Welcome to your CDP Water Security Questionnaire 2020

W0. Introduction

W0.1

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

JT Group is a leading global tobacco company operating in over 70 countries/regions. Our products are sold in over 130 countries/regions and our internationally recognized brands include Winston, Camel, MEVIUS and LD. We are also active in pharmaceutical and processed food businesses and we expect them to establish a foundation for future profit contribution, as we strive for sustainable growth. Headquartered in Tokyo, JT is listed on the Tokyo Stock Exchange and our company comprises four main business units: Japanese domestic tobacco business: we are the leader in Japan, which is one of the largest markets in the world, with around 60% ready-made cigarettes market share mainly driven by MEVIUS. Our Japanese domestic tobacco business continues to be a significant profit contributor to JT Group, generating about one third of our consolidated adjusted operating profit. International tobacco business: JTI (Japan Tobacco International), headquartered in Geneva, Switzerland, is JT Group's profit growth engine, accounting for over 60% of the Group's consolidated adjusted operating profit. Looking ahead, we expect it will further increase its contribution, enabling JT Group to continue achieving sustainable top- and bottom-line growth in the mid- to long-term period. Pharmaceutical business: Our pharmaceutical business focuses on the research and development, manufacturing and sale of prescription pharmaceuticals. Its mission is to build an R&D-led business, aiming at first-in-class internationally competent compounds, to increase our market presence. Processed food business: Our processed food business primarily engages in frozen and ambient food (mainly staple food products such as frozen noodles, frozen rice, packed cooked rice and frozen baked bread), seasonings (including yeast extracts and oyster sauce), and bakery chain outlets mainly in the Tokyo metropolitan area.

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	January 1, 2019	December 31, 2019

W0.3

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

Algeria
Andorra
Armenia
Austria
Azerbaijan
Bangladesh
Belarus
Belgium
Bolivia (Plurinational State of)
Brazil
Bulgaria
Cambodia
Canada
China
China, Hong Kong Special Administrative Region
Colombia
Czechia
Denmark

Dominican Republic
Egypt
Ethiopia
Finland
France
Georgia
Germany
Greece
Hungary
Indonesia
Iran (Islamic Republic of)
Ireland
Italy
Japan
Jordan
Kazakhstan
Kyrgyzstan
Lebanon
Lithuania
Malawi
Malaysia
Mexico
Mongolia
Morocco
Myanmar
Netherlands
Nigeria
Norway
Philippines
Poland

Portugal
Republic of Korea
Republic of Moldova
Romania
Russian Federation
Serbia
Singapore
Slovakia
South Africa
South Sudan
Spain
Sudan
Sweden
Switzerland
Taiwan, Greater China
Tajikistan
Thailand
Tunisia
Turkey
Ukraine
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United Republic of Tanzania
United States of America
Viet Nam
Zambia

W0.4

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

JPY

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 quality freshwater available for use	Vital	Important	Water is vital for JTG as we cannot operate our business without water. Many of JT Group's operations are water intensive. In particular, our processed food business needs a significant quantity of good quality freshwater for manufacturing products. Across our business segments, we aim to locate operations in water rich areas. If an operation is located in a water-scarce area, we aim to cut down on water use in order to reduce water risks, both in our business and in communities within which we operate. Across our business segments, good quality freshwater for indirect use is also important to us, as it is important for growing

			agricultural products such as tobacco leaf, and manufacturing paper, card and other materials. We do not foresee changes in the business processes for which we / our suppliers depend on water. For instance, our dependency on water is not likely to lessen significantly for the processing of food products and processing of other materials.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Recycling water is important for both direct and indirect use as it contributes to reducing water withdrawn and discharged, as well as reducing costs for our operations. Some of JT Group's direct operations use recycled water within the production process as well as for sanitary purposes. Within our international tobacco business, a number of operations located within water-scarce areas use recycled water. Recycled water is also important in indirect operations, for example, the manufacturing of paper, card and other materials. This is unlikely to change in the future. Recycled water will continue to be important for our business as the forecast is that access to fresh water will reduce globally. However, most of the water used in our manufacturing processes is fresh water. Therefore, although the importance of recycled water is high, it is considered that its importance continues to be lower than that for fresh water.

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
Tobacco	More than 80%	Sourced	88.4% of JT Group's revenue is relevant to our Tobacco business that significantly depends on tobacco, our key agricultural commodity. The remainder of the revenue comes from our Pharmaceutical business (4.1%), our Processed Food business (7.3%) and Others

			(0.3%).Tobacco accounts for a significant proportion of revenue and accounts for the majority of emissions and so it will be the only commodity presented in this response.

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	76-99	Water withdrawal data are collected from all JT Group sites using actual data, whenever they are available, or using extrapolation where actual data are not available. For our international tobacco business, total volumes are monitored monthly for manufacturing facilities and quarterly for non-manufacturing facilities. For operations in Japan, total volumes are monitored every two months for all sites, while extrapolation is made once a year for the sites where actual data are not available.
Water withdrawals – volumes by source	76-99	Water withdrawal data are collected from all JT Group sites using actual data, whenever they are available, or using extrapolation where actual data are not available. For our international tobacco business, volumes by source are monitored monthly for manufacturing facilities and quarterly for non-manufacturing facilities. For operations in Japan, volumes by source are monitored every two months for all sites, while extrapolation is made once a year for the sites where actual data are not available.
Water withdrawals quality	76-99	Water withdrawal quality data are assessed at JT Group manufacturing and processing facilities where water quality is an important aspect for our production. The monitoring frequency is decided by individual facilities. Where water quality is critical for production and product quality, we typically monitor this monthly. At other locations, the quality of water withdrawn is periodically monitored. Monitoring is typically by direct sampling and analysis.
Water discharges – total volumes	76-99	Water discharge data are collected from all JT Group sites using actual data, whenever they are available, or using extrapolation where actual data are not available. For our international tobacco business, total volumes are monitored monthly for manufacturing facilities and

		quarterly for non-manufacturing facilities. For our operations in Japan, total volumes are monitored every two months for all sites, while extrapolation is made once a year for the sites where actual data are not available.
Water discharges – volumes by destination	76-99	Data in relation to water discharge destination are collected from all JT Group sites, whenever available. If the destination is not known, it is assumed that the wastewater is sent for municipal treatment. In the absence of volume data, it is assumed that water discharge is the same as water withdrawal. For our international tobacco business, volumes by destination are monitored monthly for manufacturing facilities and quarterly for non-manufacturing facilities. For our operations in Japan, volumes by destination are monitored every two months for all sites, while extrapolation is made once a year for the sites where actual data are not available.
Water discharges – volumes by treatment method	76-99	Final treatment method is determined at JT Group site level by destination of water discharged. The data are mainly collected from sites where actual data are available and, in some cases, extrapolated for sites where actual data are not available. For our international tobacco business, volumes by treatment method are monitored monthly for manufacturing facilities and quarterly for non-manufacturing facilities. For our operations in Japan, volumes by treatment method are monitored every two months for all sites, while extrapolation is made once a year for the sites where actual data are not available.
Water discharge quality – by standard effluent parameters	76-99	JT Group's operations are located in jurisdictions that have regulatory requirements with differing water discharge parameters. The monitoring frequency is decided by individual facilities dependent on local regulatory requirements and site procedures. For production facilities, this is typically monthly. Our factories are required to monitor water discharge before and after on-site treatment, where installed. From 2018 our International tobacco business introduced an internal standard with a list of parameters and minimum expectations (concentrations) for direct discharge in natural waters, against which factories monitor such discharges. In relation to exceedances of standard effluent parameters, data are collected from a site when it does not meet the water discharge parameters prescribed in the regulations relevant to that location.

Water discharge quality – temperature	76-99	Monitoring is conducted by reviewing local legislation and regulations and putting in place the relevant monitoring requirements. Where temperature is a regulatory-prescribed parameter and/or a critical variable in water discharged, we monitor this monthly, in-line with other wastewater monitoring. At other locations, the monitoring frequency varies between monthly and annually. For some locations, e.g. where water discharged will typically not be of excessive or variable temperature (e.g. sanitary wastewater only) we do not routinely monitor.
Water consumption – total volume	76-99	We apply the following formula for water consumption: Water consumption = Water withdrawals - Water discharges. Total volumes are calculated monthly for manufacturing facilities and quarterly for non-manufacturing facilities.
Water recycled/reused	76-99	Water recycled/reused data are monitored at JT Group's manufacturing and processing facilities. Frequency of monitoring is monthly. Where possible this is monitored by direct measurement.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Fully functioning WASH services are deemed to be provided where a facility is providing workers with drinking water and sanitation facilities, and the facility hasn't received any upheld claims from workers relating to their access to drinking water or sanitation facilities. Dedicated departments at sites monitor functioning and management of wash services once a week and implement improvements if required. We monitor by direct inspection, for example, when we carry out assessments/audits of our locations and by checking claims if they arise.

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	10,448.03	About the same	In the Processed Food Business that consumes the most water in the group, the production volume of products that use a lot of water, slightly decreased as well as new equipment installation and existing ones upgraded which improved the water efficiency of the entire group, resulting in a decrease in total water withdrawal. As a result, FY2019 is about the same as FY2018 (2% decrease). Going forward, we will be striving for improving water withdrawal, as an increase is expected due to the production volume growth in the Processed Food Business.
Total discharges	5,754.53	About the same	In Processed Food Business that consumes the most water in the group, the production volume of products, that use a lot of water, decreased as well as new equipment installed and existing ones upgraded which improved the water efficiency of the entire group, resulting in a decrease in total discharges. As a result, FY2019 is about the same as FY2018 (2% decrease). Going forward, we will be striving for improving water discharge as an increase is expected due to the production volume growth in Processed Food Business.
Total consumption	4,693.5	About the same	In Processed Food Business that consumes the most water in the group, the production volume of products, that use a lot of water, decreased as well as new equipment installed and existing ones upgraded which improved the water efficiency of the entire group, resulting in a decrease in total water consumption. As a result, FY2019 is about the same as FY2018 (2% decrease). Going forward, we will be striving for improving water intensity as an increase is expected due to the production volume growth in Processed Food Business.

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	11-25	Much higher	WRI Aqueduct	JT Group established a water risk assessment methodology in 2016 and started to assess water risks at our JT Group manufacturing sites. In 2017 we began tracking the percentage of water withdrawn from stressed areas. We use WRI Aqueduct to inform our assessment of water stress at all sites within direct operations. Sites that are rated medium to extremely high risk in the "Physical risk - Quantity" are considered to be in a water stressed area. The WRI Aqueduct tool has had an update in August 2019 following which the ratings for water stress at many of our sites increased. In addition, international tobacco business has acquired new sites in water stressed areas.

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
Tobacco	Not applicable	Yes	JT Group partially owns a small amount of land which is used for tobacco production. However, this production volume is not material in comparison to tobacco sourced from third parties (about 0.2%). The WRI Aqueduct tool has been used to assess commodities sourced from water stressed areas. This assessment is of physical risk, covering quantity of water sourced. This is in line with the JT Group internal risk assessment methodology we have developed and implemented since 2016. For some countries Maplecroft Risk Indices was more appropriate to carry out the assessment. For the purpose of this assessment, sites in areas that were rated medium to extremely high risk in the "Physical risk - Quantity" category for

			Aqueduct and "Water stress" category for Maplecroft Risk Indices were considered to be in water stressed areas.

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
Tobacco	26-50	The figure was calculated using WRI Aqueduct and Maplecroft Risk Indices assessments of sourcing locations. All locations rated medium to extremely high risk in the "Physical risk - Quantity" category for Aqueduct and "Water stress" category for Maplecroft Risk Indices were considered to be in water stressed areas. Some sites in the USA, Tanzania, Turkey, and Zambia were identified as being in water stressed areas. Further Aqueduct assessment found that water stress in Turkey could increase by 1.4 times by 2030. Leaf tobacco is procured from raw material suppliers based in Brazil, Malawi, India, and other countries, where water stress varies by location, so if the proportion of leaf tobacco procured change, that of procurement from stressed regions also changes. It is possible to source from multiple regions to reduce the effects of water stress. From a long-term perspective, JT Group has further evolved the efficient technology of plants cultivation over many years resulting in crops that require less water and can be cultivated even in areas under some levels of water-stress. Using this metric and other assessments, we understand that water stress is increasing globally. This is one reason why supplier water assessments are included in our Environment Plan 2030. To better understand water risk and use in our supply chain, by 2022, we will implement a water risk management process in our manufacturing supply chain. This includes tobacco leaf suppliers.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	1,672.1	About the same	An overseas factory in our food business uses water including rainwater and river water for some purposes, for example, production, cleaning and cooling facilities/machinery. Production volume at this factory was increased in 2019 comparing to 2018, so we increased the water withdrawal. For future years, Processed Food Business plans to increase production and as such, water withdrawal also will be increased. Recognizing this, we will be striving for improving water intensity.
Brackish surface water/Seawater	Not relevant			JT Group does not withdraw any water from this source. This is not predicted to change in the near future.
Groundwater – renewable	Relevant	5,662.25	About the same	Some of our factories use this water, for example, for cleaning and cooling facilities/machinery. In Processed Food Business that consumes the most water in the group, the production volume of products that use a lot of water decreased, and the introduction of new equipment and improvement of existing equipment improved the water efficiency of the entire group. On the other hand, some sites in our international tobacco business are sourcing slightly more groundwater. As a result, the number in FY2019 was about the same as FY2018.
Groundwater – non-renewable	Not relevant			JT Group does not withdraw any water from this source. This is not predicted to change in the near future.

Produced/Entrained water	Not relevant			JT Group does not withdraw any water from this source. This is not predicted to change in the near future.
Third party sources	Relevant	3,113.68	Lower	We use this water for various purposes, for example, production/drinking/cleaning. In Processed Food Business that consumes the most water in the group, the production volume of products that use a lot of water decreased as well as the introduction of new equipment and upgrade of existing equipment improved the water efficiency of the entire group, and also, some sites in our international tobacco business reduced amount of water from third party sources, resulting in a decrease in total water withdrawal. As a result, the number in FY2019 was lower than that in FY2018. For future years, Processed Food Business plans to increase the production and as such, the water withdrawal also will be increased. Recognizing this, we will be striving for improving water intensity.

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	2,887.78	About the same	In Processed Food Business that consumes the most water in the group, fresh surface water discharge slightly increased due to the production growth at one factory in Thailand that discharges cooling water. Rainwater and water used are discharged to surface water only at some of our manufacturing sites, after confirming that the used water complies with relevant water quality standards. In the international tobacco business, discharge to this destination has decreased, in line with production reduction at factories discharging water to fresh surface.

				Going forward, we will be striving for improving water intensity as an increase is expected due to the production growth in Processed Food Business.
Brackish surface water/seawater	Relevant	29.99	About the same	First of all, the amount of discharge to this destination is small in our operations (0.52% of water discharged). JT group discharges already treated wastewater to this destination from only 2 sites in our International Tobacco Business but considers relevant despites the small amount. The slight increase in water discharge in 2019 comparing to 2018 relates to a newly acquired site in Russia. Going forward, we do not anticipate any changes in discharge to this destination.
Groundwater	Relevant	0.77	About the same	Groundwater discharge represents a very small proportion of the wastewater amount discharged from 2 of our manufacturing sites in International tobacco business (0.01% of water discharged), but JT group still regards it as relevant. Since there is no change in the operation of related sites, the amount of discharged water is almost the same as last year. The water discharged is already treated at our sites. We do not anticipate any changes in the future.
Third-party destinations	Relevant	2,835.99	Lower	JT Group Tobacco, Processed Food and Pharmaceutical business factories and offices are located in all over the world and we discharge water to this destination where municipal water treatment plants are available. In Processed Food Business, that consumes the most water in the group, the production volume of products that use a lot of water decreased as well as new equipment introduced and existing ones upgraded which improved the water efficiency of the entire group, resulting in a decrease in total discharge to third parties. In the international tobacco business, 86% of water discharged goes to a third-party treatment plant which is the same as last year. Overall, FY2019 discharge to third-party destination is lower than FY2018 (6%). Going forward, we will be striving for improving water intensity as an increase is expected due to the production growth in Processed Food Business.

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
Tobacco	Not applicable	No, not currently but we intend to collect/calculate this data within the next two years	JT Group partially owns a small amount of land which is used for tobacco production. However, this production volume is not material in comparison to tobacco sourced from third parties (about 0.2%). JT Group manufacturing and production facilities collect/calculate data in relation to water intensity. Water withdrawn is measured for use as the numerator; production volume is recorded for use as the denominator. Given that tobacco is a predominantly precipitation fed crop, it is not practical/feasible to collect water intensity data associated with tobacco growing. However, over the course of the next two years, we plan to collate information from existing studies to better understand the precipitation levels experienced in the various growing regions from which we source tobacco. From this information we will calculate the water intensity of the tobacco sourced.

W1.4

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

Yes, our suppliers

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

51-75

% of total procurement spend

26-50

Rationale for this coverage

Within JT Group, leaf and Non-Tobacco Material suppliers, and logistics suppliers of our international tobacco business have been engaged via CDP Supply Chain. These materials are, for example, tobacco leaf, paper and cardboard and cellulose based acetate tow. In order to have a representative number of suppliers, we selected these using a Pareto analysis to get close to 80% coverage based on procurement spend in these categories of materials suppliers. To encourage suppliers to respond we explain the importance of water and what we as a business are currently doing in relation to water management. We further encourage suppliers to respond by asking them to identify potential opportunities for collaboration with suppliers. Direct engagement with our tobacco growers is via our company-specific grower programs, our Agricultural Labour Practices (ALP), and our Minimum Agronomic Standards (MAS).

Impact of the engagement and measures of success

In 2019, our international tobacco business requested suppliers to respond to CDP Supply Chain questionnaire. The responses and data gathered, such as governance, performance, risks and opportunities. The information is used on an annual basis to better understand risks and opportunities in our supply chain. Also, our aim is to raise awareness of water and its importance among our suppliers, thus the number of responders is used as a metric of success for the program.

The information provided is also used to develop our Group-wide water risk management approach in the tobacco business manufacturing supply chain, which is a target in JTG Environment Plan 2030. Engagement with suppliers will be based on evaluation criteria applied to the information gathered and the perceived risks to the business. Our measure of success is if we achieve the target in the Environment Plan 2030. Our Agronomy Technicians monitor and report back on implementation of our grower programmes and their benefits.

Comment

In our international tobacco business, prior to entering a commercial relationship, our key suppliers undergo a screening process. This process allows us to understand potential risks related to environment, compliance, human rights, and health and safety. In the last three years, we have screened 67% of the key suppliers in our international tobacco business and we have a target in our Tobacco Business Sustainability Strategy to reach 100% of key suppliers by 2023.

W1.4b

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

Type of engagement

Innovation & collaboration

Details of engagement

Requirement for water-related targets is included in your supplier selection mechanism
Provide training and support on sustainable agriculture practices to improve water stewardship

% of suppliers by number

51-75

% of total procurement spend

26-50

Rationale for the coverage of your engagement

Our engagement is predominantly with tobacco growers from our vertically integrated origins (growers with which we directly contract). These growers are our most important partners to the business, given that tobacco is the primary raw material for our products. Within JT Group, our international tobacco business has greater opportunity to work more closely with growers in its vertically integrated origins and to directly engage with them. In the JTG Tobacco Business we have committed to screening all our key suppliers against ESG criteria by 2023. We recognize that some categories of suppliers are more at risk and we then conduct onsite audits to make sure these follow high standards of environmental due diligence, health and safety and labor rights. For examples, we have Audited two of our main Reduced Risk Product (RRP)

Contract Manufactues (CM) in China against the Responsible Business Alliance (RBA) code of conduct, used as a reference in the electronics industry.

Impact of the engagement and measures of success

We deploy programs aligned with Principles of Sustainable Agriculture. Through providing extensive training and promoting Good Agriculture Practices (GAP), our Minimum Agronomic Standards (MAS), soil and water management practices to our growers, they are able to improve yield and quality, and achieve beneficial outcomes such as reduced water usage and water security. To measure success, we record number of GAP/MAS trainings, participants and conduct follow up surveys. We have MAS observation and monitoring system, and ultimately measure success by growers' improvement in yield, quality and integrity of tobacco.
Also, we conduct audits of our main RRP CMAs to ensure that they follow high standards of environmental due diligence. We audited two RRP CMs in China against the RBA code of conduct, including a focus on water management. An outcome was confirmation that our suppliers have water management program. Our measure of success is implemented corrective actions based on the audits.

Comment

The Target Crop Calendar that forms part of MAS stipulates that tobacco seedlings are planted at a preferential period in the crop year so that the maximum plant water requirement is most likely to correspond with consistent and adequate rainfall, reducing the need for extraction of local water supply for irrigation.

W2. Business impacts

W2.1

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

No

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?

No

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?

JT Group identifies water pollutants stemming from our own business operations as well as upstream agricultural processes. Local and national legislation relating to quality parameters for water (e.g. Water Pollution control law, Offensive odor control law) is a primary input for the identification of potential water pollutants. We have multiple other inputs that feed information into creating our own internal standards that identify potential pollutants, rather than using an established standard. Our communication with various stakeholders e.g. internal and external experts, growers, international research institutes and NGOs, gives us insight into risks and opportunities around water use and discharge and helps us to identify potential water pollutants that could have impact on water ecosystems and human health. From abovementioned process of identifying water pollutants, major pollutants identified and relevant to our business value chain include but are not limited to: Crop Protection Agents (CPAs), heavy metals, bacteria and hydrocarbons. When the contamination level is exceeded, these substances are classified as pollutants that disturb wastewater treatment system (incl. biological treatment process), which in turn cause damage such as eutrophication (water ecosystem) and bacterial contamination (human health). Impacts vary across our value chain, but our main concern is in the upstream supply chain in relation to the use of fertilizer, CPAs and other products in agricultural processes. If not applied properly in terms of amount and timing, those can possibly enter watercourses, causing impacts mentioned earlier. We consider this as a risk and thus we have provided growers with incentives to follow good agricultural practices. At our own production sites, the water pollutants are mainly edible fat and oil contained in the water discharge from our food processing factories. These are the substances stemming from food manufacturing such as grilling and frying processes and we control the quality of wastewater to comply with regulations to manage the impacts.

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 – supply chain

Description of water pollutant and potential impacts

The misuse and improper handling and management of fertilizers can contribute to increased risks of soil and water contamination e.g. fertilizers if overused can eventually run-off from agricultural landscapes to adjacent water sources and courses (rivers, streams, springs) and contaminate groundwater sources; this is detrimental to achieving sustainable agriculture, not only due to the potential negative environmental impacts, but also in relation to human health and economic losses (i.e. with the purchase and use of unnecessary crop inputs).

Management procedures

Soil conservation practices
Crop management practices
Fertilizer management
Waste water management

Please explain

JT Group works with growers to deploy appropriate programs, such as good agricultural practices, initiatives on soil management and water conservation. All of our leaf suppliers are expected to follow Good Agricultural Practices (GAP), an external international standard to support our commitment to sustainable tobacco farming, through a cycle of continuous improvement. In addition, the majority of our directly contracted growers are required to act in accordance with our Minimum Agronomic Standards (MAS).
We have direct relationships with tens of thousands of growers and actively engage with them in relation to fertilizer management. This includes optimizing the quantity and rate of fertilizers applied and the timing of this, which is specific to each production system. This reduces the potential for fertilizers to run-off into watercourses. Soil conservation and crop management practices including crop rotation, cover crops, and minimum tillage are included in MAS. These practices improve water retention which thus reduces additional water requirements for tobacco production. We also provide trainings for our direct contracted growers and provide customized fertilizer application recommendations. We currently employ 606 Agronomy Technicians in our international tobacco business, each providing extension services to an average 97 directly contracted growers. They visit every contracted grower approximately seven times during the course of the cropping cycle to ensure the growers understand how to implement best practices.

In terms of measuring success, Agronomy Technicians, through MAS observations record their observations which are then analyzed in order to select the right improvement measures. We track the effectiveness of our response using KPIs, internal evaluation, assessments, and on-site investigations. MAS allows us to gather information in relation to water such as mulching to decrease water evaporation, reservoirs for seedling production, the use of box ridges to capture rainwater within the field and reduce runoff and erosion. Also, we encourage growers to use seasonal crop rotation, which improves soil conservation.

Potential water pollutant

Pesticides and other agrochemical products

Activity/value chain stage

Agriculture – supply chain

Description of water pollutant and potential impacts

Pesticides and other agrochemicals are used to assist the growth of our agricultural commodities including tobacco. The misuse and improper handling and management of Crop Protection Agents (CPAs), which include pesticides and agrochemicals, can contribute to increased risks of soil and water contamination as these have the potential to run-off from agricultural landscapes to adjacent water sources and courses (rivers, streams, springs) and contaminate groundwater sources, leading to negative impacts on ecosystems and biodiversity. This is detrimental to achieving sustainable agriculture, not only due to the potential negative environmental impacts but also in relation to human health and economic losses (i.e. with the purchase and use of unnecessary crop inputs).

Management procedures

Soil conservation practices
Crop management practices
Pesticide management
Waste water management

Please explain

JT Group directly contracts small-scale growers worldwide and has a well-defined and established framework of principles to enable tobacco growing, under the stewardship of JTG, to be conducted in a socially responsible, commercially viable and environmentally sustainable manner,

and is in compliance with local and/or regional regulatory requirements.
JT Group works with growers to deploy appropriate programs, such as good agricultural practices, initiatives on soil management and water conservation. All of our leaf suppliers are expected to follow Good Agricultural Practices (GAP), an external international standard to support our commitment to sustainable tobacco farming, through a cycle of continuous improvement. The majority of our directly contracted growers are required to act in accordance with our Minimum Agronomic Standards (MAS). Also, we have a Good Agricultural Practices Protocol, that promotes the maintenance of soil structure and fertility, as well as cultivation practices that optimize water usage, and limit the detrimental impact on ground and surface water quality, protecting aquatic plant, animal and human life.
Regarding pesticide and other agrochemical product management, only registered and lower hazard Crop Protection Agents (CPAs) are permitted and recommended for use with specific modalities and dosages in tobacco production. This minimises the risk of CPAs runoff to groundwater and other unintended ecosystems. Crop management practices include selecting pest and disease resistant varieties of tobacco which reduces the need for pesticides, thus minimises the risk of runoff.
We provide trainings and capacity building of leaf extension, contracted growers and their workers in correct CPA use and management, in respect of people and the environment (i.e. CPA products, hazard levels, rates, storage, handling, application, safe disposal of residues). We currently employ 606 Agronomy Technicians in our international tobacco business, each providing extension services to an average 97 directly contracted growers. They visit every contracted grower about seven times during the course of the cropping cycle to ensure the growers understand how to implement best practices.
To measure success, our leaf technicians undertake comprehensive leaf CPA residue testing programs to ensure that growers are following the management procedures. They record their observations which are analyzed to select the right improvement measures.

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 a standalone issue

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market
Databases
Other

Tools and methods used

GEMI Local Water Tool
WRI Aqueduct
WWF Water Risk Filter
FAO/AQUASTAT
Regional government databases
UNEP Vital Water Graphics
Internal company methods
External consultants

Comment

JT Group’s risk assessment methodology has been developed by incorporating relevant information which could influence our approach to future water management and water stewardship. The information includes that gained from the WRI Aqueduct and WWF-DEG and other tools (such as GEMI Local Water Tool etc.), as well as site information. We integrate these data with other publicly available information with help from subject matter experts to implement our overall risk assessment approach.

Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as a standalone issue

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market
Databases
Other

Tools and methods used

WRI Aqueduct
Internal company methods
External consultants

Comment

Via CDP supply chain we ask our suppliers to tell us about topics such as governance, performance, risks and opportunities. This information is used on an annual basis to better understand risks and opportunities in our supply chain. Also, our aim is to raise awareness of water and its importance amongst our suppliers.
The information provided by suppliers, alongside information from databases such as Maplecroft Risk Indices is also being used to develop our Group-wide water risk management approach in the tobacco business manufacturing supply chain, which is a target in our new JT Group Environment Plan 2030. Engagement with suppliers will be based on evaluation criteria applied to the information gathered and the perceived risks to the business.

Other stages of the value chain

Coverage

None

Comment

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	The ongoing success of JT Group operations is linked to securing and maintaining access to water. We also seek to conserve water as a resource through sustainable use. Within our water risk assessment methodology, we include relevant data on water availability and quality at a basin/catchment level from regional government, publicly-available information, WRI Aqueduct and site information where available. Where this information indicates potential water scarcity this information is taken in account in our water risk assessment. The future availability and quality of water at a basin/catchment level may affect not only our direct operations, but also the supply of key commodities and raw materials on which we rely (e.g. tobacco, paper and cardboard). Our new Environment Plan 2030 includes a commitment to reduce water withdrawal by 15% from our tobacco-producing operations. In addition, our Environment Policy includes a commitment to the sustainable use of resources and commits us to seeking to continually improve overall environmental performance. In 2019 we have continued our water risk assessments across a number of our manufacturing facilities in line with our Water Risk Assessment Protocol. An example of a water risk assessment conducted in 2019 is one conducted for a cigarette manufacturing plant in Southeast Asia. We selected the site based on WRI Aqueduct results which we use for prioritizing sites to be assessed. These results indicated that water availability in that location was predicted to decrease in future due to

		changes in weather patterns caused by climate change. In order to better understand the water availability around the site, we reviewed the information issued by local government, news and information we gathered directly from the site, working closely with external water risk subject matter experts.
Water quality at a basin/catchment level	Relevant, always included	The ongoing success of JT Group's operations is linked to securing and maintaining access to water. We also seek to conserve water as a resource through sustainable use. Within our water risk assessment methodology, we include relevant data on water availability and quality at a basin/catchment level from regional government, publicly-available information, WRI Aqueduct and site information where available. Where this information indicates potential water scarcity this information is taken in account in our water risk assessment. The future availability and quality of water at a basin/catchment level may affect not only our direct operations, but also the supply of key commodities and raw materials on which we rely (e.g. tobacco, paper and cardboard). Based on our JT Group Environment Plan 2030, we made a commitment to better understand water risk and use in our supply chain, by 2022, we will implement a water risk management process in our manufacturing supply chain. We already assessed 95% of our manufacturing sites. Only new acquired sites are still to be assessed based on our company WRA methodology. In 2019, we have continued our water risk assessments across a number of our manufacturing facilities. One of the examples for our water risk assessments in 2019 is the one conducted for one of our food factories in America. We selected the site based on WRI Aqueduct results which we use for prioritizing sites to be assessed. In order to better understand the water quality around the site, we reviewed the information issued by local government, news articles and information we gathered directly from the site, working closely with external water risk subject matter experts. Typically, our food factories require good quality water for cooking chicken and beef extract, for example. As such, although we did not find any water related risks which could have a substantive impact to the business, we will be checking if the site and/or local situations change significantly, taking into account, for example, changes in local water quality.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	We recognize that we are one of many stakeholders using water at a local level, and therefore the consideration of potential conflicts with other stakeholders is important. Within JT Group's risk assessment methodology, we include relevant information on stakeholder interests from regional government databases and publicly-available information and site information where available. Where potential stakeholder conflicts concerning water are identified, this information is taken in account in our water risk

		assessment. We understand that as water becomes scarce in some parts of the world, the potential for stakeholder conflict may increase. We already assessed 95% of our manufacturing sites. In 2019, we have continued our water risk assessments across a number of our manufacturing facilities. One of the examples for our water risk assessments in 2019 is the one conducted for one of our food factories in America. We selected the site based on WRI Aqueduct results which we use for prioritizing sites to be assessed. In order to better understand the water availability around the site, we reviewed the information issued by local government, news articles and information we gathered directly from the site, working closely with external water risk subject matter experts. Typically, our food factories consume a significant amount of water for cooking chicken and beef extract, for example. As such, it is necessary for us not to have conflicts with stakeholders, so as to maintain suitable quantities of water for our operations and stakeholders. Although we did not find any water related risks which could have a substantive impact to the business, we will be checking if the site and/or local situations are not changed significantly, taking into account, for example, changes in water users and water uses locally through our water risk reassessment approach.
Implications of water on your key commodities/raw materials	Relevant, always included	The availability and quality of water affects not only our direct operations, but also the provision of the key commodities and raw materials on which we rely (e.g. tobacco, paper, cardboard and rice). Within JT Group's risk assessment methodology, we include relevant data on our key raw materials from various water risk assessment tools (such as WRI Aqueduct) and also site information where available. Where this information indicates potential water scarcity this information is taken in account in our water risk assessment. The future availability and quality of water may affect not only our direct operations, but also the supply of key commodities and raw materials on which we rely. In 2019, we have continued our water risk assessments across a number of our manufacturing facilities. To assess water related risks to the business, our processed food business periodically checks the precipitation patterns in Japan where rice, which is one of the key raw materials for the business, is grown, as growing rice requires a significant amount of water and poor quality of rice or expensive rice due to less precipitation could impact the business. Their check on the precipitation patterns enables them

		to make a plan for their sustainable operation. Going forward, as part of the JT Group Environment Plan 2030, we will be further investigating water related risks in our value chain.
Water-related regulatory frameworks	Relevant, always included	JT Group is committed to complying with environmental laws and regulations where we operate. Within our water risk assessment methodology, we include relevant data on regulatory frameworks and tariffs from regional government databases and publicly-available databases and site information, where available, and also information from external water risk subject matter experts. For example, given that the regulatory frameworks in China have been transforming significantly in terms of environmental aspects, which could have impacts to our business, we are gathering information from our frozen food factories in China, so that we can promptly take actions in response to potential changes in regulatory frameworks. Some water-related regulatory frameworks have penalty provisions for non-compliance including imprisonment and fines. In addition, if we violate the water-related regulations, we can lose our license to operate. Increasing regulatory restriction in relation to water access could have the potential to impact production at our sites which could result in loss of sales. By proactively identifying regulatory trends and potential risks we can develop business continuity plan.
Status of ecosystems and habitats	Relevant, always included	The availability and quality of water is directly linked to the functioning of the ecosystems that support many of the goods on which JT Group businesses rely such as tobacco and rice. We therefore recognize that the ongoing status of ecosystems and habitats informs us the current and future availability and quality of water. At manufacturing sites, water risk assessments (WRAs) conducted by external consultants include the use of WRI Aqueduct. Aqueduct assesses reputational risks through RepRisk which quantifies risk exposure to ESG issues including ecosystem or habitat destruction. These WRAs also assess the risk of groundwater contamination from wastewater discharge or chemical storage, which can significantly impact the local ecosystem. The WRA identifies sites with this risk, assesses their current mitigation measures, and puts in place additional countermeasures to minimise the risk. For our agricultural suppliers, we take a holistic approach in assessing ecosystem and habitats; focusing on the effective conservation and management of natural resources, biodiversity and ecosystem services in order to address the twin objectives of environmental sustainability and crop productivity. To achieve this, we use our Minimum Agronomic Standards to improve agricultural practices that have the potential to lead to contamination of water which is discharged to the ecosystem. This includes training in environmental conservation, sustainable agriculture and natural resources, soil and water management,

		surveys and assessments of tobacco pests and diseases, dedicated initiatives such as Biodiversity Inventory and Monitoring, conservation and/or rehabilitation of Areas of Permanent Protection (APP) at selected small-scale tobacco farms. Our International tobacco business has partnered with the Wildlife Research and Environmental Education Society to restore over 300 hectares of permanent protection areas in Brazil. We defined priority areas in strategic river basins, based on factors such as soil, rain, and proximity to other projects, to create green corridors (strips of land with sufficient habitat to support wildlife) connecting different regions. Additionally, we understand that our products could contribute to litter which may impact aquatic and marine ecosystems and habitats, thus we approach consumers directly through various awareness and responsible consumer behaviour campaigns and activities, so they dispose our products properly.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	Access to clean water is fundamental for human health, including that of our employees. In addition, fully functioning and safely managed sanitation facilities protect water resources, helping to ensure ongoing access to good quality water. As part of our commitment to effective occupational health and safety management, we provide employees with access to safe drinking water (we provide bottled water where sufficient water quality is not reached) and sanitation facilities at our operations, taking account of local water availability and quality, especially in water stressed areas in which we operate such as the Middle East. We consider WASH services within our internal company methods through occupational health & safety risk assessments and also in our water risk assessment in relation to water availability and quality and wastewater discharge. Our Human rights assessment which is based on UN Guiding Principles on Business and Human Rights (UNGPs) and follows the UN guidelines on the right to water and sanitation. Our internal company methods also include analysing regional water quality, using Aqueduct tool.
Other contextual issues, please specify		

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	Our approach to sustainability is governed by JT Group “4S” model, through which we balance the interests of our four stakeholder groups: consumers, shareholders, employees, and wider society. We might only achieve short-term results if we consider only one of our stakeholders or run our business only for profit. We can improve JT Group’s medium- and long-term corporate value by paying attention to our four stakeholder groups and by contributing to a sustainable society. The majority of JT Group's products do not consume water when they are used. However, production processes, especially in relation to our food products, require a significant amount of water – e.g. for cooking noodles and rice. In order to supply quality food products to our customers so as to meet customers’ expectations in line with the 4S model, we assess risks associated with water quality at our operational sites. More broadly, given increasing public awareness regarding environmental issues, the risk is that consumers could react negatively towards a company that is perceived not to be taking action to protect water resources through sustainable use of water. In 2014, we held a series of interviews with stakeholders relevant to our business – including consumer groups, employees, investors, NGOs, trade union representatives, and suppliers – to seek their views on sustainability issues (including water) that affect our international tobacco business. In 2015, we carried out further interviews at Group level.
Employees	Relevant, always included	Our approach to sustainability is governed by JT Group “4S” model, through which we balance the interests of our four stakeholder groups: consumers, shareholders, employees, and wider society. We might only achieve short-term results if we consider only one of our stakeholders or run our business only for profit. We can improve our medium- and long-term corporate value by paying attention to our four stakeholder groups and by contributing to a sustainable society. We consider employee engagement as key to implementing JT Group's water management strategy and in relation to identifying, assessing and managing water related risks. We engage with employees on the importance of water as a natural resource and methods to conserve its use; the risk being that water may be considered by employees to be a plentiful resource which could result in inefficient water use by employees. In 2019 we marked World Water Day by raising employee awareness of the importance of water conservation and the growing problem of water stress caused by climate change. We presented why water is an important global issue, what we are doing in relation to water risk and some key case studies of community facing water projects which are supported by Community Investment and the JTI Foundation. We have an internal environmental awareness reinforcement program in Japan with distribution of environmental

		leaflets with the theme of “Now on the Globe”. This is presented on our intranet three times a year, which enables employees to better understand what water related risks look like in Japan. Water and human health are closely linked and WASH services are necessary for employees’ health. As part of our commitment to effective occupational health and safety management, we provide employees with access to safe drinking water and sanitation facilities at our operations. We consider WASH services within our occupational health & safety risk assessments, rather than in our water risk assessment methodology.
Investors	Relevant, always included	Our approach to sustainability is governed by JT Group “4S” model, through which we balance the interests of our four stakeholder groups: consumers, shareholders, employees, and wider society. We might only achieve short-term results if we consider only one of our stakeholders or run our business only for profit. We can improve JT Group’s medium- and long-term corporate value by paying attention to our four stakeholder groups and by contributing to a sustainable society. We understand that investors are increasingly interested in water-related issues, impacts on potential investments and how companies are addressing these issues and impacts. Investor confidence in our company could be weakened if our water management practices are seen to be inadequate, hence, investors are considered in our water risk assessments. One of the main forums for engagement with shareholders is our General Meeting of Shareholders. As the business operates globally, including in some water stressed areas – e.g. the Middle East – it is important for us to demonstrate clearly to investors how we assess and identify water related risks, and how we address those risks that are identified. As such, we respond to investor requests for information on water through CDP Water.
Local communities	Relevant, always included	Our approach to sustainability is governed by JT Group “4S” model, through which we balance the interests of our four stakeholder groups: consumers, shareholders, employees, and wider society. We might only achieve short-term results if we consider only one of our stakeholders or run our business only for profit. We can improve JT Group’s medium- and long-term corporate value by paying attention to our four stakeholder groups and by contributing to a sustainable society. We engage with local communities on relevant environmental issues including water. The risk is that if local communities do not understand the need to manage water effectively (e.g. in terms of quantity and quality), this may impact on the availability and quality of water for our operations. Conversely, if we are not seen by local communities to be managing water effectively, the risk is that our reputation and licence to operate could be negatively impacted, hence, local communities are considered in our water risk assessments. In our tobacco supply chain, for example, in African countries from which we source significant amounts of tobacco, we support local grower programs to help manage and improve their water use.

		We have also instigated a number of community water related projects through our Community Investment team and the JTI Foundation. For example, our international tobacco business supports projects to provide safe and drinking water to communities in Azerbaijan. In 2019, 4500 people in Qozlubulaq village of Shaki District in northwest Azerbaijan provided with durable access to potable water. In all, we helped about 50,000 people living in different communities across Azerbaijan to use clean and safe drinking water following such projects since 2013.
NGOs	Relevant, always included	Our approach to sustainability is governed by JT Group “4S” model, through which we balance the interests of our four stakeholder groups: consumers, shareholders, employees, and wider society. We might only achieve short-term results if we consider only one of our stakeholders or run our business only for profit. We can improve JT Group’s medium- and long-term corporate value by paying attention to our four stakeholder groups and by contributing to a sustainable society. We engage with NGOs around various topics, including water, to explain our approach and get insight into their concerns of our water-related impacts. The insights gained are fed into our risk assessment process as necessary. These engagements also help us to manage the potential risk of reputational damage. In 2014, we held a series of interviews with stakeholders – including consumer groups, employees, investors, NGOs, trade union representatives, and suppliers – to seek their views on sustainability issues (including water) that affect our international tobacco business. In 2015, we carried out further engagement with stakeholders at Group level. This identified that some NGOs were interested in water-related issues associated with our company. We also recognize that a number of global NGOs such as CDP have interests in the same and the failure to meet their expectations could impact our reputation. This informed us when we established our water risk assessment methodology. Our International tobacco business has partnered with the Wildlife Research and Environmental Education Society to restore over 300 hectares of permanent protection areas in Brazil. We defined priority areas in strategic river basins, based on factors such as soil, rain, and proximity to other projects, to create green corridors (strips of land with sufficient habitat to support wildlife) connecting different regions.
Other water users at a basin/catchment level	Relevant, always included	Our approach to sustainability is governed by JT Group “4S” model, through which we balance the interests of our four stakeholder groups: consumers, shareholders, employees, and wider society. We might only achieve short-term results if we consider only one of our stakeholders or run our business only for profit. We can improve JT Group’s medium- and long-term corporate value by paying attention to our four stakeholder groups and by contributing to a sustainable society. The continued success of our operations is linked to the sustainable use of

		common water resources. As such, JT Group recognizes the importance of understanding broader water demands at the basin / catchment level. The risk is that competition for resources, wastewater impacts, upcoming legislation, etc. could impact on our ability to do business or cause impacts to other water users, especially at our operational sites in water stressed area, for example, Middle East. We engage with other water users at the basin / catchment level by considering in our water risk assessment method the water needs of other water users through a review of publicly available information and through direct feedback from our facility staff. If a risk to other water users is identified, we implement measures to address this risk. For example, at one of our sites in Africa where the municipality did not impose minimum water discharge standards, the site installed a water treatment plant to reduce the chemical loading of its process water.
Regulators	Relevant, always included	JT Group is committed to complying with environmental laws and regulations where we operate. Regulations regarding water, such as water abstraction quotas and wastewater discharge levels, represent a potential risk as they can impact JT Group's site operations and so they are an important consideration when assessing risks. For example, by limiting the water allocation to the site which could result in disruption of site operations. Therefore, JT Group tracks regulatory developments so as to be ready to address new or more stringent regulations. We engage with regulators as appropriate, for example, through responses to consultations. In anticipation of the BREF wastewater document being published in Russia which is one of the biggest tobacco markets for our business, our international tobacco business carried out an assessment of its Russian sites against the European BREF document to be prepared for the forthcoming changes to regulation. JT Group also measure water withdrawal, wastewater discharge and water quality parameters in order to report to the relevant regulators.
River basin management authorities	Relevant, always included	Our approach to sustainability is governed by JT Group “4S” model, through which we balance the interests of our four stakeholder groups: consumers, shareholders, employees, and wider society. We might only achieve short-term results if we consider only one of our stakeholders or run our business only for profit. We can improve JT Group’s medium- and long-term corporate value by paying attention to our four stakeholder groups and by contributing to a sustainable society. We consider information from, and the interests of, such authorities, where available, within our risk assessment methodology which informs potential risks. River basin management authorities could impact our site operations, for example, should we fail to meet a quality requirement for wastewater discharged and they order to stop our operations. Hence, we consider them in our water risk assessment. We provide wastewater quality analysis at various stages to the municipal water organisation at our

		operating sites where appropriate. This ensures that we comply with the parameters set by the authorities and enables us to identify variations in the water quality and make changes to our wastewater process when needed. Additionally, through our water risk assessments, we sometimes find that we and river basin management authorities have common water related risks in the area where we operate. In such cases, we seek opportunities to work with them in order to mitigate the risk(s). For example, our Kyushu factory in Japan has an engagement with local river basin management authorities and local stakeholders, and establishes together with them some water reservoirs onsite to prevent flooding in the region when experiencing heavy rain.
Statutory special interest groups at a local level	Relevant, always included	Our approach to sustainability is governed by JT Group “4S” model, through which we balance the interests of our four stakeholder groups: consumers, shareholders, employees, and wider society. We might only achieve short-term results if we consider only one of our stakeholders or run our business only for profit. We can improve JT Group’s medium- and long-term corporate value by paying attention to our four stakeholder groups and by contributing to a sustainable society. Wider society includes special interest groups. Our facility staff identify the needs of local special interest groups and this information is fed into the risk assessment approach via site questionnaires. For example, in Japan historically, there have been a number of statutory special interest groups in relation to local water management. They are typically in charge of preventing water related hazards, such as flooding and tidal waves. Given their responsibilities, they may contact us in relation to taking action on local water related issues and this kind of information is taken into consideration when we conduct water risk assessments onsite.
Suppliers	Relevant, always included	Our approach to sustainability is governed by JT Group “4S” model, through which we balance the interests of our four stakeholder groups: consumers, shareholders, employees, and wider society. We might only achieve short-term results if we consider only one of our stakeholders or run our business only for profit. We can improve JT Group’s medium- and long-term corporate value by paying attention to our four stakeholder groups and by contributing to a sustainable society. Wider society includes our suppliers. The future availability and quality of water may affect the supply of key commodities and raw materials on which we rely (e.g. tobacco, paper and cardboard). The risk is that if we are not able to obtain sufficient quantities of these raw materials, because of water related issues on our suppliers, for example, a paper supplier reducing or closing production due to inadequate water availability, this could negatively impact our own production. Therefore, suppliers are an important consideration in our water-related risk assessment. Through the CDP Supply Chain program, we have engaged with our key suppliers on carbon and water related issues in order to better understand water related

		issues and risks in our supply chain. We also directly engage with our vertically integrated growers on water related issues. Through our Supplier Qualification Questionnaire, we ask suppliers to tell us if they have any significant environmental risks (which includes water). Within our new JT Group Environment Plan 2030, launched in 2019, we have a target that by 2022, JTG will have implemented a water risk assessment and management approach in the manufacturing supply chain.
Water utilities at a local level	Relevant, always included	Our approach to sustainability is governed by JT Group "4S" model, through which we balance the interests of our four stakeholder groups: consumers, shareholders, employees, and wider society. We might only achieve short-term results if we consider only one of our stakeholders or run our business only for profit. We can improve JT Group's medium- and long-term corporate value by paying attention to our four stakeholder groups and by contributing to a sustainable society. When appropriate, our facilities engage directly with local water utilities suppliers in order to comply with relevant regulatory requirements and to assess and better understand water resources at a local level. The risk is that if we fail to understand the requirements of local water utilities, it may impact the operation of our sites hence water utilities are an important consideration in our water-related risk assessment. For example, if we were to discharge too much wastewater without notice beyond the capacity of water utility's drainage channels, this then could cause overflows in the site premises or even outside the site. An example of our engagement activities is that at one of our Western European sites, the water utility requested that we discharge more wastewater to assist the proper functioning of the local wastewater discharge infrastructure.
Other stakeholder, please specify		

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.

The first three stages of the JT Group water risk assessment methodology involve data gathering from a number of sources. This includes using existing water risk tools (e.g. WWF-DEG water risk filter, WRI Aqueduct) for understanding the context in the region/area where the site is located, obtaining site-specific information through a questionnaire for understanding context on the site, and undertaking desk-based research with external

databases (e.g. FAO/AQUASTAT, Regional government databases). The water risk tools were chosen based on subject matter expert advice and the fact that they are considered to be market-leading, best practice tools. Our questionnaire provides a practical overview of water availability, wastewater disposal and the factors that govern their use and control. The assessments consider: - physical/economic water scarcity, flooding, wastewater and future climate/ water trends - community and reputational aspects - regional/site information and historical evidence. The water risk assessment process also includes a water balance, to gain understanding of where water is used throughout the asset until its discharge from site. Once these data are compiled, a report is written highlighting issues of concern and risks requiring additional countermeasures/further investigation. The location then establishes an action plan, considering: whether the concern identified represent a risk to the asset and/or its operations; what is that risk; whether further investigation or assessment of the risk is required; whether existing countermeasures for the risk are appropriate and adequate; and/or what additional countermeasures are required. Typically, our water risk assessment process for a site spans a number of months. Following completion of the initial assessments we will carry out a reassessment of the risk at a frequency determined by, for example, the risk level previously identified, significant operational changes, legislative changes, etc.

We use CDP Supply Chain as a platform to identify and assess water related risks and opportunities in our supply chain. In order to understand water related risks in our growing regions we use The WRI Aqueduct tool to assess commodities sourced from water stressed areas. This assessment is of physical risk, covering quality of water sources. This is in line with the JT Group internal risk assessment methodology we have developed and implemented since 2016. For the purposes of this assessment, sites in areas with a physical quantity water risk from medium to extremely high risk were considered to be water stressed.

For some countries Maplecroft Risk Indices was more appropriate to carry out the assessment. For the purpose of this assessment, sites in areas that were rated medium to extremely high risk in the "Physical risk - Quantity" category for Aqueduct and "Water stress" category for Maplecroft Risk Indices were considered to be in water stressed areas.

In line with our Environment Plan 2030, we are in the process of developing a water risk management process in our manufacturing supply chain to better understand water risk and use in our supply chain. As the first step we are screening our materials and supplier to generate a prioritised list for further analysis.

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?

No

W4.1a

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

Internally the definition for substantive impact focuses on 3 key areas, any of which would result in the risk or opportunity being considered as important to JT Group's business: • Financially: a materiality threshold of anything with the potential to impact profitability by 1 billion Yen • Attention in the mainstream media: news articles in the mainstream or national media, whether positive or negative • Attention from shareholders: issues raised by shareholders who have a 1% or larger stake in the business, whether positive or negative This applies to the assessment of risk in our direct operations and in our value chain. Examples of substantive impacts/risks considered include access to sufficient quantities of good quality freshwater and recycled water. Further impacts could include costs of additional technical control measures, business interruption, brand perception or reputational damage etc. In one of our Middle Eastern factories we considered the availability of fresh water and plan to implement suitable counter-measures. However, the overall impact of this risk was substantially below our 1bn yen threshold. The above definition of substantive impact was developed in 2017 to be in line with other enterprise-wide risk definitions. When applied to our risk assessment process we have not identified any inherent water-related risks with the potential to have substantive strategic or financial impact.

W4.2b

(W4.2b) Why does your organization not consider itself exposed to water risks in its direct operations with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	Through JT Group's bespoke water risk assessment process, we have identified potential concerns in relation to certain sites (e.g.in relation to continuing borehole yield), but none have been confirmed as representing a substantive financial or strategic impact. As an example, in one of our Middle Eastern factories we considered the availability of fresh water and plan to implement suitable counter-measures. However, the overall impact of this risk was substantially below our 1bn yen threshold. Our business is geographically diverse so water risks at one particular site will not substantively impact the business as a whole either financially or strategically. We piloted our water risk assessment methodology during the period 2014-2016 and commenced roll out of the program in

		2017. We had a target to complete initial water risk assessments at all of our manufacturing facilities by the end of 2020. By the end of 2019, we had completed water risk assessments at 75 out of our 79 factories (95%) of our factories. Our water risk assessments are part of an ongoing process. Following completion of the initial water risk assessments we will carry out a reassessment of the risk at a frequency determined by, for example, the risk level previously identified, significant operational changes, legislative changes, etc.

W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	Through JT Group's in-house risk analysis of supplier responses through CDP Supply Chain, to date we have not identified water-related risks in our supply chain that represent a potential substantive financial or strategic impact. Our in-house risk analysis takes into consideration the water-related risks identified and highlighted by our key suppliers through their CDP Supply Chain responses. To better understand the severity of the water-related risks with each supplier and their potential to impact on our own business success, we weight suppliers individually in our risk analysis based on the type of products and services they provide to our international tobacco business, the level of spend with each supplier, and the actions they are taking to mitigate water-related risks in their own organisations. This process allows us to rank our key suppliers in terms of the level of risk they therefore pose to our international tobacco business.

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

Markets

Primary water-related opportunity

Increased brand value

Company-specific description & strategy to realize opportunity

Description of Processed Food (PF) business

□Business segments: Frozen and ambient food (incl. staple food), seasonings and bakery

□Revenue: 159 billion yen

□Substantive impacts compared to the ones for Tobacco business (1 billion yen for Tobacco is equivalent to 80 million yen for PF in 2019)

□Water use in the business: Approximately 70% of the total group water withdrawal comes from PF and why (see below)

What is water for PF

□Key ingredients for the products

□Key resources for the production as well as the sourced raw materials (mainly agricultural)

What they do in relation to water opportunities

□ We believe that further strengthening water reduction efforts will help fulfil our responsibilities as a water-reliant company and ultimately lead to an opportunity to increase the value of our corporate and product brands. The water is a valuable resource for PF. Although we have confirmed through water risk assessment that stable water can be procured for a long period of time, conservation of forests that recharge water is an important issue for PFs and societies that rely on good water resources. For this reason, the JT group has been conducting afforestation and forest conservation activities (JT Forest) since 2005 in Japan, where most of PF's site are located. We are contributing to climate change issues and water resource conservation in the watershed through proper forest management. Specifically, in addition to financial contributions, employees are taking part in volunteer activities held at JT Forest and providing products manufactured by PF. In addition, we are strategically

developing products to promote environmental activities, such as selling products that show that part of the package sales is used for tree planting and forest conservation activities.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,500,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The survey results from the Consumer Affairs Agency shows that consumers who choose eco-friendly products and services increased by about 2% in one year, and the change in environmental awareness of consumers is reflected in the market reliably and significantly. We believe that the ratio is increasing year by year. Here, we calculated the effect of increasing our market share by 1% (from 11% to 12%) against 2% (29.6 billion yen) of the total sales (about 1,480 billion yen) of Japanese frozen food companies.

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 business impact on water Description of water-related performance standards for direct operations Description of water-related standards for procurement Reference to international standards and widely-recognized water initiatives Company water targets and goals	JT Group considers water and water related issues as critical to our business as a fundamental resource for direct operations and suppliers. Water and climate related issues could have a substantive impact on our business and value chain. Our company-wide “JT Group Environment Policy” specifically addresses water aspects. It is publicly available on JT’s website and shared by all our businesses company-wide. Our new JT Group Environment Plan 2030 includes a target to reduce water use associated with our tobacco operations by 15% by 2030. To achieve the target, we set annually quantitative water targets on direct operations. The policy also includes education and encouragement of our employees and suppliers to reduce environmental impacts and optimize the use of natural resources including water. In addition, our Human Rights Policy also recognizes the human right to water and sanitation and JT Group supports the UN SDGs. We align our management systems with international standards ISO14001 and ISO50001.

		Commitment to align with public policy initiatives, such as the SDGs Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	

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
Director on board	JT Group considers water-related issues to be strategically important for our business. As such, high level board oversight is critical. The person directly responsible for water-related issues is the Chief Sustainability Officer (CSO) of JT, Director on Board (called “Member of the Board” in JT Group) and Senior Vice President of JT. This position reports directly to Representative Director and Executive Vice President of JT on Compliance, Sustainability Management and General Affairs. This person is Member of the Board also serving as Executive Officer. They are directly responsible for developing and implementing strategies and plans for Sustainability Management, including water related issues. In 2019 the CSO made the decision to approve our new Environment Plan 2030, which includes a target to reduce water use associated with your tobacco operations by 15% by 2030 and Implementation of a water risk management process in our manufacturing supply chain by 2022, as the long-term plan for JTG. The CSO is also responsible for approving the Annual and Strategic Planning (ASP) over the next three years and reviewing progress on water withdrawal performance against ASP and against the Environment Plan 2030 every year.

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 Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans	JT Group considers water-related issues to be strategically important for our business. As such, high level board oversight is critical so water-related issues are included in Board level meetings 4 times a year as part of environmental planning. Our governance mechanism contributes to the Board’s oversight of water problems including following measures; 1) JTG’s Board of Directors verify environmental practice at the Mid-Year Review 2) Review of Annual and Strategic Planning (ASP) 3) Approving the annual operation plan, which includes the yearly environmental plan. 4) Confirming the progress of sustainability targets including water-related target.

		Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Setting performance objectives	

W6.3

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

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

Chief Sustainability Officer (CSO)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

1) CSO in charge of JTG Sustainability Management, is a Member of the Board and is also responsible for Compliance and General Affairs. They report directly to Representative Director and Executive Vice President who is directly responsible for developing and implementing strategies and plans for Legal, Corporate Strategy, Digitalization, Human Resources, Operation Review & Business Assurance, Pharmaceutical Business and Processed Food Business, including water-related issues. 2) CSO is responsible for water-related issue management and more broadly, sustainability management. The Sustainability function monitors and assesses water-related issues, coordinates activities, gathers data and provides information to the JTG's Board of Directors. Water-related management and performance are reported to the Board 4 times a year so that the Board can understand the progress to the target and provide oversight.

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	

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 Sustainability Officer (CSO)	Reduction of water withdrawals	The CSO is individually evaluated for achievement of CSO performance targets through execution of CSO duty that will lead to the JT Group's sustainable profit growth. The performance targets, including the water targets (15% reduction with our tobacco business from 2015 to 2030) in Environmental Plan 2030, are set through interviews with the CEO at the beginning of year and evaluated at the end of year. The base salary for the following year is set within a certain range reflecting the individual performance evaluations. Thus, it can be said that the individual performance indicator and the increase in salary are related as incentive are linked. And, executive bonus for the CSO is paid as monetary remuneration, reflecting business performance of the company, which is the basis of

			sustainable profit growth. Environmental measures such as reduction of operating costs and refinement of resilience by water withdrawal reduction activity, water risk assessment, and so on, according to the Environmental Plan 2030 will contribute to profit growth of the JT Group. In addition, in order to relate executive compensation to corporate value over the medium to long term, shares linked to corporate value, i.e. Restricted Stock and Performance share unit are granted to CSO as part of CSO compensation. Pursuing environmental initiatives such as water withdrawal targets and reporting progress will improve ESG evaluations and have a positive impact on stock prices.
Non-monetary reward	No one is entitled to these incentives		Currently, there is not a formal non-monetary incentive provided for C-suite members.

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?

No

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)

JTG_integrated_report_2019.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	11-15	We reflect water-related issues into our strategies through the following processes. JT Sustainability Management – Environment team (SM-E) functions, that are environmental experts, monitor changes in the external environment in terms of water and associated changes in the internal environment, and identify risk/opportunity drivers which could impact on our businesses. The monitoring information includes reports from each business division. Our Group environment plans contain commitments relating to improved water efficiency and the identification and mitigation of water-related risks. The JT Group Environment Plan 2030 has a target to reduce water withdrawal associated with our tobacco business by 15% from 2015 to 2030. To better understand water risk and use in our supply chain, by 2022 we will implement a water risk management process in our manufacturing supply chain. This will allow the company to effectively make long term decisions whilst maintaining tangible objectives and targets. We have an Annual and Strategic Planning (ASP) process which is carried out annually and measures progress against annual targets for the next three years. Sites are required to set specific actions showing how they can contribute to achieving our longer-term targets relating to water efficiency and water risk assessments, at the site, business and company level. As such, our environment plans form an integral a part of our overall business plan.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	In addition to opportunities such as improving water efficiency by saving water, increasing market opportunities such as refining brand value and increasing ESG investment by conserving water resources, physical risks due to droughts and floods, water pollution, legal regulations and public Water-related issues, such as risks associated with reputational impacts of policy changes, are

			integrated into strategies for achieving long-term objectives. To address the above-mentioned water-related issues, we have established a long-term environmental plan with a view to supporting water risk assessment (WRA), promote WRA in the supply chain toward achieving it, and take appropriate measures against detected risks. By integrating water-related issues into strategies for achieving long-term objectives the JT Board will also have a process for reviewing the integrated plan to ensure it is consistent with the long-term environmental strategy of the business, requesting changes (if necessary) and approving the plan. This enables you to make effective long-term decisions while maintaining specific goals and objectives.
Financial planning	Yes, water-related issues are integrated	11-15	Water related plans and programs are incorporated into JT Group's Annual and Strategic Planning processes, which includes both capital and operational financial planning. Where capital expenditure is required in relation to water related projects (e.g. upgrading facilities to reduce water consumption, improving wastewater treatment), this is requested and authorised through our Business Approval Process (BAP). The BAP can be used for CAPEX planning with paybacks beyond 11 years, hence this is considered in the timeframe 11-15 years.

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)

-41

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

156

Water-related OPEX (+/- % change)

-10

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

2

Please explain

Water-related CAPEX decreased by over 40% compared to the previous year, mainly because the equipment renewal or introduction had already been done in 2018. Going forward, it is anticipated that CAPEX will increase, mainly due to the upgrade and renewal of equipment such as coolers to recycle water, wastewater treatment plants, rain water flood mitigation etc.

OPEX decreased by around 10% compared to the previous year due to the diminution in production in Processed Food Business. However, as the production is planned to grow, it is expected that OPEX will slightly increase going forward; even though we plan to reduce the amount of water intake by capital investment and to recycle water through new equipment.

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	Yes	In 2019, we conducted climate-related scenario analysis for our Tobacco business whose total revenue is 88.4% of our group. The process was aligned with the TCFD recommendations and involved our Directors on Board at key milestones. Also, in the development of our climate targets, we used 2DS model to assess emissions reductions including the inputs of current and anticipated GHG emissions of JT Group. We assessed multiple methodologies to set our science-based target and ultimately chose RCP2.6 scenario. The science-based target has been validated by the SBTi and included in our Environment Plan 2030. We also use climate scenario analysis to identify which factories and tobacco growing regions could experience climate change-induced water stress and thus at higher water supply risks in the future. This information is used to inform sourcing decisions and business expansion and supported the development of our group water reduction target and site-specific water reduction actions.

W7.3a

(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?

Yes

W7.3b

(W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization's response?

	Climate-related scenarios and models applied	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	2DS RCP 2.6 Nationally determined contributions (NDCs) Other, please specify Aqueduct RCP4.5, 8.5 future projection	Increased flooding at various production sites and in our leaf supply chain for example in Japan (where our group HQ is located). Acute Risk: We conducted scenario analysis using external data such as reports by Japan Meteorological Agency. As an example outcome, we realised that climate change may increase precipitation, typhoon intensity and occurrence of large tropical cyclones in Japan. These risks could impact on the volume and quality of tobacco leaf we procure, which could result in disruption of our production site operations.	We conduct water risk related climate scenario analysis for own factories and key tobacco growing regions. This water risk analysis is used to identify which sites are likely to experience climate change-induced flooding and are at higher flooding risk in future. The data tool that we use to conduct this initial analysis is the WRI's Aqueduct Tool which is then supplemented with extensive site-level research by independent water security experts. We have implemented our water risk assessment process with the intention of both identifying possible climate-related water risks and then implementing actions to address these risks. Responses vary depending on the scale of the risk at each site, but include measures such as implementing an evacuation drill and business continuity plans. Through our risk analysis using WRI Aqueduct, we have also identified some of the tobacco growing regions that are likely to experience climate-related water issues in the future. Although

			no significant water issues have been identified at this time, in order to support global water stewardship by reducing our water withdrawal and by encouraging water risk management in our supply chain, by 2022, we will implement a water risk management process in our manufacturing supply chain.

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

Water does not represent a significant expense to JT Group's business, nor have we identified water-related risks that represent a substantive financial impact to our business.

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	Company-wide targets and goals	Targets are monitored at the corporate level	Water related targets, plans and programs are incorporated into the JT Group Annual and Strategic Planning (ASP) processes and in our long-term environment plans. Through our ASP process we set targets relating to water withdrawal at the site, business and company

	Business level specific targets and/or goals Site/facility specific targets and/or goals	Goals are monitored at the corporate level	level. We have targets in our new JT Group Environment Plan 2030 in relation to water reduction and water risk assessments. We have set a target to reduce our tobacco business-associated water withdrawal by 15% by 2030 vs 2015. This target was calculated, taking into account site level water intensities and regional predictions for future water stress. We plan to achieve the target by using less water for factory irrigation, reducing water use in our processes, improving leak control, using more recycled water, and improving cleaning practices. Progress against targets and goals in ASP and the group environment plan is monitored at group and business level and reported to the board.

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

Company-wide

Primary motivation

Reduced environmental impact

Description of target

We will reduce water withdrawal associated with our tobacco business by 15% by 2030

Quantitative metric

% reduction in total water withdrawals

Baseline year

2015

Start year

2018

Target year

2030

% of target achieved

65

Please explain

Target was calculated by analysing site level intensities against peer factories, taking into account predicted future water stress for the region in which each site is located.

Target reference number

Target 2

Category of target

Water pollution reduction

Level

Company-wide

Primary motivation

Reduced environmental impact

Description of target

To achieve water conservation, the JT Group's goal of reducing water pollution is to maintain 100% of the wastewater meeting Discharge Standards (one of the indicators of compliance with laws and regulations). Is listed.

Quantitative metric

% proportion of wastewater that is safely treated

Baseline year

2018

Start year

2018

Target year

2019

% of target achieved

100

Please explain

Maintaining 100% of the water discharge that meeting Discharge Standards is one of the compliance evaluation indicators of laws and regulations.

W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

Goal

Other, please specify

Understand water-related risks

Level

Company-wide

Motivation

Risk mitigation

Description of goal

Environmental protection is a crucial part of our responsibility to society, and key to the sustainability of our business. In regard to water, our JT Group Long-term Environment Plan 2020 included a goal to understand water-related risks to the business and to establish our management approach to these risks by 2020. This goal included: 1. developing a methodology to assess water risk; 2. undertaking water risk assessments for all of our business segments; and 3. identifying by 2020 appropriate measures to address these risks. The reason why this goal was adopted was so that we can reduce our environmental impacts, not just because it is the right thing to do, but because it delivers business benefits, such as cost reduction and enhanced reputation. This goal is important to the company as it drives awareness towards water related risks in the business and also delivers on our publicly declared commitment to address water related issues in order to make sure our operations are sustainable. In addition, increased visibility of which facilities have a higher water-related risks enables us to focus our efforts appropriately. We think of it as a step to maintain and improve water security. As water risk is primarily a local concern that varies depending on location, we conduct our water risk assessments at a site/facility level for our manufacturing facilities.

Baseline year

2015

Start year

2018

End year

2020

Progress

Within our JT Group Long-term Environment Plan 2020, we made a commitment to develop and conduct water risk assessments at our manufacturing operations across all of our business segments by 2020. In 2019, we continued our water risk assessment program. Once we have completed the assessments, we will be able to better understand the impact and consequences of water risk to the business. We measure progress in terms of the number and percentage of sites where we have conducted a water risk assessment. By the end of 2019 we had completed water risk assessments at 95% of our manufacturing facilities. We consider success against this measure to be when we have

conducted assessments at 100% of our facilities and have action plans established to address the risks identified. We also monitor the action plans to completion.

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	Total Water Withdrawal Total Water Discharge	ISAE 3000	These data points were verified under ISAE3000 (Revised) by Bureau Veritas

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.

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 and Senior Vice President, Chief Sustainability Officer	Director on board

W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

No

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

Please confirm below

I have read and accept the applicable Terms