Associated British Foods CDP Water Security 2020

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 £15.8bn, 138,000 employees and operations in 52 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.

Grocery comprises consumer-facing businesses that manufacture and market a variety of well-known food brands. Some of our best-known household brands include Twinings, Ovaltine, Ryvita, Kingsmill, Silver Spoon, Tip Top, Mazola and Spice Islands. George Weston Foods is one of Australia and New Zealand's largest food manufacturers. Tip Top is one of the most recognised brands in Australia with an extensive range of bread and baked goods.

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 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.

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 one of the world's foremost low-cost producers. We operate two beet sugar factories in China, with annual sugar production capacity over 180,000 tonnes. The group operates in ten countries and has 24 factories with the capacity to produce 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 as the UK's largest agri-food company and a leader in nutrition, science and technological innovation in animal feed. Our unique breadth and experience enable us to add value 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 businesses that supply a range of ingredients to food and non-food manufacturers. AB Mauri operates globally in yeast and bakery ingredients production, supplying industrial and artisanal bakers and the foodservice and wholesale channels. It is a technology leader in bread improvers, dough conditioners and bakery mixes. ABF Ingredients produces value-added products and services for food and non-food applications. It manufactures and markets enzymes, specialty lipids, yeast extracts, extruded ingredients, pharmaceutical excipients and antacids worldwide with manufacturing facilities in Europe, America and India.

Primark is an international retailer that offers high quality fashion, beauty and homeware at the best value on the high street. Primark employs more than 75,000 people in 12 countries across Europe and the US. Primark offers customers value for money clothing in more than 373 stores and 15 million square feet of retail selling space.
We have a decentralised approach to doing business. 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. Operational decisions are made locally because they are most successful when made by the people who have the best understanding of their markets. This culture of setting strategy locally gives our businesses an advantage in being able to swiftly respond to local market, environmental and people issues. The corporate centre provides a framework in which our business leaders have the freedom to pursue opportunities.
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. Our values are a common thread that ties our businesses together. We live and breathe our values through the work we do every day and reflect the way we conduct ourselves:
§ Respecting everyone's dignity: We strive to protect the dignity of everyone within and beyond our operations.
§ Acting with integrity: We proudly promote and protect a culture of trust, fairness and accountability that puts ethics first. From farms and factories right through to our boardroom we are committed to embedding integrity into every action.
§ Progressing through collaboration: We work with others to leverage our global expertise for local good.
§ Pursuing with rigour: From the products we make, to the way we preserve the resources we rely on, we are always learning and incorporating better practices.

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, 2018	July 31, 2019

W0.3

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

Argentina	Belgium	Chile
Australia	Brazil	China
Austria	Canada	Colombia

Czechia
Denmark
Ecuador
Eswatini
Finland
France
Germany
India
Ireland
Italy
Malawi
Malaysia
Mexico
Mozambique
Netherlands
New Zealand
Pakistan
Peru
Philippines
Poland
Portugal
Singapore
South Africa
Spain
Sri Lanka
Switzerland
Thailand
Turkey
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.

Companies, entities or groups over which operational control is exercised

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	Vital	Vital	Water is a primary resource for the majority of our businesses, in particular the sugar, yeast, baking and pharmaceutical industries.

quality freshwater available for use			Direct use: Sufficient, secure amounts of good quality freshwater is vital in our food manufacturing businesses, and in particular our Grocery, Agriculture and Ingredients segments. Water quality is paramount in our food-related operations as well as for potable use across all our businesses. Our sugar operations require large volumes of water for irrigation and for processing purposes. Insufficient availability of water would have a negative impact on production output which could result in less profitability. Indirect use: As water is used throughout ABF's value chain for example, by independent farmers, within our suppliers' wet processing facilities or when added to our end products (tea, rice and cereals), sufficient amounts of good quality freshwater is critical. A reduction in either raw material supply or finished goods from our suppliers could impact the output of our businesses. For example, Westmill and PGP require reliable sources of fresh water for a consistent supply of rice. Over half of the sugarcane processed by Illovo is cultivated by independent farmers. An insufficient freshwater supply could impact yield, cane quality and production facilities in our end to end supply chain. Future use: We anticipate that access to secure amounts of good quality freshwater will remain vitally important in our direct operations as we continue to require large volumes of water for irrigation and cooling purposes. As such, we invest time and resources to identify opportunities to improve water efficiencies. In our indirect operations, secure amounts of good quality freshwater will remain important for our suppliers to enable them to produce raw materials, as well as for customers who require it to benefit from and use our products.
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. Direct use: For example, 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. Insufficient recycled water supply could specifically impact yield and production facilities. Indirect use: Water is used throughout ABF's value chain for example, 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 requires that all outgrowers have water supply agreements with the relevant national authorities. Future use: We anticipate that access to, and the importance of, recycled and produced water will increase in both our direct and indirect operations in future, as pressure on good quality freshwater reserves intensifies. As such, we invest time and resources in our operations to identify opportunities to use all water as many times as possible before final discharge.

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 operates sugar beet factories in the UK, Spain and northern China, and Illovo Sugar operates sugar cane plantations and mills, refineries and ethanol distilleries in six African countries. Sugar represents the largest water user in the group (97%) 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, including crop irrigation, cleaning sugar

			beet, washing, cooling machinery and in creating some co-products. Illovo Sugar manages sugar cane estates totalling approximately 70,000HA, of which 82% is irrigated, with the rest rain-fed. Of the 11 sugar cane plants, 4 receive cane from rain-fed farms and 7 receive cane from irrigated estates. Illovo's operations in Zambia, Eswatini, Malawi and Mozambique are under full irrigation while in Tanzania, the majority of land under cane is irrigated with the balance cultivated under rain-fed conditions. For AB Sugar China's 2018/19 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.
Other, please specify Cotton	41-60	Sourced	Cotton is sourced by our retail business Primark for use in clothing and other goods such as soft furnishings. In the reporting year, Primark's revenue represented 49% of the group's revenue, and accordingly cotton is included in our disclosure. Cotton is a key resource in the fashion industry, making up 50% of Primark's resource mix. Primark's long-term ambition is for all cotton in its supply chain to be sourced sustainably through its Sustainable Cotton Programme. Under the German Partnership for Sustainable Textiles, Primark commits to 10% sustainable cotton in its ranges by March 2020; and supports a membership goal for total cotton use to comprise 25% sustainable cotton and 10% organic cotton by 2020. 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. Currently 67% of soy sourced for ABN Feed Mills meets the FEFAC benchmark. AB Agri is an active member of the UK Roundtable on Sustainable Soya which compliments AB Agri's 2024 ambition to source 100% of soy from certified responsible sources. Other business segments sourcing soy include our Ingredients and Grocery segments. 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, while 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. Westmill Foods recognises that growing rice requires a lot of water, and releases both greenhouse gas emissions and potent methane

			emissions which contribute to climate change. In order to address these sustainability issues, farmers and governments need to change their water usage and water management policies respectively. Accordingly, Westmilll Foods has begun working with smallholder farmers in the Punjab region of Pakistan to train them in the use of water saving technologies such as land laser levelling, alternate wetting and drying and direct seeding. Wider dissemination of water stewardship advice at village level means that the project reach is much greater than the direct project beneficiaries. Through a partnership with Helvetas, Westmill Foods is also engaging with the ever-changing policy dialogue in Pakistan, helping to shape the future of water governance. Our PGP business is a member of the USA Rice Millers Association who, as part of the wider USA Rice, are involved with Conservation and Sustainability initiatives across the industry working with local NGOs.
Other, please specify Tea	Less than 10%	Sourced	Our tea business is Twinings which sells premium teas and malted beverages in more than 100 countries. Tea is sourced from 160 tea gardens, and over 100 different plants are sourced from 30 countries. Tea is grown in a mix of large plantations and smallholder farms and Twinings has full traceability for the tea they source. Over 80% of the tea gardens Twinings buys from are certified by international sustainability standards such as Fairtrade, Rainforest Alliance, UTZ Certified and Fairwind. Twinings were one of the first companies to provide a sourcing map detailing names and locations of tea providers for their customers. For Twinings, responsible sourcing begins with ensuring that they know where their products and ingredients come from and that people making them are treated well and have a safe and hygienic work environment. Twinings strives to ethically source all its tea, herbal ingredients and packaging.

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%	For ABF, “sites/facilities/operations” refer to each of our operational sites separately, including our sugar mills, manufacturing plants, factories and retail stores. All ABF businesses 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 by Ernst & Young. This data is used to evaluate operational performance and assists with activities such as water conservation, legal compliance and agricultural management. For example, British Sugar uses different processes to monitor water abstraction depending on the source. Environmental specialists monitor groundwater pump records, meter calibration and abstraction licenses. This is reviewed monthly by the site specialist. Municipal water is measured using water meters and reconciled with invoice data by Finance. Surface water, cooling water and effluent data is input into the data system which is reviewed by the wastewater specialist.
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, CDP and other external stakeholder reporting requirements. In addition to reporting total abstracted water, each site now provides the volume of water abstracted by source. 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

	% of sites/facilities/operations	Please explain
		sustainability of their supply and ensure legal compliance.
Water withdrawals quality	100%	For the majority of our factories, offices and stores, water quality is paramount for use within operations and for potable use. For other uses, the quality of sourced water is less imperative as it will not be directly consumed. For example, it will be used for irrigation, as a coolant within factory processes or for equipment cleaning. However, quality is still monitored and managed as constraints on the quality of water, impacts our ability to operate efficiently and has associated costs. For example, even though the quality of the water withdrawn is not critical for Illovo as the water is treated to the required standard on site for consumption and different process uses, Illovo still conducts full spectrum analysis (metals and biological) on the quality of water both upstream and downstream at each of its sites. In South Africa, this testing takes place on a monthly basis and in Tanzania, Malawi, Mozambique, Zambia and eSwatini, this testing takes place on a quarterly basis.
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. This data is verified by ABF and independently assured by Ernst & Young. Some businesses have a current objective to decrease wastewater discharged. For example, Illovo's approach to water includes an aim to decrease wastewater by increasing water reuse and recycling. Water discharge is therefore monitored at 100% of Illovo's operations to identify recycling opportunities. At Illovo Tanzania effluent meetings have been implemented to discuss the status of wastewater and key streams are monitored daily, whilst others are monitored on a weekly basis. At Illovo Zambia, external water and environment specialists have been measuring the wastewater

	% of sites/facilities/operations	Please explain
		flows on site, every three months, since 2006, to demonstrate compliance with legislation and for effective internal management of wastewater.
Water discharges – volumes by destination	100%	ABF facilities report the 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 this information to estimate the volumes by destination for our businesses; checking with them if operational or other local changes may have altered the water discharge destination.
Water discharges – volumes by treatment method	100%	ABF businesses measure, monitor and maintain records for water discharges by treatment method for operational reasons and for regulatory purposes. Although ABF does not require this information to be reported to the group, if the data were required, it can be obtained from the individual business records. ABF sites return as much water as possible to natural watercourses by treating the wastewater on-site or by using municipal treatment plants. For Illovo the monitoring of water discharged 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. At Illovo Tanzania, wastewater passes through two treatment plants before being discharged into the river (an anaerobic digester (AD) and a shallow lagoon). The chemical oxygen demand (COD) is measured before and after the AD, together with the volume of water leaving the AD, on a daily basis.
Water discharge quality – by	100%	All ABF's businesses operate within and comply with a regulatory water and wastewater framework. As such, our sites regularly measure

	% of sites/facilities/operations	Please explain
standard effluent parameters		and monitor the quality of their water discharges to ensure legal compliance and minimal impact on the surrounding natural and social environments. For example, our Illovo sites test the quality of water discharge according to samples taken on a weekly basis and in line with the permits that govern the water use. Where the permit does not prescribe the frequency for water discharge quality testing, Illovo has implemented a weekly testing parameter as a minimum standard. This testing includes a full spectrum analysis including metal and biological parameters. Although biological oxygen demand (BOD) is not a legal parameter at most Illovo sites; COD is, and accordingly COD is included in the testing parameters.
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. For example, our Illovo sites test the quality of water discharge according to samples taken on a weekly basis and in line with the permits that govern the water use. Where the permit does not prescribe the frequency for water discharge quality testing, Illovo has implemented a weekly testing parameter as a minimum standard. This testing includes a full spectrum analysis including metal and biological parameters. Although the temperature of the discharge water is not governed by the permits, the Illovo standard prescribes a three degree variation. If the discharge temperature is three degrees above the abstracted water temperature, it is considered a pollution load.
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,

	% of sites/facilities/operations	Please explain
		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 constantly monitor their total water footprints.
Water recycled/reused	100%	Of our group's total water use this year, 19% was recycled or reused 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 employees 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 Illovo, our estates provide employees with basic amenities, and also to some of the communities in which Illovo is situated. For example, Illovo Nchalo in Malawi houses 2000 employees and their families. Water supply and domestic effluent are managed by Illovo as part of this accommodation provision. A recent analysis of the existing domestic wastewater infrastructure yielded significant improvements to the quality of discharged water.

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	880,377	Higher	Our total withdrawals have increased by 5.1% when compared with the previous year, as a result of the high water use associated with sugar growth, processing and sugar manufacture, and in particular due to an increase in withdrawals at Illovo Nakambala primarily driven by the persistent dry conditions in Zambia. As many of our sugar businesses are reliant on extracted water as opposed to rainfed water, we anticipate that our total withdrawals will remain relatively constant and will only increase in the event of less rainfall. ABF uses the following approach when determining the comparative thresholds: ● Much higher: > 10% ● Higher: > 5% but < 10% ● About the same: between -5% and 5% ● Lower: < -5% but > -10% ● Much lower: < -10%
Total discharges	56,912	Much higher	There was a significant increase in water discharged this year primarily driven by improved reporting at a significant water abstracting site. Another site stored a large volume of water from the previous year due to its quality which needed to be treated. It was discharged to the river in the reporting year fully compliant with water quality regulations.
Total consumption	823,465	About the same	Our water consumption figure is based on the group level calculation of water withdrawn subtracting water discharged. At a business level, water consumption figures are calculated based on a number of variances such as water availability within crop. This level of detailed information is not currently collated at group level.

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	51-75	About the same	WWF Water Risk Filter	In 2014, we first conducted a group wide water stress assessment for the sites withdrawing a material amount of water. We piloted the latest version of 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 in 2019 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 the assessment and in 2019, we assessed the top 50 material water user sites which account for 99.6% of the group's total water use. 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

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
					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. This year, the WWF Tool's highest ranking for our sites was 3.4 so we are reporting sites ranked between 3 and 3.4; some stress. There is a 5% percent increase in water withdrawn from areas with water stress when compared with the previous reporting period. This is largely due to an increase at one of our Illovo sites that experienced persistent dry conditions during the reporting period. We continue to work with our businesses operating in other water basins on their approach

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
					to water risk management. Our sugar operations in southern Africa constitute 66% of the total amount of water extracted from water stressed areas. Water conservation, use and availability have all been identified as material issues to the business. Consequently, Illovo's Sustainability Policy includes water governance criteria. Two of the key objectives of the Sustainability Policy are to reduce water consumption per unit of production within the organisation and to review wastewater management so as to identify opportunities for improvement. Illovo's key focus area is how to ensure "More crop per drop". As part of its water aspiration, Illovo is converting its farrow and sprinkler systems to more efficient subsurface drip irrigation and looking to produce more cane, sugar and downstream products per drop of water. ABF uses the following approach when determining the comparative thresholds: ● Much higher: > 10% ● Higher: > 5% but < 10% ● About the same: between -5% and 5% ● Lower: < -5% but > -10% ● Much lower: < -10%

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 areas with water stress?

Agricultural commodities	The proportion of this commodity produced in areas with water stress is known	The proportion of this commodity sourced from areas with water stress 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. 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. Our sugar operations in southern Africa constitute 66% of the total amount of water extracted from water stressed areas. Water conservation, use and availability have all been identified as material issues to the business. Consequently, Illovo's Sustainability Policy includes water governance criteria. Two of the key objectives of the Sustainability Policy are to reduce water consumption per unit of production within the organisation and to review wastewater management to identify opportunities for improvement. Illovo's key focus area is how to ensure "More crop per drop". As part of its water aspiration, Illovo is converting its farrow and sprinkler systems to more efficient subsurface drip irrigation and looking to produce more cane, sugar and downstream products per drop of water. The groupwide water stress assessment conducted in 2014 and repeated in 2017

Agricultural commodities	The proportion of this commodity produced in areas with water stress is known	The proportion of this commodity sourced from areas with water stress is known	Please explain
			and 2019 included sugar that is sourced from our outgrower suppliers as they operate in the same river basins as our own sugar estates.
Other commodities from W-FB1.1a, please specify Cotton	Not applicable	No, not currently but we intend to collect this data within the next two years	We recognise the importance of understanding the proportion of cotton sourced from water stressed areas due to the water intensity of the commodity and the impact cotton has on ABF's revenue. 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	As less than 10% of our revenue is dependent on soy and soy derived products, and due to the costs associated therewith we have not undertaken a water stress assessment on this commodity. Therefore we do not have a group wide figure for the proportion of soy originating from water stressed areas; however we are confident that our relevant businesses are aware of the water risks in their supply chain and address these through tailored approaches. For example, soy is an ingredient used primarily by AB Agri as a key component in animal feed. AB Agri's ambition is to source 100% of soy from certified responsible sources by 2024. To reach its goal of 100% ethically sourced soya, the business expects to base this on a combination of certificates and mass balance. AB Agri has previously chaired the Sustainability Committee of the European Feed Manufacturers' Federation (FEFAC) and is an active member of the UK Roundtable of Sustainable Soya to support customers to meet the demand for

Agricultural commodities	The proportion of this commodity produced in areas with water stress is known	The proportion of this commodity sourced from areas with water stress is known	Please explain
			livestock products. AB Agri also engaged a third party to conduct training across the business with its procurement and commercial teams to inform them on the topic of ethical sourcing in supply chain management.
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. Our PGP business is a member of the USA Rice Millers Association who ,as part of the wider USA Rice, are involved with Conservation and Sustainability initiatives across the industry working with local NGOs.

Agricultural commodities	The proportion of this commodity produced in areas with water stress is known	The proportion of this commodity sourced from areas with water stress is known	Please explain
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	We do not have a group wide figure for the proportion of tea 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. 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 Twinings, responsible sourcing begins with ensuring that they know where their products and ingredients come from. Twinings strives to ethically source all their tea, herbal ingredients and packaging. Currently, over 80% of the tea gardens from which they buy are certified by internationally recognised standards (such as Rainforest Alliance, Fairtrade or UTZ Certified).

W-FB1.2f

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

Agricultural commodities	% of total agricultural commodity produced in areas with water stress	Please explain
Sugar	26-50	To obtain this figure, we have used data supplied by our AB Sugar sites for their total product tonnage, including co-products (molasses, animal feed, agricultural fertilizer and topsoil). We also used the output from the WWF Water Risk

		Filter Tool assessment conducted towards the end of 2017 and in 2019. 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. This proportional figure has remained similar to the previous reporting year as our sugar estates are located geographically on immovable property and unless there is an acquisition or disposition of a sugar estate in a water stressed area, the exposure is likely to remain relatively static over time.

W-FB1.2g

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

Agricultural commodities	% of total agricultural commodity sourced from areas with water stress	Please explain
Sugar		Our sugar businesses work closely with their 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,	Relevant	853,429	Much higher	Fresh surface water is ABF's most significant source of water and

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
water from wetlands, rivers, and lakes				includes water from wetlands, rivers and lakes. These sources are monitored at a site level to ensure that withdrawals are in line with extraction permits. The total volume of surface water is obtained from direct measurement and is reported by the local teams. It is verified by ABF and assured by Ernst & Young. This is a 6% increase when compared with the previous reporting year, as a result of increased water withdrawal, within extraction permit limits, at Illovo Zambia due to the drought conditions experienced. The anticipated future trend will be defined by AB Sugar's 2030 commitments to reduce its water footprint by 30%; however withdrawal for water from rivers is expected to remain about the same due to the geographical location of our sugar operations. Any significant change is only likely if there is an acquisition or disposition of a sugar operation.
Brackish surface water/Seawater	Relevant but volume unknown			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.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Groundwater – renewable	Relevant	15,041	About the same	This is a 1% increase when compared with last year's reported renewable groundwater data. This data is directly measured and falls within ABF's parameters of "About the same" as there is only a marginal increase when compared with the prior year. As an example, both of AB Sugar China's sites source groundwater from wells for use in the sugar production process, domestic water use and maintenance. There are four wells at each site in Zhangbei Qianqi. At Zhangbei, water consumption is monitored by on-site well meters, which are managed by the site and the local water bureau, who collect water meter readings and issue monthly water consumption records. This enables the site to check that water consumption is consistent across meters. At Qianqi, water consumption is monitored by meters and is manually recorded each shift. Monthly water consumption and supporting evidence are consolidated at year

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
				end by the Environmental or HSE Manager at each site.
Groundwater – non-renewable	Not relevant			
Produced/Entrained water	Relevant	789	Much lower	Our businesses have used about the same amount of produced or process water.
Third party sources	Relevant	11,118	Much lower	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. Within ABF, all third party sources refer to water supplied by a municipal supplier as opposed to a third party organization that supplies water.

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	34,716	Much higher	Our businesses continue to invest in initiatives to reuse water in our operations and to monitor this process and data with more accuracy. This year, over 169 million m3 of water has been reused by our

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
				operations. This means that 19% of the water abstracted this year 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. 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. ABF uses the following approach when determining the comparative thresholds: ● Much higher: > 10% ● Higher: > 5% but < 10% ● About the same: between -5% and 5% ● Lower: < -5% but > -10% ● Much lower: < -10%
Brackish surface water/seawater	Relevant	4,496	Much higher	Our businesses continue to invest in initiatives to reuse water in our operations and to monitor this process and data with more accuracy. This year, over 169 million m3 of water has been reused by our operations. This means that 19% of the water abstracted this year was used more than once in our operations before it was returned to the waterways. This is a cost

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
				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. 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. ABF uses the following approach when determining the comparative thresholds: ● Much higher: > 10% ● Higher: > 5% but < 10% ● About the same: between -5% and 5% ● Lower: < -5% but > -10% ● Much lower: < -10%
Groundwater	Relevant	57	Much higher	Our businesses continue to invest in initiatives to reuse water in our operations and to monitor this process and data with more accuracy. This year, over 169 million m3 of water has been reused by our operations. This means that 19% of the water abstracted this year 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.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
				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. ABF uses the following approach when determining the comparative thresholds: ● Much higher: > 10% ● Higher: > 5% but < 10% ● About the same: between -5% and 5% ● Lower: < -5% but > -10% ● Much lower: < -10%
Third-party destinations	Relevant	17,643	Much higher	Our businesses continue to invest in initiatives to reuse water in our operations and to monitor this process and data with more accuracy. This year, over 169 million m3 of water has been reused by our operations. This means that 19% of the water abstracted this year 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. The destination of our water discharge is estimated based on findings from the WWF Water Risk Filter Tool. Therefore while

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
				we have accurately reported data for the group's total discharged water, the proportion by destination is estimated. ABF uses the following approach when determining the comparative thresholds: ● Much higher: > 10% ● Higher: > 5% but < 10% ● About the same: between -5% and 5% ● Lower: < -5% but > -10% ● Much lower: < -10%

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	Not applicable	No, not currently but we intend to	As part of our approach to water stewardship, we

Agricultural commodities	Water intensity information for this produced commodity is collected/calculated	Water intensity information for this sourced commodity is collected/calculated	Please explain
from W-FB1.1a, please specify Cotton		collect/calculate this data within the next two years	recognise the need to evaluate and manage the sustainability of our cotton supply. Primark's long-term ambition is for all the cotton in its supply chain to be sourced sustainably. Its Sustainable Cotton Programme started with female farmers in India in 2013, was expanded into Pakistan in 2018 and was launched in China this year with male and female farmers. By the end of 2022, the business aims to have trained more than 160,000 independent cotton farmers in sustainable farming methods, including using fewer chemical pesticides and fertilisers as well as less water. The programme affords a high degree of supply chain transparency, enabling the cotton to be directly traced from farm through manufacture to store. More than 23 million Primark products made with sustainable cotton have been sold since they were first introduced in August 2017, including women's pyjamas, jeans, duvet covers and towels.
Soy	Not applicable	No, not currently and we have no plans to collect/calculate this data within the next two years	We are not planning to calculate the water intensity of soy at a group level in the next two years due to a focus on sugar and cotton as the key agricultural commodities used by our businesses. Less than 10% of our revenue is dependent on soy, and each

Agricultural commodities	Water intensity information for this produced commodity is collected/calculated	Water intensity information for this sourced commodity is collected/calculated	Please explain
			business is aware of the water risks concerned with soy and have agreed to purchase responsibly sourced soy. Furthermore, 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.
Rice	Not applicable	No, not currently and we have no plans to collect/calculate this data within the next two years	We are not planning to calculate the water intensity of rice at a group level in the next two years due to a focus on sugar and cotton as the key agricultural commodities used by our businesses. Less than 10% of our revenue is dependent on rice, and each business is aware of the water risks concerned with rice and have agreed to purchase responsibly sourced rice. Furthermore 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.
Other commodities from W-	Not applicable	No, not currently and we have no plans to collect/calculate this	For Twinings, responsible sourcing begins with ensuring that safe and decent working

Agricultural commodities	Water intensity information for this produced commodity is collected/calculated	Water intensity information for this sourced commodity is collected/calculated	Please explain
FB1.1a, please specify Tea		data within the next two years	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.

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

1-25

% 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

The impact of the Primark's Sustainable Cotton Programme from 2013-2016:
• An average profit increase of almost 200% and an increase in yield of almost 10%
• A reduction of input costs by 15.8% (e.g. by reducing chemical pesticide and fertiliser usage, buying seeds collectively, and a reduction in additional labour costs)
• A 24.7% reduction in the use of chemical fertiliser and a 50.3% reduction of chemical pesticide usage, indicating that environmentally sustainable farming methods are being adopted
• A 4% water usage decrease, revealing sustainable water efficiency practices in action
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.

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

Offer financial incentives to suppliers improving water management and stewardship across their own operations and supply chain

% of suppliers by number

1-25

% of total procurement spend

Unknown

Rationale for the coverage of your engagement

As AB Sugar contributes 97%, and Illovo 96.1%, of ABF's total abstracted water due to high water use associated with sugar cane growth, processing and manufacture, our engagement activities are focused around creating and strengthening sustainable supply chains and promoting community development.

Illovo's Standard Trading Conditions and Code of Conduct and Business Ethics sets the standards expected of suppliers. These include sustainable farming and agricultural practices, a precautionary approach to environmental challenges, efficient and sustainable operations including water conservation programmes.

As over 50% of the cane processed by Illovo is cultivated by a supply chain of over 14,700 growers, Illovo significantly invests in working closely with cane suppliers to ensure a sustainable supply. Through the South African Fairtrade Sugar Project, Illovo supports the development of farming and local communities to enable a sustainable future for people and the environment.

Impact of the engagement and measures of success

Fairtrade farmers are encouraged to form co-operatives which are eligible to receive a Fairtrade Development Premium of £34 for every tonne of refined Fairtrade sugar produced from their sugarcane.

Illovo supports the set-up of out-grower co-operatives, encouraging and helping them to acquire Fairtrade accreditation. A comprehensive range of support is provided, including helping the co-ops to obtain funding to purchase farming inputs and providing training and advice on farm management, along with partners (WWF, SEDA, and other development agencies). Illovo also helps the co-ops with the day-today management of their farms, from checking soil samples to planting, harvesting and milling.

Illovo pays for the administration of out-growers' Fairtrade schemes, as well as providing assistance with Fairtrade audits. The successful Fairtrade accreditation of small-scale growers has facilitated direct revenue injection into rural areas through Illovo's support and coordination processes.

Comment

Type of engagement

Innovation & collaboration

Details of engagement

Provide training and support on sustainable agriculture practices to improve water stewardship

% of suppliers by number

1-25

% of total procurement spend

Unknown

Rationale for the coverage of your engagement

To ensure a continuous and sustainable cane supply, Illovo provides agronomy extension services to a number of smallholder farmers, through dedicated teams of extension officers. Illovo assists with technical and material expertise and resources, such as dredging of canals, crop diversification and adaptation, pest and disease control, and maintenance of pumping equipment. In certain countries, Illovo also provides out-grower associations with inputs to farming operations at cost-price.
At Illovo Tanzania, the Kilombero Growers Department have introduced an extension department with 24 extension staff fully employed with effect from February 2019. The extension staff help growers improve productivity and have visited approximately half of the existing growers. In addition, the Kilombero Sugar Company works closely with the Sugar Research Institute of Tanzania and the Government extension officers in driving productivity efficiencies into the production value chain.

Impact of the engagement and measures of success

In order to help sugar farmers in South Africa to improve yields, increase their incomes and provide a sustainable cane supply for the Illovo mill in Noodsberg, Illovo developed a comprehensive growing guide. With many growers having little formal education, the booklet provides simple step-by-step guidance and employs infographics to illustrate the necessary actions. These are also summarised on a single-page, highly visual ‘roadmap’. The materials also raise awareness of the guidelines for sugar cane production, such as the South African Sugarcane Research Institute (SASRI) standards. The roll-out of the guide tripled attendance at Illovo’s field days, and more growers are now applying for supply agreements. The booklet will now be distributed to all Illovo operations across southern Africa, while a version suitable for schools and a mobile app for use in the field are also being considered.

Comment

Type of engagement

Innovation & collaboration

Details of engagement

Provide training and support on sustainable agriculture practices to improve water stewardship

% of suppliers by number

1-25

% of total procurement spend

Unknown

Rationale for the coverage of your engagement

In order for AB Sugar China to meet its business goals, it launched the Sustainable Agriculture Programme in March 2014 and updated it in 2019 to increase productivity, embrace conservation and improve lives. The agricultural strategy is focused on sugar beet crop optimisation and driving efficiencies to increase yield and sugar content, while reducing water and fertiliser use. The programme provides growers with advice on agronomy and technology to help enhance productivity and to provide them with solutions to overcome specific challenges such as those related to weather, localised soil quality, fertiliser use and water scarcity.

Impact of the engagement and measures of success

AB Sugar China utilises a Customer Relationship Management (CRM) system to collect key agricultural data (e.g. number of growers, percentage of area under irrigation, seed variety and planting type) to inform business decision making and measure progress against its goals. The Agriculture department (approximately 70 employees) support the sugar beet growers with planting and harvesting and utilise the CRM data system to segment the grower base and tailor their engagement approach.

To give sugar suppliers science-based information on using fertilisers, AB Sugar China launched the More from Less Fertiliser initiative in 2018 with the intention that by the end of 2019, all its large growers (representing around 90% of its total growing area) would have access to this new, free soil testing and fertiliser advice service. Demonstration plots are also used to show growers that lower fertiliser use reduces costs and environmental risks without adversely affecting crop quality or yields.

Comment

Key engagement channels for large-scale growers include one-on-one relationships with members of the Agricultural team, specialised training courses, as well as soil testing services. For small holder farmers, the business hosts Open Days and shares information (e.g. learning videos) via a dedicated company WeChat platform.

Type of engagement

Innovation & collaboration

Details of engagement

Provide training and support on sustainable agriculture practices to improve water stewardship

% of suppliers by number

1-25

% of total procurement spend

Unknown

Rationale for the coverage of your engagement

British Sugar sources its sugar beet from over 3,000 growers in the UK and has noted the importance of using sustainable agricultural processes to maintain production outputs. Accordingly, British Sugar maintains close relationships with its growers to

make sure the harvest remains resilient, cost-effective and that practices are compliant with existing and upcoming regulations. British Sugar has multiple engagement points with its growers, including contract managers who are responsible for grower relationships. Furthermore, British Sugar partners with the British Beet Research Organisation (BBRO) whose mission statement is to commission and implement research and technology transfer designed to increase the competitiveness and profitability of the UK sugar beet industry in a sustainable and environmentally acceptable manner.

Impact of the engagement and measures of success

The BBRO publishes an annual 'Sugar Beet Reference Book'. This report provides technical advice on harvest techniques, soil management and crop nutrition and protection. In 2018/2019, 3,540 Reference Books were issued and over 30 research projects, alongside demonstration farm activities and trials at open day sites, were managed. The BBRO also conducted a review on future weed control strategies, a review of pesticide application technology in light of new nozzle development and the use of appropriate water volumes. The BBRO has invested in various PhD projects covering a wide range of topics including focusing on understanding water use efficiency of sugar beet, canopy architecture of sugar beet, population genetics and ecology of leaf miner and the effect of cover crops on soil structure and subsequent growth of sugar beet. This partnership allows British Sugar to engage with their growers on best practices and strengthen the resilience of British sugar beet agriculture.

Comment

Type of engagement

Innovation & collaboration

Details of engagement

Provide training and support on sustainable agriculture practices to improve water stewardship

% of suppliers by number

1-25

% of total procurement spend

Unknown

Rationale for the coverage of your engagement

Cotton is a key resource in the fashion industry, making up 50% of Primark's resource mix, and textile manufacturing depends on water at many stages, whether in dyeing material or washing the final product before it is shipped. Primark recognises the importance of water along the supply chain and Primark's long-term ambition is for all the cotton in its supply chain to be sourced sustainably. Primark's Sustainable Cotton Programme started in India in 2013, was expanded into Pakistan in 2018 and was launched in China this year. By the end of 2022, the business aims to have trained more than 160,000 independent cotton farmers in sustainable farming methods, including

using fewer chemical pesticides and fertilisers as well as less water. The programme affords a high degree of supply chain transparency, enabling the cotton to be directly traced from farm through manufacture to store. More than 23 million Primark products made with sustainable cotton have been sold since August 2017.

Impact of the engagement and measures of success

In Pakistan, those who completed their first year of training have seen yields increase by 11.2%, input costs fall by 12.9%, resulting in an average rise in profits of 26.8%. Primark has also partnered with sustainable supply chains experts Solidaridad and the International Finance Corporation (IFC) on its Partnership for Cleaner Textile (PaCT) initiative in Bangladesh and its Better Mills Initiative in China. Both projects have delivered training to factory managers and invested in technologies to reduce water use and better manage the chemicals used in dyeing and washing. Primark is also committed to Greenpeace's Detox campaign, which is centred around phasing out the use of certain chemicals within the supply chain. Primark reports annually on progress in this area, and has made their restricted substance lists publicly available.

Comment

Primark has signed up to the ZDHC Foundation's programme and committed to the ZDHC's Manufacturing Restricted Substances List (MRSL) which lists the substances in chemicals that suppliers are not permitted to use in manufacturing Primark products. Primark has held workshops for many suppliers in China, India and Bangladesh to support them in implementing the MRSL.

Type of engagement

Innovation & collaboration

Details of engagement

Provide training and support on sustainable agriculture practices to improve water stewardship

% of suppliers by number

Less than 1%

% of total procurement spend

Unknown

Rationale for the coverage of your engagement

Pakistan is predicted to be chronically short of water by 2025 due to climate change and the area of cultivated rice land has already dramatically reduced in recent years due to water shortages.

As a member of the UNEP Sustainable Rice Platform, ABF's Westmill supports basmati rice farmers in water-stressed Pakistan, training them in water-efficient cultivation techniques to meet growing domestic and international demand. Our efforts form part of the multi-stakeholder Water and Productivity (WAPRO) Project, which aims to directly support 1,200 farmers by December 2021, and reach a further 10,000 people through the dissemination of water stewardship advice. The project is registered under the

Sustainable Rice Platform and takes a PUSH PULL POLICY approach - engaging with local Pakistani government to help drive systemic change.

Impact of the engagement and measures of success

The intended outcomes are increased yields and incomes, water savings, GHG reductions, tackling of social issues and supply chain resilience. After one year, water efficiency had already improved by 26%, yields had risen by 22% and net incomes were up by 67%. Westmill has procured sustainable basmati and has committed to increasing the volume of sustainable basmati to be procured year on year, as more volume becomes available via the programme.

Comment

W1.4c

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

Our rationale is two-fold for engaging with partners in our value chain:
1 - The values of ABF include acting with integrity and progressing through collaboration. In order to respect the environment, we recognise that by working with others, we will be able to help ensure a sustainable supply of natural resources upon which our business relies, and the local communities in which we reside requires. Our businesses are entrusted to make decisions locally which are commercially relevant but also important for the long-term benefit. As such, they determine how to prioritise engagements with customers and suppliers.
2 - Maintaining brand reputation and value for our customers are also of primary importance and therefore, included in our water management. On a business to business commercial basis, our businesses respond to customer requests to collaborate on a range of environmental management projects including water activities such as water use efficiencies, water quality and reporting. 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. This engagement also extends across specific industries where positive impact is more likely if we collaborate with other organisations. For example, 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. Primark takes the lead in developing monitoring tools and standards with ZDHC and the Sustainable Apparel Coalition (SAC), to maximise leverage and prevent duplication. In line with Greenpeace's Detox campaign, Primark aims to have 100% of its supply chain publishing water and air discharge data.

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 the total financial impact.

Country/Area & River basin

Zambia

Zambezi

Type of impact driver & Primary impact driver

Physical

Drought

Primary impact

Supply chain disruption

Description of impact

Zambia has suffered from numerous droughts and prolonged dry spells in recent years, impacting agricultural production. The 2017/2018 rainfall season had prolonged dry spells, affecting mainly the southern half of the country. Since the regional start of the 2018/2019 rainy season, countries in southern Africa faced abnormal dry conditions. 2018/2019 marks the driest season since 1981 in central and western parts of southern African region due to a weak El-Niño cycle.

Zambia has experienced drought conditions since the end of 2018, and the rainy season, typically lasting from November to March, was delayed and only started in early January. Zambia has been receiving below average precipitation in the rainy season for the second consecutive year. The significant rainfall deficit was especially noticeable in southern and western provinces.

Illovo's Nakambala estate in Zambia is located in the south-western region alongside the Kafue River. To support the cultivation of sugar cane for the sugar manufacturing process, water is withdrawn from the river in terms of an extraction licence, and the water is used for irrigation as well as for factory heating, cooling and cleaning.

Primary response

Adopt water efficiency, water reuse, recycling and conservation practices

Total financial impact

Description of response

Aware of the need to maintain access to water for all, the site keeps within the water abstraction limits set by the local authorities. Under a supply agreement, water is transferred to local growers, as well as the local town of Mazabuka. This supply is prioritised and maintained during times of supply restrictions, with the site adapting to lower water use if necessary. Illovo Zambia has also improved the efficiency of its water equipment, replacing old water pumps and introducing drip irrigation technology.

Illovo Zambia works with various partners such as the WWF in order to enhance its own water stewardship activities. These partnerships ensure that its sustainable resources and water management activities are aligned with international best practice. Particularly its active participation, as one of three private sector member companies, in the Kafue Flats Joint Action Group (KFJAG). In addition to substantial and long-standing investments in water supply and sanitation for the business' own irrigation and factory requirements, Illovo Zambia also supplies raw water to the town of Mazabuka. The regular upgrading of its water treatment plants provides potable (drinking) water to 16,000 residents within the Nakambala Estate.

Country/Area & River basin

Malawi
Zambezi

Type of impact driver & Primary impact driver

Physical
Flooding

Primary impact

Reduction or disruption in production capacity

Description of impact

Malawi is highly vulnerable to the impacts of extreme weather events given its location along the great African Rift Valley, rapid population growth, unsustainable urbanization, climate variability and change, and environmental degradation. The most common weather-related shocks affecting Malawi include floods, drought, stormy rains and hailstorms. Over the past five decades, Malawi has experienced more than 19 major floods and seven droughts, with these events increasing in frequency, magnitude and scope over the years. In March 2019, heavy rains developed from a Tropical Depression that formed offshore central Mozambique and hit Malawi, causing severe flooding negatively affecting people's lives, livelihoods and socio-economic infrastructure. Illovo Malawi is the country's biggest producer of sugar and has significant agricultural and milling assets at the Dwangwa Sugar Estate, in the mid-central region at Nkhotakota, and at the Nchalo Sugar Estate, situated in the south at Chikwawa. Ahead of Cyclone Idai's actual 'touchdown' at Beira in Mozambique, the southern region of Malawi, where Illovo's Nchalo cane and factory operations are situated, was hit by cyclone-associated heavy rains and strong winds, causing flooding. In reports released by NGOs Fairtrade and Bonsucro, the devastating effects on smallholder sugarcane projects, had not only compromised food security but also the income derived from cash crops like sugarcane.

Primary response

Develop flood emergency plans

Total financial impact

223,600

Description of response

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 have demonstrated improved resilience and yielded improved results. Illovo Malawi also engages with its supply chain as around 20% of the cane supplied to Illovo's two sugar mills in Malawi comes from small-scale growers. To promote their long-term sustainability and protect security of supply, Illovo has helped to establish the Sugarcane Growers Association of Malawi (SUGAM). Seventeen growers' associations are represented by this new independent body, which provides a forum for sharing technical expertise and learning opportunities. This will help Illovo's suppliers to become financially sound, technically responsible and more sustainable. As part of the support, the company has provided R40,000, (equivalent to £2402) to help set up SUGAM and promote its benefits.

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

5

Total value of fines

21,340

% of total facilities/operations associated

0.4

Number of fines compared to previous reporting year

Higher

Comment

In the previous year, only one fine was received for a site exceeding its discharge limits. In this reporting year, five wastewater-related fines were received across three different countries.

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?

Operations:

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 municipal 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. Firstly, in order to not exceed 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. Any pre-treatment could use one or more of a range of technologies including settlement of solids, aerobic digestions and anaerobic digestion. The selection of technologies addresses the local aquatic sensitivities and water quality objectives. 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.

Each ABF facility has dedicated HSE resources who have the technical skills and expertise to identify, assess and manage potential water pollutants in their direct operations and factories.

Supply Chain:

In line with Primark's stringent chemical requirements, we are working with our suppliers to phase out certain chemicals deemed hazardous from our supply chain, replacing them with suitable alternatives. This work has been supported by over 4,500 hours of workshops and on-site training on environmental issues, including chemicals. In the product lifecycle of a garment, various, hazardous chemicals are used, particularly in the dying and processing stage. Chemicals involved in these processes can be hazardous when released into the environment, posing a risk to human health. Primark has taken steps to control and prevent the use of

hazardous chemicals in its supply chain. Primark has provided training to its suppliers through its in-house “Implementation Toolkit” which contains guidance on restricted chemicals and legislative requirements. Primark works collaboratively with suppliers through its Ethical Trade and Environmental Sustainability team on the ground, to identify areas of improvement and monitor progress against chemical compliance. Primark is also a member of the Zero Discharge of Hazardous Chemicals (ZDHC) program. The ZHDC is an industry-wide commitment to phase out the use of toxic chemicals in companies’ supply chain by 2020. Together with other apparel retailers, the industry group has created a list of restricted manufacturing substances and developed audit and training tools on chemical management to encourage more sustainable management and use of chemicals in its supply chain.

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
Agriculture – supply chain

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. For example, 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. In Illovo, previously the spraying of chemicals to control pests like Yellow Sugarcane Aphids and Thrips was done via aerial application. However, with the conversion to sub-surface drip irrigation, Illovo is now in a position to apply these chemicals through the irrigation system, and in particular via sub-surface irrigation, reducing the risk of contamination to the environment considerably. As the risk of runoff is reduced, so is the environmental risk of polluting the wetlands and water sources on the sugar estate.

Management procedures

Sustainable irrigation and drainage management
Pesticide management

Please explain

We promote sustainable agricultural practices across all of our operations, including the conversion to sub-surface drip irrigation where financially feasible. We promote the use of the best available registered and recommended insecticides and apply these according 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

Manufacturing – 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 watercourse. For example, AB Mauri's production processes require a significant amount of water to produce bakery ingredients, yeast and spices. AB Mauri established an effluent steering group to develop tools and standards to manage its water use. Through this committee, AB Mauri asked its sites to predict future effluent legal requirements so that any operational upgrades can be future-proofed. At the Pederneiras site in Brazil, AB Mauri has approved CAPEX to start the upgrade of the site's effluent treatment plant so that it can meet nitrogen federal requirements and standards. The new plant will have both aerobic and anaerobic treatment of wastewater. Furthermore, with the construction of the ETP plant, the Energy Conservation Team has identified that a cogeneration system with biogas could meet 25% of the site's energy needs.

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. Firstly, in order to not exceed 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. Any pre-treatment could use one or more of a range of technologies including settlement of solids, aerobic digestions and anaerobic digestion. The selection of technologies addresses the local aquatic sensitivities and water quality objectives. 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.

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 as part of an enterprise risk management framework

Frequency of assessment

More than once a year

How far into the future are risks considered?

More than 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 process for identifying and assessing water-related risks is integrated in our group-wide approach to risk management. The delivery of our strategic objectives and the sustainable growth of ABF is dependent on effective risk management. We regularly face business uncertainties and it is through a structured approach to risk management that we are able to mitigate and manage these risks. The diversified nature of our operations, geographical reach, assets and currencies are important factors in mitigating the risk of a material threat to the group's sustainable growth and long-term shareholder value.

The board is accountable for effective risk management, for agreeing the principal risks facing the group and ensuring they are successfully managed. The board undertakes an annual assessment of the principal risks, including those that would threaten the business model, future performance, solvency or liquidity. The board also monitors the group's exposure to risks as part of the business-level performance reviews conducted at each board meeting. Each year, the Audit Committee on behalf of the board reviews the effectiveness of the group's approach to risk management including the internal control procedures and resources devoted to them. Our decentralised business model empowers the management of our businesses to identify, evaluate and manage the risks they face to ensure compliance with relevant legislation, our business principles and group policies.

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?

More than 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. Communities in which we work or source our materials may also face challenging risks. By working to internationally recognised standards and partnering with global experts, we can address these risks and strengthen our supply chains.

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?

More than 6 years

Type of tools and methods used

Tools on the market
Enterprise Risk Management

Databases

Tools and methods used

WWF 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

	Relevance & inclusion	Please explain
		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.
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 an example, Illovo plays a key role in collaboration with WWF to undertake catchment research in Zambia and has been recognised by being awarded second place in the Zambia Water Stewardship Awards.
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

	Relevance & inclusion	Please explain
		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

	Relevance & inclusion	Please explain
		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 to next to resources of conservation importance including the Selous National Park, Tanzania, Kafue Flats Wetland, Zambia and the Incomati Estuary, Mozambique. In Malawi, both estates participate in annual tree planting activities in an effort to retard environmental degradation and soil erosion and continue to make substantial donations of tree seedlings on a regular basis to surrounding communities. The Group also continued to maintain biodiversity corridors throughout its sugar estates. A 400-hectare reserve known as Nyala Park has been set aside within the Nchalo estate boundary and is maintained with species of the original flora and fauna of the Shire Valley. 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 are 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. For example, Illovo Zambia supplies raw water to the nearby town of Mazabuka and potable water and sanitation to over 16,000 residents of the sugar estate. WaterAid and tea company Twinings have joined forces to transform the lives of 4,000 people in Darjeeling through access to clean water, decent toilets and good hygiene. The partnership provides these basic needs to communities and schools in all 30 villages across two tea estates in the Darjeeling District of West Bengal, India. Funded donations from Twinings, WaterAid will ensure all 30 villages have a well-maintained piped water supply system that protects the springs from contamination and provides clean, easily accessible water. They will also help build adequate toilets

	Relevance & inclusion	Please explain
		and waste management systems and run hygiene education in the villages and schools.
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

(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

	Relevance & inclusion	Please explain
		who conducted an audit on behalf of the Coca Cola Company using the Coca Cola Company's Supplier Guiding Principles (SGP). The very nature of some of our ingredients helps our customers to enhance their own manufacturing processes such as by minimising energy and water consumption or replacing the use of harsh chemicals. Our ingredients can also help to boost the performance of products when used by the end-consumer. We develop innovative and value-adding products and services to help solve problems for our customers. As leaders in speciality ingredients, we have strong technological expertise, which means we are able to convert science and our know-how into products which have a wide breadth of functions. For example, we manufacture enzymes which, beside their technical performance, are able to address specific environmental challenges. These challenges include cutting food waste by extending the shelf life of bread, reducing the need for chemicals for bleaching in textiles, and lowering the energy consumption required for the production of paper.
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. We primarily communicate with and respond to investors through our

	Relevance & inclusion	Please explain
		Responsibility and ESG Reports, our annual CDP submissions and individual meetings or written correspondence.
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, Illovo Zambia supplies raw water to the town of Mazabuka and the regular upgrading of its water treatment plants provides potable (drinking) water to 16,000 residents within the Nakambala Estate. 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.
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

	Relevance & inclusion	Please explain
		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. Illovo Zambia works with various partners such as the WWF in order to enhance its own water stewardship activities. These partnerships ensure that its sustainable resources and water management activities are aligned with international best practice. Twinings recognises that industry-wide change will only happen if all activities can be scaled-up and leveraged. Twinings partners with NGOs, supply chain partners, companies, governments, industry associations and local communities to help tackle the broader structural challenges affecting the tea sector. Twinings is also a founding member of the Ethical Tea Partnership (ETP), which works to improve conditions across the industry, from discrimination to safe use of agrochemicals.
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. Illovo Zambia actively participates as one of three private sector member companies, in the Kafue Flats Joint Action Group (KFJAG). In addition to substantial and long-standing investments in water supply and sanitation for the business' own irrigation and factory requirements, Illovo Zambia also supplies raw water to the town of Mazabuka. The regular upgrading of its water treatment plants provides potable (drinking) water to 16,000 residents within the Nakambala Estate. In addition to its own requirements, the business helps to channel the resource to its farmers as well as the local municipality through the Southern Water and Sewerage Company (SWASCO). As a result, the company is very active in water resource management best practice through major investments to its systems and infrastructure; including

	Relevance & inclusion	Please explain
		irrigation taking its role as one of the many users of the Kafue River seriously.
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.
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 works 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 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.

	Relevance & inclusion	Please explain
Suppliers	Relevant, always included	Our businesses engage with their suppliers on water issues where it is fundamental for the growth and sustainable supply of raw materials, for production and to build resilience to the impacts of climate change. 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.
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. As an example, in addition to substantial and long-standing investments in water supply and sanitation for the business' own irrigation and factory requirements, Illovo Zambia also supplies raw water to the town of Mazabuka. The regular upgrading of its water treatment plants provides potable (drinking) water to 16,000 residents within the Nakambala Estate. In addition to its own requirements, the business helps to channel the resource to its farmers as well as the local municipality through the Southern Water and Sewerage Company (SWASCO). As a result, the company is very active in water resource management best practice through major investments to its systems and infrastructure; including irrigation taking its role as one of the many users of the Kafue River seriously.
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

	Relevance & inclusion	Please explain
		achieve a more sustainable use of fresh water. AB Sugar China has been running the Sugar Beet Academy for ten 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 environmental, climate, energy and water risks. 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 a risk or a group of risks that would threaten our business model, future performance, the group's ability to generate profit or other financial impact which could create movements in our share price as an event that would have a substantive financial or strategic impact on the business. A substantive impact could also be one that affects our ability to continue supplying our valuable customers. ABF classifies these risks as principal risks and uncertainties. The directors have carried out an assessment of the principal risks facing ABF which we believe are likely to have the greatest current or near-term impact on our strategic and operational plans and reputation. They are grouped into external risks, which may occur in the markets or environment in which we operate, and operational risks, which are related to internal activity linked to our own operations and internal controls. "Our use of natural resources and managing our environmental impact" is one of the principal operational risks identified by ABF that could lead to a substantial financial or strategic impact on ABF.

ABF consists of five segments or divisions; a substantive risk to ABF as a whole is very rare because if a variable impacts one segment, the other four will continue to operate and it is unlikely to move the group's share price. However, if water-related risk is not managed effectively, operating and production costs relating to water and crop risk can be substantive especially in our water-intensive operations such as sugar. As such there is a strong focus on managing water use efficiently.

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	17	1-25	As ABF consists of five business segments a substantive risk to the group as a whole is very rare because if something impacts one segment, the other four will continue to operate and it is unlikely to move the group's share price. There is sufficient diversity in the group, and across our supply chains, that the impact of water risks consolidated at the group level is relatively low. Nonetheless, we recognise that individual sites and businesses have the potential to be impacted by water risks and we therefore manage these risks at the local level. The term 'facility' covers all of ABF's direct operations which includes factories, offices, warehouses and retail space. In 2014, we first conducted a group wide water stress assessment for the sites withdrawing a material amount of water. We piloted the latest version of 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 in 2019 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 the assessment and in 2019, we assessed the top 50 material water user sites which account for 99.6% of the group's total water use. 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. This year, the WWF Tool's highest ranking for our sites was 3.4 so we are reporting sites ranked between 3 and 3.4; some stress. We continue to work with our businesses operating in other water basins on their approach to water risk management. Our sugar operations in southern Africa constitute 66% of the total amount of water extracted from water stressed areas. Water conservation, use and availability have all been identified as material issues to the business. Consequently, Illovo's Sustainability Policy includes water governance criteria. Two of the key objectives of the Sustainability Policy are to reduce water consumption per unit of production within the organisation and to review wastewater management so as to identify opportunities for improvement. Illovo's key focus area is how to ensure "More crop per drop". As part of

			its water aspiration, Illovo is converting its farrow and sprinkler systems to more efficient subsurface drip irrigation and looking to produce more cane, sugar and downstream products per drop of water.

W4.1c

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

Country/Area & River basin

Zambia

Zambezi

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Illovo's site in Zambia accounts for 30% of the group's total water use.

Country/Area & River basin

Mozambique

Incomati

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Illovo's site in Mozambique accounts for 3% of the group's total water use.

Country/Area & River basin

Australia

Murray - Darling

Number of facilities exposed to water risk

2

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Country/Area & River basin

Malawi
Zambezi

Number of facilities exposed to water risk

2

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Illovo's two sites in Malawi count for 33% of ABF's total extracted water.

Country/Area & River basin

Thailand
Chao Phraya

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Country/Area & River basin

China

Yangtze River (Chang Jiang)

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Country/Area & River basin

China

Luan He

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Country/Area & River basin

China

Balkhash

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Country/Area & River basin

United Kingdom of Great Britain and Northern Ireland

Other, please specify

Nene

Number of facilities exposed to water risk

2

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Country/Area & River basin

Spain

Guadalquivir

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Country/Area & River basin

Spain

Other, please specify

Guadalete

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Country/Area & River basin

Turkey

Other, please specify

Kus Golu

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Country/Area & River basin

United States of America
Mississippi River

Number of facilities exposed to water risk

2

% company-wide facilities this represents

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

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/Area & River basin

Malawi
Zambezi

Type of risk & Primary risk driver

Physical
Flooding

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Flooding can result in damage to the actual sugarcane crop, as well as to infrastructure resulting in loss of productivity. For example, in 2019 Illovo's Nchalo site in Malawi was impacted by cyclone Idai which resulted in heavy rains and flooding which affected the

crop and communities surrounding the site. Illovo's Dwangwa site in Malawi also experienced flooding of approximately 125ha of sugarcane fields with cane submerged. Concrete canals and field feeders collapsed while bridges and field culverts were also damaged. The flood protection dyke along the Dwangwa River and the dyke fields were breached in many places. This all resulted in disruption to manufacturing processes and, for a short period of time, impacted the output of product to market.

Timeframe

Current up to one year

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)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

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

Develop flood emergency plans

Description of response

At these operations, Illovo is working on re-delineating flood risk zones and implementing and improving flood protection mechanisms. Investment in water infrastructure, pumps and pump stations including delineating flood risk zones and improving flood protection mechanisms. At Dwangwa, approximately £100,000 was spent on flood mitigation. At Nchalo, the cost of dealing with floods between April - August 2019 was £53,000 and additional £149,000 was spent between September 2019 - February 2020 to repair the damage.

Cost of response

150,000

Explanation of cost of response

The costs reported here are specifically for the rehabilitation of infrastructure at Nchalo after the 2019 floods and flood mitigation activities for potential future flooding.

Country/Area & River basin

Malawi
Zambezi

Type of risk & Primary risk driver

Physical
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)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

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.
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

Improve maintenance of infrastructure

Description of response

Measures used to manage the risk include:
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/Area & River basin

United Republic of Tanzania
Rufiji

Type of risk & Primary risk driver

Physical
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 Illovo 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)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

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.

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

Increase 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/Area & River basin

South Africa

Pongola-Uzimkulu

Type of risk & Primary risk driver

Physical

Other, please specify

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential impact

Constraint to growth

Company-specific description

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 events 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)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

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

Adopt water efficiency, water reuse, recycling and conservation practices

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
- 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 ABF 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 arise as and when the corporate centre conducts strategic and tactical analysis to support our businesses.

Country/Area & River basin

Mozambique
Incomati

Type of risk & Primary risk driver

Physical
Declining water quality

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Increased salinity of river water due to saltwater 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)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

Not quantified

Primary response to risk

Adopt sustainable irrigation practices

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/Area & River basin

Mozambique
Incomati

Type of risk & Primary risk driver

Physical
Flooding

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Flooding can result in damage to the actual sugarcane crop, as well as to infrastructure resulting in loss in productivity.
Although the infrastructures to protect from floods (dykes) and to drain the water out of the cultivation area were paid for by the EU project (2016-2017) and were designed for growers, there is an annual cost of maintenance of this infrastructure that is carried by Illovo Sugar.

Timeframe

Current up to one year

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)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

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

Develop new products and/or markets

Description of response

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 Mozambique have demonstrated improved resilience and yielded improved results.

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.

Country/Area & River basin

Australia

Murray - Darling

Type of risk & Primary risk driver

Reputation & markets

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 one 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)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

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.

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/Area & River basin

Mozambique
Incomati

Stage of value chain

Supply chain

Type of risk & Primary risk driver

Physical
Seasonal supply variability/inter annual variability

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Illovo Maragra 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.

During the reporting period, Mozambique experienced severe flooding when Cyclone Idai made landfall, with 700ha needing to be replanted due to flood damage.

Timeframe

4-6 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)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

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

Direct operations

Other, please specify

Water-related capital expenditure

Description of response

The site's infrastructure to protect from floods (dykes) and to drain water out of the cultivation area were paid for by an EU sponsored project (2016-2017) and were

designed to benefit the growers. However, there is an annual cost to Illovo to maintain this infrastructure. Illovo has outsourced oversight of the whole infrastructure to a private company and carries the annual associated costs. There is a two-year cycled of surveying and maintenance. 2019 was a surveying year while maintenance (with higher costs) will take place in 2020.

Cost of response

Explanation of cost of response

An annual cost to maintain the flood protection and water drainage infrastructure.

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.

In the reporting year, Illovo Malawi implemented a project that involved a complete review and overhaul of the water and wastewater management systems that serve Nchalo's milling operations and expansive residential villages. Over nine months, the external consultant's technical specialists, supervisors, trainers and auditing staff provided full-time support to workers, supervisors and managers to deliver a holistic and sustainable solution to the site's long-standing water challenges. Support ranged from the establishment of water, wastewater and domestic effluent management systems,

sampling, analysis and risk tracking, to infrastructure and maintenance planning, reporting and hands-on training to improve internal knowledge and capacity. The aim was to invest in local teams to provide long term sustainable mill operations.

At the end of the nine-month period the condition and performance of the operation, the infrastructure and maintenance protocols had exceeded predetermined targets. Full compliance has been achieved in respect of chemical oxygen demand, biological oxygen demand, ammonia, nitrates and pH. 100% risk mitigation was achieved by project completion. Upstream process area audits contributed an additional 25% reduction in effluent strength from project initiation.

Estimated timeframe for realization

Current - up to 1 year

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)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

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.

As part of Illovo's aim to be more energy efficient, to produce more cane, sugar and downstream products per drop of water and to utilise water responsibly and retain its quality during its usage cycle, Illovo has approved two long-term irrigation upgrade projects at its Ubombo, eSwatini and Nchalo, Malawi sites.

The six-year upgrade plan for Ubombo was proposed and approved in March 2017 with Phase 1 successfully implemented during the 2017/2018 season. During the reporting period, Phase 2 of the project was completed resulting in the conversion of 453.1ha of furrow fields into drip irrigation. The project will result in profit growth from additional sucrose, electricity generation from additional bagasse and improved water use efficiency.

At Nchalo, Phase 3 of a five phased irrigation system conversion project was implemented during the reporting year. This phase of the project converted 480ha of an existing drag line irrigation system with a drip irrigation system. The project will result in a more efficient use of the current quota of water and reduced electricity costs increasing average cane yield approximately from 90 to 121 t/ha. The current drag line irrigation system has an application efficiency of 70% as opposed to drip irrigation efficiency of 95%. The increase in efficiency will yield an increase of 31.7 Tc/ha/an off a baseline yield of 89.3 Tc/ha/an (over the previous yield cycle) as demonstrated by the yields obtained from the Phase 1 harvested fields.

Estimated timeframe for realization

More than 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)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

In 2013, Illovo developed water footprints for each of their operations. The assessment modelled each agricultural system 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 6,370ha.

Type of opportunity

Markets

Primary water-related opportunity

Strengthened social license to operate

Company-specific description & strategy to realize opportunity

Illovo Zambia was awarded second place in the Zambia Water Stewardship Awards hosted by the Zambia Chamber of Commerce and Industry (ZACCI) and Lusaka Water Security Initiative (LuWSI). The competition is focused on promoting sound water resource management practices by companies. The awards aim to promote, incentivise and recognise good corporate water stewardship amongst water-using companies in Zambia as well as to promote the sustainable use of water resources in line with international best-practice.

Company entries were evaluated against four criteria, each with their own hurdle-rates:
• The clear demonstration of a company's official commitment to water stewardship
• The company's compliance with water-related legal and regulatory requirements and its respect of water rights
• The company's positive participation in catchment governance
• Its provision of water and sanitation services (WASH) to workers on site.

Relying on the Kafue River for irrigation and provision of water for its operations, Illovo Zambia set out to demonstrate that all water drawn from the river is used sustainably and in line with its Integrated Sugar Cane Processing Model. This ensures the efficient use of water and the promotion of waste-water recycling. Illovo Zambia works with various partners such as the WWF to enhance its own water stewardship activities. These partnerships ensure that its sustainable resources and water management activities are aligned with international best practice.

Illovo Zambia is an active participant in the Kafue Flats Joint Action Group (KFJAG) to ensure healthy freshwater and secure water supply for all catchment users. In addition to substantial and long-standing investments in water supply and sanitation for the business' own irrigation and factory requirements, Illovo Zambia also supplies water to the town of Mazabuka. The regular upgrading of its water treatment plants provides potable (drinking) water to 16,000 residents within the Nakambala Estate.

Estimated timeframe for realization

Current - up to 1 year

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)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

These activities are considered as core to the daily operations of the site and part of their license to operate and therefore, have not been quantified into costs or potential financial impacts.

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 (2-5tc/ha) and reduce crop risk over 6000ha 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)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

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

W5. Facility-level water accounting

W5.1

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

Facility reference number

Facility 1

Facility name (optional)

Country/Area & River basin

Zambia

Zambezi

Latitude

-15.82325

Longitude

27.77548

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

262,808

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

262,808

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

22,286

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

22,286

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

240,522

Comparison of total consumption with previous reporting year

Much higher

Please explain

This site derives all its water as surface water and the significant increase in water withdrawal at this site was driven by the persistent dry conditions in Zambia. The site experienced an extremely dry year with a significant reduction in rainfall. Water use is weather-driven and the irrigation schedule is based on rain availability. In the previous reporting period, the rainfall from August 2017 to July 2018 was 713.7mm, which is considered a reasonably normal year. The rainfall from August 2018 to July 2019 was 433.5mm, equivalent to 60% of the previous year, resulting in unusually high pumping during November 2018 and from February to May 2019, with all these months experiencing extremely low rainfall.

Facility reference number

Facility 2

Facility name (optional)

Country/Area & River basin

Mozambique
Incomati

Latitude

-25.703413

Longitude

32.357483

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

27,937

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

27,312

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

625

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

250

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

250

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

27,687

Comparison of total consumption with previous reporting year

Much higher

Please explain

The increase in water use is due to an increase on the irrigation level from one circle to two circles per month. A new effluent pump was installed during the offcrop of the previous reporting period 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 (optional)

Country/Area & River basin

Australia
Murray - Darling

Latitude

-37.055863

Longitude

144.208559

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

493

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

493

Total water discharges at this facility (megaliters/year)

406

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

406

Total water consumption at this facility (megaliters/year)

87

Comparison of total consumption with previous reporting year

Much higher

Please explain

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

Facility reference number

Facility 4

Facility name (optional)

Country/Area & River basin

Australia
Murray - Darling

Latitude

-36.34541

Longitude

143.971972

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

388

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

153

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

235

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

0

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

388

Comparison of total consumption with previous reporting year

About the same

Please explain

There is zero effluent at this site.

Facility reference number

Facility 5

Facility name (optional)

Country/Area & River basin

Thailand

Chao Phraya

Latitude

13.646877

Longitude

100.58928

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

321

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

321

Total water discharges at this facility (megaliters/year)

247

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

151

Discharges to brackish surface water/seawater

19

Discharges to groundwater

0

Discharges to third party destinations

77

Total water consumption at this facility (megaliters/year)

74

Comparison of total consumption with previous reporting year

Much lower

Please explain

Facility reference number

Facility 6

Facility name (optional)

Country/Area & River basin

China

Yangtze River (Chang Jiang)

Latitude

31.003757

Longitude

121.383138

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

160

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

160

Total water discharges at this facility (megaliters/year)

35

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

22

Discharges to brackish surface water/seawater

3

Discharges to groundwater

0

Discharges to third party destinations

11

Total water consumption at this facility (megaliters/year)

125

Comparison of total consumption with previous reporting year

Much higher

Please explain

This site experienced issues with water-related equipment during the reporting period.

Facility reference number

Facility 7

Facility name (optional)

Country/Area & River basin

United Kingdom of Great Britain and Northern Ireland

Other, please specify

Nene

Latitude

52.254292

Longitude

0.726952

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

441

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

427

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

14

Total water discharges at this facility (megaliters/year)

1,049

Comparison of total discharges with previous reporting year

Much lower

Discharges to fresh surface water

640

Discharges to brackish surface water/seawater

83

Discharges to groundwater

1

Discharges to third party destinations

325

Total water consumption at this facility (megaliters/year)

-609

Comparison of total consumption with previous reporting year

Much lower

Please explain

The increase in water extraction is due to the integration of two sites into one at this location.

Facility reference number

Facility 8

Facility name (optional)

Country/Area & River basin

United Kingdom of Great Britain and Northern Ireland

Other, please specify

Nene

Latitude

52.550773

Longitude

0.45027

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

337

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

245

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

92

Total water discharges at this facility (megaliters/year)

1,320

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

805

Discharges to brackish surface water/seawater

104

Discharges to groundwater

1

Discharges to third party destinations

409

Total water consumption at this facility (megaliters/year)

-982

Comparison of total consumption with previous reporting year

About the same

Please explain

More river water was abstracted at this site due to operational needs as a result of there not being enough stored condensate for factory cooling towers out of campaign.

Facility reference number

Facility 9

Facility name (optional)

Country/Area & River basin

Spain

Other, please specify

Guadalete

Latitude

36.676342

Longitude

-5.903802

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

431

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

423

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

8

Total water discharges at this facility (megaliters/year)

522

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

319

Discharges to brackish surface water/seawater

41

Discharges to groundwater

1

Discharges to third party destinations

162

Total water consumption at this facility (megaliters/year)

-92

Comparison of total consumption with previous reporting year

Much lower

Please explain

During the reporting period the site experienced a longer refining campaign. During the refining campaign, the water from sugar beet is not available and accordingly abstracted water is higher.

Facility reference number

Facility 10

Facility name (optional)

Country/Area & River basin

United States of America
Mississippi River

Latitude

42.659203

Longitude

-89.017648

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

743

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

743

Total water discharges at this facility (megaliters/year)

743

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

453

Discharges to brackish surface water/seawater

59

Discharges to groundwater

1

Discharges to third party destinations

230

Total water consumption at this facility (megaliters/year)

0

Comparison of total consumption with previous reporting year

About the same

Please explain

During the reporting year, the site repaired the tank farm secondary containment equipment.

Facility reference number

Facility 11

Facility name (optional)

Country/Area & River basin

United States of America
Mississippi River

Latitude

38.781326

Longitude

-75.104576

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

1,416

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

816

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

600

Total water discharges at this facility (megaliters/year)

1,223

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

746

Discharges to brackish surface water/seawater

97

Discharges to groundwater

1

Discharges to third party destinations

379

Total water consumption at this facility (megaliters/year)

193

Comparison of total consumption with previous reporting year

Much higher

Please explain

Facility reference number

Facility 12

Facility name (optional)

Country/Area & River basin

Turkey

Other, please specify

Kus Golu

Latitude

40.318628

Longitude

28.009644

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

660

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

660

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

533

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

325

Discharges to brackish surface water/seawater

42

Discharges to groundwater

1

Discharges to third party destinations

165

Total water consumption at this facility (megaliters/year)

126

Comparison of total consumption with previous reporting year

About the same

Please explain

Facility reference number

Facility 13

Facility name (optional)

Country/Area & River basin

China

Luan He

Latitude

41.146949

Longitude

114.708252

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

499

Comparison of total withdrawals with previous reporting year

Much lower

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

401

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

99

Total water discharges at this facility (megaliters/year)

402

Comparison of total discharges with previous reporting year

Much lower

Discharges to fresh surface water

245

Discharges to brackish surface water/seawater

32

Discharges to groundwater

0

Discharges to third party destinations

125

Total water consumption at this facility (megaliters/year)

98

Comparison of total consumption with previous reporting year

Much lower

Please explain

Facility reference number

Facility 14

Facility name (optional)

Country/Area & River basin

China
Balkhash

Latitude

44.022447

Longitude

80.945892

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

565

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

304

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

262

Total water discharges at this facility (megaliters/year)

446

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

272

Discharges to brackish surface water/seawater

35

Discharges to groundwater

0

Discharges to third party destinations

138

Total water consumption at this facility (megaliters/year)

119

Comparison of total consumption with previous reporting year

Much lower

Please explain

During the reporting year, the site undertook a wastewater cooling upgrade project.

Facility reference number

Facility 15

Facility name (optional)

Country/Area & River basin

Spain
Guadalquivir

Latitude

37.847968

Longitude

-4.912821

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

374

Comparison of total withdrawals with previous reporting year

Lower

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

374

Total water discharges at this facility (megaliters/year)

308

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

188

Discharges to brackish surface water/seawater

24

Discharges to groundwater

0

Discharges to third party destinations

95

Total water consumption at this facility (megaliters/year)

67

Comparison of total consumption with previous reporting year

Higher

Please explain

Facility reference number

Facility 16

Facility name (optional)

Country/Area & River basin

Malawi
Zambezi

Latitude

-12.313207

Longitude

34.356495

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

91,486

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

91,486

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

0

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

91,486

Comparison of total consumption with previous reporting year

Higher

Please explain

There is zero effluent at this site.

Facility reference number

Facility 17

Facility name (optional)

Country/Area & River basin

Malawi

Zambezi

Latitude

-16.195845

Longitude

34.774079

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

198,707

Comparison of total withdrawals with previous reporting year

Much lower

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

198,707

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

962

Comparison of total discharges with previous reporting year

Much lower

Discharges to fresh surface water

962

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

197,745

Comparison of total consumption with previous reporting year

Much lower

Please explain

During the reporting period, there were less irrigation activities at this site due to an extended rainy season with heavy downpours. The decrease in effluent is a result of water efficiency projects that have been implemented as part of the site's broader management plan: CAPEX was spent in upgrading of potable water treatment plants, construction of Vinasse ponds, construction of microbiology lab and bulk water supply upgrades.

W5.1a

(W5.1a) 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 the International Standard for Assurance Engagements (ISAE) 3000 Revised provided by Ernst & Young. For details of the Assurance Statement, see pages 53 and 54 of ABF’s Responsibility Report 2019.

Water withdrawals – volume by source

% verified

76-100

What standard and methodology was used?

ABF's water abstraction data is verified in alignment with the International Standard for Assurance Engagements (ISAE) 3000 Revised provided by Ernst & Young. For details of the Assurance Statement, see pages 53 and 54 of ABF's Responsibility Report 2019.

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 did not seek independent verification of this data at the group level in the reporting year, 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

76-100

What standard and methodology was used?

The quality of waste discharge by effluent parameters is considered as part of the group's environmental compliance audit programme and the data is therefore subjected to independent verification.
While ABF does not require the sites to report their water discharge quality data at the group level nor require confirmation from the businesses when they seek their own verification, individual businesses do engage independent verifiers to provide them with assurance over their water and/or wastewater data and management processes. In parallel, if the compliance programme identifies issues, these are reported to group the HSE function. We, therefore, estimate that 76- 100% 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

76-100

What standard and methodology was used?

ABF's water recycled or reused water data is verified in alignment with the International Standard for Assurance Engagements (ISAE) 3000 Revised provided by Ernst & Young. For details of the Assurance Statement, see pages 53 and 54 of ABF's Responsibility Report 2019.

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 Description of water-related performance standards for direct operations Commitments beyond regulatory compliance Commitment to water stewardship	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. ABF's water policy falls within the Environment Policy that

		and/or collective action	recognises that “our businesses use natural resources and create emissions and waste. We aim to be responsible stewards of the environment by minimising any negative impacts.” ABF’s approach to environmental stewardship includes “monitoring, auditing and reporting our environmental performance, particularly in energy and water consumption, waste generation and greenhouse gas emissions, to support continual improvements and be transparent in our performance.” 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...". Although specific commitments and targets are not included in ABF’s Environment Policy due to our decentralized operating model, certain individual businesses have publicly set out their commitments and the manner in which they intend to achieve them. For example, AB Sugar has set a commitment to reduce end-to-end supply chain water use by 30% by 2030. As part of its risk assessments, British Sugar identified CO2 emissions and water use reduction as two long-term priorities, focusing on energy efficiency measures across its sites and improvements to its wastewater treatment plants. To support this, the business has environmental and wastewater specialists at each operational site to support these ambitions. Illovo's Safety, Health, Environment, Risk Quality (SHERQ) and Food Safety Policy sets out the environmental principles Illovo is committed to in conducting its business activities.

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
Board-level committee	The board as a whole is responsible for ABF's overall risk management and agreeing the group's principal risks. During the reporting year the board agreed that 'Our use of natural resources and managing our environmental impact' as a principal risk for ABF (as reported in the 2019 Annual Report and Accounts). This principal risk includes all water-related issues. The risks are mitigated by implementing efficiencies, use of technologies and adapting our operations to climate change. As water-related issues are integrated into group wide risk assessments, the board has ultimate responsibility for all risk related to water use. The directors of the board have a duty to act in a way which promotes the success of ABF with regards, amongst other matters, the impact of the Group's operations on the environment.
Chief Executive Officer (CEO)	The Group CEO receives and reviews a summary of risks, including water-related risk, from each business segment at least annually. ABF's five business segments are Grocery, Agriculture, Sugar, Ingredients and Retail. Where water-related risks are considered material and likely, it is the responsibility of the CEO to keep the other board of directors fully informed of how the risks are being managed. In addition, water-related risks that have a high and immediate likelihood are reported to the Group CEO via the Group Chief People and Performance Officer, and the Group Company Secretary. Otherwise, water-related risks are incorporated into the group's standard risk processes.
Chief Financial Officer (CFO)	ABF has implemented an enterprise-wide risk management system for which the Group Finance Director is accountable to the board of directors. The Group Finance Director (equivalent title to Chief Risk Officer and Chief Financial Officer) is a member of the board. The CEO and Group Finance Director are accountable to the board for matters relating to risk. This includes keeping the board informed of water-related risks through the group's risk management procedures. Water-related issues and potential financial implications are reviewed, monitored and escalated to the board through this risk management system for which the Group Finance Director has responsibility.
Other C-Suite Officer	The Group Company Secretary is accountable at board level for matters relating to corporate responsibility including water stewardship. The Company Secretary position reports into the Chief Executive Officer and therefore has the ability to review, influence and monitor changes at a group level. Any water-related risks that have a high and immediate likelihood are reported to the Group CEO via the Group Chief People and Performance Officer and the Group Company Secretary. The Company Secretary acts as a focal point for communications to the board and with shareholders on responsibility matters. During the year, the Company Secretary responded to requests for meetings, telephone meetings or written information from both existing and potential shareholders and research bodies on a broad range of environmental, social and governance risk matters including matters related to

	climate change, greenhouse gas emissions, water, supply chain management and sustainable agriculture.

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	ABF's board of directors is collectively responsible to shareholders for the direction and oversight of the group to ensure its long-term success. The board met eight times throughout 2019 to approve the group's strategic objectives, to lead the group within a framework of effective controls which enable risk to be assessed and managed, and to ensure that sufficient resources are available to meet the objectives set. The board is accountable for effective risk management; for agreeing the principal risks facing the group and ensuring they are successfully managed. As water-related issues are integrated into group wide risk assessments, the board has ultimate responsibility for all risk related to water use. The Group Director of Finance (equivalent title to Chief Risk Officer and Chief Financial Officer) receives from the five business segments their consolidated risk assessments twice a year and, with the Director of Financial Control, reviews and challenges them with the segment chief executives. A summary of these segment risks is discussed between the Group Finance Director and Chief Executive annually and shared with the board twice a year as part of the formal risk assessment process. The board undertakes an annual assessment of the principal risks which are believed to likely have the greatest current or near-term impact on the group's strategic and operational plans and reputation. During these meetings, the board reviews ABF's strategic objectives including climate change, water use and other material environmental impacts. The use of natural resources and managing our environmental impact has been identified as one of the group's principal risks and uncertainties, as

			reported in the 2019 Annual Report. These risks and their impact on business performance are also considered as part of the senior management presentations from each of the group business areas delivered to the board at each meeting on a rolling basis. In 2019, the board also received a presentation from the Group Director of Health, Safety and Environment on the group's environmental performance including GHG emissions and climate change considerations relating to ABF's energy sources. Each year, the Audit Committee on behalf of the board reviews the effectiveness of the group's approach to risk management as detailed in the Annual Report. The Audit Committee comprises a minimum of three members, all of whom are independent non-executive directors of the group. The committee held four meetings in 2019 with the external auditor. The external auditor is responsible for providing assurance over the group's Annual Report and Accounts and conducted a limited assurance of the group's 2019 Responsibility Report and ESG Appendix. The Responsibility Report and Annual Report include our approach to the TCFD recommendations, approach to managing climate risk, water use and GHG emissions performance. The committee Chairman reported the outcome of the meetings to the board.

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)

Other C-Suite Officer, please specify

Director of Legal Services and Company Secretary

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 Group Company Secretary has overall accountability for all responsibility issues, including water-related issues. Responsibility lies here because the Company Secretary reports to the board and into the CEO and therefore has the ability to review, influence and monitor water-related activities at a group level. Any water-related risks that have a high and immediate likelihood are reported to the CEO via the Group Chief People and Performance Officer and the Group Company Secretary. The role is supported by the Director of Group Secretariat, who also has the equivalent role of Chief Sustainability Officer.

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 Chief Sustainability Officer (CSO), who reports to the Group Company Secretary, is responsible for assessing water-related activities across the group and externally reporting these activities. The CSO works with the finance teams to help identify and quantify water-related risks and chairs the CR Leaders Group which addresses a range of responsibility issues across the businesses including climate change. The CSO has responsibility for environment, social and governance (ESG) issues including internal communication and external reporting of ABF's sustainability performance. The role facilitates positive change and supports the businesses with their ESG matters; sharing good practice, providing tools, resources and being a central point for sustainability which includes water risks and opportunities.

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

Other C-Suite Officer, please specify

Director of Financial Control

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 Group’s Director of Financial Control (equivalent title to Chief Risk Officer) receives risk assessments twice a year and, with the Group Finance Director, reviews and challenges them with the business segment CEOs. These risks and their impact on business performance are considered as part of the segment performance updates to

the board presented at each board meeting. Responsibility for monitoring water-related risk lies here as water is integrated into the group's risk management procedures. In addition, an aggregated summary of risks, including water use, is reviewed by the Director of Financial Control, Group Finance Director, CEO and ABF's board at least annually.

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

Environmental health and safety manager

Responsibility

Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Annually

Please explain

The Group Safety and Environment Manager supports the businesses with their environmental performance and reporting; working with the CSO and HSE managers in the businesses. This role reports annually to the board on the group's environmental performance including water use and water stewardship. Responsibility lies here as the role has direct engagement with the sites and business level Environment Managers to support the tracking of water use and related activities as well as responsibility for the annual disclosure of environmental performance data. This role reports to the Group Chief People and Performance Officer who reports to the CEO. This role chairs the HSE Leaders Group which addresses a range of environmental issues including sharing best water use practices.

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

Business unit manager

Responsibility

Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

As important matters arise

Please explain

The CR and HSE Leaders Groups have representatives from the businesses and group-level finance, procurement, risk and communications. These leadership groups meet throughout the year to discuss group wide and business- or geographic-specific issues such as climate change, water stewardship and deforestation.

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	As reported in the 2019 Annual Report and Accounts, the personal performance element of the Short Term Incentive Plan for executive remuneration will be modified to focus on in-year execution of multi-year priorities related to environmental, social and governance (ESG) measures/business health as well as to business performance. This change was welcomed by our shareholders in consultation.

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward	Chief Executive Officer (CEO) Other, please specify Business Unit Manager	Other, please specify ESG matters	It was reported in the 2019 Annual Report and Accounts that the personal performance element of the short-term incentive plan will be modified to focus on in-year execution of multi-year priorities related to environmental, social and governance (ESG) measures/business health as well as to business performance. This change was welcomed by our shareholders in consultation. Business unit managers are the equivalent role of the chief executives of each ABF business.
Non-monetary reward	Other, please specify Management group	Reduction of water withdrawals Improvements in efficiency - direct operations Improvements in efficiency - product-use Improvements in waste water quality - direct operations Improvements in waste water quality - product-use	Due to the importance of sugar to the group, we include here the example from Illovo Sugar Africa (Pty) Ltd: Water-related indicators are directed at initiatives and advancements in water efficiency including conversion to drip irrigation and the increase of recycling of water within operations.

		Supply chain engagement	

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, direct engagement with policy makers

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 2019 Annual Report and Accounts.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 2018, AB Sugar published its 2030 global commitments which includes reducing its end-to-end supply chain water footprint by 30%. AB Sugar 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. For example, ensuring access to a reliable supply of water is a critical strategic priority for Illovo to meet both its business needs and those of surrounding communities. The company has undertaken a number of initiatives to improve the management of water, including substituting sprinkler and furrow irrigation with more efficient centre pivot irrigation application systems, the installation of water-efficient linear irrigation systems, the concrete lining of bulk water supply canals to decrease water losses and the undertaking of water mass-balance assessments at all Illovo operations to provide accurate water consumption data.
Strategy for achieving	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

long-term objectives			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, Illovo has identified three risks related to water usage, namely reducing sugar cane supply, bulk water supply and changes in weather patterns. As a result, a water strategy development team was established to drive the development of water strategies for Head Office and per site. To inform this strategy, the sites have completed risk profiles that maps out water and production KPIs under a BAU scenario and an action plan to 2025. This strategy looks to account for potential future risks borne out of climate change.
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 a variable 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)

0

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

0

Water-related OPEX (+/- % change)

0

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

0

Please explain

Over the last year, our businesses have invested just over £8m in effluent treatment plants and improvements in managing wastewater. This CAPEX includes the upgrade of effluent ponds to prevent pollution and improve treatment efficiency, construction of Vinasse ponds, microbiology labs and bulk water supply, as well as new ETPs and a new anaerobic digestor.

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, but we anticipate doing	In 2018, we explored climate-related scenario analyses to build an understanding as to which approach may be suitable for our business model. We conducted a high-level assessment of our businesses against

	so within the next two years	temperature increases and the potential physical and transition risks on sourcing, manufacturing, distribution, customers and communities. In 2019, we commissioned work with a national body of climate scientists to help inform leadership on the potential implications of global 2 and 4°C temperature changes and scenarios (drought, flooding, precipitation patterns) for our operations and major supply chains. The work is current and outcomes are to be determined. We propose to explore this approach more from the corporate centre over the coming two years in parallel with work conducted by individual businesses. The use of climate-related analysis to inform business strategy is in progress and, given the nature of our business model, could take some time to fully develop and benefit ABF.

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 or commitments and performance against these are shared with colleagues. Some examples of business level commitments 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 joined the 2020 Federation House Commitment in 2015 which requires it to reduce its water usage 5% year on year. - 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

Business

Primary motivation

Water stewardship

Description of target

In April 2018, AB Sugar launched its commitment to creating a sustainable future through its Global Minds, Local Champions sustainability framework. Global Minds, Local Champions sets out AB Sugar's global principles and priorities for how to address the emerging challenges faced across three broad pillars; economic, social and environment. The delivery of this approach is implemented by each of the sugar businesses; AB Sugar China, Azucarera, British Sugar, Germains and Illovo.
To further extend its ambition and delivery across its three pillars of building rural

communities, thriving and health communities and consuming resources responsibly, AB Sugar has set a series of commitments for how it and its supply chain will 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 footprints by 30% (baseline 2018).

Quantitative metric

Absolute reduction in total water withdrawals

Baseline year

2018

Start year

2018

Target year

2030

% of target achieved

0

Please explain

In this reporting year, AB Sugar completed a project to baseline each of the 2030 commitments. For water, AB Sugar developed a baseline for the end to end supply chain from farm to factory. The baselines have been completed by site, by business and by supply chain. The baselines are now supporting the work in articulating the levers and projects that can help AB Sugar reach their 2030 commitments. The baselines enable the group to create focus to their efforts and consider investments that materially improve water performance.

In this reporting year, AB Sugar completed a project to baseline each of the 2030 commitments. The baselines have been completed by site, by business and by supply chain. The baselines are now supporting the group's work in articulating the levers and projects that can help them reach the 2030 commitments. The baseline enables AB Sugar to create focus to their efforts and consider investments that materially improve water performance.

Target reference number

Target 2

Category of target

Product water intensity

Level

Business

Primary motivation

Reduced environmental impact

Description of target

George Weston Foods water target is derived from the Australian Food & Grocery Council's Sustainability Commitment and is to reduce water consumption per kg of goods produced by 20% by 2020, relative to a 2010 - 2011 baseline. Initiatives include water re-circulation, more efficient cleaning practices and rainwater harvesting.

Quantitative metric

% reduction per product

Baseline year

2010

Start year

Target year

2020

% of target achieved

Please explain

GWF is currently tracking at 22% below its baseline years' water intensity.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

Yes

W9.1a

(W9.1a) 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 W1.2 water recycled / reused W1.2b total withdrawals W5.1 facility	ISAE 3000	Ernst & Young LLP assure our groupwide annual health, safety and environment data which is reported in ABF's annual Responsibility Reports, ESG Appendix 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

	level withdrawals		found on page 54-55 of ABF's 2019 Responsibility Report.

W10. 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.

ABF operates in 52 different countries which include the locations of various subsidiaries or branches. The data provided in CDP Water aligns with our scope of reporting ABF's water data. This is for 44 countries where ABF has operational entities, where we have operational control.

W10.1

(W10.1) 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)