

W0. Introduction

W0.1

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

Philip Morris International Inc. (PMI) is a leading international tobacco company. PMI has its executive headquarters in New York, US, its primary listing on the New York Stock Exchange (NYSE: PM), and its Operations Center in Lausanne, Switzerland. PMI manufactures and sells cigarettes, smoke-free products and associated electronic devices and accessories, and other nicotine-containing products in markets outside of the U.S. We have a wide range of cigarette brands, including the world's best-selling international cigarette Marlboro. Our smoke-free product portfolio includes heat-not-burn and nicotine-containing vapor products. In 2020, PMI net revenues amounted to USD 28.7 billion excluding excise taxes on products worth USD 47.4 billion, on a like-for-like basis; 23.8% of PMI's net revenues in 2020 related to the sale of smoke-free products. PMI's 2020 total shipment volume for combustible products and smoke-free products was 730 billion (654 billion combustible products and 76 billion smoke-free products).

We are building our future on smoke-free products that are a much better consumer choice than continuing to smoke cigarettes. Our vision is that these products ultimately replace cigarettes to the benefit of adult smokers, society, our company and our shareholders. This ambition is at the very core of our corporate strategy and sits atop our sustainability priorities. For PMI, sustainability is an opportunity for innovation, growth, and long-term value creation, and a means to minimize the negative externalities associated with our products, operations, and value chain while maximizing operational efficiency and resource allocation. We have a global footprint: as of December 31, 2020, PMI had a workforce of close to 71,000 people worldwide and operated 39 production facilities globally. In 2020, our tobacco was sourced from over 285,900 contracted farmers across 23 countries, and our products were sold in over 175 markets.

Our sustainability materiality analysis helps us prioritize our focus and resources in areas where we can have the greatest impact. Climate protection, littering prevention and product eco-design and circularity are tier 1 environmental topics that are prioritized in our sustainability strategy.

Engagement beyond our own operations is key, as this is where the most significant sustainability impacts occur, especially when it comes to climate change and carbon emissions.

Our business has a significant, global supply chain organized by five main categories:

- 1. Agricultural products, including tobacco and other agricultural products, such as clove, menthol and guar gum.
- 2. Direct materials used to produce cigarettes and other tobacco products, such as acetate tow (for filters) and paper (both cigarette paper and for packaging materials).
- 3. Machines for our cigarette and heated tobacco products factories.
- 4. Electronic devices for heated tobacco and vapor products.
- 5. Goods and services that are not specific to our business, but essential for any business, such as office equipment etc.

As a responsible business, we want to understand and continuously address potential sustainability issues in our global supply chain. We are working with business partners to proactively identify, manage, and reduce risks, and create shared value. The description above is a summary and is qualified in its entirety by reference to the full text of PMI's Annual Report on Form 10-K for the year ended 2020 and 2021 Proxy Statement dated March 25, 2021 filed with the U.S. Securities and Exchange Commission, and the full text of PMI's Integrated Report 2020.

Remarks for this disclosure, in this submission:

-"PMI" "we" "us" and "our" refer to Philip Morris International Inc. and its subsidiaries;

-Trademarks and service marks in this submission are the registered property of, or licensed by, the subsidiaries of PMI and are italicized;

-Expectations, aspirational targets and goals set forth in this submission do not constitute financial projections;

-Smoke-Free Products or Reduced-Risk Products (RRPs) - the terms PMI uses to refer to products that present, are likely to present, or have the potential to present less risk of harm to smokers who switch to these products versus continued smoking. PMI has a range of RRPs in various stages of development, scientific assessment and commercialization;

-Materiality: In this submission and in related communications, the terms "materiality," "material" and similar terms, when used in the context of economic, environmental, and social topics, are defined in the referenced sustainability standards, and are not meant to correspond to the concept of materiality under the U.S. securities laws and/or disclosures required by the US Securities and Exchange Commission.

-Unless otherwise indicated, the scope of the data in this report covers our operations worldwide for the full calendar year 2020 or reflects the status as of December 31, 2020. Where not specified, data come from PMI estimates.

W-FB0.1a

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

Distribution

(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 2020	December 31 2020

W0.3

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

Argentina Brazil Canada China Colombia Czechia Ecuador Germany Greece India Indonesia Italy Jordan Kazakhstan Lebanon Lithuania Malawi Malaysia Mexico Mozambique Netherlands North Macedonia Pakistan Philippines Poland Portugal Republic of Korea Romania Russian Federation Senegal Serbia South Africa Spain Switzerland Thailand Turkey Ukraine United States of America Venezuela (Bolivarian Republic of)

W0.4

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

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? Yes

W0.6a

 Exclusion
 Please explain

 Offices and some minor facilities.
 We have excluded offices and finished goods warehouses for which our water footprint is marginal. These exclusions are not significant to this disclosure as the water consumption in these sites is imited to water access, sanitation, and hygiene services (WASH) for the employees. We estimate that all the sites together represent less than 2% of our overall blue water usage based on a water footprint screening performed in collaboration with an external consultant.

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.

	importance rating		Please explain
Sufficient amounts of good quality freshwater available for use	Important	Important	According to a study we conducted in 2017-2018, our agricultural supply chain, our other direct materials supply chain and our manufacturing represent respectively 53%, 41% and 6% of our water footprint (offices and finished goods warehouses excluded). As PMI relies on the availability of sufficient good quality freshwater for the production of its raw materials, and the manufacturing of its products, we have chosen to consider as "important" in both direct and indirect operations. Indirect: Water is used in PMI's supply chain to grow raw materials. PMI's most critical suppliers in terms of water risks are tobacco growers, paper and cellulose acetate-based material suppliers. More than half of our purchased tobacco crops are rainfed, the rest require irrigation. PMI expects its indirect dependency on water to decrease in the future. This will be achieved through collaborations with our suppliers to promote our Good Agricultural Practices (GAP), our Leaf Water Stewardship Program, and Responsible Sourcing Principles (RSP) programs to optimize the use of freshwater resources. Direct: At our manufacturing sites, high quality freshwater is used for WASH services, landscape watering, and for manufacturing processes including the preparation of flavors, liquid products, in several stages of the tobacco processing, among others. Good quality fresh water is also an ingredient in the manufacturing process of our RRP products which are expected to have an increased importance in PMI's strategy in the future. PMI expects its direct dependency on water to increase in the short to medium term (up to 5 years), as we are transitioning toward RRP products which are more water-intensive in their manufacturing processes. To reduce water dependency in the long term, PMI is implementing at its factories technologies for recycling and reuse such as reverse osmosis and electrode ionization, and efficiency initiatives.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Direct: The process to manufacture our RRP requires approximately four to five times more water per unit of product than conventional cigarettes. Our efforts are geared towards improving water efficiency throughout the process by implementing technologies to recycle and reuse water, and using rainwater harvesting for landscape watering. We use recycled water for example in processing related to cooling, cooling towers, boliers, equipment cleaning, and also for landscape irrigation. For this reason, we have rated the importance of recycled water as important. At our manufacturing sites, water is recycled in our wastewater treatment plants and used for watering gardens, equipment cleaning and for some production processes where technically possible. PMI expects its dependency on recycled water to have a slight increase in the future. This is related to the expected water needs that PMI will face when transitioning to RRP, which are more water intensive. Indirect: we encurage the adoption of practices within tobacco and other direct material suppliers like paper or cellulose acetate, including the treatment and use of recycled or brackish water as part of their processes, which might include secondary uses of water such as for cleaning and maintenance of equipment, operation of equipment, and others depending on the local context. Reducing freshwater withdrawn by using recycled water improves our direct and supply chain resilience to water scarcity and increases water availability for surrounding communities, therefore, we have given them a rating of important. Water recycling is gaining importance among our suppliers and we expect this trend to continue increasing in the future. This is linked to increasing water risks faced by suppliers, who have to mitigate them through increased efficiency in the use of water resources.

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	revenue	and/or sourced	Please explain
Tobacco	More than 80%		100% of PMI heated tobacco units, cigarettes and other nicotine-containing products require tobacco. We purchase tobacco leaf of various types, grades and styles throughout the world. In 2020 our purchases came from around 285,898 farmers directly contracted either by us or by our third-party leaf suppliers in 23 countries. We contracted farmers directly in several countries, including Argentina, Brazil, Italy, Pakistan, and Poland. Some of our main tobacco sourcing countries are Argentina, Brazil, China, Italy, Indonesia (mostly for domestic use in kretek products), Malawi, Mozambique, Philippines and Turkey. In 2020, PMI continued to assess water risks associated with its value chain, as well as to gather water intensity data from the production of its key commodities such as tobacco.

W1.2

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

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	100% of our operational (i.e., factory) sites are monitored for this water aspect and this is considered part of usual facility management for our sites. Flow meters are used as methodology to measure continuously volumes of water withdrawals by source and origin in all our sites. 100% of our factories are ISO14001 certified, helping our sites to demonstrate compliance with current statutory and regulatory requirements associated with water withdrawals. Monthly water aggregated data from all sites is entered into our EHS data management system, checked quarterly and audited annually by SGS during onsite verification. We have also become a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate, and 11 factories have been already certified against the AWS Standard by the end of 2020. We have committed to certify all factories by 2025.
Water withdrawals – volumes by source	100%	We monitor 100% of our factories for this water aspect and this is part of usual facility management for our sites. Flow meters are used to measure continuously volumes of water withdrawals by source and origin in all our sites. 100% of our factories are ISO14001 certified, helping them to demonstrate compliance with current and future statutory and regulatory requirements associated with water withdrawals. Monthly aggregated water data from all sites is entered into our EHS data management system, checked quarterly and verified by a third party annually. Our water stressed factories have been identified through our cent water risk assessment based on the WRI Aqueduct tool. We have also become a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate, and 11 factories have been already certified against this Standard. We have committed to certify all factories by 2025.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<not applicable=""></not>	<not applicable=""></not>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<not applicable=""></not>	<not applicable=""></not>
Water withdrawals quality	100%	In all our factories where water is sourced via the municipal provider, we monitor the quality via the provider's analyses, with the exception of the RRP factories where we perform additional analyses due to product quality reasons. In all the cases we withdraw water from wells, fresh water sources or in case we store water in water tanks, we monitored closely (up to 3 times a month). We collect up to 30 parameters like hardness, conductivity, metals, suspended solids, Coliforms, PH, salinity, temperature, and chlorine. Most of the analyses are taking place in external accredited laboratories, and we also measure inhouse some parameters like PH. Moreover, we installed in our factory in Romania a water online monitoring system allowing automatic sampling and measuring to ensure water quality. We have become a member of the Alliance for Water Stewardship and we have committed to certify against this standard all factories by 2025.
Water discharges – total volumes	100%	100% of our operational (i.e. factory) sites are monitored for this water aspect and this is considered part of usual facility management for our sites. PMI uses flow meters to measure continuously discharges volumes in almost half of its sites, and calculates the rest based on consumption values. 100% of our factories ISO14001 certified, helping our sites to demonstrate compliance with current statutory and regulatory requirements associated with water discharges. Monthly water aggregated data from all sites is entered into our EHS data management system, checked quarterly and verified by a third party annually. We have also become a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate, and 11 factories have been already certified against this Standard. We have committed to certify at least 16 facilities by 2021 and all factories by 2025.
Water discharges – volumes by destination	100%	100% of our operational (i.e. factory) sites are monitored for this water aspect and this is considered part of usual facility management for our sites. PMI uses flow meters to continuously measure discharges and identify volumes by destination in almost half of its sites, and measures the rest based on consumption values. 100% of our factories are ISO14001 certified, helping our sites to demonstrate compliance with current statutory and regulatory requirements associated with water discharges. Monthly water aggregated data from all sites is entered into our EHS data management system, checked quarterly and verified by a third party annually. We have also become a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate, and 11 factories have been already certified against this Standard. We have committed to certify all factories by 2025.
Water discharges – volumes by treatment method	100%	100% of our operational (i.e. factory) sites are monitored for this water aspect and this is considered part of usual facility management for our sites PMI uses flow meters to continuously measure discharges and identify volumes by destination in almost half of its sites, and calculates the rest based on consumption values. 100% of our factories are ISO14001 certified , helping our sites to demonstrate compliance with statutory and regulatory requirements associated with water discharges. Monthly water aggregated data from all sites is entered into our EHS data management system, checked quarterly and verified by a third party annually. We have also become a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate, and 11 factories have been already certified against this Standard. We have committed to certify all factories by 2025.
Water discharge quality – by standard effluent parameters	100%	We perform chemical analyses on the wastewater in our factories and this activity is considered part of routinely facility management. We do sampling following recognized sampling protocols and laboratory analysis in internal, but mostly in external accredited labs, to measure standard effluent parameters. 100% of our factories are ISO14001 certified, helping our sites to demonstrate compliance with current and future statutory and regulatory requirements. BOD, COD, pH, TSS, phosphorus, nitrogen, coliforms, phenols are only some of the parameters typically controlled, depending always on the final wastewater receptor. The frequency of analyses varies: pH and TSS are often measured continuously with online instruments, while other parameters like COD are measured on average on a monthly basis. As part of our water strategy, we will progressively increase the number of parameters controlled and on-line measurements at all our sites.
Water discharge quality – temperature	100%	As part of our ISO14001 system, we ensure that the wastewater temperature is adequate to the receptor requirements, and to achieve and monitor this in all our sites we follow the most adequate methods. In 70% of our sites wastewater is treated onsite and sometimes discharged in natural receptors like surface or underground water/ soil, or in case the local regulatory framework requires, we measure the temperature in the various treatment stages as well as in the final treated wastewater tanks with online or offline thermometers, usually on a monthly basis. In the remaining sites, we calculate the effluent temperature based on the process water temperature and volume, and this is in line with the temperatures measured on the sites with installed online meters. We ensure that this parameter is controlled annually. Our process water temperature is the same across our factories and has not changed over the years, and our effluent wastewater temperatures are similar to the civil wastewater.
Water consumption – total volume	100%	100% of our operational (i.e. factory) sites are monitored for this water aspect and this is considered part of usual facility management for our sites. The volume is calculated based on the withdrawal and discharges. 100% of our factories are ISO14001 certified , helping our sites to demonstrate compliance with current e statutory and regulatory requirements associated with water consumption. Monthly water aggregated data from all sites is entered into our EHS data management system, checked quarterly and verified by a third party annually.
Water recycled/reused	100%	100% of our operational (i.e. factory) sites are monitored for this water aspect and this is considered part of usual facility management for our sites. We use flow meters to continuously measure the volumes, at the end of the treatment process in our facilities, prior to being reused. 100% of our factories are ISO14001 certified, helping our sites to demonstrate compliance with current statutory and regulatory requirements associated with water recycle/reuse. Monthly water-aggregated data from all sites is entered into our EHS data management system, checked quarterly and verified by a third party annually. Optimizing our osmosis water treatment plants and reusing rejected water are examples of initiatives implemented to reuse water in our factories.
The provision of fully-functioning, safely managed WASH services to all workers	100%	100% of our operational (i.e. factory) sites are monitored for this water aspect and this is considered part of usual facility management for our sites, with measurement being carried out and validated through ISO14001 and ISO 45001 standard in 100% of the sites. Each site uses the potable water measurement method indicated by the local legislation, and as a minimum to meet the Drinking Water Directive 98/83/EC. We use global reporting requirements for water data with a central data collection system for all sites. WASH services in all PMI sites is a minimum PMI requirement, it is integrated into our occupational health and safety management system, according to ISO 45001 standard and it is monitored and controlled through internal, corporate and third-party audits. Each site is being audited against WASH requirements at least annually.

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)		Please explain
Total withdrawals	3377	Much lower	In 2020, total withdrawals decreased by 16% vs. 2019. The decrease was due to the water saving and water recycling initiatives despite the incremental production of our smoke free products (RRP) which require approximately 4 to 5 times more water per unit of product than for conventional cigarettes. In 2020, PMI implemented several initiatives in the frame of its "Drive for Zero" program, which aims to reduce process losses, including water use and increase water recovery; these measures helped us achieve a decrease on our average water withdrawals from 4.74 m3 in 2019 to 4.21m ³ of water for every million units of product equivalent produced. In the medium term, PMI expects decreases in water withdrawals, as we continue to improve the efficiency of manufacturing process for RRP products and to implement our water recycling and reusing strategy. PMI is expecting RRP demand and production to grow over time, which could lead to long-term slow increments in our water withdrawal volumes. Still, this increased water withdrawal demand is expected to be significantly less due to the implementation of our water management strategy. As an example of our progress, our smoke-free products factories in Italy and Greece, improved their water efficiency rate by 10 and 11 percent respectively in 2020 versus 2019. Several water-saving initiatives contributed to this, including the reuse of treated wastewater in the boilers and for green areas irrigation, but also changes in the product design, requiring less water withdrawals for its production. This increase in water efficiency led to reduction in water withdrawals.
Total discharges	1754	Much lower	In 2020, our total discharges decreased by 17% from 2,125 megaliters in 2019. Most of the decrease was due to the new reusing and recycling technologies applied to our new smoke free product factory production processes; these measures helped us achieve a decrease on our average water discharges from 2.51 m3 in 2019 to 2.19 m ³ of water for every million units of product equivalent produced. The process to manufacture our smoke free products requires approximately 4 to 5 times more water per unit of product than for conventional cigarettes. To mitigate these impacts, our efforts are geared towards improving water efficiency throughout the process by implementing new process designs, reusing or recycling water, using rainwater harvesting and improving Waste Treatment Plan efficiency. We expect medium term (1-5 years) decreases in discharge as we continue to improve the efficiency of manufacturing process for RRP products and to implement our water recycling and reusing strategy. PMI is expecting RRP demand and production to grow over time, which could lead to long-term slow increments in our water discharge volumes.
Total consumption	1623	Much lower	In 2020 our total consumption decreased by 14% from 1,884 megaliters in 2019. The decrease was due to the water saving and water recycling initiatives despite the incremental production of our smoke free products (RRP) which require approximately 4 to 5 times more water per unit of product than for conventional cigarettes. In 2020, PMI implemented several initiatives to reduce water use and increase water recovery and also to reduce losses; through this our water consumption decreased from 2.23 m3 in 2019 to 2.02 m ³ of water for every million units produced. We expect the RRP demand and thus production to grow over time, and we will mitigate these impacts, with our efforts geared towards improving water efficiency throughout the process by implementing new process designs, reusing, recycling water and using rainwater harvesting. In the medium term, PMI expects decreases in water consumption, as we continue to improve the efficiency of the manufacturing process for RRP products and to implement our water consumption volumes. Still, this increased water consumption demand is expected to be significantly less due to the implementation of our water management strategy.

W1.2d

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

		withdrawn from	with previous	Identification tool	Please explain
Row 1	Yes	51-75		WRI Aqueduct	PMI uses the WRI Aqueduct tool to identify factories that are located in geographies facing water stress. The analysis is carried out annually and is focused on those indicators related to physical risks (quality and quantity), future water conditions and WASH, as these risks are the most relevant for PMI's direct operations. Results are used by PMI to monitor the trend of water withdrawals in each geography, and to identify key factories where to implement water efficiency interventions. Using the WRI Aqueduct tool with each factory's GPS coordinates, we were able to detect those sites where the baseline water stress is equal to/greater than high 40 - 80%. Then we calculated the total amount of water withdrawn from those factories vs total withdraws. Based on this study, 53% of our direct factory water withdrawals are from water stressed areas in 2020 vs. 54% in 2019. We perform this study annually to make sure that we maintain our focus on water stressed factories. Water withdrawals from water stressed areas in courcent on a several RRP factories are in water stressed areas (e.g., Italy, Greece, Romania). In addition, the water stressed areas unfortunately are expanding, reaching regions where in the past didn't suffer from baseline water stresses. This impact has been partially offset by programs that have been implemented in our facilities located in water stressed areas to reduce our water consumption. Our efforts are geared towards improving water efficiency throughout the process by implementing new process designs, reusing or recycling water, and using rainwater harvesting.

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?

commodities	of this commodity produced in areas with water	proportion of this	Please explain
Tobacco	Not applicable		We do not grow tobacco; we source it as raw material to manufacture our products. To identify water stressed areas we use the WRI Aqueduct tool and we calculate the tobacco volume grown in the areas with an overall physical water risk scoring above 3. We also replicate the global assessment at the local level with specific field visits (local risk assessments) to validate the methodology on the ground with the help of a technical advisor. Progress on local risk assessments has included 15 locations between 2018 and 2019, and in 2020 we assessed 8 new Tobacco Growing Areas (TGAs) including one in Indonesia, Spain, Pakistan, and Italy and two TGAs in both China and Brazil. In 2020 we have redefined our TGAs with the help of spatial analyses, but we have continued analysing risk through the WRI Aqueduct tool and extending our local risk assessments. Our target is to complete a local risk assessment in 100% of our TGAs by the end of 2025. Each of these risk assessments has allowed us to further improve our knowledge about local conditions faced by farmers and suppliers in the tobacco growing areas where they operate. Studies will continue through 2021 to further understand local risks including water stress risk and build best practices. In 2017-2018, we conducted a water footprint study showing that 53% of our water usage is due to our agricultural supply chain, 41% to other direct materials supply chain, and 6% to our manufacturing processes (offices and warehouses excluded). In 2017, water baseline studies were conducted in 60 different tobacco growing areas, representing 90% of our tobacco leaf purchases and we aggregate the data in a baseline database to analyse our tobacco leaf water footprint.

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

Agricultural commodities		Please explain
Tobacco	26-50	The percentage of total tobacco sourced from water stressed areas in 2020 increased by 18% vs. 2019, driven mainly by Tobacco Growing Areas (TGAs) in Mozambique, China, Indonesia, Pakistan, and Brazil. This is not based on changes in purchasing but rather PMI refining its list of TGAs and TGA boundaries through spatial analyses resulting in more local specific data and more effective environmental data consolidation and management by suppliers. TGAs GPS coordinates were used in the 2020 Aqueduct assessment to result in Overall Physical Water Risk and then combined with volume purchased data per TGA to understand the total volume percentage with a risk higher than 3. Based on our revised, spatially defined TGAs and the results of the 2020 WRI Aqueduct tool analysis, 27% of our TGAs are considered high water stress areas with an Aqueduct 'Overall Physical Water Risk 'score of 3 or greater. The production of RRP requires less tobacco compared to cigarettes. As PMI transitions to RRPs, we expect a reduced demand for tobacco per unit of product. We plan to use data from our water risk assessments to inform our decision making process to evaluate opportunities to progressively reduce the percentage of tobacco sourced from water stressed areas by allocating RRP tobacco volumes to less water stressed origins or to origins where this risk is effectively managed through interventions. PMI uses the WRI Aqueduct assessment internally to identify priority areas for supplier engagement, to inform its sourcing strategy, and to inform risk assessment processes and develop supplier specific projects to address risks and shared water challenges. Scores of 3 or higher in the assessment are considered within the range of developing mitigation projects. As part of PMI's effort to reduce impacts from agriculture in water stressed areas, we developed a specific approach to evaluate water stress at local level with our suppliers; and the results (if 3 or higher) trigger collaboration with our suppliers on water efficiency m

W1.2h

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

	Relevance	Volume (megaliters/year)		Please explain	
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	28.76	Higher	Even if fresh surface water is globally less than 1% of our total withdrawals, we consider it relevant at local level since, whenever possible, we use it to reduce water sourced from municipal water. In 2020, fresh surface water withdrawals increased by 2.99 megaliters vs. 2019, due to the implementation of various projects. In our factory in Switzerland the lake water we use for steam boilers increased the fresh water use by 11% vs. 2019. We increased the rinalwater catch, in Ukraine and Brazil, 4 megaliters in total vs. 2019. By sourcing fresh surface water untreated and treating it in-house (with natural means – filtering process and UV treatment), we reduce the use of drinkable water from the municipality and we do not compete with other catchment users like households. We expect this source to increase slightly in the next 1 to 5 years based on learnings from the AWS certification and the implementation of water harvesting and water pump technologies where feasible.	
Brackish surface water/Seawater	Not relevant	<not applicable=""></not>	<not Applicable></not 	We currently neither use brackish surface water nor seawater and we do not anticipate using it in the next 3 to 5 years. We indeed require higher quality water for our operations as we use mainly water for WASH facilities, landscape watering, and the utilities process. Currently, a third of our factories are reusing treated wastewater, e.g. in Greece where treated domestic wastewater is used for irrigation of green areas of the factory. We plan to increase these initiatives in the mid-term (1 to 5 years) as we continue to innovate and increase quality of treated wastewater so it can be reused and allow PMI to continue operating without the use of brackish surface water/ seawater.	
Groundwater – renewable	Relevant	1133.03	Lower	Renewable groundwater is relevant to PMI's operations as it represents the second largest source of water for the company's direct operations. Inlet water is currently supplied from two main sources: urban network (66%) of municipalities or private suppliers; and groundwater renewable sources (34%) from wells and aquifers, which are metered and verified annually by external auditors. In 2020, 1,133 megaliters were withdrawn from groundwater sources compared to the 1,400.38 in 2019. The decrease was due to increase of the shares of the fresh surface water sources, as well as the decrease of the total withdrawals, as result to the implemented water saving and water recycling initiatives and the increase of recycled water.	
Groundwater – non-renewable	Not relevant	<not applicable=""></not>	<not Applicable></not 	We do not currently use non-renewable groundwater and we do not anticipate using it over the next 3 to 5 years. PMI meets its groundwater demands through withdrawals of renewable groundwater and other renewable sources. This is because we use the majority of our water for WASH facilities, landscape watering, and the utilities process. Currently, a third of our factories are reusing treated wastewater, e.g. in Greece where treated domestic wastewater is used for irrigation. We plan to increase these initiatives in the mid-term (1 to 5 years) as we continue to innovate and increase quality of treated wastewater so it can be reused and allow PMI to continue operating without the use of groundwater non- renewable.	
Produced/Entrained water	Not relevant	<not applicable=""></not>	<not Applicable></not 	We do not currently use produced or entrained water and we do not anticipate using it over the next 3 to 5 years. We indeed require higher quality water which can be used onsite. This is because we use the majority of our water for WASH facilities, landscape watering, and the utilities process. Currently, a third of our factories are reusing treated wastewater, e.g. in Greece where treated domestic wastewater is used for irrigation. We plan to increase these initiatives in years to come as we continue to innovate and increase these initiatives no it can be reused and allow PMI to continue operating without the use of produced or entrained water.	
Third party sources	Relevant	2215.27	Lower	3rd party sources represent PMI's main source of water. As the company depends on significant amounts of high quality freshwater, this source of water is considered relevant. Water required for production in our factories is currently sourced from urban network (66%) of municipalities or private suppliers and groundwater wells (34%) which are metered and verified annually by external auditors. In 2020, 2,215 megaliters were sourced from third party sources, 14% less than 2019. The decrease was due to the efficiency and reduction initiatives implemented in our factories, despite the incremental production of our smoke free products (RRP) which require approximately 4 to 5 times more water per unit of product than for conventional products. The expansion of RRP production may increase withdrawn volumes from third party sources in the mid- term (1 to 5 years). We are implementing new technologies to recycle and reuse water to limit the increase in water withdrawal.	

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	327.42	Lower	Discharges to fresh surface water are relevant because they are a significant amount of PMI's total water discharges, and we have to comply with regulation, including water discharges related ones, in all countries where we operate. We discharge around 29% of treated wastewater into surface water disposal. Wastewater is treated both in public and in on-site water treatment plants before being discharged into surface water. In 2020, we discharged 327 megaliters into surface water, a 29% decrease vs. 458 megaliters in 2019. This decrease was due to the increase of the implementation of new technologies to recycle and reuse water, that increased our percentage of recycled water use from 6% in 2019 to 7% in 2020.
Brackish surface water/seawater	Not relevant	<not applicable=""></not>	<not Applicable></not 	We currently neither discharge to brackish surface water nor to seawater and we do not anticipate this to change in the next 3 to 5 years, therefore this water destination is considered to be not relevant. Our operations are not located near brackish surface water or seawater locations. Onsite audits conducted by our third-party auditor did not reveal any brackish surface water or seawater discharge. We do not foresee any discharge to brackish surface or seawater in the next 1 to 5 years. To validate our numbers, PMI's sites are audited annually by SGS and factory visits are part of the onsite verification. This year, SGS assessed our factories in the Netherlands, Germany, Turkey, Jordan and Kazakhstan. Based on the desktop review and site visits, they have not found brackish surface water or seawater discharges.
Groundwater	Relevant	208.16	Much lower	Discharges to groundwater are relevant because they represent a significant amount of PMI's total water discharges. PMI's overall wastewater discharge to ground water destination is 12%. Wastewater is equally treated between public and onsite wastewater treatment plants. In 2020, groundwater discharges decreased by 26% from 282 megaliters in 2019. The reason for this decrease is due mainly to the integration of new technologies for reusing or recycling water to limit the increase in groundwater discharge volumes in the mid-term (1 to 5 years). PMI will continue to implement new technologies to recycle and reuse water to limit the increase in discharge volumes.
Third-party destinations	Relevant	1218.66	Lower	Discharges to third-party destinations are relevant because they represent the largest share of PMI's total water discharges. Moreover, PMI has to comply with relevant regulations in all countries where it operates, including those related to water discharges. In 2020, third-party discharges decreased by 12% from 1,385 megaliters in 2019 due mainly to the incorporation of process improvements, reusing or recycling water to limit the increase in groundwater discharge in our factories. The increase in reduced risk products (RRP) production, which require more water than conventional products, may also rise discharge volumes in mid-term (1 to 5 years). PMI will continue to implement new technologies to recycle and reuse water to limit the increase in discharge volumes.

W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)		% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	903.4	This is our first year of measurement	41-50	Half of our factories are processing wastewater with advanced methods in many cases with the purpose to reuse the treated wastewater or in some cases also requested from the environmental permitting authorities, like for example in our factories in Greece and in Philippines.
Secondary treatment	Relevant	149.38	This is our first year of measurement	11-20	The few facilities that process wastewater up to secondary treatment, are connected to the public sewage network. In several occasions, and if treated wastewater meets the requirements, like for example in our factories in South Africa and Pakistan, this can be used for irrigation of the green spaces of the facility.
Primary treatment only	Relevant	106.71	This is our first year of measurement	1-10	Only 3 factories are limiting the wastewater treatment only to primary treatment. In all cases the water is being further treated in a third-party wastewater treatment plant.
Discharge to the natural environment without treatment	Not relevant	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	PMI does not have any type of discharge to the natural environment without prior treatment. It is avoided at all costs, since we meet with all necessary standards and regulations.
Discharge to a third party without treatment	Relevant	501.87	This is our first year of measurement	21-30	In many occasions our factories are built within industrial parks, so the wastewater is being treated by an industrial large-scale wastewater treatment facility.
Other	Relevant	92.88	This is our first year of measurement	1-10	These are our 2 factories in Germany, where we only need to adjust the pH before we reject the wastewater to the third-party wastewater treatment plant.

W-FB1.3

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

	information for this	sourced commodity is	
Tobacco	Not applicable	Yes	We source tobacco as raw material to manufacture our products. Water intensity is calculated by dividing the total quantity of water (m3) used for irrigation by tobacco farmers supplying tobacco to PMI by total tobacco volume (ton) sourced. The data collection focuses on water consumption at the farm specifically requesting cubic meters of water use per cultivation stage and is managed through a global, annual survey covering the entire geographical scope of our tobacco sourcing. Water use has been estimated: recording the water used during seedbed, transplanting and field stages, and considering the irrigation systems used. Both irrigated and rainfed origins are covered, with the latter contributing marginally with water consumption for seedbed and transplanting. For 2020 we have increased the granularity of the collected information including a more precise segmentation of Tobacco Growing Areas (TGAs) within markets and in 2021 we will work with an external partner to further standardize our irrigation data collection methodology.

W-FB1.3b

(W-FB1.3b) Provide water intensity information for each of the agricultural commodities identified in W-FB1.3 that you source.

Agricultural commodities Tobacco

Water intensity value (m3)

Numerator: Water aspect Freshwater withdrawals

Denominator

Tons

Comparison with previous reporting year Lower

Please explain

In 2020, water intensity in our tobacco supply chain decreased by 7% vs. 2019. This was the result of more refined data collection processes and the outcome of sustainability initiatives with suppliers and farmers. In 2020, irrigation data was collected by Tobacco Growing Area (TGA), leveraging on a GIS spatial approach on the specific TGA water catchment. This results in more refined data collected within a spatial boundary. PMI monitors water stress contributions from tobacco growing and outcomes of water stewardship initiatives using two methods: 1) WRI's Aqueduct tool for a high level global risk assessment (GRA) of TGAs (updated annually) and 2) applying our tobacco tailored Local Risk Assessment (LRA) on the ground approach at local scale (updated every 3 to 5 years). In 2020, 8 additional TGAs have been assessed using the LRA, reaching 52% coverage of whole supply chain (100% target in 2025). To better manage the risk and have a landscape-level approach, PMI developed in 2020 a water stewardship target of optimizing 10 million cubic meters within its TGAs by 2030. Volumes of water will be considered optimized if they mitigate water risk in the watershed of the TGA through projects in water reduction, water recharge, or improved water quality. This target will be achieved with an increased focus in improving irrigation practices in irrigated markets. The calculated tobacco production water intensity baseline of PMI's TGAs, together with the results of the risk assessments (GRA-LRA) helps prioritize TGAs that would benefit from water related initiatives to be developed next to our Good Agricultural Practices Program (GAP). Initiatives include, but are not limited to: maximizing water use efficiency (e.g., rainwater harvesting), promoting water infiltration (e.g., conservation tillage or contour farming) and protecting natural ecosystems that can improve water quality (e.g., upstream reforestation). Optimization of irrigation through field efficiency software (which was trialled in 2020) is an example of th

W1.4

(W1.4) Do you engage with your value chain on water-related issues? Yes, our suppliers Yes, our customers or other value chain partners

W1.4a

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

Row 1

% of suppliers by number 76-100

% of total procurement spend

76-100

Rationale for this coverage

The proportion of suppliers who we request to report on their water use, risk, and management is based only on data from our tobacco supply chain. This is because, through our Life Cycle Assessments (LCA), water stress estimation, and water footprints, we have identified our tobacco agricultural supply chain as currently having our largest potential environmental impact. As tobacco farming represent 53% of PMI's water footprint, it is key that we focus on gathering water related information from tobacco farmers. We have therefore prioritized engagement with tobacco leaf suppliers through our Good Agricultural Practices (GAP) program across 23 countries. GAP guidelines for water management practices cover water scarcity, local impacts, water efficiency, and WASH. Our tobacco suppliers are contractually required to comply with the program's requirements, among which includes reporting on several indicators related to irrigation technology, water consumption per irrigation type, and water consumption per field stage. In 2020, PMI developed WASH Monitoring Guidelines and priority countries began collecting data on water access, sanitation, and hygiene. WASH data collection will continue in 2021 and onwards to ensure an understanding of WASH risks and to track progress. A representative sampling procedure is used by suppliers to collect WASH datasets and several visits by Field Technicians to each contracted farmer during the crop season allows for a detailed understanding of local challenges and the monitoring of progress. Prioritization of WASH interventions is informed by the results of the monitoring, for example, if WASH data indicates that farmers in Malawi have limited access to improved drinking water sources then PMI will support the development of a WASH program (through funding and management assistance). The recurrent analysis of environmental and social data will further support projects that result in the greatest positive impact across PMI's tobacco supply chain. We inform our tobacco sourcing strateg

Impact of the engagement and measures of success

Through our Sustainable Tobacco Production (STP) program, PMI requests tobacco suppliers to submit annual self-assessments and carries out on-site reviews by a third party on water consumption and local water issues in the tobacco growing areas. Additionally, risk and shared water challenges are reviewed through Local Risk Assessment (LRA) on a three-year basis: an on the ground analysis of water stress conditions performed in collaboration with suppliers and involving a sample of their farmers. Through these methods, PMI collects metrics on performance indicators including water extraction and quality, use of hazardous or non-hazardous pesticides and integrates these metrics into supplier scorecards and develops internal indicators such as water intensity. Suppliers are expected to annually improve their performance by demonstrating continuous improvements in the STP annual assessment. PMI uses individual supplier scorecard to track annual performance for each indicator and the LRA results to prioritize interventions based on risk. Success is measured as the percentage of farmers implementing best practices, which result in the mitigation of water related risks and an increase of farmers resiliency.

Comment

We share and discuss with suppliers and their farmers the relevant baseline conditions, issues and findings of the LRAs they are requested to perform. Engagement with farmers is key to validate assumptions on the ground and collect their feedback on the findings.

W1.4b

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

Type of engagement

Innovation & collaboration

Details of engagement

Encourage/incentivize innovation to reduce water impacts in products and services

Encourage/incentivize suppliers to work collaboratively with other users in their river basins

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

Educate suppliers about water stewardship and collaboration

Other, please specify (Inclusion of water stewardship and risk management in supplier selection mechanism. Demonstrable progress against water-related targets is incentivized in your supplier relationship management)

% of suppliers by number

76-100

% of total procurement spend 76-100

10-TOO

Rationale for the coverage of your engagement

53% of our blue water footprint is used to grow tobacco required for our products, 41% is used in the non-tobacco part of our supply chain, and 6% is used in our manufacturing sites. PMI focuses on covering these agricultural suppliers (tobacco, timber, paper, and cardboard), as they are most critical to our business in terms of the relevance of their products, as well as the implications from being exposed to water risks. Through our GAP program implementation we address water issues within the tobacco supply chain (covering contracted but also other farmers in the markets we source from), collaborating with suppliers on implementing best practices towards generating measurable improvements. PMI supports suppliers to identify and mitigate risks where they operate and seize water opportunities through dedicated trainings for farmers and technicians aimed at increasing capacity on water resource management at the farm. In 2020, PMI defined its water stewardship target of optimizing 10 million cubic meters of water by 2030. A new set of guidelines has been created in 2020 to include the methodologies that can be deployed to account for the generated water volumes towards the 10 million target. Categories that are eligible for optimization accounting are on-farm improvements, next to the farm interventions, and catchment level stakeholder engagement driven projects. PMI has adopted WRI's internationally recognized Volumetric Benefit Accounting Methodology to estimate impacts of these projects towards the target. 2021 will be the first year of estimating benefit. Action to target is triggered based on the 'shared water challenges' across the local watershed where the TGA belongs: encouraging supplier and farmer collaboration with other users in the area and developing impactful solutions to mitigate identified risks. Our suppliers and farmers are required to participate in our water stewardship strategy (including conducting LRAs in all tobacco growing areas by 2025) based on the risk-based prioritization, and to p

Impact of the engagement and measures of success

In 2018-2019 we supported suppliers in conducting local water risk assessments (LRAs) in 15 markets, and in 2020 PMI supported suppliers in conducting LRAs in 8 additional Tobacco Growing Areas (TGAs): Indonesia, Italy, Spain, Pakistan, plus 2 TGAs in China and 2 in Brazil. This progress allowed PMI to reach 52% coverage of our TGAs with LRAs, moving us closer to our target of performing LRAs in 100% of TGAs by the end of 2025. In addition to LRAs, GAP allows PMI to engage with tobacco suppliers and their farmers in promoting training sessions and methods to drive water-related improvements. Success is measured as farmers' participation to training (94%)

in 2020) and the % of farmers implementing best practices as per GAP (70% in 2020). The beneficial outcome for PMI is a more water resilient supply chain adapted to sustain the unavoidable impacts of climate change while still providing production outputs and therefore a livelihood for farmers. Water resilience also relates to ensuring that farmers have sufficient WASH access. PMI's WASH targets include: 100% of contracted farmers with basic drinking water access by 2025, 100% of contracted farmers with sufficient drinking water quality by 2030, and 100% of contracted farmers with access to sanitation and hygiene facilities by 2030. These targets will improve the well-being of farmers by promoting healthy environments surrounding farmer households. In 2020, PMI worked with its tobacco suppliers to drill 47 handpump boreholes in Malawi and 50 in Mozambique, building on the 13 solar-pump boreholes and 30 hand-pump boreholes drilled in Malawi in 2019 and the 60 handpump boreholes drilled in Mozambique. It is estimated that each borehole in Malawi benefits over 500 people and each borehole in Mozambique benefits more than 1000 people, highlighting the impact of PMI's WASH program. Additionally in 2020, PMI shared updated WASH Monitoring Guidelines with suppliers to standardize data collection and ultimately measure the success of PMI's WASH targets. In 2021 PMI plans to continue partner with its tobacco leaf Suppliers and to drill new boreholes in Malawi and Mozambique in addition to rehabilitating non-functioning boreholes. Regarding PMI's new water stewardship target of optimizing 10 million cubic meters of water by 2030, in 2021 PMI will undergo the first verification of volumetric progress using WRI's Volumetric Water Benefit Accounting Methodology.

Comment

Along with these interventions improvements were made on sanitation facilities, concrete storage tanks, and rainwater harvesting systems. For each borehole drilled, suppliers work with village leads to ensure that they are maintained by a local water committee established within the community. Local water committees are attended by village members and local community authorities' representatives.

Type of engagement

Onboarding & compliance

Details of engagement

Requirement to adhere to our code of conduct regarding water stewardship and management

Other, please specify (Supplier due diligence and performance program, Sustainable Transformation Enables Performance (STEP), to achieve supplier compliance with our responsible sourcing principles in the Non-Tobacco (Leaf) supply chain.)

% of suppliers by number

1-25

% of total procurement spend

26-50

Rationale for the coverage of your engagement

We focus STEP deployment on critical suppliers identified by our risk-based criteria. We started to formally onboard suppliers in July 2019. This first wave focused mainly on suppliers of direct materials and electronics. PMI's definition of critical suppliers is the following: - High-spend supplier: a supplier with whom PMI spends \geq \$500 thousands per year - Essential component supplier: all Tobacco (Leaf) and all Procurement Direct Spend (Direct Materials and Electronics) suppliers are considered essential components. - Non-substitutable suppliers: a supplier that cannot easily be replaced due to the lack of competition on the market and/or the high specificity of the component provided to PMI.

Impact of the engagement and measures of success

Through this process we request and analyse the status of our supplier's compliance with our Responsible Sourcing Principle, where water resources conservation and pollution, is an integral part. The results of this due diligence will trigger further auditing process steps (desktop and/or an on-site audit). End of 2020, we on-boarded suppliers of all Procurement Categories, allowing us to cover 36% of the total PMI Procurement spend, pertaining to, among others, 94% of our Direct Spend and 14% of our Indirect Spend. For Direct Materials we assessed 108 (group level) Tier 1 suppliers representing 91% of the DIM spend, while we also assessed 100% of our Tier 2 suppliers (Board & Paper suppliers). For Electronics, all our Tier 1 suppliers (EMS) and 34 Tier 2 suppliers were also evaluated under the STEP program. In parallel to the questionnaires, we conducted 29 desktop audits with DIM & Electronics suppliers to check on the suppliers' performance against their self-assessment questionnaire. The outcome was very satisfactory as 86% of the suppliers audited scored as equal or above the expected compliance level.

Comment

Suppliers are initially screened internally through a heatmap to identify the inherent risk profile based on the type of material or service, as well as the country of production, or service delivery. This risk profile tailors the subsequent evaluation: low risk suppliers will complete a basic questionnaire, while medium or high risk suppliers complete a full questionnaire. Depending on the results of the latter, the suppliers may go through desktop and/or on-site audit.

W1.4c

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

PMI engages mainly with its consumers, key account customers, external consultants, verification bodies and supplier communities, who can contribute to minimize risks within their supply chain or to achieve PMI's water targets and create opportunities to collaborate and innovate. The engagement methods/strategies used with them are dialogue, development of projects, training, and materiality assessment.

We are involved with consumers and employees in programs to address cigarette butt littering, negatively impacting water, and land habitats. Despite all the constraints arising from the COVID-19 pandemic, some affiliates were still able to deploy anti-littering campaigns, including trade partners, NGOs, experts, and local authorities; we have deployed innovative cigarette butt disposal solutions in the Nordics, Germany, Russia, and Mexico. We also launched Our World Is Not an Ashtray, which is a web-based platform to educate, inspire, and engage the public on the issue of littering. PMI measures engagement success depending on the stakeholder and engagement activity; including: qualitative indicators such as feedback from supply chain surveys and presentations on water practices (e.g. CDP Supply Chain program), increased customer interest on water issues, quantitative indicators like response rates (e.g. from surveys) and achievement of engagement targets (e.g. number of participants) and other water related targets (e.g. water footprint optimization).

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

W2.2a

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

Row 1

Total number of fines

4

Total value of fines 32889

% of total facilities/operations associated

10

Number of fines compared to previous reporting year About the same

Comment

PMI had 4 water related fines in 2020, the same number as in 2019. One example, as mentioned in our 2020 PMI's Integrated Report, was related to the factory of Ukraine pertained to sewage water contamination exceeding national limitations. Other examples of small fines (\$50 to \$600) are in our factory in South Korea where wastewater pollutant (antimony) was identified by the local authority's sampling; while this is below the discharging threshold, it was not registered in the wastewater discharge permit; in Romania a fine of around \$300 was issued because of late payment of invoices. In PMI Integrated Report we report on fines above \$10,000 while here we considered all water-related fines incl. the ones below this threshold. In our operations we record fines using our Performance Monitoring System according to the ISO 14001 standard (i.e., all factories are certified and need to monitor compliance with all environmental legislation and report any yearly deviations including fines).

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?

Although our direct operations use minimal water relative to our whole value chain (6% of total water footprint), we are cognizant of potential water pollutants that may result from our direct processes and supply chain. All of PMI's wastewater is either treated on-site or sent to treatment facilities prior to discharge respecting local legal regulations, limits and other applicable standards.

In PMI we have internal standards on the spill prevention and chemical management in order to prevent water pollution. These standards are integrated in all our factories environmental management systems, and their implementation is certified in the frame of the ISO 14001 certification. These standards dictate that all chemicals are assessed before delivery to the premises based on the SDS (Safety Data Sheets), in case these are hazardous, alternative materials are being evaluated. Based on their properties (health & safety hazards and environmental impacts) they are classified as per local legislation and internal assessment (ex. toxicity, water hazards, flammability) and are being registered and monitored. For the ones that are classified hazardous to the environment appropriate technical measures are put in place to prevent accidental release (retention basins, leak detectors, secondary contaminant among others). All employees and contractors handling hazardous materials are systematically trained and appropriate spill kits are provided on the areas, as part of the assessment. Underground storage tanks for hazardous materials, are officially avoided, and can only be approved by exemption. Wastewater generated in our factories is either directed to authorize treatment plants of the industrial zone or municipality or previously treated on onsite through biological/physicochemical process. We have developed high corporate technical standards for the design and operations of these wastewater treatment plants, including the parameters to be monitored in each stage of the treatment but also the type and specifications of the measuring instrumentation. Eleven factories had been already certified conforming with the AWS Standard by the end of 2020. We have committed to certify all factories by 2025.

As we ensure to treat wastewater from direct operations according to all applicable laws, regulations and standards where PMI operates, we do not expect significant waterrelated impacts either on humans or ecosystems. However, negative impacts on ecosystems and humans can be caused from the misuse of pesticides in our supply chain, which are used to protect tobacco crops from pests and diseases, can contaminate aquatic systems by surface run-off and leaching. This contamination can be caused by inappropriate management of the pesticides and can have an impact on aquatic life or fish-eating wildlife, such as depletion of oxygen by eutrophication. Since Highly Hazardous Pesticides (HHPs) can be considered either, carcinogenic, mutagenic, toxic for reproduction, pesticide residues present in watercourses and groundwater can also have an effect on humans through consumption of fish and shellfish that are contaminated by pesticides. To avoid these negative impacts from materializing, PMI requires all those who grow and supply its tobacco to implement Integrated Pest Management (IPM) practices as part of Good Agricultural Practices (GAP) program. PMI's GAP includes a series of principles and measurable standards to be met by all those who grow and supply tobacco to PMI, including the ones related to the use of pesticides. Such as frequency of use, quantity, and type of pesticides. Products of World Health Organization (WHO), toxicity class III and higher (the higher the class, the lower the toxicity level) should preferably be used. Toxicity class II should only be used in well-justified cases, and diseases. The list should include low toxicity and pest-specific products and can use local brand names relevant to the active ingredients listed to ensure greater farmer understanding. This list of pesticides should only include those that are registered for use in tobacco in the country.

To support the elimination of WHO Tox1 and other Highly Hazardous Pesticides, PMI promotes the use of less hazardous alternative pesticides that include biopesticides such as botanicals, microbials, macrobials and semi chemicals. Tobacco suppliers promote the use of low-toxicity and pest-targeted pesticides and the elimination of preventative treatments, conducting training and other initiatives with their contracted farmer base.

(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

Pesticides and other agrochemical products

Activity/value chain stage Agriculture - supply chain

Description of water pollutant and potential impacts

Pesticides, also called Crop Protection Agents (CPAs), which are used to protect tobacco crops from pests and diseases, can contaminate aquatic systems by surface runoff and leaching and have an impact on aquatic life and fish-eating wildlife; pesticide residues present in watercourses and groundwater can also have an effect on humans through consumption of fish and shellfish that are contaminated by pesticides. The contamination can be caused by inappropriate management of the pesticide and can have an impact on the ecosystems according to the toxicological characteristics of the active ingredient. An example from tobacco cultivation is Diamide insecticides. Flubendiamide and Chlorantraniliprole which are used in some geographies to control Lepidoptera pests in tobacco. It has been reported that these insecticides may cause hazard to aquatic life. In order to limit potential impact on water, PMI has imposed for these insecticides MRLs (maximum residue levels) which are lower than those adopted by the industry. Impacts from potential water pollutant mismanagement could have significant consequences to PMI's tobacco supply chain. In 2018, PMI identified that misuse of pesticides could represent around 5% of PMI's modelled water pollution footprint and this estimation remains valid for 2020 Furthermore, the insecticide methomyl, classified as WHO Toxicity Class I (WHO TOX1), has been completely eliminated from the production of tobacco destined to PMI. Methomyl, used in the past to control budworms and acutely toxic to humans and many aquatic species, has been substituted with less hazardous alternatives such as the biopesticide Bacillus thuringensis which has no toxicity for aguatic life and human health.

Management procedures

Soil conservation practices Crop management practices Sustainable irrigation and drainage management Fertilizer management Pesticide management Follow regulation standards

Please explain

PMI requests tobacco suppliers to implement Good Agricultural Practices (GAP) which defines principles and measurable standards to be met by all those who grow and supply tobacco to PMI with the aim of adopting responsible practices related to pesticides use to reduce water pollutant risk. For synthetic pesticides, suppliers must account for environmental and human health risk where there is a choice of pesticides. Products of World Health Organization (WHO), toxicity class III or lower toxicity classes (higher the class, lower the toxicity level) are preferred. Class II should only be used in well-justified cases, and Class I must not be used at all. PMI implements a global Integrated Pest Management (IPM) program to reduce usage of unnecessary pesticides (Crop Protection Agents-CPAs), promoting less hazardous alternatives and correct management, including annual trainings. PMI developed tools to support this in collaboration with Centre for Agriculture and Bioscience International (CABI), e.g. the IPM App and a website (updated regularly) with country-specific management factsheets on pests and diseases and IPM and CPA management. The App has reached more than 2100 users and the website had more than 12,000 views in 2020. A global biopesticides and low hazardous CPA database is available to farmers. To limit potential water impact, PMI has set MRLs (lower than those adopted by the industry) for certain insecticides (for example MRLs for Diamide insecticides which are used in some locations to control Lepidoptera pests in tobacco). GAP promotes reduction of the use of unnecessary CPAs and safe disposal or recycling of empty CPA containers to prevent water contamination. These tools plus trainings raise awareness of potential impacts of pesticides and enable PMI to deter their use. PMI measures success for GAP and IPM programs through specific indicators. E.g., pesticide residues are measured by PMI's Tobacco Lot Integrity program where every packed lot is tested by independent, accredited labs before PMI accepts it. Based on this program, PMI assessed that as of 2018, all sourced tobacco lots have been free from quantifiable levels of residues attributable to the use of WHO TOX1 CPAs, and as of 2020 have been free from residues of other HHPs. Additional initiatives are in place including the Green Leaf Tobacco Program where tobacco is also sampled at the farm level to measure pesticides residues or identify pesticide presence before it is processed.

Potential water pollutant Fertilizers

Activity/value chain stage

Agriculture - supply chain

Description of water pollutant and potential impacts

Fertilizers are used to improve tobacco yield within PMI's agricultural supply chain; however, they can enter groundwater or watercourses, impacting aquatic ecosystems through eutrophication. PMI considers impacts from mismanagement of fertilizers such as overdosage or improper application related to vulnerable natural areas especially water bodies near to tobacco growing areas to be of a significant magnitude as the use of fertilizers involves all of PMI's suppliers of tobacco, and if not properly managed fertilizers could cause eutrophication of water and pollution. For this reason, all suppliers have to comply with good fertilizer management practices that are part of GAP program. In 2018, with the support from an external consultant, PMI developed its water footprint model based on the ISO14036. The model considers PMI's direct and indirect operations through a life-cycle approach, incorporating water consumption, depletion and pollution aspects. With this tool PMI identified that fertilizer leaching from tobacco cultivation could represent up to 62% of PMI's modelled water pollution footprint (non-tobacco supply chain represents an additional 33%) and this remains pertinent for 2020.

Management procedures

Soil conservation practices Crop management practices Sustainable irrigation and drainage management Fertilizer management Calculation of fertilizer intensity data Follow regulation standards

Please explain

Through its Good Agricultural Practices (GAP) program, PMI promotes a series of practices for suppliers to optimize fertilizer usage and adjust rates to avoid unnecessary applications. PMI encourages soil analysis as a basis for farmers to optimize fertilization to meet soil fertility and crop nutritional requirements. By calculating the soil available nutrients and related deficiencies and matching them with plant uptake needs, an optimized fertilization plan can be designed and implemented, ensuring no excesses to the amount of fertilizers needed by the plant and, therefore, minimizing fertilizer leaching to the water table, avoiding the main source of eutrophication. PMI's GAP principles and standards promote the use of fertilizers with identified sources of origin, with available certificates of analysis (i.e fertilizers should be analysed to determine the amount of specific substances such as cadmium and chloride), and that comply with regulatory standards, where enforced, or with the PMI's internal GAP standards which apply to all our suppliers. Through GAP, PMI recommends appropriate amounts of fertilizers that can minimize their negative impacts on the environment. PMI also promotes the development of water protection plans that include the implementation of buffer zones next to where fertilizers are utilized, the avoidance of methods and timing of fertilizer application that may result in leaching, the safe handling and storing of fertilizers to prevent contamination of water. PMI measures and evaluates success of these initiatives through a series of targets and indicators within GAP, including the % of farmers implementing best practices as described in the program, which is part of the contractual obligations for suppliers.

W3.3

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

Yes, water-related risks are assessed

W3.3a

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

Direct operations

Coverage Full

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

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 International methodologies Other

Tools and methods used

WRI Aqueduct Life Cycle Assessment IPCC Climate Change Projections Alliance for Water Stewardship Standard Internal company methods External consultants

Comment

In 2015, PMI conducted a comprehensive Climate change risk assessment (CCRA) for corporate and asset level, identifying physical risks and opportunities up to 2025-2030; Our technical partner Quantis developed water and risk footprints in 2017 and 2018 respectively. We used the WRI Aqueduct and IPCC Projections to update these annually and in early 2020 we performed a global water risk assessment covering all our direct operations. In 2017, we joined Alliance for Water Stewardship and certified our Brazilian factory in 2018, to better understand local risks, and by the end of 2020 11 sites were already certified. Our target for 2021 is to have 16 factories certified and the rest by 2025. Additionally, in 2018 PMI conducted a climate change risk assessment in line with TCFD recommendations. As part of this assessment, PMI identified risks and opportunities for its business under a reference scenario (exploring a decarbonization approach under the existing climate and energy policies) and a 2 degrees scenario (aligned with an average global temperature increase below 2 degrees). In our assessment process we considered the importance of water resources for PMI's direct and indirect operations and looked into several water elements including projected prices of water and their implications, changes in water supply, water stress areas and others.

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 International methodologies Other

Tools and methods used

WRI Aqueduct Life Cycle Assessment IPCC Climate Change Projections Internal company methods External consultants

Comment

PMI undertakes an annual water risk assessment which uses internal methodologies, market tools and external consultants to identify risks and opportunities in the supply chain. This includes a global risk assessment and local risk assessments. PMI's Global Water Risk Assessment uses market tools, including WRI Aqueduct, Water Risk Filter, national databases, and others. As part of this assessment, PMI measures its water footprint using primary and secondary data. Since 2018, PMI also undertakes Local Risk Assessments (LRA), where each suppliers' water risks are evaluated during a 3-day workshop. LRAs are carried out with the support of external consultants with the objective of identifying granular, and highly relevant local water risk related data together with a variety of stakeholders in order to better understand water risks and their materiality to the areas where PMI sources tobacco. In 2019 the assessment was carried out in 7 locations, using 17 different indicators to measure physical, regulatory and reputational water risks. In 2020, the assessment was carried out in 8 tobacco growing areas (TGAs). 9 indicators were prioritized and selected as relevant, including baseline water stress, groundwater table decline, seasonal variability drought severity, flood occurrence, upstream natural land, downstream water impact, reputational risk, and regulatory compliance risk. PMI's target is to complete LRAs in 100% of TGAs by the end of 2025.

Other stages of the value chain

Coverage Partial

Risk assessment procedure

Water risks are assessed as a standalone issue

Frequency of assessment Every two years

How far into the future are risks considered? More than 6 years

Type of tools and methods used

Tools on the market International methodologies Other

Tools and methods used

WRI Aqueduct IPCC Climate Change Projections External consultants

Comment

In 2015 external consultants ERM and Quantis conducted climate change (CC) risk assessment for corporate and asset level physical risks & opportunities up to 2030; water footprints were developed in 2015 and 2018 respectively. We used WRI Aqueduct and IPCC CC Projections to update this annually. PMI is expanding to assess current and future water-related risks more broadly across our value chain, such as water scarcity and quality in tobacco growing areas and water demand in locations where we run manufacturing facilities.

W3.3b

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

	Relevance	Please explain
	& inclusion	
Water availability at a basin/catchment level	Relevant, always included	Water availability at a basin/catchment level is relevant since water is a key input that is used in our factories, in filter manufacturing, paper and packaging materials, for staff use and green spaces. Moreover, in our agricultural supply chain water availability is needed for growing tobacco, clove and timber-based fuels. For these reasons, water availability is always included in our risk assessments. For our direct operations, we assess water availability risks through our company level risk assessment initiatives. For instance, external consultants conducted climate change risk assessment (CCRA) for corporate & asset level physical risks & opportunities up to 2030 in 2015 and in 2018; water footprints in 2015 and 2018 respectively. We use the WRI Aqueduct and IPCC Climate Change Projections to update this periodically. We have also become a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate, and our factory in Brazil was certified against the AWS Standard in March 2018. I1 factories have been already certified against the AWS Standard by the end of 2020. We have committed to certify all the factories by 2025. We are expanding our water programs by assessing current and future water-related risks more broadly across our value chain. These risks include water scarcity and quality in tobacco growing regions, flood risk in warehouse locations and ports, and water demand in locations where we have manufacturing facilities. In 2020, PMI continued undertaking Local Risk Assessment (ICRA) in 8 additional Tobacco Growing Areas where suppliers' water risks where evaluated. The LRA was carried out with the objective of identifying granular, and highly relevant local water risks including baseline water stress, groundwater table decline, drought severity, seasonal variability, flood occurrence, upstream natural land, downstream water impact, reputational risk, and regulatory compliance risk. PMI's target is to complete LRAs in 100% of Tobacco Growing Area

	Relevance & inclusion	Please explain
Water quality at a basin/catchment level	Relevant, always	Water quality at a basin/catchment level is regarded as relevant since PMI needs to follow production specifications and product design protocols setting high quality water used during the manufacturing of our products to protect our consumers and to meet international standards and regulations, e.g., the requirements described in the EU directive 98/83/EC. Water quality is also important to our supply chain to ensure high quality raw materials and to protect workers' health and livelihoods by providing access to Water, Sanitation and Hygiene services (WASH). For these, reasons water quality is always included in the risk assessment. PMI assesses this issue through a combination of internal procedures and use of external tools and methodologies. E.g. in direct operations PMI assesses the compliance of manufacturing sites with ISO14001 and ISO 45001 programs and minimum EHS requirements. We have detailed water quality standards for potable water and water used as ingredient in production, which should meet at least the requirements described in the EU directive 98/83/EC unless stricter local regulations are enforced. For its supply chain is exposed to physical risks related to quality such as changes in return flow ratio and upstream protected lands, as these could significantly alter the quality of water used by farmers in downstream areas. We have also become a member of the Alliance for Water Stewardship (AWS). In March 2018, our factory in Brazil was certified against the AWS Standard, which covers water quality LeA Sessment (LRA) in 8 additional Tobacco Growing Areas where suppliers' water risks where evaluated. The LRA was carried out with the objective of identifying granular, and highly relevant local water risks including baseline water stress, groundwater table decline, drought severity, flood occurrence, seasonal variability upstream natural land, downstream water impact, reputational risk, and regulator crisks. PMI's target is to complete LRAs in 100% of Tobacco Growing Areas by the end of 2025 to be
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Our operations withdraw small volumes of water compared with other industries. Nonetheless, stakeholder conflicts concerning water resources at a basin/catchment level are included in our water risk assessments since access to water and water rights within our supply chains are essential to our operations. Our water risk assessment aims to provide PMI a better understanding of water availability at the basin level, water use by different stakeholders and potential conflicts over time. An example of this is PMI's local water risk assessment with tobacco suppliers and growers, where stakeholders are engaged to identify how water demand from different stakeholders in the basin can affect the water budget in terms of quality and quantity. As part of this process, stakeholders identify the main risks as well as potential approaches to prevent future conflicts over water resources. Another example includes PMI's work with external consultants to conduct its water footprints, which highlight water hotspots across the company's direct operations and supply chain. From this assessment, PMI learned that more than 50% of its water footprint can be attributed to its agricultural supply chain (tobacco represent 53% of PMI's freshwater consumption). PMI complements this analysis with the use of external tools and methods such as WRI Aqueduct and IPCC Climate Change Projections to identify locations facing higher water risks such as water scarcity and extended droughts, which could result in the availability of less water resources, causing potential conflicts with local stakeholders. PMI also includes WASH services for local stakeholders as part of the assessment. We became a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate and prevent any potential conflicts with local stakeholders. In March 2018, our factory in Brazil was certified against the AWS Standard, which covers water quality at a basin level issues. 11 factories have been already certified against th
Implications of water on your key commodities/raw materials	Relevant, always included	Change in tobacco leaf and clove prices, quality and quantity could affect our profitability and our business. Water is a key input for our agricultural supply chain as it is needed for growing tobacco and for other timber and agricultural based materials, therefore we consider water implications on our key commodities as relevant and include this issue in our risk assessments. Water implications on PMI's key commodities are factored into risk assessments through a combination of company methods, and the use of external methodologies and other tools. Internally, PMI uses indicators from the GAP program to assess different water variables such as water availability, water use and water intensity from production. These indicators are used by all suppliers, specifically on tobacco and clove suppliers. PMI addresses SDG 6, specifically target 6.4 by addressing water scarcity in the supply chain and under GAP guidelines encourages its affiliates and suppliers to have a water management plan that takes into account the locations most at risk from water scarcity and promotes efficient water use and renewability of sources. PMI also uses WRI Aqueduct and IPCC Climate Projections to explore how its supply chain is exposed to physical risks that could have direct implications on its key commodities, such as the increased occurrence of heatwaves, droughts and floods. For the markets where a Local Risk Assessment (LRA) as available the inputs mentioned above are complemented by the estimation of baseline water risks where evaluated. The LRA was carried out with the objective of identifying granular, and highly relevant local water risks including baseline water stress, groundwater table decline, seasonal variability, drought severity, flood occurrence, upstream natural land, downstream water impact, reputational risk, and regulatory compliance risk. Additionally, PMI uses water footprint and supplier engagement questionnaires to monitor and evaluate on an annual basis how water requirements for tobacco production change ov
Water-related regulatory frameworks	Relevant, always included	Although our direct operations withdraw small volumes of water in comparison to other industries, ensuring compliance with water-related regulatory frameworks is important for our operations, for example to maintain license to operate and to be able to withdraw water/discharge water, and for our agricultural supply chain. This is particularly relevant for PMI, as 66% of our water withdrawals are from third parties which could face further regulations in the future. We are subject to international, national and local environmental laws and regulations in the countries in which we do business. Therefore, water-related regulatory frameworks are always factored into the water risk assessment. PMI assesses this issue through the use of internal company methods. For example, PMI has specific programs across business units designed to meet and go beyond applicable environmental compliance requirements related to water withdrawal, consumption and discharges. As part of these programs, PMI uses a consistent environmental and occupational health, safety and security management system ("EHSS") at all our manufacturing centers. We track compliance through our EHS Systems and our Global system for EHS Legal Compliance and Monitoring. PMI also follows the guidelines provided by the EU on maximum limit of chemical substances for drinking water and products (controlled by nearly all the regulatory frameworks), and compliance teams in our water specifications for process water (slurry ingredient and final wash water). All our manufacturing sites are ISO 14001 certified. This certification process ensures that legal requirements are identified and complex where we operate, and we have already 11 sites certified against the AWS Standard. We have committed to certify all of our factories worldwide by 2025 to stay ahead of any water-regulatory frameworks dealing with water abstraction and discharge consents.
Status of ecosystems and habitats	Relevant, always included	The conservation of ecosystems and habitats is key for the preservation of water-related ecosystem services, such as the maintenance of water quality and availability. Thus, the status of ecosystems and habitats are considered relevant for both our operations and agricultural supply chain, and factored into company level risk assessment initiatives. PMI assesses this issue through a variety of methods including the use of internal methodologies (analysis of information from the Good Agricultural Practices (GAP) program) and external consultants. In 2020 we continued to focus our work to enhance understanding of potential impacts on biodiversity (including life on water) from our direct operations and supply chain. From this work, we identified that most of the potential impacts on biodiversity can be found across our supply chain and are caused using fertilizers, pesticides and other land use activities. Having identified these potential threats to biodiversity and ecosystems, we defined best practices to be communicated and monitored by suppliers as part of GAP program, including the development of water conservation plans, with the aim to assess both suppliers' potential impact and adherence to GAP. The indicators are aligned with recommendations and standards by the international Institute for Sustainable Development, the Business and Biodiversity Offsets Programme, and the Convention on Biological Diversity. We're expanding our water programs by assessing current and future water-related risks more broadly across our value chain. In addition, in 2020, we developed a target for our tobacco supply chain on biodiversity. Littering stands out as Tier 1 issue in our materiality assessment. While many consumers dispose of their waste properly, too much waste ends up in the environment. We are addressing this littering issue with a multipronged approach, including awareness-raising campaigns, ongoing research into alternatives to filters and improved design of products and packaging. Such efforts also have the pot
Access to fully- functioning, safely managed WASH services for all employees	Relevant, always included	For PMI the socio-economic wellbeing of tobacco farming communities was a tier 1 topic in 2020 based on the 2019 materiality assessment. For PMI, this means improving the capacity of tobacco farming communities to achieve a decent standard of living. Specifically access to water, sanitation, and hygiene (WASH) is a fundamental human right that helps ensure healthy, prosperous communities to achieve a decent standard of living. Specifically access to water, sanitation, and hygiene (WASH) is a fundamental human right that helps insk to farmers' and workers' health and livelihoods. WASH related risks within our tobacco supply chain are identified initially through a global water risk assessment performed using the WRI Aqueduct tool and in early 2020 PMI developed WASH Monitoring Guidelines to further monitor water access, sanitation, and hygiene progress as part of our Agricultural Labor Practices monitoring system. These indicators were monitored for the first time via a pilot assessment af farm level in 2020 through internally collected data with the support of field technicians. These results help drive the implementation of appropriate interventions in areas at risk, including drilling boreholes in collaboration with suppliers. Action plans are im place for multiyear interventions to support our farming communities to reaching WASH goals, and in 2020 this action plan resulted in 47 new handpump boreholes being drilled near Malawi tobacco farms. In 2021, PMI will further enhance WASH monitoring by providing video trainings to farmers and field technicians to increase WASH knowledge on the ground. For our employees, access to WASH is addressed as part of our ISO14001 and ISO 45001 programs and minimum EHS requirements. PMI tracks compliance with these requirements the facility level through the use of internal reporting tools, and identifies any potential risks that could prevent the company from providing full functioning, safely managed WASH services to all employees. We have also become a member of the Allian
Other contextual issues, please specify	Relevant, sometimes included	There are no other contextual water related issues that we have identified. For many years, we have been expanding our water programs and assessing current and future water- related risks more broadly across our value chain. These risks include seasonal variability and water quality in tobacco growing regions including India and Mozambique, flood risk in major tobacco warehouse locations and ports, and water demand in cities where we have manufacturing facilities. Other contextual issues are not anticipated to be relevant now or in the future, however, we continue to monitor emerging research, run tools like WRI Aqueduct, ask for stakeholder input, and conduct materiality assessments to understand if there are other contextual issues around water that PMI should be engaged on.

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	Customers are included because they are increasingly expecting brands to manage their environmental impacts, especially related to water management and climate change. Failure to respond to PMI's customers' concerns can negatively impact its business (for example a potential impact on sales). PMI engages customers through a series of methods including ongoing dialogue, surveys and questionnaires, corporate communications, forums and events, and hotline and call centres. Additionally, we ensure high quality water in our products to protect our customers. We also respect the vulnerability of water resources we use and the role of those resources in the wider community, which may affect the communities where some of our customers. We also respect the vulnerability of water resources we use and the role of those resources in the wider community, which may affect the communities options for reducing environmental impacts throughout the entire life-cycle of our products. Considering the transformation of our business with the introduction of our new smoke free products, we will expand our LCA to cover the new suite of products including review of water risks. Additionally, in the last 2 years, Quantis has conducted water footprints of our value chain. Our consumer insights research helps us understand the potential market for eco product developments. PMI encourages proper disposal of cigarette butts and heated tobacco units by raising awareness and providing equipment, such as ashtrays and pocket ashtrays. We are improving our understanding of littering behaviour, of anti-littering approaches, and ways to directly reach consumers about this issue. For example, IQOS heated tobacco units are much less littered than cigarette butts. For example, in 2020 we deployed several anti-littering campaigns, for example in Pakistan, over 70 or our employees in collaboration with a local NGO, collected over 700 kdg of litter from the shoreline in Karachi. We also deployeed innovative cigarette butts disposal solutions, launched t
Employees	Relevant, always included	Employees are included because they are the ones driving the implementation of PMI's goals and targets, they are also the ones managing suppliers. Failure to engage employees could lead to not meeting PMI water related targets. PMI engages its employees on water issues through ongoing dialogue, surveys and questionnaires, trainings, corporate communications, forums and events, reports and publications, PMI provides relevant water information such as the release of targets, as well as progress to relevant employees, asks for their feedback. An example of awareness raising sessions are annual eco-weeks held in our sites including initiatives like planting trees, recipes for homemade natural soap or advices on saving water at home. Specific company awards such as the Chairman's Award and Excellence Awards, which are either cash or stock, are available for Sustainability and EHS Managers, project teams and other employees who are responsible for water related initiatives and improvements. Other employee engagement activities take place in our AWS certified sites, through awareness campaigns and additional communications on specific risks and opportunities found in the catchment area and how they can contribute at their workplace and at home to mitigate them. We joined the AWS in 2017 and 11 factories were already certified in 2020. We plan to increase this number in 2021 and following years, and to achieve our target to certify all factories by 2025. Through this process, we base the prioritization of the sites selection on the outcome of our water risk assessment. This will enable further engagement opportunities and support to provide access to wASH to all our facilities and contracted farms.
Investors	Relevant, always included	Investors are included because as one of the most important stakeholders they have to be informed on the performance of the company in all aspects. Failure to respond to investors' water concerns would directly translate in financial risks for PMI. PMI engages Investors through various methods including ongoing dialogue on water and sustainability issues, corporate communications and reports, public disclosures such as CDP, ESG ratings such as SAM CSA, attendance and contributions to formal gatherings, forums and events, ad- hoc requests and calls. Another example is the engagement about the results of the water risk assessment, which are shared with investors. We also communicate through our annual integrated report and website. Our 2020 PMI Integrated Report is available on our website.
Local communities	Relevant, always included	We respect the vulnerability of water resources we use and the role of those resources in the wider community. Failure to include local communities could result in potential conflicts over water resources especially when water resources are limited in water stressed areas, particularly in PMI's agricultural supply chain. E.g., a lack of availability of water resources for all stakeholders/users at the watershed level could result in an increased competition for water resources between agricultural requirements and local community requirements, causing disruptions in agricultural production and leading to operational risks. We strive to use water optimally, taking into account the surrounding water basin context and community demand, so local communities are relevant and always included in our water risks assessments. Our approach to working with communities is based on 3 principles: water preservation (management/pollution prevention), innovation (better irrigation/less water intensive tobacco varieties), and engagement (WASH). As part of PMI's AWS activities, we consult local communities and stakeholders on water isses. In 2020 PMI continued to engage with local communities and other stakeholders as part of Local Risk Assessments (LRA) to identify granular, highly relevant water risk data at a local level. The LRA format is a workshop, which trains suppliers and communities to identify and understand water risks (which builds capacity and water related expertise across the tobacco supply chain). In 2020, PMI supported suppliers in conducting LRAs in 8 markets: Indonesia, Italy, Spain, Pakistan, and 2 tobacco growing areas in China and 2 in Brazil. Understanding WASH needs is also an important part of PMI's water-related risk assessments. Since Malawi and Mozambique have already been identified as a WASH priority markets based on low levels of WASH access, PMI continues to sponsor WASH projects (including drilling 47 handpump boreholes in Malawi and 50 in Mozambique in 2020) while tracking progress on improveme
NGOS	Relevant, always included	NGOs are included because they can often provide support and technical expertise to manage PMI's sustainability related risks. Failure to include NGOs could result in a lack of access to local knowledge, which could prevent PMI from meeting its sustainability targets with regard to water issues. PMI engages NGOs in a variety of ways, depending on the location of the organization as well as their area of expertise. Engagement methods include ongoing dialogue, consultations and other collaborations on a project basis. We work with several NGOs on a global and local level and we engage with them through training, corporate communication, formal gatherings, forums, events, reports and publications, memberships and partnerships hotline and call centres. We are also member of the World Business Council for Sustainable Development (WBCSD), the WeMeanBusiness coalition, and since participating in the UNFCCC COP21 in Paris, we continue to engage externally on our commitments on climate change adaptation and water, including our support to the Paris Agreement. On a local level, we support local NGOs that help address water risks in our manufacturing and agricultural supply chain. A sound example is our collaboration since 2017 with local suppliers, stakeholders and NGOs, such FAI (Fundacion Mexicana de Apoyo Infantil) in Mexico, as part of our efforts to improve the living and working conditions of migrant workers in tobacco growing areas we source from. Amongst others it includes the provision of access to safe drinking water, improved sanitation and hygiene (WASH). Furthermore, we also help address water risks locally through our charitable partnerships to support disaster preparedness and relief efforts.
Other water users at a basin/catchment level	Relevant, always included	We strive to use water optimally, taking into account the surrounding water basin context and water demand. Failure to include other water users could result in potential conflicts over water resources when water resources are limited in water stressed areas, particularly when related to the company's agricultural supply chain, for example, a lack of availability of water resources for all stakeholders/users at the watershed level could result in increased competition for water resources causing subsequent disruptions in agricultural production and leading to operational risks. Thus, other water users at a basin/catchment level are considered relevant and they are factored through our company level risk assessments. PMI engages with them through a combination of methods, including ongoing dialogue, training, forums and events and other as necessary. Our approach to working with other water users is based on 3 principles - water preservation, innovation (better irrigation practices/less water intensive tobacco varieties), and engagement (water access, sanitation and hygiene (WASH)). We also consider other water users at the local level and work to retain our social license to operate. The interaction with local stakeholders is through our: i) Manufacturing operations - We joined the Alliance for Water Stewardship (AWS) in 2017 to better manage water within the local watersheds. One of the key elements of AWS certification is to understand local water risks and opportunities and engage with local stakeholders. For example, we organize at least two events during the certification process where we invite water authorities, neighbor factories or NGOs to discuss openly how to improve the local water situation. ii) Agricultural practices (GAP) program, we expect our suppliers to have a water conservation plan that takes into account the management of water for tobacco production to minimize adverse impacts to other users within water catchment areas. The plans also cover access to WASH services for local communities,
Regulators	Relevant, always included	To be able to operate, PMI needs to ensure compliance with water-related regulatory frameworks in all 29 countries where we manufacture our products. Integral part of our manufacturing sites' ISO14001 certification is the risk and opportunities assessment of each ; site's risk and opportunity assessments always include regulators related topics. Potential increase in taxes, changes in wastewater treatment permits rules, increased requirements for discharged water quantity and quality can have significant impact in our operating cost and permits to operate and that's why this stakeholder is considered relevant. This is particularly relevant for PMI, as 66% of our water withdrawals are from third parties which could face further regulations in the future. PMI engages regulators through a variety of methods including ongoing dialogue where appropriate and per local regulations, training, formal gatherings, forums and events, reports and publications and consultations. For example, in our pilot RRP factory in Italy, we have developed a collaborative relationship with the local authority ARPAE. We engage with them via meetings and visits in an open and transparent way. Through discussion we became aware of the opportunity to apply for a temporary exemption for the limits of 3 parameters: COD, BOD and total suspend solids on the wastewater we discharge to the sewage. Without these learnings and the efforts that we invested to improve our waste water treatment facility, we would have had an impact on our ability to operate, until the improvements were set up, resulting in losses in production volumes and extra cost. Other examples of engagement include specific programs and trainings across our business units designed to meet and applicable environmental compliance requirements and sometimes do more to reduce our water consumption. We have a consistent environmental and occupational health, safety and security management system ("EHSS") at all our manufacturing centers. We track compliance through our EHS S
River basin management authorities	Relevant, always included	Ensuring compliance and adherence to river basin management plans that can have a direct influence both in direct operations and PMI's agricultural supply chain. Engaging river basin management authorities is relevant for PMI as it can provide important insights on future water related taxes, management plans, regulations or other water related issues River basin management authorities are engaged through a variety of methods including ongoing dialogue, formal gatherings, forums and events, consultations and regular ad hoc visits. PMI combines results from these engagement activities with the annual assessment of its factories by ISO14001, allowing our sites to align with current and upcoming local river basin management regulations associated with water withdrawals and wastewater. We have also become a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate. The AWS standard also requires sites to consider stakeholders' engagement and open dialogue to better understand their needs, including those of river management authorities. Our factory in Brazil was certified against the AWS Standard in March 2018. By the end of 2020, we had certified 10 more sites – in Italy, Portugal, Indonesia, 2 in Russia, Turkey, Mexico, Romania, Greece and Poland, – as part of the program to certify all factories by 2025, with the first sixteen targeted by 2021. This will allow us be prepared for any water-regulatory frameworks dealing with water abstraction and discharge consents.

	Relevance	Please explain
	& inclusion	
Statutory special interest groups at a local level	Relevant, sometimes included	We believe a multi-stakeholder approach is key to address climate change and water security. In this context, statutory special interest groups are important since they can facilitate the dialogue between stakeholders and provide assistance regarding best water practices. When applying for the construction of a new factory, or if significant changes are due to an existing one, the permitting process, according to the EU regulation, might require open consultation from local community and NGOs (e.g. in Italy and Greece substantial modifications of the existing factories require the review of the environmental permit, and its publication to governmental website, where the "public" has access and the right raise objections). In the specific example both water resources management, withdrawals volumes and wastewater treatment and disposal are described in detail. Thus, statutory special interest groups are regarded as relevant and are engaged through a variety of dedicated methods. E.g., in 2017, we joined Alliance for Water Stewardship (AWS). By the end of 2020 we have certified 11 factories against the AWS standard. We plan to increase this number and have all factories certified by 2025. Through this process, we consult with local stakeholders which may include statutory special interest groups when appropriate. In 2019, we supported projects to protect and enhance natural resources, implement conservation agriculture, provide clean water, cater for food security, and improve livelihoods of people living in rural communities. PMI's Charitable Contributions program includes projects supportunities for smallholder farmers, increasing resources management capacity, water availability and knowledge of eco-technology solutions. In 2020, we continued partnering with tobacco growers t restore degraded riverbanks through our Water Guardian Project (engaging with multi-stakeholder initiatives such as Brazilian Business Commitment to Water Security (a coalition of >20 major companies led by Brazilian WBCSD). PMI's communi
Suppliers	Relevant, always included	Our suppliers are key partners in achieving our water reduction and stewardship goals. Failure to include suppliers would expose PMI to increased physical water risks and would prevent the company from achieving its overall sustainability targets including water related ones. Thus, they are regarded as relevant and factored into company level risk assessment initiatives through our Climate Change risk assessment, use of water risk tools, Good Agricultural Practices (GAP), Responsible Sourcing Principles (RSP) and engagement activities with suppliers (directly or through CDP Supply Chain). Suppliers are engaged through a variety of methods and projects including ongoing dialogue, surveys and questionnaires, training, corporate communications, formal gatherings, forums and events, memberships and partnerships, visits, reports and publications, holdine and call centres, consultations, contractual relationships, and other ad hoc activities. E.g. we developed our blue water footprint with Quantis in the last 2 years, including tobacco growing (farmers' irrigation, fertilizers and pesticides usage) (53%), supply chain (41%) and our manufacturing practices (6%). By engaging and working with suppliers, we are reducing our overall water footprint and increase their resiliency. Examples of how we partner: i) For tobacco-growing, under GAP, we expect our suppliers to have a water management plan including the management of water risk mitigation, as well as providing additional advice or technical support as needed. Through "STEP" supplier due diligence program we are requesting suppliers to disclose on their annual consumption of water and unit of measure, monitoring of this consumption, and related reduction objectives. Suppliers are also considered in the risks and opportunities assessment at manufacturing site, according to the AWS standard. E.g., in our factory in Italy we engaged with the local water supplier HERA via meetings and visits with an open and transparent attitude, in order to assess together the risks rel
Water utilities at a local level	Relevant, always included	We work closely with local water utilities to track and manage our water usage at large facilities. This is particularly relevant for PMI, as 66% of our water withdrawals and 69% of our discharges are from third parties which could face further regulations in the future. By including the local utilities providers in our risk assessment we ensure the integrity and accuracy of the data from their side to perform informed decisions related to water expenditures or the accomplishment of water related targets. Where possible, we work to integrate water efficiency projects and reduce our footprint. We engage water utilities at a local level through data collection processes and exchanges in scheduled meetings to better understand future demands. PMI uses a water self-assessment tool to assess annually all our manufacturing centers serving as a great source for water saving initiatives. In 2017, we joined the Alliance for Water Stewardship (AWS). By the end of 2020 we had certified 11 factories by AWS. We plan to increase this number in 2021 and following years, and to achieve our target to certify all factories by 2025. Through this process, we base the prioritization of the sites selection on the outcome of our water risk assessment and we engage and consult with local stakeholders, including the local water utilities.
Other stakeholder, please specify	Relevant, always included	We regularly conduct sustainability materiality assessments. During our 2019 refresh, we asked for input from a broad range of stakeholders on the topic of water. We engage with stakeholders on an ongoing basis in a number of ways. Key stakeholders include the scientific community, investors & shareholders, employees, the business community, media, civil society, farmers & farmworkers, local communities, suppliers, retailers, regulators & governments, and adult consumers. In 2018, we had aligned our work with the SDC's including SDG 14 which addresses Life Below Water and this year we made sure to keep it up to date in line with the refreshed sustainability materiality assessment. To date, we address both the direct and indirect impacts on water from PMI's operations. For example, litter from cigarette butts and packaging is an issue that comes under regular public sortuiny that could potentially negatively affect our brand. Much of the litter washes into the waterways and causes problems during rain events. In 2020, despite all the constraints arising from the CCVID-19 pandemic, some affiliates were still able to deploy anti-littering campaigns, involving trade partners, NGOs, experts, and local autorities. For example, in Pakistan, over 70 of our employees in collaboration with a local NGO, collected over 700 kg of litter from the shoreline in Karachi. We also deployed innovative cigarette butt disposal solutions, launched the Nordics, Germany, Russia, and Mexico. We also launched Our World Is Not an Ashtray, a web-based, platform to educate, inspire, and engage the public on the issue of littering. In 2020, 65 markets developed localized strategies, with 33 of them having started implementation.

(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.

In 2015 PMI performed a comprehensive Climate Change risk assessment (CCRA; water risk due to climate change) of PMI operational sites and key supplier assets (e.g. ports & tobacco growing regions). This comprehensive risk assessment is updated annually through the use of various tools in the market including WRI Aqueduct and IPCC Projections. This assessment identifies material risks and opportunities using WRI indicators to assess risk levels factoring in the significance of the operations sites for the business; risks assessed comprise costal and riverine flood, drought, baseline water stress and water quality.

The water risk scores were based on results of the Aqueduct Water Risk Atlas. The relevant water risk indicators for PMI were identified based on the type of operations sites. Indicators were selected to identify water risks that can result in potential impacts causing business interruption or affecting operational continuity. A site is considered at risk if any of the relevant indicators for a site is above a score of 3 (high) in the Aqueduct scoring scale.

The analysis covers all PMI's assets and continues to be expanded to cover a growing set of risks within our supply chain (for example water scarcity, extended droughts, changes in water quality and other). We complemented our analysis by conducting another study in 2017 and 2018 of our blue water footprint which is composed of tobacco farming practices (such as irrigation, fertilizers and pesticides usage) responsible for the 53%, rest of supply chain for the 41% and manufacturing activities for 6%.

From the results of the risk assessment we identified and prioritized:

- Drought: 3 factories in Europe are facing a high risk;
- Water stress: 2 of the above factories are located in a high risk areas;
- Riverine flood: 1 factory in Asia is in high risk area.

The evaluations of the identified water risks are reviewed by senior management and guide the strategy for the implementation of the mitigation actions. Specifically, the Senior Vice President Operations examines and monitors water-related issues, ensuring the integration of the results of risk and opportunity assessment and their management into business direction and strategies, and to form part of our annual and long-range plan, objectives, budget and performances appraisal processes. He receives updates on progress towards objectives and their achievement, in monthly meetings with the Operations Management Team reporting to him, and during quarterly functional reviews.

The water risk assessment takes place as follows across our value chain:

1. Manufacturing: Beyond compliance and water efficiency, we are looking at the factory within its watershed. In 2017, we joined the Alliance for Water Stewardship (AWS) & certified our Brazilian factory in March 2018. Based on the results of our water risk assessment we set the goal to certify all our factories by 2025.

2. Supply chain: PMI has a sound system to identify water related risks within its tobacco supply chain including a Global Water Risk Assessment (GRA) leveraging on internal company methods (including current irrigation data collection practices), national databases, and internationally recognized market tools (WRI Aqueduct). GRA uses globally available/ comparable data to evaluate water risks at a high level. PMI collects data from farmers through Environmental Insights (EI) Surveys covering 44 tobacco growing areas (TGAs) globally to improve the understanding of water use and materiality issues for all PMI supply chain tobacco growers. PMI carries out Local Risk Assessments (LRAs) utilizing granular data to highlight water-related risks and engage with local stakeholders. In 2020, GRA was updated and LRAs were carried out in TGAs in Indonesia, Italy, Spain, Pakistan, 2 TGAs in China, and 2 TGAs in Brazil. Each LRA reviewed 9 key risk indicators: Baseline water stress, groundwater table decline, seasonal variability, drought severity, flood occurrence, upstream natural land, downstream water impact, reputational risk, and regulatory compliance risk.

Mapping local water risks allows for better monitoring and increased focus on GAP implementation. Outputs help inform sustainability and sourcing strategies, set objectives and targets relevant to risk mitigation, and develop water efficiency projects within facilities or with strategic suppliers. In agriculture the risk is cross-referenced to the water applied (monitored annually through EI) to highlight areas of action to mitigate risk and potential water-related initiatives. As a result, in 2020 PMI began trailing drip irrigation in Argentina and irrigation optimization software in Italy. PMI also developed a global target of optimizing 10 million cubic meters by 2030 and shared guidelines for this with implementation approaches to: i) reduce water use at the farm, ii) restore water retention in soil, iii) protect natural areas that can improve the water cycle in the watershed.

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business? Yes, both in direct operations and the rest of our value chain

W4.1a

CDF

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

PMI evaluates a "substantive impact" (e.g.: financial or strategic impact) based on a variety of factors and quantitative indicators, including<u>but not limited</u> to the potential impact on financial performance as well as other strategic factors that may affect PMI's efforts and/or delivery towards a smoke-free future, ultimately replacing cigarettes with RRPs. The impacts reported as substantive strategic or financial impacts are defined as those identified and prioritized by management in our value chain, through key enterprise risks based on four risk dimensions: the impact a risk could have on the organization if it occurs, the likelihood a risk will occur, the velocity with which a risk would affect, the organization if it occurs, and the interconnectivity of a risk with other risks, that exceed defined thresholds at the corporate level.

As part of the Company's annual Integrated Risk Assessment (IRA) process, we have in place an extensive risk control program by which we assess the climate change physical risks including the water-related ones. Specifically in our operations, locations with values exceeding \$30 million range are surveyed by engineers from our property insurer, who provide recommendations to us on the magnitude of environmental risks, for example risk of flooding that could cause reduction or disruption in production capacity in specific locations, and the cost of management. Recommendations for risk management are given if the expected reduction in the financial impact of the risk exceeds the cost to comply by a factor of 10 or more. Internally, we focus on recommendations above the \$50 million range as management of identified risks can involve substantial capital expenditure and disruption to operations including our supply chain.

In 2020+ risk forecasting terms, in relation to our tobacco supply chain, we assumed as substantive risks those with a potential impact in excess of \$5 million or a raw material impact in excess of 1000 metric tons of tobacco leaves. This definition is applicable to PMI's agricultural supply chain.

For example, in our 2020 water risk assessment in our tobacco growing areas, risks like drought, flooding and cyclones and other severe weather events with a potential impact above \$5 million have been identified in Indonesia, the Philippines and Brazil.

W4.1b

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

	Total	%	Comment
	number of	company-	
	facilities	wide	
	exposed to	facilities	
	water risk	this	
		represents	
Row	4	1-25	Annually, our company's risk and opportunity identification and management process covers regulatory, reputational, physical climate, water, geopolitical and market issues. In
1			2015, we performed a comprehensive Climate Change risk assessment (CCRA) that highlighted risks for cyclone, floods or severe droughts and a list of factories to be considered as of high risk. Our Climate change risks and opportunities assessment was further aligned with the TCFD recommendations. The analysis is updated every year, and in early 2020 we conducted additional water risk assessment of physical water risks (water supply, drought, water stress, flood, water quality) using WRI Aqueduct.

W4.1c

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

Country/Area & River basin

Italy Other, please specify (Samoggia and Reno)

Number of facilities exposed to water risk 2

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities <Not Applicable>

% company's annual electricity generation that could be affected by these facilities <Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities <Not Applicable>

% company's total global revenue that could be affected

1-10

Comment

Annually, our company's risk/opportunity identification and management process covers regulatory, physical climate, water, geopolitical and market issues. In 2015, we performed a comprehensive Climate Change risk assessment (CCRA) that highlighted risks of cyclones, floods or severe droughts and a list of factories to be considered as of high risk. In the frame of our annual exercise, in early 2020 we conducted a water risk assessment on physical water risks, (water supply, drought, water stress, flood, water quality) using the WRI Aqueduct.

Country/Area & River basin	
Indonesia	Other, please specify (Citarum river)

Number of facilities exposed to water risk

1

% company-wide facilities this represents 1-25

Production value for the metals & mining activities associated with these facilities <Not Applicable>

% company's annual electricity generation that could be affected by these facilities <Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities <Not Applicable>

% company's total global revenue that could be affected

1-10

Comment

Annually, our company risk/opportunity identification and management process covers regulatory, physical climate, water, geopolitical and market issues. In 2015, we performed a comprehensive Climate Change risk assessment (CCRA) that highlighted risks of cyclones, floods or severe droughts and a list of factories to be considered as of high risk. In the frame of our annual exercise, in early 2020 we conducted a water risk assessment on physical water risks, (water supply, drought, water stress, flood, water quality) using the WRI Aqueduct.

Country/Area & River basin

Poland	Wisla

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities <Not Applicable>

% company's annual electricity generation that could be affected by these facilities <Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities <Not Applicable>

% company's total global revenue that could be affected 1-10

Comment

Annually, our company risk/opportunity identification and management process covers regulatory, physical climate, water, geopolitical and market issues. In 2015, we performed a comprehensive Climate Change risk assessment (CCRA) that highlighted risks of cyclones, floods or severe droughts and a list of factories to be considered as of high risk. In the frame of our annual exercise, in early 2020 we conducted a water risk assessment on physical water risks, (water supply, drought, water stress, flood, water quality) using the WRI Aqueduct.

W4.2

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

Country/Area & River basin

Italy Other, please specify (Samoggia and Reno)

Type of risk & Primary risk driver

Physical

Increased water stress

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Water risk and opportunities assessment is undertaken at the site level to understand potential issues with regards to a shared and sustainable management of the water resources, following the AWS protocol and the ISO 14001 standard. At a global level PMI conducted a water risk assessment through the use of WRI Aqueduct and a Climate change risks and opportunities assessment following TCFD recommendations. These assessments aim to identify material risks and opportunities, which includes flood, drought, baseline water stress, water depletion and water quantity limitations risk management and mitigation plans discussed with our insurers and local stake holders. From the risk assessment, PMI identified that its manufacturing facility in Valsamoggia (Italy) is directly exposed to potential disruptions in production capacity due to water stress and drought, as these indicators were identified as 'very high risk' according to results from PMI's risk assessment, estimating one week of water unavailability as a minimum threshold which could cause a potential substantive impact. In 2020, our RRP manufacturing facility in the Samoggia and Reno river basins was responsible for about 40% of PMI's total production of heated tobacco units (HTUs) and therefore is strategically significant for the business.

Timeframe

4-6 years

Magnitude of potential impact Medium-high

Likelihood More likely than not

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure - minimum (currency) 1470000

Potential financial impact figure - maximum (currency) 11800000

Explanation of financial impact

We estimate the relative magnitude at the range of \$1.47 million to \$11.8 million in the medium to long term (4-6 years) for our operations based potential disruptions in production capacity and current production data, as well as per our insurance's estimations, not having experienced yet such an event. PMI's range of potential financial impacts related to water impacts is developed by estimating potential losses related to minor and major business interruptions. This assessment is carried out on a per facility basis considering the total cost of business interruption per day based on production costs (excluding raw materials). These costs mainly represent labour costs from business disruption, as production would not be able to continue. PMI's estimated range of financial impacts can be broken down as in the formula below; the actual number of days of business interruption will depend on the site's ability to recover from an event: Potential financial impact (minimum): number of interruption days in major event * cost of business interruption per day

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

PMI's response has been focused on reducing water dependency on water withdrawals through the implementation of water saving initiatives in our factory. Since 2018, PMI has implemented several water efficiency, reuse, recycling and conservation projects have been implemented in this which specifically aim to reduce water consumption and make the site more resilient to increased local water stress. In 2020 the factory in Italy decreased the water withdrawals by 14% vs. 2019 and it is covering 30% of its water needs using recycled water. More specifically PMI has focused on investing in the following interventions: - use reverse osmosis on treated recycled water in boilers and cooling towers; - Installation of SR-CT for Cooling Tower Water Treatment; - reuse of treated wastewater in boilers; - boiler blowdown cooling with re-used water; - increase potable water use efficiency by implementing water plant saving settings - pilot Cold Plasma System in tobacco processing to replace water scrubbers. In addition to those technical measures the site got certified according to the AWS protocol in 2019, aiming to further assess and mitigate these risks.

Cost of response

2900000

Explanation of cost of response

The cost of response refers to the investment costs for the design and implementation of the initiatives from 2018 to 2020. Specifically, in 2020, PMI implemented several technologies, aiming to reduce water withdrawals. The cost of response corresponds to the design and implementation of all these: - Production process operational parameters settings modification, in order to reduce water losses - Reuse of treated wastewater in boilers: installation of SRCT systems that use electrolysis technology to reduce blowdown frequency and save water - Boiler blowdown cooling with re-used water: the osmotic water produced in the WWTP is recycled for cooling purposes in boiler blowdowns - Implementation of plant saving settings: process water conductivity standardization, boiler blowdown optimization and standardization on water utilities - Cold Plasma System in tobacco processing (Pilot Phase): an electricity-based air emissions treatment technology replaced the washing towers (scrubbers) - Electrodialysis Reversal System: measurement and validation plan to confirm the EDR capability to treat water according to washing specifications, define the equipment performance and validate operative cost assumptions. PMI re-evaluates the need for further investments on an annual basis and updates its budget to manage water related risks in all factories, including in Italy.

Country/Area & River basin

Indonesia Other, please specify (Citarum)

Type of risk & Primary risk driver

	Physical	Flooding
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Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Results from PMI's water footprint indicate that manufacturing facilities in Indonesia are the company's second most water intensive in terms of fresh water consumption. We conducted a comprehensive Climate Change risk assessment (CCRA) and reviewed water risk due to climate change, for corporate and asset level physical risks and opportunities up to 2025-2030 of PMI and key supplier assets in 2015. We use the WRI Aqueduct and IPCC Climate Change Projections. On an asset level, we conduct environmental risk assessments (ISO14001) to identify material risks and opportunities, which includes flood risk management and mitigation plans discussed with our insurers. Through these assessments we identified the primary risk drivers in our Indonesian operations are flooding and cyclones. Potential impacts from cyclones could cause loss and/or disruption of production in manufacturing plants, warehouses, 3rd party operations, suppliers and ports, which directly impact PMI's operations. In 2020 the indicated facility in Karawang was responsible for the production of around 9% of PMI's total production of cigarettes. We disclose about this facility due to its relevance for the business and the potential impacts that could be caused by floods and cyclones.

Timeframe

4-6 years

Magnitude of potential impact Medium-low

Likelihood Likely

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency) 430000

Potential financial impact figure - maximum (currency)

3430000

Explanation of financial impact

We estimate the relative magnitude at the range of \$0.43 million to \$3.43 million in medium to long term (4-6 years) for our Indonesian operations based on potential disruptions in production capacity and current production data, as well as per our insurance's estimations, although actual losses due to flood cases remained much below this threshold. PMI's range of potential financial impacts related to water impacts is developed by estimating potential losses related to minor and major business interruptions. This assessment is carried out on a per facility basis considering the total cost of business interruption per day based on production costs (excluding raw materials). These costs mainly represent labour costs from business disruption, as production would not be able to continue. PMI's estimated range of financial impacts can be broken down as in the formula below; the actual number of days of business interruption per day Potential financial impact (maximum): number of interruption days in minor event * cost of business interruption per day Potential financial impact (maximum): number of interruption days in major event * cost of business interruption per day Potential financial impact (maximum): number of interruption days in major event * cost of business interruption per day Potential financial impact (maximum): number of interruption days in major event * cost of business interruption per day Potential financial impact (maximum): number of interruption per day

Primary response to risk

Develop flood emergency plans

Description of response

External providers are contracted annually to develop flood emergency plans that mitigate flood and business continuity risks identified from the water risk assessment. External providers carry out additional flood risk assessments at the site level to further understand how sites are vulnerable to local flooding events. This is followed by the development of flood and cyclone emergency plans which are specific to our facilities' conditions in Indonesia and addressing the risks of flooding and cyclones. In Indonesia Karawang factory is located in the Industrial Estate Area in West Java province. For this site PMI's emergency plan is also covered by the industrial estate's emergency plan. PMI operates another factory in Sukorejo, which is located in East Java. As part of the PMI Business Contingency Plan, both manufacturing production facilities are linked, and Karawang's production can be temporally discontinued, in case of flood and cyclones, and be transferred to Sukorejo. PMI's insurance and business continuity management plans are informed through this process and designed to mitigate the impacts associated with disruptions that may result from flooding events. PMI further mitigates these risks by having widely distributed operations across the world, which reduce impacts from individual facilities. This process was applied in the indicated manufacturing facility in Indonesia.

Cost of response

1000000

Explanation of cost of response

The cost of response (\$ 1 million) is estimated based on recurring cost of external providers used to assess flood and business continuity risk annually, and related staff costs. Flood risk assessments are undertaken at the site level to understand how vulnerable sites are to cyclones/local flooding events. These assessments provide a better understanding on the scale and nature of this risk and our insurance and business continuity management plans are designed to mitigate the impacts from short and medium-term (0-5 years) flooding events.

Country/Area & River basin

Poland	Wisla

Type of risk & Primary risk driver

Physical

Drought

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Drought risk assessments are undertaken at the site level to understand how vulnerable sites are to local drought events through the use of WRI Aqueduct and IPCC Climate Change Projections. We conduct environmental risk assessments in the frame of ISO14001 to identify material risks and opportunities, which include drought risk management and mitigation plans. From the Global risk assessment, PMI identified that its manufacturing facility in the Wisla basin (Poland) is directly exposed to potential disruptions in production capacity due to drought. This indicator has been identified as 'high risk' according to the results from PMI's risk assessment, and provided that the sole water source of the site is the third party provider, which, in case of drought, will have to prioritize other users (i.e., mainly households), in the city of Krakow where the site is situated. We estimate one week of water unavailability as a minimum threshold which could cause a potential substantive impact. In 2020, our manufacturing facility in the Wisla basin was responsible for the production of around 11% of PMI's total production of cigarettes. We disclosed about this facility due to its relevance for the business based on its production capacity.

Timeframe More than 6 years

Magnitude of potential impact Medium-low

Likelihood Unlikely

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure - minimum (currency) 880000

Potential financial impact figure - maximum (currency) 7070000

Explanation of financial impact

We estimate the relative magnitude at the range of \$0.88 million to \$7.07 million in the long term (more than 6 years) for our operations based on potential disruptions in production capacity and current production data, as well as per our insurance's estimations, not having experienced yet such an event. PMI's range of potential financial impacts related to water impacts is developed by estimating potential losses related to minor and major business interruptions. This assessment is carried out on a per facility basis considering the total cost of business interruption per day based on production costs (excluding raw materials). These costs mainly represent labour costs from business disruption, as production would not be able to continue. PMI's estimated range of financial impacts can be broken down as in the formula below; the actual number of days of business interruption will depend on the site's ability to recover from an event: Potential financial impact (minimum): number of days in minor event * cost of business interruption per day Potential financial impact (maximum): number of days in major event * cost of business interruption per day

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

PMI's response has been focused on reducing water dependency on water withdrawals through the implementation of water saving initiatives in our factory. Since 2013, PMI has implemented several water efficiency, reuse, recycling and conservation projects which specifically aim to reduce water consumption and make the site more resilient to droughts. In 2020 the factory in Poland decreased the water consumption by 8% vs. 2019. More specifically PMI has focused on investing in the following interventions: - simplification of Burley tobacco processing treatment; - modernization of main Reverse Osmosis station; - aerators in sinks and showers installation in change rooms; - change in the suction vapor from pipe dryer; - Reverse Osmosis unit modernization; - reduction of water consumption by HAAR and scrubber in tobacco expansion plant; - Water reduction for powder transfer in flavor preparation; - Reduced time for Flash Tower Dryer automatic cleaning; - Leakage reduction in tobacco processing ; - Reduced time for flavour tank cleaning; - Reduced steam generation in the drying process ; - Leakage reduction in Scrubbers; - New water meters installation in and connection to the BMS.

Cost of response

93000

Explanation of cost of response

The cost of response refers to the investment costs (\$93,000) for the design and implementation of the initiatives since 2013 as described above (i.e. the cost is one unique figure referring to the total program budget and not calculated). In 2020 the implementation of water saving initiatives intensified, with additional 8 completed projects, expecting to yield another 4200 m3 in water withdrawals reduction per year. The total cost of these initiative amounted around 25,000 USD. PMI re-evaluates the need for further investments on an annual basis and updates its budget to manage water related risks in all factories, including in Poland.

Country/Area & River ba	sin	
Italy	Other, please specify (Reno)	

Increased water stress

Type of risk & Primary risk driver

Physical

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Water risk and opportunities assessment is undertaken at the site level to understand potential issues with regards to a shared and sustainable management of the water resources, following the ISO 14001 standard. At a global level PMI conducted a water risk assessment using of WRI Aqueduct and a climate change risks and opportunities assessment following TCFD recommendations. These assessments aim to identify material risks and opportunities, which include flood, drought, baseline water stress, water depletion and water quantity limitations risk management and mitigation plans discussed with our insurers and local stake holders. From the risk assessment, PMI identified that its manufacturing facility in Zola Predosa (Italy) is directly exposed to potential disruptions in production capacity due to water stress and drought as these indicators were identified as 'very high risk' according to results from PMI's risk assessment, which could impact PMI's manufacturing operations during a dry year. This factory relies 100% on a 3rd party water provider that might have to prioritize other users (i.e.: mainly households), in case of water unavailability. This heated tobacco units manufacturing center is important in PMI operations, not for its manufacturing capacity, but for the capability to evaluate manufacturing optimization practices, including the ones related to water use, and therefore it is strategically significant for the business.

Timeframe

More than 6 years

Magnitude of potential impact Medium-high

Likelihood More likely than not

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure - minimum (currency) 40000

Potential financial impact figure - maximum (currency) 320000

Explanation of financial impact

We estimate the relative magnitude at the range of \$40 thousand to \$320 thousand in the long term (more than 6 years) for our operations based on potential disruptions in production capacity and current production data, as well as per our insurance's estimations, not having experienced yet such an event. PMI's range of potential financial impacts related to water impacts is developed by estimating potential losses related to minor and major business interruptions. This assessment is carried out on a per facility basis considering the total cost of business interruption per day based on production costs (excluding raw materials). These costs mainly represent labour costs from business disruption, as production would not be able to continue. PMI's estimated range of financial impacts can be broken down as in the formula below; the actual number of days of business interruption will depend on the site's ability to recover from an event: Potential financial impact (minimum): number of interruption days in minor event * cost of business interruption per day Even though the indicated financial impact figure is initially below our threshold for substantive financial impact, the risk has been evaluated as substantive due to the manufacturing facility strategic relevance and connection to the manufacturing of RRP products.

Description of response

PMI has a business continuity plan in place to prevent financial impacts from increased water stress that could lead to reduction or disruptions in production capacity in its manufacturing facility in Reno, Italy. PMI's business continuity plan involves a temporary shift of production from our manufacturing facility in Reno, to an alternative approved facility in Europe which is already manufacturing the same products. As PMI's manufacturing operations in Reno are relatively small (these represent around 1% of the total PMI Heated tobacco units (HTU) production), this operational shift could be accomplished in a very short period of time (less than two months), which would prevent substantive financial impacts in the event of business interruptions materializing. PMI's alternative location has been assessed in terms of water risks and is not expected to be impacted by drought, water stress, floods or any other water related disruptions in the long term, as per the results of PMI's risk assessment process using the WRI Aqueduct and IPCC Climate Change Projections. PMI's current plant considers a reallocation of production of up to one year, however it could assess shifting operations permanently if results from future water risks assessments require a different response.

Cost of response

500000

Explanation of cost of response

The cost of response (\$ 500,000) is estimated based on the expected increases in production costs (\$/ volume of production) associated to shifting production to PMI's alternative approved facility in Europe, for an estimated period of one year. The expected increases would be linked to higher operational costs of the alternative facility, mainly due to higher labour costs.

W4.2a

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

Country/Area & River basin

Indonesia

Other, please specify (Citarum River Basin & Brantas River Basin)

Stage of value chain

Supply chain

Type of risk & Primary risk driver

Physical

Other, please specify (Drought)

Primary potential impact

Supply chain disruption

Company-specific description

Physical climate change risks could adversely impact quality and yield of the crops we use, such as tobacco leaf and cloves. Indonesia tobacco leaf suppliers are exposed to physical climate change risks (drought and flooding being most critical). Tobacco growing is strongly influenced by climate change such as changes in temperature and precipitation. Specifically, in the markets where we source from located in the tropics and subtropics that are more vulnerable to climate change, precipitation pattern shifts (too much/ too little rain) could impact PMI's sourcing strategy due to crop losses, quality degradation and disrupted supply chains. Clove is an essential raw material for PMI to use in our local kretek brands. Indonesia produces over 70% of the world's cloves and PMI purchases 100% of clove supplies from Indonesian farms (purchasing about 18% of the total clove grown in Indonesia), making it a substantial market. Compared to tobacco in 2020, clove made up 27% of total volumes purchased in Indonesia. Clove production is 100% rainfed, making it highly reliant on well distributed rainfall during the growing season. Clove yields fluctuate historically, with harvests varying up to 60% over a 4-year cycle and climate change might increase these fluctuations if dry seasons are prolonged or rain events become more extreme. These fluctuations can cause yield volatility, resulting in crop losses/ decreased yields for suppliers and farmers. Without mitigation measures in place, these fluctuations in availability could threaten PMI's largest clove source, impactful also because PMI is one of the largest kretek cigarettes producer in Indonesia. To help mitigate potential impacts of El Niño/ La Niña events or other climatic extremes, the duration of PMI's stock is extended over a number of years to prepare for any variations in yields. In the past, these weather shifts have typically only impacted 1 season of clove production, making stocks sufficient but the magnitude and unpredictability of climate change events, ma

Timeframe

More than 6 years

Magnitude of potential impact Medium

<mark>Likelihood</mark> Likelv

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure - minimum (currency) 4000000

Potential financial impact figure - maximum (currency) 14000000

Explanation of financial impact

The potential financial impact range is based on a long-term assessment of costs from physical climate change risks related to drought for the specific case of Indonesia. The lower range derives from our comprehensive climate change risk assessment tool combined with the threshold defined for the substantive financial impact, resulting in an 8% estimate (applied either to the sourced volume or spend). The upper range reflects an estimation of 28% based on our modeling projection, that feeds our climate change risk assessment tool (CCRA based on the IPCC and RCP8.5), of the expected impact due to climate change (worst case scenario) for this country. We estimated the relative magnitude between \$4-14 million per year while we foresee this risk in the short to long-term (>6 years) for the Indonesian growers due to supply chain disruptions arising from drought and flood events during the growing season and combining estimated costs due to disruption from crop losses (based on the cost of production, considering potential production fluctuations), quality impacts, and supply chain restrictions (a critical event, for example, can inhibit farmers from accessing their crops during an event). The range that we have calculated is based on the number of days in which activities could not be performed at farm level, therefore constituting a delay/ loss in production.

Primary response to risk

Supplier engagement

Promote the adoption of sustainable irrigation practices among suppliers

Description of response

As part of our tobacco procurement strategy, we require all tobacco suppliers to follow our Good Agricultural Practices, which provide measures to mitigate water-related risks through the adoption of climate smart agriculture practices. We implement globally our Local Risk Assessment (LRA) methodology utilizing granular local data to highlight water-related risks and engaging local stakeholders including tobacco suppliers. PMI utilizes the LRA results to implement initiatives with farmers to improve agricultural resiliency to flooding and drought such as the case in Indonesia where the results of the 2018 LRA led to continued planning and implementation of interventions in 2019 and 2020. Focus trial projects to mitigate the effects of drought impacts on cultivated crops were deployed in clove and tobacco growing areas. In particular, drip irrigation systems have been tested with farmers in clove production to increase resiliency, reduce dependency on rainfall and avoid productivity losses. Another example is the improved water access through deep well installations in a tobacco growing area to ensure the continuous availability of water for crop irrigation and human consumption, in collaboration with our local supplier, to avoid potentially negative impacts to the crop due to changing weather patterns, supported by a thorough investigation of the deep well's impact on the groundwater level. The results of our actions and initiatives include the physiology of our crop has been better understood and the water relationship including stress thresholds and optimal water uptake have been systematically tested and more efficient irrigation protocols, for more consistent productivity, derived. Another example is the improved water access through the drilling of deep wells for tobacco growing to ensure the continuous availability of water for crop irrigation and human consumption, to avoid potentially negative impacts linked to changing weather patterns, supported by a thorough investigation of the deep well's impact on

Cost of response

93000

Explanation of cost of response

As part of our tobacco procurement strategy, we require all tobacco suppliers to follow our Good Agricultural Practices (GAP), which provide water related risks mitigation through the adoption of climate smart agriculture practices. We implement globally our Local Risk Assessment (LRA) methodology utilizing granular local data to highlight water-related risks and engaging local stakeholders including tobacco suppliers. PMI utilizes the LRA results to work with farmers to improve agricultural resiliency to flooding and drought like in Indonesia where the results of our 2020 LRA led to planning and implementation of interventions that will continue in the next years. Focus trial projects to mitigate the effects of drought impacts on cultivated crops were deployed in clove and tobacco growing areas. Drip irrigation systems have been tested with farmers in clove production to increase resiliency, reduce dependency on rainfall and avoid productivity losses. The cost of response is based on a \$93 thousand budget allocated in 2020 to environmental projects (related to climate change, water security and biodiversity) under the GAP program implementation in Indonesia. The engagement with tobacco and clove suppliers in crop management practices in Indonesia is included in the cost of response. The expenditures represent approx. 2% of the 2020 global GAP budget. Similar investment is expected over the next 10 years considering projected climate change and the potential scale-up of current projects.

Country/Area & River basin

Brazil

Rio Prado

Stage of value chain Supply chain

Supply clidin

Type of risk & Primary risk driver

Physical

Severe weather events

Primary potential impact

Supply chain disruption

Company-specific description

In the short to long-term most of PMIs sourcing regions face risks due to physical climate change events, such as cyclones, floods and others, potentially affecting our tobacco suppliers' capability to deliver on contracted volumes globally, e.g. in Brazil, which is among PMI's top 15 tobacco origins. Changes in precipitation patterns and extreme variability in weather patterns could affect the yield, quality and availability of the tobacco crops, triggering a substantive risk in case the potential financial impact is above our threshold (1000 metric tons of tobacco leaves), changing our sourcing plans and increasing operational costs (e.g. a substantive impact in Brazil could have the potential to delay deliveries of tobacco affecting significantly the production cycle all the way to the product). Considering that Brazil volumes represent 45% of the total tobacco volumes at risk of climate change related losses, the impact on the business when floods, droughts, and hail impact our tobacco growing areas is relevant. In 2020 tobacco volumes were significantly impacted by extreme weather events, causing relevant crop losses to contracted farmers (e.g. in Brazil, where over 2,300ha of production in the South regions were impacted in 2020 alone due mainly to drought events). The losses experienced by tobacco farmers were volumes already contracted by PMI suppliers which had to adopt a contingency plan searching for alternative volumes to be purchased. These volumes 1 n came within the same growing area or even in new ones and had to be booked in a short time window, thus reducing the power of negotiation that is typical of pre-booked volumes and potentially impacting our off-taking price above the substantive impact threshold of \$5 M. Extreme rainfall in the fields may require pumping of excess water; while extreme droughts could require long-term irrigation, both of which would increase tobacco production costs above our substantive financial impact threshold. Changes in precipitation patterns could also affect lo

Timeframe More than 6 years

Magnitude of potential impact Medium

Likelihood More likely than not

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure - minimum (currency) 4000000

Potential financial impact figure - maximum (currency) 17000000

Explanation of financial impact

The potential financial impact range is based on a long-term assessment of costs from physical climate change risks related to extreme weather events in our tobacco origins in Brazil in a given year. Based on previous years' data on crop losses due to extreme weather events, which could lead to decrease of revenues for farmers from reduced production capacity, combined with our comprehensive climate change risk assessment tool, the range of potential financial impact is derived. Setting the basis as PMI threshold for substantive financial impact (1,000 metric tons of tobacco leaves or \$5.0 million) for the specific case of Brazil, the lower range results in an estimate 3% (of the sourced volume or spend). The upper range reflects an estimation of 10% (of the sourced volume or spend) based on historical crop loss data (actual impacts reported) and our modelling projection. We estimated the relative magnitude of extreme weather events (excessive rainfall, hail, drought) at around \$4-17M per year; we foresee this risk in the short to long-term (>6 years) for the Brazilian growers leading to supply chain disruptions, and potentially impacting PMI's estimated costs due to disruption from crop losses, quality impacts and supply chain restrictions. The costs estimation takes in account the above factors; however, due to their inter-correlation, our modelling provides a bottom and top range.

Primary response to risk

Supplier engagement Other, please specify (Promote greater due diligence among suppliers and Increase supplier reporting on water)

Description of response

PMI's operations and supply chain are globally spread mitigating the effects of severe climatic disruption, and business continuity management plans are designed to mitigate the consequence of supply chain interruption and disruption. We have a thorough risk management process to inform our long-term business planning through different assessments (e.g. water-related risk assessments and Good Agricultural Practices program (GAP) assessments including soil health assessment). The results of these assessments support business decisions, for example internal investments in soil conservation practices among suppliers managed through dedicated trainings and technical support at farm level. Furthermore, PMI collaborates with its suppliers and engages with local communities towards water-related risk mitigation and resiliency. In 2020 we updated our global water risk assessment and performed additional targeted local water risk assessments in specific tobacco growing areas to better understand our exposure to changes in water security and fine-tune our water stewardship strategy to mitigate the risk in our tobacco supply chain. In 2020, projects were implemented in Brazil on water source protection and landscape conservation practices related to tobacco farming by engaging farmers into creating yegetation buffers and physical protection barriers around water sources within their farmland, contributing to increasing the resilience of the local agricultural system and protecting soil health, in response to increasing occurrence of extreme weather events. In addition, in 2020 Brazil designed a drip irrigation trial that will be piloted in 2021.

Cost of response

250000

Explanation of cost of response

The cost of response is based on the set yearly budget allocated in 2019 to environmental projects under the Good Agricultural Practices (GAP) program implementation in Brazil. GAP program is PMI's main initiative to tackle physical climate risks within the company's tobacco supply chain, as identified through our Strategic Enterprise Risks and Company's Integrated Risk Assessment processes. GAP program provides suppliers with a set of climate-smart agriculture practices, action plans and monitoring tools to promote a supply chain that is more resilient to impacts from climate change such as drought, floods, and fires. Within GAP program, in 2020 projects were implemented in Brazil's southern region, near PMI's manufacturing facility in Santa Cruz do Sul, focusing on increasing the resilience of natural ecosystems to better protect local communities and their economic activities in the tobacco growing areas. Around 47,500 contracted farmers supply tobacco to PMI (directly or via third-party suppliers) within the region and the focus of GAP initiatives is on water source protection and landscape conservation practices related to tobacco farming with planned monitoring and training at farm level. In Brazil there are approximately 330 field technicians who work year-round with the contracted farmers and suppliers of tobacco to PMI is using drones to map and scout tobacco fields in North East Brazil, generating live data for decision making on crop management. The cost of these initiatives for 2020 was around \$250,000 which includes the total cost of on farm water management and water stewardship activities (e.g. spring protection or projects) at landscape level in Brazil, together with the roll out of a specific "on farm and next to the farm" biodiversity conservation program. 50% of the expenditure is coming from the implementation of forest protection, renewable fuels, and good agricultural practices programs that include training, stakeholder engagement and verification of the results reported. PMI's investment

Country/Area & River basin

Philippines	Other, please specify (Marikina river basin & San Juan river basin)
Stage of value chain	
Supply chain	
Type of risk & Primar	y risk driver

Physical Other, please specify (Drought, flooding and cyclones)

Primary potential impact

Supply chain disruption

Company-specific description

Based on GermanWatch's annual Climate Risk Index (2021), the Philippines is in the top 5 countries (4th) most affected by climate change impacts (including cyclones and flooding) resulting in an average loss of \$3.2 billion in purchasing power parity to the country from 1999 - 2019. The supplies of tobacco leaf in Philippines (one of PMI's top 15 tobacco sourcing countries), coupled with negative impacts on tobacco crop quality , and supply chain manufacturing restrictions due to increased severity and frequency of extreme weather events could impact PMI's production and tobacco sourcing strategy, leading to increase in direct costs for PMI, suppliers and farmers.

Tobacco leaf growing can be strongly affected by small changes in physical climate conditions such as changes in temperature and precipitation. Yield, quality and availability of tobacco crops could be negatively impacted by changes in precipitation and periods of drought, which have increased in frequency in recent years. This could affect PMI's access to tobacco supplies, impacting crop buying patterns and operational costs, affecting PMI manufacturing operations and business directly. We consider a range for the increase in our operational cost between 16 and 32% given by our modelling and estimation of medium-long term impact of adverse extreme climate events on our supply chain in the Philippines. In case of significant damage to the crop we would be forced to look for alternative sourcing areas within the country in a short time, significantly impacting our power of negotiation. This would also cause additional efforts in defining supply chain logistics and approaches, thus driving up the total cost of tobacco sourcing and unfavorably impacting the market budget for Philippines.

Timeframe

More than 6 years

Magnitude of potential impact Medium

Likelihood Likely

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure - minimum (currency) 3000000

Potential financial impact figure - maximum (currency) 6000000

Explanation of financial impact

The potential financial impact range is based on a long-term assessment of costs from physical climate change risks related to drought, flooding and cyclones for the specific case of the Philippines. The lower range derives from our comprehensive climate change risk assessment tool combined with the threshold defined for the substantive financial impact, resulting in a 16% estimate (applied either to the sourced volume or spend). The upper range reflects an estimation of 32% based on our modelling projection of the expected change for this country with climate change (worst case scenario). We estimated the relative magnitude between \$3-6 million per year while we foresee this risk in the short to long-term (>6 years) for the Filipino growers due to supply chain disruptions arising from physical risks such as drought, flooding and cyclones, and combining estimated costs due to disruption from crop losses, quality impacts and supply chain restrictions.

Primary response to risk

Supplier engagement Promote the adoption of sustainable irrigation practices among suppliers
--

Description of response

As part of PMI's strategy in the procurement of tobacco, we require all tobacco suppliers to follow our Good Agricultural Practices, which provide measures to mitigate water related risks, through the adoption of climate smart agriculture practices. We implement globally our Local Risk Assessment (LRA) methodology utilizing granular local data to highlight water-related risks and engaging local stakeholders including local Leaf suppliers. PMI utilizes the LRA results to implement initiatives with farmers to improve agricultural resiliency to flooding and drought such as the case in the Philippines where the results of the LRA performed in 2019 led to the planning and implementation of interventions in 2020. A good example is the irrigation viability project to ensure the lack of negative impact due to water discharge following irrigation in the growing stage of tobacco cultivation. It addresses water availability and quality at local level, mitigating potential negative impacts due to drought, flood and cyclones. Another example is the identification of moderate risks of flooding and seasonal variability in the local risk assessment, which has resulted in interventions focused on mulching and cover crops and also training farmers to be proactive in adapting to the annual variability by utilizing weather forecast data. In order to ensure business continuity, PMI has substantial inventories of tobacco leaf which can help mitigate short term impacts.

Cost of response

160000

Explanation of cost of response

The cost of response is based on the yearly budget allocated to the Philippines in 2020 for environmental projects (mainly related to climate change, water security and biodiversity) under the Good Agricultural Practices program, accounting for approx. \$160,000 in internal investment. The engagement with tobacco suppliers to drive improvements in crop management and environmental protection practices in the Philippines are included in the cost of response and represented approx. 3% of the global 2020 expenditure in environmental projects) of the 2020 GAP budget. In 2019, and continued in 2020, projects were implemented in the Philippines on water source protection, water management practices and landscape conservation practices related to tobacco farming, contributing to increasing the resilience of the local agricultural system, in response to increasing physical risks such as drought, flood and cyclones.

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business? Yes, we have identified opportunities, and some/all are being realized

W4.3a

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

Type of opportunity Efficiency

Primary water-related opportunity Improved water efficiency in operations

Company-specific description & strategy to realize opportunity Opportunities exist to improve water efficiency in our operations. Improving water efficiency means that less water withdrawal volumes are required for the same production unit volume. A lower water consumption would improve PMI resilience especially in the locations where we operate which are facing water related issues such as water availability and water quality, and could generate additional financial benefit, when the payback period of investment costs of water efficiency interventions are covered. As PMI is aiming to increase the production of RRP, the company sees improved water efficiency as a strategic priority, especially due to the fact that our RRP require approximately 4 to 5 times more water per unit of product than conventional products and water efficiency is a relevant opportunity to reduce this ratio. As more production lines will be converted in the future to RRPs, the technological and process know-how acquired from the successfully implemented solutions will become an asset for the company and the financial savings will grow with a multiplicative factor. For this reason, PMI is aiming to optimize all new processes by increasing water recycling and defining specific water quality by use. To seize these opportunities, PMI is implementing technologies such as reverse osmosis and EDI, and a series of initiatives to reduce water use and increase water recovery and our average water consumption decreased from 5.35 m3 in 2010 to 4.20 m3 of water for every million units of product equivalent. As the new manufacturing process matures, we are incorporating new technologies to recycle and reuse water to limit the increase of water discharge. It should take us around 1-2 years to realize these opportunities. Our improvements in water efficiency at PMI manufacturing facilities are driven by a water withdrawal reduction target. In 2020 PMI implemented 37 water efficiency projects across its manufacturing operations. An example of this is an initiative implemented in our factory in Russia, to reduce air humidity requirements in production area from 60 to 50%, that is expected to reduce water consumption by 49,700 m3 per year.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) 2000000

Potential financial impact figure – maximum (currency) 3000000

Explanation of financial impact

Results from PMI's water footprint assessment carried out by Quantis indicate that potential financial savings linked to water efficiency are around US\$2 - 3 million in the next 1 - 3 years. The estimates are calculated through direct financial savings that would be experienced by PMI once investment costs of water efficiency interventions are covered. The Quantis update of the water footprint of our RRP will provide us with a better understanding of opportunities on how to increase water efficiency. In our industry, the potential financial impact that could result by the direct cost of water is medium-low.

Type of opportunity Resilience

Primary water-related opportunity

Increased resilience to impacts of climate change

Company-specific description & strategy to realize opportunity

Opportunities exist to increase PMI's resilience to the impacts of climate change from direct operations. PMI business objective is to achieve our smoke free vision, and therefore over time production of RRP will increase. Our RRP production requires approximately 4 to 5 times more water per unit of product than conventional cigarettes therefore the company will not only need to increase efficiency within its operations, but also ensure that it is resilient to impacts of climate change such as flooding, droughts, water stress, extended heatwaves and others that could impact its manufacturing operations. PMI's strategy is to increase the amount of recycled water in its operations, to be less dependent on water withdrawals and increase the company's resilience. In 2020 recycled water accounted for 7% of our global withdrawals (vs 6% in 2019), 246,211 cubic meters of water were recycled internally, with further increments planned for 2021. PMI implemented 12 projects to increase the use of recycled water in Europe, Africa, Asia and Latin America. These will be replicated at other sites in the future. In 2019, we had our first 6 factories AWS certified, and we are expanding its application across our global operations. Until the end of 2020, we certified another 5 sites according to the AWS Standard– in Mexico, Romania, Greece, Poland and the second factory in Russia,– as part of the program to certify all factories by 2025. The AWS certification process supported the identification of risks and opportunities, the management of projects implementation as well as the engagement with local communities and stakeholders on water issues.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact Low

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) 1000000

Potential financial impact figure – maximum (currency) 2000000

Explanation of financial impact

The cost of AWS certification varies, however based on cost of AWS assessments and certification audits, it could cost more than \$8.5 thousands per factory. We do see this as a long-term investment that will increase our resilience to water risks due to climate change and it is difficult to determine exactly how much this will save PMI. Based on potential water savings analyzed and projected by our sites as well as potential investments, we estimate this to be around \$1,000,000 for all our operations until 2025. In addition, the AWS process of consulting local communities and stakeholders on water issues helps retain our social license to operate which has a high value even though not quantifiable in dollar terms. We use here \$1,000,000 as a proxy until we will have an internal specific valuation of those non-monetary opportunities.

Type of opportunity Resilience

Primary water-related opportunity Increased supply chain resilience

Company-specific description & strategy to realize opportunity

PMI estimated that over 90% of its water footprint can be linked to its agricultural supply chain, therefore it is there that the biggest margins for reducing and managing risks related to water issues are. With the risk monitoring system in place, both at global and local levels, combined with the annual water related data collection at farm level, we have access to reliable data to support business decisions towards implementing interventions to improve local conditions within the supply chain and increase the resilience of farming communities linked to our operations. A more resilient supply chain, especially in relation to water conditions in the watershed can lead to more continuity in the business, better capabilities in tackling extreme events and conditions, and more efficiency in the usage of resource water for tobacco growing. By increasing supply chain resilience, PMI is expecting to improve farmers' conditions, and to prevent physical climate risks such as droughts, extended heatwaves and others from impacting the production of raw materials. PMI's strategy has focused on establishing GAP as a standard for suppliers and providing technical assistance to partners in the supply chain to prevent and/or mitigate water risks from materializing. To seize these opportunities, PMI yearly assesses its water risks within its supply chain and shares results with key suppliers. In 2020 PMI extended the roll out of our local water risk assessments in collaboration with our suppliers in 8 tobacco growing areas (TGAs): Indonesia, Italy, Spain, Pakistan, 2 TGAs in China, and 2 TGAs in Brazil. PMI uses the results to implement initiatives on irrigation and soil conservation practices watershed management, e.g. in Brazil the development of drought and flood tolerant seed varieties, as well as access to water, sanitation, and hygiene (WASH) services for farmers and workers in Malawi and Mozambique. By increasing supply chain resilience, PMI is expecting to improve farmers' conditions, as well as access to water, sanit

Estimated timeframe for realization

More than 6 years

Magnitude of potential financial impact Low-medium

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) 3000000

Potential financial impact figure – maximum (currency)

12500000

Explanation of financial impact

Sustainable water and irrigation management has a positive effect on crop yield and helps minimize uncertainty in supply. PMI estimates potential financial impacts to be between \$3-12,5 million with long-term impacts (>5 years). This estimation is done by using financial information from gains in efficiency and crop productivity generated by the implementation of best in class water management practices, among which drip irrigation and drought resistant seed varieties, to avoid crop losses and improve yield. PMI's previous water related projects in its supply chain, as well as data annually gathered through the GAP program (for example, baselines on water practices as well as potential for development of water projects) are further contributing to informing decisions and raising awareness to deliver better results.

W5. Facility-level water accounting

W5.1

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

Facility referent	Facility reference number Facility 1			
Facility name (IT (PM MTB RR				
Country/Area &	River basin			
Italy	Other, please specify (Samoggia and Reno)			
Latitude 44.55151				
Longitude 11.16038				
Located in area Yes	a with water stress			
	Primary power generation source for your electricity generation at this facility <not applicable=""></not>			
Oil & gas secto <not applicable<="" th=""><th>r business division</th></not>	r business division			
Total water with 392.33	hdrawals at this facility (megaliters/year)			
Comparison of Lower	total withdrawals with previous reporting year			
Withdrawals fro 0	om fresh surface water, including rainwater, water from wetlands, rivers and lakes			

Withdrawals from brackish surface water/seawater 0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water 0

Withdrawals from third party sources 392.33

Total water discharges at this facility (megaliters/year) 172.69

Comparison of total discharges with previous reporting year Lower

Discharges to fresh surface water 0

Discharges to brackish surface water/seawater 0

Discharges to groundwater 0

Discharges to third party destinations 172.69

Total water consumption at this facility (megaliters/year) 219.63

Comparison of total consumption with previous reporting year Lower

Please explain

The water consumption decreased from 246.25 megaliters to 219.63 megaliters resulting in a 11% decrease.

Facility reference number Facility 2

Facility name (optional) IT (PM MTB RRP ZP)

Country/Area & River basin

Italy

Other, please specify (Reno)

Latitude 44 49783

Longitude 11.23614

Located in area with water stress Yes

Primary power generation source for your electricity generation at this facility <Not Applicable>

Oil & gas sector business division <Not Applicable>

Total water withdrawals at this facility (megaliters/year) 60.97

Comparison of total withdrawals with previous reporting year Lower

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

0

Withdrawals from brackish surface water/seawater 0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable 0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources 60.97

Total water discharges at this facility (megaliters/year) 35.75

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations 35.75

Total water consumption at this facility (megaliters/year) 25.22

Comparison of total consumption with previous reporting year Lower

Please explain

The water consumption decreased from 47.51 megaliters to 25.22 megaliters resulting in a 47% decrease.

Facility reference number Facility 3

Facility name (optional) Philip Morris Indonesia Karawang

Country/Area & River basin

Indonesia

Other, please specify (Citarum)

Latitude -6.35877

Longitude 107.28877

Located in area with water stress No

Primary power generation source for your electricity generation at this facility <Not Applicable>

Oil & gas sector business division <Not Applicable>

Total water withdrawals at this facility (megaliters/year) 149.09

Comparison of total withdrawals with previous reporting year Lower

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

0

Withdrawals from brackish surface water/seawater 0 Withdrawals from groundwater - renewable 0 Withdrawals from groundwater - non-renewable 0 Withdrawals from produced/entrained water 0 Withdrawals from third party sources 149.09

Total water discharges at this facility (megaliters/year) 89.45

Comparison of total discharges with previous reporting year Lower

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater 0

Discharges to groundwater

Discharges to third party destinations 89.45

Total water consumption at this facility (megaliters/year) 59.63

00.00

Comparison of total consumption with previous reporting year Lower

Please explain

The water consumption decreased from 80.06 megaliters in 2019 to 59.63 megaliters resulting in a 25.5% decrease

Facility reference number Facility 4

Facility name (optional) Philip Morris Polska

Country/Area & River basin

Poland

Wisla

Latitude 50.07172

Longitude 20.02136

Located in area with water stress

Primary power generation source for your electricity generation at this facility <Not Applicable>

Oil & gas sector business division <Not Applicable>

Total water withdrawals at this facility (megaliters/year) 175.45

Comparison of total withdrawals with previous reporting year Lower

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

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable 0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water 0

Withdrawals from third party sources 175.45

Total water discharges at this facility (megaliters/year) 107.58

Comparison of total discharges with previous reporting year Higher

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater 0

0

Discharges to third party destinations 107.58

201100

Total water consumption at this facility (megaliters/year) 67.87

Comparison of total consumption with previous reporting year Lower

Please explain

The water consumption decreased from 73.78 megaliters to 67.87 megaliters resulting in a 8% decrease.

W5.1a

(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been externally verified?

Water withdrawals - total volumes

% verified

76-100

What standard and methodology was used?

100% of sites had EHS&S data verified by external party (SGS) according to ISO 14064-3, in the frame of the Green House Gas verification. 100% of our sites have been ISO 14001 certified successfully in 2020. The scope of certification includes manufacturing facilities producing more than three billion cigarette equivalents annually.

Water withdrawals - volume by source

% verified

76-100

What standard and methodology was used?

100% of sites had EHS&S data verified by external party (SGS) according to ISO 14064-3, in the frame of the Green House Gas verification. 100% of our sites have been ISO 14001 certified successfully in 2020. The scope of certification includes manufacturing facilities producing more than three billion cigarette equivalents annually.

Water withdrawals – quality

% verified

76-100

What standard and methodology was used?

100% of our sites have been ISO 14001 & ISO 45001 successfully certified in 2020. The scope of certification includes manufacturing facilities producing more than three billion cigarette equivalents annually.

Water discharges – total volumes

% verified

76-100

What standard and methodology was used?

100% of sites had EHS&S data verified by external party (SGS) according to ISO 14064-3, in the frame of the Green House Gas verification. 100% of our sites have been ISO 14001 certified successfully in 2020. The scope of certification includes manufacturing facilities producing more than three billion cigarette equivalents annually.

Water discharges - volume by destination

% verified

76-100

What standard and methodology was used?

100% of sites had EHS&S data verified by external party (SGS) according to ISO 14064-3, in the frame of the Green House Gas verification. 100% of our sites have been ISO 14001 certified successfully in 2020. The scope of certification includes manufacturing facilities producing more than three billion cigarette equivalents annually.

Water discharges - volume by treatment method

% verified 76-100

What standard and methodology was used?

100% of sites had EHS&S data verified by external party (SGS) according to ISO 14064-3, in the frame of the Green House Gas verification. 100% of our sites have been ISO 14001 certified successfully in 2020. The scope of certification includes manufacturing facilities producing more than three billion cigarette equivalents annually.

Water discharge quality - quality by standard effluent parameters

% verified

76-100

What standard and methodology was used?

100% of our sites have been ISO 14001 certified successfully in 2020. The scope of certification includes manufacturing facilities producing more than three billion cigarette equivalents annually. We are routinely measuring our water discharge quality in all our affiliates and we are beyond local requirements. Around 51% of our sites have been reviewed by local authorities. Going forward, we are planning to verify them externally as part of our verification process.

Water discharge quality - temperature

% verified 76-100

What standard and methodology was used?

100% of our sites have been ISO 14001 certified successfully in 2020. The scope of certification includes manufacturing facilities producing more than three billion cigarette equivalents annually. We are routinely measuring our water discharge quality in all our factories and we are beyond local requirements. Around 51% of our sites have been reviewed by local authorities. Going forward, we are planning to verify them externally as part of our verification process.

Water consumption - total volume

% verified

76-100

What standard and methodology was used?

100% of sites had EHS&S data verified by external party (SGS) according to ISO 14064-3, in the frame of the Green House Gas verification. 100% of our sites have been ISO 14001 certified successfully in 2020. The scope of certification includes manufacturing facilities producing more than three billion cigarette equivalents annually.

Water recycled/reused

% verified 76-100

What standard and methodology was used?

100% of sites had EHS&S data verified by external party (SGS) according to ISO 14064-3, in the frame of the Green House Gas verification. 100% of our sites have been ISO 14001 certified successfully in 2020. The scope of certification includes manufacturing facilities producing more than three billion cigarette equivalents annually.

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

	Scope	Content	Please explain
ow	Company-	Description of	PMI is well aware of the importance of water for the company. Water is used in our manufacturing facilities, our agricultural supply chain, and in the production of other raw
	wide	business	materials and supplies, such as paper, electronic devices, and packaging materials. For this reason, PMI has adopted a company-wide water policy, which effectively integrate
		dependency on	all the relevant water dimensions of the business. PMI's water policy describes the company's business dependency on water, impacts, water-related performance standards
		water	for direct operations and suppliers (in line with PMI's GAP and Sustainable Tobacco Program) and recognizes the linkages between water and other environmental issues suc
		Description of	as climate change and biodiversity conservation. PMI uses international standards and widely recognized water initiatives, such as the AWS Standard. PMI is an active
		business impact	member of the AWS; following a successful pilot in Brazil, we are implementing the AWS Standard across all our factories, to promote a more sustainable use of water in the
		on water	communities where we operate. PMI has active, time bounded water related targets and goals, and is committed to align its efforts with other public initiatives such as the
		Description of	SDGs. For example, SDG 6 is embedded in our Sustainability and Good Agricultural Practices (GAP) programs. PMI has additional targets which go beyond regulatory
		water-related	compliance, including implementing innovative practices in water usage in agriculture, capacity building for farmers and local communities, providing access to water and
		performance	sanitation, and taking collective water stewardship action. In our supply chain, water-related procurement standards are set forth through our GAP program, our risk assessme
		standards for	process, Water Insights data collection, and Responsible Sourcing Principles. Beyond our efficiency targets in factories, we have outlined a roadmap for taking action with our
		direct operations	suppliers and stakeholders, including watershed action and the development of tobacco seed varieties that are drought and flood tolerant.
		Description of	pmi-water-stewardship-policy.pdf
		water-related	
		standards for	
		procurement	
		Reference to	
		international	
		standards and	
		widely-recognized	
		water initiatives	
- 1		Company water	
		targets and goals	
		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	
		Commitment to	
		safely managed	
		Water, Sanitation	
		and Hygiene	
		(WASH) in the	
		workplace	
		Commitment to	
		safely managed	
		Water, Sanitation	
		and Hygiene	
		(WASH) in local	
		communities	
		Acknowledgement	
		of the human right	
		to water and	
		sanitation	
		Recognition of	
		environmental	
		linkages, for	
		example, due to	
		climate change	
		Other, please	
		specify (Roll-out	
		anti-littering	
		campaigns in	
		cooperation with	
		local stakeholders	
		to reduce the	
		amount of	
		cigarette butts	
		reaching	
		waterways and	
		the oceans.)	

W6.2

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

W6.2a

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

Position of individual	Please explain
Board- level committee	PMI's Board of Directors (BoD) and its Committees are responsible to foster the long-term success of the company including setting broad corporate policies, strategic direction, and overseeing management, which is responsible for daily operations. The BoD considers that environmental, social and governance (ESG) factors, including climate change and water resources as relevant to the company's business and long-term success. As an example of a water-related decision making process in 2020, the BoD and its Committees approved the company's annual budget and received updates on the company's performance and targets against the budget throughout the year including those related to the achievement of sustainability and climate change targets, and water related matters. The annual budget factors in resources required to deploy water related initiatives to achieve our goals. Starting from 2018, the BoD mandated the Nominating and Corporate Governance Committee (NCGC) of the Board, composed by 5 BoD members, at the time of the publication of the 2021 proxy statement, to oversee PMI's sustainability strategies and advise the Board on sustainability matters, including to provide recommendations to executive management on climate change-related issues, and a set of initiatives aiming to actively reduce unfavourable impacts of our business toward water resources, in 2020, PMI's Integrated Report 2020—that constitutes the main external communication of PMI on sustainability matter secources—was completed with oversight of PMI's Board of Directors and reviewed by its Executive Chairman. The NCGC reflected on potential audiences for the engagement based on the information in the report and made a recommendation to the CSO for such engagement.
Board- level committee	The Audit Committee of the BoD, composed by 6 BoD members, at the time of the publication of the 2021 proxy statement, oversees the assessment and management of the company risks including to provide recommendations to executive management on those related to climate change, and water-related issues such as flood or drought, supply chain potential disruption, water scarcity, increased pressure on water resources and conflict with other water users affecting our direct operations and/or our supply chain, which may impact PMI's ability to operate.

W6.2b

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

Der	that water- related issues are a scheduled agenda item		Please explain
Rov 1	- some meetings	Monitoring implementation and performance Overseeing acquisitions and divesiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding major plans of action plans of action plans of action plans of action plans of action guiding major plans of action guiding major plans of action guiding strategy Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorites Setting performance objectives	The Board of Directors (BoD) oversees PMI's full range of activities including establishing broad corporate policies setting strategic direction, and overseeing Management, which is responsible for the dayt-do goverations of the company's annual budget each year and receives updates on the company's performance and targets against the budget throughout the year including those related to the achievement of austianability and water targes. The BoD has restablished various standing Committees to assist with the performance of the company's business are important to PMI's long-term success and rater targes. The BoD believes that environmental factors, including those related to water resources, social, and governance (ESG) relevant to the company's business are important to PMI's long-term success. These factors are part of the responsibility of the Board and considered in the evaluation of the annual performance of the company and its management. The BoD is advised on Sustainability matters, including water resources-related issues, by the Nominating and Corporate Goverance Committee of the BoD, which oversees the Company's sustainability strategies and performance, including water resources related issues, by the Nominating and Corporate BiG overance Committee of the BoD as well as by the full BoD. Management has identified and prioritized a number of key enterprise risks and, as part of the risk management process. has established a Corporate BiG coverance Committee (CRGC') that comprise dists to a method revalue the related of the six to a method revession of company conducted both by the Cormagement to BuS is nogramber for the Company's business. The Company conducted both with committees of the BoD as well as by the full BoD. Management for SIS. The BoD believes of our company conducted both by the Compare Sis doverance Committee (CRGC') that compare the value of the that comprise risks an amethod reversion of a day compare. The Company Commeton and senior feaders from relevant functions. Management reports

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 Operating Officer (COO)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

The Chief Operating Officer (COO) is a member of PMI's Company Management (CM) and reports to the CEO. In 2020 the COO and SVP Operations were the highest management level responsible for water related issues incl. management of risks and opportunities; specifically, they are responsible for monitoring and reviewing PMI's objectives, risk assessment processes, business continuity strategies, and action plans related to climate change, incl. water related issues and physical risks. Together with the CM, they report on these issues to the Nominating and Corporate Governance Committee and Audit Committee of the BoD on quarterly basis, via presentation incl. strategies and performance progression. The COO was a member of PMI's Corporate Risk Governance Committee which drives PMI's risk management process; in this role, he also reported on climate and water risks that could result in disruptions to PMI's value chain, to the Audit Committee and to the full Board as required through the year.

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

Other C-Suite Officer, please specify (Senior Vice President, Operations)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues Quarterly

Please explain

The Senior Vice President, Operations (SVP Operations) member of the Company Management, is tasked with addressing climate change risk, including physical water risks, across all activities of the company, because it could result in natural disasters, water scarcity, and agricultural instability, which may impact PMI's ability to operate. Our SVP Operations is delegated with operational responsibility, including maintaining robust business resiliency, risk assessment processes, and strategies to support business continuity; he examines, monitors and reports to the Board, on water related issues ensuring the integration of risk assessment and management into long-range plan, objectives, budget and performance review processes. Effectively addressing these risks is critical to the achievement of PMI's strategic objectives and therefore is considered during the annual Integrated Risk Assessment process. Management provided the Board with insights on the reassessment process thru 2020.

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

Other, please specify (Sustainability Committee)

Responsibility

Other, please specify (Overseeing PMI's sustainability work)

Frequency of reporting to the board on water-related issues Annually

Please explain

The Sustainability Committee composed of the company's CEO, CFO, Senior VP Operations, and other members of the CM – meets quarterly to review and validate PMI strategy, commitments, goals, and annual reporting. PMI's sustainability strategy is shaped by a formal sustainability materiality assessment, which was updated in 2019, re-prioritizing the most relevant sustainability topics for PMI. To help manage these topics from a global and sustainability perspective, within our CM, members are responsible for driving progress and delivering on our sustainability targets within their respective functions (e.g. climate change and mitigate related risk, including physical water risks, across all activities of the company, is assigned SVP Operations, as it could result in natural disasters, water scarcity, and agricultural instability, which may impact PMI's ability to operate).

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

Chief Sustainability Officer (CSO)

Responsibility

Other, please specify (Leading the integration of sustainability, including environmental topics, across PMI.)

Frequency of reporting to the board on water-related issues

Annually

Please explain

PMI's CSO reports to our CFO and leads the strategy of integration of sustainability, including climate-related issues, across our business, and aiming to actively reduce unfavourable impacts of our business on the environment and water resources, as well as to increase resilience of our business toward water resources in terms of quality and availability. PMI's CSO heads and manages PMI's Corporate Sustainability Team, reports on progress to the Sustainability Committee on a quarterly basis and updates the Board of Directors at least once a year. From an operational perspective, our Operations Sustainability and Corporate Sustainability functions coordinate the company's climate change-related activities, including the water resources-related ones. This helps ensure that our global strategies and programs are monitored, assessed and can be implemented at the market level and that local realities are reflected in our global efforts.

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) 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	Corporate executive team Chief Executive Officer (CEO)	Reduction of water withdrawals Improvements in efficiency - direct operations Improvements in efficiency - supply chain	PMI's compensation and benefits program supports its business and financial objectives, including the achievement of sustainability efforts such as reduction of water withdrawals and water efficiency in direct and indirect operations. In its transformation towards a smoke-free future, PMI has defined strategic priorities, among which to build global societal support for RRP, where our operational sustainability efforts are embedded. Operating with excellence and protecting the environment are strategic pilars. The BoD considers that environmental, social and governance factors, including protecting the environment and water resources are relevant to the company's business and long-term success. These factors are part of the responsibility of the Board and are considered in its evaluation of the annual performance of the company and its management. Accordingly, progress against the strategic priorities, is included in our compensation program (e.g., based on a linear progression) for the management group and other eligible employees. Executive management covering sustainability, including EHS topics, are specifically appraised each year for performance against targets, including those relating to water resources and related issues. We discuss our executive compensation program in more detail in our proxy statement filed with the U.S. Securities and Exchange Commission (which includes annual performance against our water reduction targets).
Non-	Other, please	Reduction of	Behavior change related indicator. Every year, a number of PMI affiliates runs certain voluntary awareness and promotion campaigns and internal programs aimed to
monetary	specify	water	increase employees' active participation in sustainability and EHS programs and to make water stewardship part of the company's culture. Awards and recognition for
reward	(Sustainability Managers, Employees)	withdrawals Reduction in consumption volumes Improvements in efficiency - direct operations Improvements in efficiency - supply chain Implementation of employee awareness campaign or training program Supply chain engagement Increased access to workplace WASH Implementation of water- related community	best practices form a core element of such campaigns for water efficiency and reduction project; Operations employees also have the opportunity to earn awards for best practice initiatives in the areas of water consumption reduction and water efficiency. This forms part of our Above and Beyond Call of Duty (ABCD) award program which encourages innovation, continuous improvement and employee engagement. Reduction of water intensity, efficiency projects and targets, and increasing access to workplace WASH were selected as indicators of success as they are aligned with the company's vision and they allow PMI to objectively quantify the progress of the company in the field of water and sustainability.

W6.5

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

Yes, other

W6.5a

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

PMI operates within an overarching Code of Conduct, or "Guidebook for Success", and a set of internal policies. This Code of Conduct and policies set the rules and review processes in relation to Sustainability and more specifically to our water strategy governing the way we may provide corporate contributions and interact with government officials, amongst others. As part of these management controls, we conduct due diligence to ensure consistency with our Code and Principles, and to check potential compliance and reputational issues when joining trade associations. We belong to many carefully selected business and trade associations around the world. We work with these groups because they represent our industry and the larger business community in policy discussions on issues where we have a common interest or objective. Our support to these organizations and groups complies with applicable laws and our own principles. We routinely evaluate our participation to ensure that the groups' objectives align with the long-term interests of PMI and its shareholders, and that their activities continue to reflect PMI's values and standards of conduct. There are times when we may not agree with certain positions adopted by the organizations we support. In these instances, we may choose to withdraw our participation or support. PMI also could withdraw its support, or participation if inconsistencies with its Code of Conduct or policies are discovered.

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report? No, but we plan to do so in the next two years

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?

	related	Long- term time horizon (years)	Please explain	
Long- term business objectives	related issues are	16-20	PMI's long-term business objective is to deliver a smoke-free future, by replacing cigarettes with smoke-free alternatives. In our transformation journey we focus our effort on a forward-looking corporate sustainability strategy with RRPs at its core, while integrating other material social and environmental topics such as water stewardship. Water issues are integrated in our long-term business objectives, mainly through the identification and management of water risks and opportunities such as droughts, floods and cyclones which can directly impact PMI's value chain. We have also set water efficiency targets in manufacturing and, in line with our strategy, we will develop water reduction targets for RRPs. Our Sustainability Team reviews annually the long-term business goals and their connection with water and other environmental risks and opportunities, which determine future management actions. Since the physical risks of climate change which include disruptions to water availability and security, might significantly impact our business and supply chains, we conducted climate risks assessments considering 2030 and 2040 scenarios since that is when we start seeing climate trends shift. This time horizon was selected as it is also aligned with our risk planning and climate change Science Base Targets, allowing us to implement actionable goals with tangible long-term effects that impact our business (16-20 years vs. 50 years).	
	Yes, water- related issues are integrated	16-20	Driving world-class sustainability programs to build a resilient value chain and answer our stakeholders' concerns is one of our core strategies to deliver a smoke-free future. Our materiality assessment is the backbone of our sustainability strategy development; water stewardship is part of our material environment topics and is integrated in our long term objectives. Our strategy is aligned with our annual Long Range Planning process and includes water issues such as water efficiency in manufacturing and water use in agriculture to increase resiliency of our business. Examples are the development of water targets and projects in our tobacco supply chain; the AWS certification of all our factories by 2025 and the investment in technologies to reduce, reuse and recycle water in manufacturing. In 2018, the Nominating and Corporate Governance Committee of the BoD was formally mandated to oversee Company's sustainability strategies and objectives, include water related issues, as this is important for our company's long-term success. With the ongoing challenge of water security, we find it important to look further into the future by conducting climate risks assessments which look out to time horizon 2030 and 2040 for two reasons, 1) it is when we start seeing climate tends shift, 2) it is aligned with our risk planning and climate change goals, enabling us to set actionable goals with tangible long-term effects for our business (16-20 years vs. 50 years).	
Financial planning	Yes, water- related issues are integrated	16-20	As PMI is working towards achieving its sustainability goals, OPEX and CAPEX for water related issues are included in our financial planning; e.g. PMI has planned financial resources to 1) implement technologies in manufacturing to minimize the use of water; 2) implement its long term GAP program in its tobacco supply chain to achieve sustainable tobacco production, incl. activities with tobacco suppliers to address water related risks, among others. These activities focus on improvement of crop management practices, incl. investment in more sustainable trigation practices, water and soil conservation plans, and development of drought and flood tolerant varieties. 3) Conduct water risk assessment, for which PMI annually allocates a budget, and the results are used to inform the company's business and sourcing strategies in the mid and long term to prevent risks of supply disruption and/or potential increase in procurement cost. PMI's risk assessment looks out to 2030 and 2040 as this is when the majority of risks are expected to materialize in the absence of successful mitigation measures. The indicated time horizon was selected as it is aligned with our risk planning and climate change goals, allowing us to set actionable goals with tangible long-term effects for our business.	

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) -56

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

70

Water-related OPEX (+/- % change)

-13

-10

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

Please explain

CAPEX: In 2020 we invested in technologies to reduce, reuse and recycle water in 23 factories, although the COVID restrictions reduced the implementation in some countries, decreasing our expenditure by 56% vs 2019. In 2021 and subsequent years we expect an increase in expenditure by 70% in 2022, as we will resume and implement further initiatives, validated in the previous years. OPEX: a net decrease of 13% in our OPEX driven by around 60% by improvements done in our RRP facility in Italy and in our factory in Argentina. This decrease is the fruit of our 2019 expenditure, aimed to reduce water withdrawals and discharge, which are the main drivers of our OPEX water related costs. In 2019 we had anticipated a 10% decrease; the decrease was exceeded in 2020, also due to production shifts during the COVID 19 pandemic. In 2021 we expect this cost to reduce 10% more. Water-related OPEX is not significant to our business (less than 0.1%)

W7.3

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

	Use of climate- related scenario analysis	
Row 1	Yes	As our business relies on agricultural crops, physical risks are the primary driver for us. We conducted a physical climate risk analysis of our direct operations and our tobacco suppliers growing regions using IPCC physical risk scenarios. The climate risk analysis evaluated impacts from the reasonable worst case (RCP 8.5), a prudent application when assessing these risks. Additionally in 2018 PMI conducted a climate change risk assessment in line with TCFD recommendations. In it PMI identified risks and opportunities for its business under a reference scenario (exploring a decarbonization approach under the existing climate and energy policies) and a 2 degree scenario (aligned with an average global temperature increase below 2 degrees). The assessment considered the importance of water resources for PMI's direct and indirect operations and looked into several water elements including projected prices of water and their implications, changes in water supply, water stress and others.

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	Other, please specify (RCP 8.5)		We continue to support and invest in growing practices that enable the tobacco crop to be resilient to changing water scenarios. Through engagement with our tobacco supply chain stakeholders we continuously assess water related indicators with our global and local water risk assessment methodologies, to have the most updated scenario and to better drive responses on water management through our GAP program with the implementation of best practices and tailored interventions. Within our Water Stewardship program in the tobacco supply chain we are developing quantifiable targets with a timeline to 2030 focusing on reduction and replenishment indicators to mitigate water related issues and trigger generation of positive impact in our sourcing geographies, along with increased resiliency for origins like the Philippines where extreme weather events are likely to continue to pose a risk for tobacco production. In our manufacturing facilities, water is not a major input to conventional product manufacturing. We continue to reduce water use in our facilities through improvement in water efficiency by implementing new process designs, conservation, and reusing or recycling water where possible. Since 2018, we have intensified the implementation of our water related initiatives , to anticipate potential shortages in water availability, including those in Italy and Poland. The expected full implementation, including the evaluation of pilot projects and expansion is forecasted by 2025.

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, but we are currently exploring water valuation practices

Please explain

In our tobacco supply chain, after reviewing risk, we estimate the cost of potential projects in dollar per cubic meter optimized to determine the most cost-effective project that results in the most volumetric benefit for the watershed. As member of Value Balancing Alliance (VBA) we explore the Triple bottom line accounting concept which focus on the balance between environmental, social, and economic issues. Water is a relevant topic included in the VBA's valuation metrics, and we expect through the participation to this working group to assess the relevance to use an internal price on water. We evaluate performance in a broader perspective to create greater business value using reports and indicators based on different sources such as Global Reporting Initiative (GRI) and SAM CSA. By 2020 11 factories have been awarded with the AWS certification and we plan to certify all by 2025. As we move forward on this certification, we will explore water valuation practices in more detail.

W8. Targets

W8.1

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

tar an	ngets nd/or	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
and Bu: lev spe tar goa Situ spe tar and	ide rgets nd goals usiness vel pecific rgets nd/or	monitored at the corporate level Goals are monitored at the corporate level	PMI is committed to be a good water steward by minimizing water use and effluent discharge in our factories; assessing water risks where we operate and working with stakeholders in shared watersheds towards the 5 water stewardship outcomes (good water governance, sustainable water balance, good water quality, habitat protection and WASH); and implementing good agricultural practices in our tobacco supply chain. We leverage from the same governance and monitoring mechanism, put in place for the company-wide science-based targets for GHG reductions, to synergize and expand on our targets towards water withdrawal which have an impact at basin level. E.g., we use the platforms for monitoring and measuring, developed for energy consumption, to connect our water meters to measure withdrawal which have an impact at basin level. E.g., we use the platforms for monitoring approach to reduce PMI's impact on water resources is focused on reducing water intensity per unit manufactured (cigarette or heated tobacco unit) and to ensure that we apply water stewardship principles. The manufacturing process is identical in all of our factories, and we have companywide common environmental policies and standards, and we make sure that these are followed through internal and 3rd-party audits. We work to understand the water risks in our operations, agricultural and non- agricultural supply chain and create specific targets to mitigate any risks. An example is our target to certify all our factories by end 2025 against the AWS standard, prioritizing them based on their water-risks. Another example includes our new target (as of 2020) to optimize 10 million cubic meters by 2030 across our tobacco supply chain. Based on a scientific approach, optimizing 10 million m3 will come from projects on the ground, suppliers and field technicians visit project sites and provide regular progress updates. Our Local Risk Assessments (performed with suppliers) help identify areas of risks and potential mitigating projects. This new water stewardshi

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

Target reference number Target 2

Category of target Water withdrawals

Level Company-wide

Primary motivation Water stewardship

Description of target

In 2015, we exceeded our goal to reduce by 20% our water withdrawals in all our manufacturing facilities from a 2010 baseline. We focus on future water demands that PMI will face from transitioning to RRP and, the company set an interim target to annually reduce total water withdrawals by 1%, from 2016 to 2020. PMI set this target to focus on achieving a better understanding of its future water demands, as well as to achieve water security by identifying and reducing water withdrawals from new manufacturing processes. As we convert more factories to produce RRP, we will be resetting our target baseline level to reflect the new production process and relative difference in water withdrawals.

Quantitative metric

% reduction in total water withdrawals

Baseline year

2010

Start year 2019

Target year 2020

% of target achieved

100

Please explain

In 2020, we were able to improve our water withdrawn average volumes from 2010 baseline of 4,998,953 m3 to 3,780,663 m3, decreasing by 5.7% vs 2019. The result has been achieved thanks to our efforts to improve water efficiency through implementing new technologies to recycle and reuse water, and by using rainwater harvesting where feasible, with a view to minimum water discharge partially compensated by the increase of production of our new RRP which requires approximately four to five times more water per unit of product than conventional cigarettes.

Target reference number

Target 3

Category of target Community engagement

Level Site/facility

Primary motivation Risk mitigation

Description of target

The AWS Standard is a globally applicable framework for major water users to understand their water use and impacts as well as to work collaboratively for sustainable water management in a catchment context. PMI uses this Standard to engage local communities and other users in the catchment area such as local authorities, farmers and others on different water issues such as good water governance, sustainable water balance, WASH, good water quality and others. Achieving an effective water management at the catchment level will allow us to avoid water conflicts and achieve water security. PMI created a roadmap based also on the results of the water risk assessment, to prioritize the sites for the assessment and certification under the AWS. After our first pilot in Brazil in 2018 we plan to extend our efforts globally by 2025 and hope that the commitment, to certify all of our factories, will inspire other companies in our value chain and beyond to take similar steps on water stewardship.

Quantitative metric

Other, please specify (Number of sites certified by AWS)

Baseline year 2018 Start year

2018

Target year 2025

% of target achieved

34

Please explain

We joined the Alliance for Water Stewardship (AWS) in 2017, a leading organization dedicated to better managing water within the local watersheds. We successfully piloted the adoption of the AWS Standard in our factory in Brazil and developed a toolbox for wider implementation. In March 2018, our Brazilian factory became the first factory to be certified by AWS in the country. Based on the results and learnings from this pilot, we started to roll out the AWS Standard globally and by the end of 2020 we had 11 factories certified to the AWS standard. As a priority, we plan to certify all of our factories by 2025, aligning with our ISO 14001 scope: all factories above 3 million cigarette equivalent annual production volume. We select and prioritize the factories to be certified based, amongst other criteria, on the outcome of our recent water risk assessment.

Target reference number Target 4

CDF

Category of target

Water pollution reduction

Level

Other, please specify (Tobacco supply chain)

Primary motivation

Reduced environmental impact

Description of target

We are aware that the use of fertilizers and pesticides in our agricultural supply chain can cause water pollution, which would damage natural ecosystems and affect the company's operations, and other water users. To prevent negative impacts on water ecosystems, maintain water quality and achieve long term water security PMI has set targets for all our tobacco suppliers to eliminate WHO TOX1 pesticides by 2018, and other Highly Hazardous Pesticides (HHPs) as defined by FAO/WHO guidelines by 2020. 2018 and 2020 targets have been met and we will continue to monitor their attainment. PMI set these targets following the FAO and WHO recommendations on the classification of highly hazardous pesticides. PMI engages its tobacco supply chain through its Good Agricultural Practices program, and monitors progress on this target annually at the supplier level.

Quantitative metric

% reduction in concentration of pollutants

Baseline year 2015

Start year 2015

Target year 2020

% of target achieved 100

Please explain

Pesticide residues are measured by PMI's Tobacco Lot Integrity program where 100% of its tobacco purchased lots are tested by independent, accredited labs before PMI accepts it. PMI has made important steps towards the elimination of WHO TOX1 and other HHPs since the start year of 2015. Based on this program, PMI assessed that as of 2018, all sourced tobacco lots have been tested as free from quantifiable levels of residues attributable to the use of WHO TOX1 CPAs, and as of 2020 have been free from residues of other HHPs. Based on these achievements we have reached 100% of our target.

Target reference number Target 5

Category of target

Water use efficiency

Level Company-wide

Primary motivation Water stewardship

Description of target

In 2015, we exceeded our goal to reduce 20% our water withdrawals in all our manufacturing facilities from a 2010 baseline. We focus on future water demands that PMI will face from transitioning to RRP, and we set a company-wide target to achieve a water ratio of 3.1 m3 of water withdrawn per million cigarettes equivalent produced by 2022, with an interim target of 4.4 m3 of water withdrawn per million cigarettes equivalent produced, by 2020. Our baseline remains 2010 with 5.35. m3 of water withdrawn per million cigarettes equivalent produced, by 2020. Our baseline remains 2010 with 5.35. m3 of water withdrawn per million cigarettes equivalent produced, by 2020. Our baseline remains 2010 with 5.35. m3 of water withdrawn per million cigarettes equivalent produced. PMI set this target to focus on mitigating its future operational water demands increase due to RRP production, as well as to increase resiliency with regard to water related risks by identifying and reducing water demand in key parts of the manufacturing process. As we convert more factories to produce RRP, we will be resetting our target baseline level to reflect the new production process and relative difference in water withdrawals.

Quantitative metric

Other, please specify (Water ratio (water withdrawn in m3 per million cigarettes equivalent produced))

Baseline year 2010

Start year

2019

Target year 2022

% of target achieved

51

Please explain

Despite the increase of production of our new RRP which requires approximately four to five times more water per unit of product than conventional cigarettes, we managed to reduced withdrawals by improving water efficiency throughout the process and implementing new technologies to recycle and reuse water, and by using rainwater harvesting where feasible, with a view to minimize water discharge. In the second year (2020) we managed to achieve a ratio of 4.2 m3 of water withdrawn per million cigarettes equivalent produced following the reduction trajectory, and we are on track to achieve the target in 2022.

W8.1b

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

Goa

Engagement with suppliers to help them improve water stewardship

Level

Basin level

Motivation

Water stewardship

Description of goal

The AWS Standard is a globally applicable framework for major water users to understand their water use and impacts as well as to work collaboratively for sustainable water management in a catchment context. PMI uses this Standard to engage suppliers and other users in the catchment area such as local authorities, local communities and others on different water issues such as good water governance, sustainable water balance, WASH, good water quality and others. It is key for PMI to achieve an effective water management at the catchment level as it will allow PMI to avoid water conflicts and achieve water security objectives. As part of the local Alliance for Water Stewardship roll out in our factories, we are engaging local suppliers (tobacco suppliers, farmers or direct material suppliers) to promote the standard and exchange best practices. By 2021, we plan to have 16 of our sites AWS certified and all our major sites by 2025. This is an important goal because it promulgates the use of the AWS international standard for sustainable water use within the organization and beyond. This reinforces our commitment to a rigorous and data driven approach to evaluating water. Our AWS team and our employees on site are fully engaged to ensure that our factory meets the AWS standard, including engaging with local authorities, the farming community and civil society groups.

Baseline year

2018

Start year 2018

End vear

2025

Progress

In 2017, we started to pilot the Alliance for Water Stewardship (AWS) Standard, successfully certifying our factory in Brazil in 2018. Furthermore throughout 2020, we expanded the AWS Standard certification to a further five factories – in Mexico, Romania, Greece, Poland and the second factory in Russia, as part of the program to certify all factories by 2025. PMI uses the number of certified factories as indicator of success. In line with our target to certify all factories in scope by 2025, the progress against the target is measured as the number of factories certified as per AWS (Alliance for Water Stewardship) Standard. PMI considers 16 factories certified by 2021 and the full adoption of the standard in the remaining factories by 2025 as the threshold of success. Through the AWS certification process, we engaged actively with more than one supplier per site in the catchment area including water suppliers, tobacco farmers/suppliers or paper suppliers, in line with our goal.

Goal

Promotion of sustainable agriculture practices

Level Basin level

Motivation

Risk mitigation

Description of goal

Water scarcity is a global issue linked with climate change, which could have a direct impact on PMI's agricultural supply chains. PMI has identified that more than 90% of its water footprint can be linked to its supply chain (tobacco suppliers alone are responsible for 51% of the water footprint), where suppliers use it as a key element for the production of raw materials. Seen as PMI's business security is wholly dependent upon its raw materials in the supply chain, promoting sustainable agricultural practices that mitigate water risks is key for the company's long-term water and business security. PMI is committed to achieving a sustainable management of water resources at the basin level. Thus, PMI is working with all its agricultural suppliers through its Good Agricultural Practices (GAP) program. As part of GAP, PMI engages suppliers to develop and implement water conservation plans that achieve rational use of water resources and incorporate best available irrigation practices at the local level, including efficient irrigation systems such as drip irrigation, timing, and amount of water distributed, based on water use efficiency measurements. PMI rolled out GAP in 2002 and monitors its success on an annual basis.

Baseline year

Start year

2007

End year

Progress

PMI measures progress for this goal on an annual basis, through the use of water related indicators as part of the Good Agricultural Practices (GAP) program. The set of indicators, as well as the specific goals vary within basins, as production conditions are significantly different within PMI's agricultural supply chain. Some of the measured indicators include reductions in water withdrawal rates, number of farmers adopting drip irrigation (or other smart irrigation practices) and other similar metrics. An example of this is the monitoring of farmers' progress on the adoption of sustainable water management practices. PMI monitors adoption rates of drip irrigation practices for tobacco production and, we estimate that our engagement has resulted in 98% of the area used to produce the tobacco purchased in 2020 from the Verona region (Italy) applying drip irrigation systems. PMI aims to continue engaging with local farmers in the region to achieve a 100% adoption of drip irrigation in Verona province by 2030, reaching our threshold of success.

W9. Verification

W9.1

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	The STP process includes: • Annual self- assessments completed by tobacco suppliers (reviewed by AB Sustain); • On-site audits conducted by AB Sustain to a sample of contracted farmers; and • Comprehensive review of tobacco suppliers' policies, procedures, and documentation; and monitoring and proof demonstrating the level of STP/GAP implementation.	Other, please specify (Sustainable Tobacco Production verification by AB Sustain)	GAP has been in place since 2002, and since 2016 we have been assessing conformity of tobacco suppliers and farmers with our GAP standards through the industry-wide Sustainable Tobacco Program (STP) managed by AB Sustain, an independent supply chain management specialist. One of the outcomes of the assessment is an independent performance rating against all STP criteria. In order to focus on developing a new STP 2.0 program, the industry did not run collective assessments with AB Sustain in 2019 or 2020, and it is expected to resume them in the coming years. 100% of PMI sourcing countries had been audited on a 3-year cycle from 2016 to 2018 and, starting back the cycle in 2019. In 2020, due to a revision of the standard, PMI continued to assess conformity through annual self-assessments; our suppliers demonstrated high levels of engagement and all except one completed the questionnaires. In total, those covered 98 percent of our tobacco supply chain.
W3 Procedures	The STP process includes: • Annual self- assessments completed by tobacco suppliers (reviewed by AB Sustain); • On-site audits conducted by AB Sustain to a sample of contracted farmers; and • Comprehensive review of tobacco suppliers' policies, procedures, and documentation; and monitoring and proof demonstrating the level of STP/GAP implementation.	Other, please specify (Sustainable Tobacco Production verification by AB Sustain)	GAP has been in place since 2002, and since 2016 we have been assessing conformity of tobacco suppliers and farmers with our GAP standards through the industry-wide Sustainable Tobacco Program (STP) managed by AB Sustain, an independent supply chain management specialist. One of the outcomes of the assessment is an independent performance rating against all STP criteria. In order to focus on developing a new STP 2.0 program, the industry did not run collective assessments with AB Sustain in 2019 or 2020, and it is expected to resume them in the coming years. 100% of PMI sourcing countries had been audited on a 3-year cycle from 2016 to 2018 and, starting back the cycle in 2019. In 2020, due to a revision of the standard, PMI continued to assess conformity through annual self-assessments; our suppliers demonstrated high levels of engagement and all except one completed the questionnaires. In total, those covered 98 percent of our tobacco supply chain.
W4 Risks and opportunities	The STP process includes: • Annual self- assessments completed by tobacco suppliers (reviewed by AB Sustain); • On-site audits conducted by AB Sustain to a sample of contracted farmers; and • Comprehensive review of tobacco suppliers' policies, procedures, and documentation; and monitoring and proof demonstrating the level of STP/GAP implementation.	Other, please specify (Sustainable Tobacco Production verification by AB Sustain)	GAP has been in place since 2002, and since 2016 we have been assessing conformity of tobacco suppliers and farmers with our GAP standards through the industry-wide Sustainable Tobacco Program (STP) managed by AB Sustain, an independent supply chain management specialist. One of the outcomes of the assessment is an independent performance rating against all STP criteria. In order to focus on developing a new STP 2.0 program, the industry did not run collective assessments with AB Sustain in 2019 or 2020, and it is expected to resume them in the coming years. 100% of PMI sourcing countries had been audited on a 3-year cycle from 2016 to 2018 and, starting back the cycle in 2019. In 2020, due to a revision of the standard, PMI continued to assess conformity through annual self-assessments; our suppliers demonstrated high levels of engagement and all except one completed the questionnaires. In total, those covered 98 percent of our tobacco supply chain.
W7 Strategy	The STP process includes: • Annual self- assessments completed by tobacco suppliers (reviewed by AB Sustain); • On-site audits conducted by AB Sustain to a sample of contracted farmers; and • Comprehensive review of tobacco suppliers' policies, procedures, and documentation; and monitoring and proof demonstrating the level of STP/GAP implementation.	Other, please specify (Sustainable Tobacco Production verification by AB Sustain)	GAP has been in place since 2002, and since 2016 we have been assessing conformity of tobacco suppliers and farmers with our GAP standards through the industry-wide Sustainable Tobacco Program (STP) managed by AB Sustain, an independent supply chain management specialist. One of the outcomes of the assessment is an independent performance rating against all STP criteria. In order to focus on developing a new STP 2.0 program, the industry did not run collective assessments with AB Sustain in 2019 or 2020, and it is expected to resume them in the coming years. 100% of PMI sourcing countries had been audited on a 3-year cycle from 2016 to 2018 and, starting back the cycle in 2019. In 2020, due to a revision of the standard, PMI continued to assess conformity through annual self-assessments; our suppliers demonstrated high levels of engagement and all except one completed the questionnaires. In total, those covered 98 percent of our tobacco supply chain.
W8 Targets	The STP process includes: Annual self- assessments completed by tobacco suppliers (reviewed by AB Sustain); On-site audits conducted by AB Sustain to a sample of contracted farmers; and Comprehensive review of tobacco suppliers' policies, procedures, and documentation; and monitoring and proof demonstrating the level of STP/GAP implementation.	Other, please specify (Sustainable Tobacco Production verification by AB Sustain)	GAP has been in place since 2002, and since 2016 we have been assessing conformity of tobacco suppliers and farmers with our GAP standards through the industry-wide Sustainable Tobacco Program (STP) managed by AB Sustain, an independent supply chain management specialist. One of the outcomes of the assessment is an independent performance rating against all STP criteria. In order to focus on developing a new STP 2.0 program, the industry did not run collective assessments with AB Sustain in 2019 or 2020, and it is expected to resume them in the coming years. 100% of PMI sourcing countries had been audited on a 3-year cycle from 2016 to 2018 and, starting back the cycle in 2019. In 2020, due to a revision of the standard, PMI continued to assess conformity through annual self-assessments; our suppliers demonstrated high levels of engagement and all except one completed the questionnaires. In total, those covered 98 percent of our tobacco supply chain.
W1 Current state	Water consumption volumes from manufacturing facilities, including water in and water out.	Other, please specify (ISO 14064-3)	In the frame of the Green House Gas verification, carried out by SGS, we also verified our manufacturing centers water volumes data, both in and out, and this is clearly described in the verification statement issued by SGS.
W8 Targets	Water consumption volumes from manufacturing facilities, including water in and water out.	Other, please specify (ISO 14064-3)	In the frame of the Green House Gas verification, carried out by SGS, we also verified our manufacturing centers water volumes data, both in and out, and this is clearly described in the verification statement issued by SGS.
W8 Targets	Manufacturing facilities AWS certification.	Alliance for Water Stewardship certification	We have become a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate, and eleven factories have been already certified against the AWS Standard by the end of 2020. We have committed to certify all our factories by 2025.

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	Chief Executive Officer (CEO)	Chief Executive Officer (CEO)

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)]. Yes

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