reduce end to end supply chain water use by 30% by 2030.

W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

Target reference number

Target 1

Category of target

Water withdrawals

Level

Other, please specify (AB Sugar business segment which includes Illovo, British Sugar, Azucarera, AB Sugar China, Germaines and Viverno)

Primary motivation

Water stewardship

Description of target

As a global business across three continents, AB Sugar is always evolving its sustainability approach to make sure it is locally relevant to all its operations. To further extend its ambition and delivery across its three pillars of building rural communities, thriving and health communities and consuming resources responsibly, it has set a series of Group-wide commitments for how it and its supply chain will continually improve AB Sugar's sustainability performance by 2030. Under the consuming resources responsibly pillar, AB Sugar commits to reduce its end-to-end supply chain water and CO2 footprints by 30% and ensure all its plastic packaging is reusable, recyclable, biodegradable or compostable by 2030.

Quantitative metric

Absolute reduction in total water withdrawals

Baseline year

2018

Start year

2018

Target year

2030

% achieved

0

Please explain

AB Sugar set their commitments in April 2018 and has therefore only recently commenced activity. Performance data is not yet available (for this 3 month period) but will be reported in future disclosures.

W9. Linkages and trade-offs

W9.1

(W9.1) Has your organization identified any linkages or tradeoffs between water and other environmental issues in its direct operations and/or other parts of its value chain?

Yes

W9.1a

(W9.1a) Describe the linkages or tradeoffs and the related management policy or action.

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Improved levels of ecosystem services

Description of linkage/tradeoff

Improved water efficiency and efficacy within Illovo's agricultural operations not only results in decreased operational cost due to water savings but also in energy.

Policy or action

Agricultural operations require significant energy to pump water from abstraction to irrigation, which entails significant cost. Illovo has identified three primary opportunities to reduce this energy requirement: 1) Improve the efficiency of conveyance systems to minimise losses; 2) Improving irrigation system efficiency to reduce the quantity of water required to grow sugarcane; 3) Improving the accuracy of irrigation scheduling to ensure the crop is irrigated effectively.

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Increased energy efficiency

Description of linkage/tradeoff

Energy efficiency through the on-site generation of biogas from waste water treatment.

Policy or action

A significant number of our sugar and yeast operations have enhanced their treatment of wastewater using a process called anaerobic digestion. The resultant biogas is recovered from the treatment plants which is used as a fuel within the factory with less energy required from the national grid. The quality of wastewater is also improved.

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Decreased energy use

Description of linkage/tradeoff

Process optimisation in AB Mauri's yeast factories

Policy or action

Our AB Mauri site in Mexico reduced water and energy consumption by operating two separators instead of three. The site has improved and adjusted process conditions in the yeast separation areas, cooling towers and osmosis system resulting in a saving of 17% of water. Using less wash water in the washing and separation of yeast has resulted in a reduction in the drying times which has also contributed to a reduction in energy use.

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Decreased wastewater treatment

Description of linkage/tradeoff

Careful scheduled irrigation helps us to move towards reducing the risk of abstracting more water than is required from river catchments as it reduced over application of water.

Policy or action

Our Sugar operations are using a scheduled approach to irrigation water application which has the benefit of reducing waste of water and consequently energy. It is also reducing leaching of fertilisers and resulting in improved yields.

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Decreased GHG emissions

Description of linkage/tradeoff

Development and implementation of an innovative approach to solar irrigation.

Policy or action

In northern Spain, Azucarera has developed and implemented an innovative approach to solar irrigation. The initial financial investment has been high but the calculated return will bring reduced operating costs using a sustainable and renewable source of energy. It is also expected that Azucarera will experience a reduction in their greenhouse gas emissions through this approach to

powering irrigation. The irrigation systems are working at lower pressures, thus requiring less energy to move the same quantity of water. In addition, Azucarera has joined the European project Maslowaten to spread solar irrigation techniques among beet growers and therefore are taking this approach to their supply chain.

Linkage or tradeoff

Tradeoff

Type of linkage/tradeoff

Increased wastewater treatment

Description of linkage/tradeoff

There is a trade off between withdrawn water use and managing the volume and treating the quality of waste water.

Policy or action

For some of our businesses, and in particular AB Mauri, there is a significant cost associated with the approximate treatment of wastewater. In our yeast sites, for every 1m³ of water used, there is approximately 0.7m³ of wastewater to treat. For many sites, the cost of water abstraction is low compared to the high cost of wastewater treatment. If the effluent is treated on-site, there are operational costs to consider. If the effluent is discharged externally to the municipality, costs are based on volume and concentration of organic and suspended matter. If a site uses less water, this can lead to increased discharge costs due to increased concentrations of organic matter.

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Environmental restoration

Description of linkage/tradeoff

Through engagement with local companies and international companies including Primark, The Institute of Public & Environmental Affairs (IPE) in China has enabled a large number of manufacturing sites to remedy environmental issues. Primark has been working with IPE for over two years to ensure that any sites making products and materials for Primark are taking action to address such issues.

Policy or action

The Institute of Public & Environmental Affairs (IPE) promotes the public disclosure of environmental information by local government and businesses in China. A team of environmental experts based in China actively engage with suppliers and sites with environmental issues, through training and on-site remediation. Primark supported a number of significant sites in their efforts to take corrective action to address these issues contributing to improvements made in environmental management practices, including water and energy consumption, and the release of wastewater.

W10. Verification

W10.1

(W10.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1d)?

Yes

W10.1a

(W10.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1. Current state	W1.2 water withdrawals – total volumes W1.2b total withdrawals W5.1 facility level withdrawals	ISAE3000	Ernst & Young LLP assure our groupwide annual health, safety and environment data which is reported in ABF's annual Corporate Responsibility Update and Annual Report and Accounts. All sites report their annual HSE data to ABF where it is verified by ABF's HSE function and a range of key performance indicators are independently assured by Ernst & Young. Their independent assurance statement can be found on page 78-79 of our Corporate Responsibility Update 2018 at https://www.abf.co.uk/documents/pdfs/arcr-2018/abf_cr_update_2018.pdf

W11. Sign off

W-FI

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

In the reporting year, ABF collected, analysed and reported water data from 286 factories or manufacturing sites, warehouses, distribution centres and offices and 360 Primark stores. While we have geolocation data for all these sites, we have chosen to not report this level of detail for SW1.2a.

In W6.6 we have provided a copy of our ABF Corporate Responsibility Update 2018 in lieu of our 2018 Annual Report and Accounts as this document is too large to upload. Please see page 55 of our Annual Report for reported information about water management at https://www.abf.co.uk/documents/pdfs/2018/abf_ar18_web.pdf

W11.1

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Director of Company Secretariat	Chief Sustainability Officer (CSO)

W11.2

(W11.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

No

SW. Supply chain module

SW0.1

(SW0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	1557400000

SW0.2

(SW0.2) Do you have an ISIN for your organization that you are willing to share with CDP?

Yes

SW0.2a

(SW0.2a) Please share your ISIN in the table below.

	ISIN country code	ISIN numeric identifier (including single check digit)
Row 1	GB	0006731235

SW1.1

(SW1.1) Have you identified if any of your facilities reported in W5.1 could have an impact on a requesting CDP supply chain member?

This is confidential

SW1.2

(SW1.2) Are you able to provide geolocation data for your site facilities?

Yes, for all facilities

SW1.2a

(SW1.2a) Please provide all available geolocation data for your site facilities.

Identifier	Latitude	Longitude	Comment
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SW2.1

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.

SW2.2

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?

No

SW3.1

(SW3.1) Provide any available water intensity values for your organization's products or services across its operations.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms