Philip Morris International - Water 2018

W0. Introduction

W0.1

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

Who we are:
Philip Morris International Inc. (PMI) is a leading international tobacco company with a diverse workforce of approximately 80,600 people across the globe as of December 31, 2017.
In 2017, our products were sold in over 180 markets, and we operated 46 production facilities globally.
Headquartered in New-York, US; PMI has its Operations Center in Lausanne, Switzerland.
What we do:
PMI manufactures and sells cigarettes and other nicotine-containing products in markets outside of the United States of America. Our portfolio comprises both international and local brands and is led by Marlboro, the world's best-selling international cigarette. In 2017, PMI net revenues amounted to USD 78.1 billion including excise taxes on products worth USD 49.4 billion. 2017 net revenues less excise tax amounted to 28.8 billion USD. 2017 Operating Income was USD 11.5 billion. PMI's 2017 total shipment volume for cigarette and heated tobacco units was 798.2 billion (761.9 billion cigarettes and 36.2 billion heated tobacco units).
Our vision:
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.
Our strategy:
To this end our core strategies are:
· Smoke-Free: Develop, market, and sell smoke-free alternatives, and switch our adult smokers to these alternatives, as quickly as possible around the world
· Transition: Transition our resources from cigarettes to smoke-free alternatives
· Regulation: Propose regulatory policies that encourage the replacement of cigarettes by smoke-free alternatives
· Sustainability: Drive world-class sustainability programs across our entire value chain
· Talent: Be the employer of choice for our global workforce and work tirelessly to attract the best talent
· Transparency: Share our progress, and invite dialogue and independent verification

· Growth: Provide superior returns for our shareholders

Sustainability:

For PMI, sustainability means creating long-term value while minimizing the negative externalities associated with our products, operations and value chain. From the more than 350,000 farmers from which we source tobacco right up to the approximately 150 million consumers of PMI products, we have an important impact on the communities and the environment around us, which we are committed to address. We cannot achieve this alone. The engagement beyond our own operations is key, as this is where the most significant impacts take place. While operating in a highly regulated environment, we strive to go beyond mere compliance to achieve a sustainable smoke-free future.

Our business has a significant, global supply chain organized by five main categories. We have a large agricultural supply chain, ranging from tobacco growers to producers of other agricultural products, such as clove, menthol and guar gum. Another part of the supply chain consists of manufacturers of direct materials used to produce cigarettes and other tobacco products, such as acetate tow (for cigarette filters) and paper (both cigarette paper and packaging materials). Key to our business are also the manufacturers of machines for our cigarette and heated tobacco products factories, a highly specialized industry. A recently added part of our supply chain consists of the manufacturers of electronic devices for heated tobacco products and e-cigarettes. Finally, we work with thousands of suppliers of goods and services that are not specific to the tobacco 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.

PMI supported the call for a price on carbon in the Paris Climate Agreement. Our targets, recognized by the Science-Based Targets initiative in 2017, demonstrate how PMI can contribute to keeping global warming below 2°C based on pre-industrial levels. We have set our performance baseline as 2010. Against that baseline, we aim to reduce absolute CO2e emissions from our own operations by 30% by 2020, 40% by 2030 and 60% by 2040. We are well on track in 2017, achieving an overall reduction of 31% for our GHG scopes 1 and 2 emissions, driven by the use of greener electricity, exceeding our 2020 target. Across our value chain, we aim to reduce absolute CO2e emissions by 40% by 2030. In 2017, we achieved a 30% reduction across scopes 1, 2 and 3, driven by gains in curing efficiency and use of greener fuels in tobacco agriculture. We also have a long-standing commitment to reduce the emissions intensity of our value chain (measured in CO2e per million cigarettes equivalent) by 30% by 2020. In 2017, we're on track to meet this target, reaching 24% reduction vs 2010.

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

(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 2017	December 31 2017

W0.3

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

Argentina
Brazil
Canada
Colombia
Costa Rica
Czechia
Dominican Republic
Ecuador
Germany
Greece
Indonesia
Italy
Jordan
Kazakhstan
Lithuania
Malaysia
Mexico
Netherlands
Pakistan
Philippines
Poland
Portugal
Republic of Korea

Romania
Russian Federation
Senegal
Serbia
South Africa
Switzerland
Turkey
Ukraine
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

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Offices and some minor facilities.	We have excluded offices and minor activities/facilities such as finished goods warehouses for which we have limited data and where we consider our water footprint and risks to be very small. These exclusions are not significant to this disclosure and we estimate that these sites represent less than 2% of our overall blue water usage based on a water footprint screening performed by external consultant, Quantis. In addition, none of these locations are in high water risk locations according to the WRI Aqueduct Tool.

W1. Current state

W1.1

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

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Important	According to a study we conducted in 2017, our agricultural supply chain, our supply chain and our manufacturing represent respectively 53%, 41% and 6% of our water footprint, highlighting the importance of direct and indirect quality freshwater for our business. Indirect: PMI's most crucial suppliers in terms of water risks are tobacco, paper and cellulose acetate based material suppliers. More than half of tobacco crops are rainfed, rest require water to grow. By collaborating with our suppliers to promote GAP and RSP, we aim to reduce our dependency in freshwater consumption. Direct:At our manufacturing sites, high quality freshwater is required for WASH services, landscaping, and for manufacturing processes. The increased production of smoke-free products, with higher water intensity, will increase our direct freshwater consumption. With process maturity and implementation of water recycling initiatives, we expect water consumption to decrease.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Direct: At our manufacturing sites, water is recycled in our waste water treatment plants and used for watering gardens and for some processes where technically possible. Indirect: tobacco and other direct material suppliers like paper or cellulose acetate use every opportunity to treat and use recycled or brackish water. 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 a trend among our suppliers and we expect it to increase. The process to manufacture our smoke-free products requires approximately four times more water per unit of product than conventional cigarettes. 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-FB1.1a

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

Agricultural commodities	% of revenue dependent on these agricultural commodities	Produced and/or sourced	Please explain
Tobacco	More than 80%	Sourced	We purchase tobacco leaf of various types, grades and styles throughout the world. Approximately 90% of our purchases come from more than 350,000 farmers directly contracted either by us or by our third-party leaf suppliers in 28 countries. In 2017, we contracted farmers directly in several countries, including Argentina, Brazil, Colombia, Ecuador, Italy, Kazakhstan, Pakistan, the Philippines and Poland. Some of our main tobacco sourcing countries are Argentina, Brazil, China, India, Indonesia (mostly for domestic use in kretek products), Malawi, Mozambique, Philippines, Turkey and the United States. In 2017, we conducted water baseline studies for 60 different geographical areas where specific types of tobacco are grown. More than half of tobacco crops are rainfed and thus do not require irrigation.
Other, please specify (Other timber based direct materials)	More than 80%	Sourced	In addition to tobacco leaf, we purchase a wide variety of direct materials from approximately 450 suppliers. In 2017, approximately 50% of our total direct materials were purchased from our top ten suppliers. The three most significant timber based direct materials that we purchase are board and paper materials used mostly in packaging, acetate tow used in filter making, and fine paper used in the manufacturing of cigarettes and heat sticks. In 2017, we conducted water baseline studies in 60 different geographical areas where more than 90% of the tobacco we purchase is grown . A water risk assessment system has been developed, including a global and tailored local risk assessment methodology and guideline. The local risk assessment was piloted in 3 countries in 2017, We will be expanding our water programs by assessing current and future water-related risks more broadly across our value chain.

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 normal facility management for our sites. 91% of our factories are assessed against ISO14001 requirements, helpng our sites to demonstrate compliance with current and future statutory and regulatory requirementsassociated with water withdrawals. Monthly water data from all sites is entered into our EHS data management system, checked quarterly and verified by third party annually.

	% of sites/facilities/operations	Please explain
Water withdrawals – volumes from water stressed areas	100%	100% of our operational (i.e. factory) sites are monitored for this water aspect and this is considered part of normal facility management for our sites. 91% of our factories are assessed against ISO14001 requirements, helping our sites to demonstrate compliance with current and future statutory and regulatory requirements associated with water withdrawals. Monthly water data from all sites is entered into our EHS data management system, checked quarterly and verified by third party annually. Our water stressed factories have been identified as a result of the water footprint study done in 2017 and in the past through a water screening based on the WRI Aqueduct tool.
Water withdrawals – volumes by source	100%	100% of our operational (i.e. factory) sites are monitored for this water aspect and this is considered part of normal facility management for our sites. 91% of our factories are assessed against ISO14001 requirements, helping our sites to demonstrate compliance with current and future statutory and regulatory requirements associated with water withdrawals. Monthly water data from all sites is entered into our EHS data management system, checked quarterly and verified by third party annually
Produced water associated with your metals & mining sector activities - total volumes	<Field Hidden>	<Field Hidden>
Produced water associated with your oil & gas sector activities - total volumes	<Field Hidden>	<Field Hidden>
Water withdrawals quality	26-50	Underground water and municipal water are monitored closely (up to 3 times a month) in respectively 26% of our sites and in our new reduced-risk product (RRP) factories. We collect up to 30 parameters like biochemical oxygen demand (BOD), chemical oxygen demand (COD), salinity, temperature, and chlorine. The rest of the factories receive annual certifications from the relevant authorities on water quality. As part of our new water strategy plan, we will progressively extend on-site water measurements for all our sites.
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 normal facility management for our sites. 91% of our factories are assessed against ISO14001 requirements, helping our sites to demonstrate compliance with current and future statutory and regulatory requirements associated with water discharges. . Monthly water data from all sites is entered into our EHS data management system, checked quarterly and verified by third party annually.
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 normal facility management for our sites. 91% of our factories are

	% of sites/facilities/operations	Please explain
		assessed against ISO14001 requirements, helping our sites to demonstrate compliance with current and future statutory and regulatory requirements associated with water discharges. Monthly water data from all sites is entered into our EHS data management system, checked quarterly and verified by third party annually
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 normal facility management for our sites. 91% of our factories are assessed against ISO14001 requirements, helping our sites to demonstrate compliance with current and future statutory and regulatory requirements associated with water discharges. Monthly water data from all sites is entered into our EHS data management system, checked quarterly and verified by third party annually
Water discharge quality – by standard effluent parameters	100%	100% of our operational (i.e. factory) sites are monitored for this water aspect and this is considered part of normal facility management for our sites. 91% of our factories are assessed against ISO14001 requirements, helping our sites to demonstrate compliance with current and future statutory and regulatory requirements associated with water discharges. Monthly water data from all sites is entered into our EHS data management system, checked quarterly and verified by third party annually. Some parameters such as biochemical oxygen demand (BOD), chemical oxygen demand (COD), salinity, conductivity, pH, temperature and chlorides are controlled according to local regulatory limits. As part of our water strategy, we will progressively increase the number of parameters controlled and on-line measurements at all of our sites.
Water discharge quality – temperature	26-50	41% of our operational (i.e. factory) sites are monitored for this water aspect and correspond to those discharging into surface or underground water and this is considered part of normal facility management for our sites. 91% of our factories are assessed against ISO14001 requirements, helping our sites to demonstrate compliance with current and future statutory and regulatory regulations associated with water discharges. Monthly water data is input from all sites globally. We monitor all our sites with water treatment and especially those discharging into underground or surface water. Some parameters are biochemical oxygen demand (BOD), chemical oxygen demand (COD), salinity, conductivity, temperature, and bacterial activity. As part of our water strategy plan, we will progressively increase number of parameters controlled and on-line measurements to all our sites.
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 normal facility management for our sites. 91% of our factories are assessed against ISO14001 requirements, helping our sites to demonstrate compliance with current and future statutory and regulatory requirements associated with water consumption. Monthly water data from all sites is entered into our EHS data management

	% of sites/facilities/operations	Please explain
		system, checked quarterly and verified by third party annually. We monitor water parameters in all our sites with water treatment plants and especially those discharging into underground or surface water. Some parameters are biochemical oxygen demand (BOD), chemical oxygen demand (COD), salinity, conductivity, temperature, and bacterial activity. As part of our water strategy plan, we will progressively increase number of parameters controlled and on-line measurements to all our sites.
Water recycled/reused	100%	100% of our operational (i.e. factory) sites are monitored for this water aspect and this is considered part of normal facility management for our sites. 91% of our factories are assessed against ISO14001 requirements, helping our sites to demonstrate compliance with current and future statutory and regulatory requirements associated with water recycle/reuse Monthly water data from all sites is entered into our EHS data management system, checked quarterly and verified by 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	76-99	100% of our operational (i.e. factory) sites are monitored for this water aspect and this is considered part of normal facility management for our sites and is validated through ISO14001 and OHSAS18001 (health and safety management) certification in 91% of the sites. We use a global reporting requirement for water data with a central data collection system for all sites. Audits and inspections are undertaken to check minimum requirements set by our documented standards.

W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	4152.3	Higher	All water metrics are collected through our EHS data management system for all sites globally. This data is input monthly from factory meters, reviewed and compared to invoices. Data is then checked quarterly by global EHS and annually by a third party. In 2017, total withdrawals increased by 22.4% vs. 2016 with 3,394 megaliters. Most of the increase was due to the inclusion of a new reduced risk product (RRP) factory in our operational scope for the first time. If we adjust the 2016 baseline to

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
			account for the RRP impact, our total withdrawals in 2017 would have been reduced by almost 1% vs 2016. Besides, the process to manufacture our new smoke-free and reduced risk products (RRP) requires approximately 4 times more water per unit of product than for conventional cigarettes. In 2017, PMI implemented some initiatives to reduce water use and increase water recovery; however, due to our new manufacturing process, our average water consumption increased from our lowest level of 4.0m3 in 2016 to 4.8m³ of water for every million units of product equivalent (cigarettes and heat sticks). At present, we have only one facility producing these products; however, we expect the demand and production to grow over time, which will proportionally increase our water footprint. In 2017, PMI performed a water footprint study which reviews the overall amount of water consumed (water withdrawal minus water released) and adjusted it for water scarcity (water consumed multiplied by a regional or watershed based water stress indicator). This study will allow us prioritize efforts based on water stress levels. To mitigate these future impacts, our efforts are geared towards improving water efficiency throughout the process by implementing new process designs, reusing, recycling water, and using rainwater harvesting Therefore we expect short term increases of water withdrawn and medium term decreases once RRP manufacturing process matures & our recycling strategy is implemented
Total discharges	2479.6	Higher	All water metrics are collected through our EHS data management system for all sites globally. This data is input monthly, checked quarterly and annually. In 2017, our total discharges increased by 30% from 1,900 megaliters in 2016. Most of the increase was due to a new reduced risk product (RRP) factory included in our operational scope for the first time. If we adjust the 2016 baseline to account for the RRP impact, our total discharges in 2017 would have been reduced by almost 2% vs 2016. The process to manufacture our new smoke-free and reduced risk products (RRP) requires approximately 4 times more water per unit of product than for conventional cigarettes. In 2017, PMI implemented some initiatives to reduce water use and increase water recovery; however, due to our new manufacturing process, our average water consumption increased from our lowest level of 4.0m3 in 2016 to 4.8m³ of water for every million units of product equivalent (cigarettes and heat sticks). At present, we have only one facility producing these products, however, we expect the demand and production to grow over time which will proportionally increase our water footprint. In 2017, PMI updated the water footprint study that was conducted in 2015 which reviews the overall amount of water consumed (water withdrawal minus water released) in relative to how it affects water scarcity (water consumed multiplied by a regional or watershed based water stress indicator). This study will allow us prioritize efforts based on water stress levels. To mitigate these future impacts, our efforts are geared towards improving water efficiency throughout the process by implementing new process designs, reusing or recycling water, and using rainwater harvesting.

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
			Therefore we expect short term increases of water discharges and medium term decrease once RRP manufacturing process matures & our recycling strategy is implemented
Total consumption	1672.7	Higher	All water metrics are collected through our EHS data management system for all sites globally. This data is input monthly and checked quarterly and annually. In 2017 our total consumption increased by 12% from 1,498.4 megaliters in 2016. Most of the increase was due to a new reduced risk product (RRP) factory included in our operational scope for the first time. If we adjust the 2016 baseline to account for the RRP impact, our total consumption in 2017 would have been almost flat (0.4%) vs 2016. The process to manufacture our new smoke-free and reduced risk products (RRP) requires approximately 4 times more water per unit of product than for conventional cigarette. In 2017, PMI implemented some initiatives to reduce water use and increase water recovery; however, due to our new manufacturing process, our average water consumption increased from our lowest level of 4.0m3 in 2016 to 4.8m³ of water for every million units of product equivalent (cigarettes and heat sticks). At present, we have only one facility producing these products, however, we expect the demand and production to grow over time which mayl proportionally increase our water footprint. In 2017, PMI updated the water footprint study that was conducted in 2015 which reviews the overall amount of water consumed (water withdrawal minus water released) in relative to how it affects water scarcity (water consumed multiplied by a regional or watershed based water stress indicator). This study will allow us prioritize efforts based on water stress levels. To mitigate these future impacts, our efforts are geared towards improving water efficiency throughout the process by implementing new process designs, reusing or recycling water, and using rainwater harvesting. Therefore we expect short term increases of water consumptio and medium term decrease once RRP manufacturing process matures & our recycling strategy is implemented.

W1.2d

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

	% withdrawn from stressed areas	Comparison with previous reporting year	Identification tool	Please explain
Row 1	24	Lower	WRI Aqueduct	Using the WRI Aqueduct tool results, we were able to detect those sites with moderate to severe drought risk. Then we calculated the total amount of water withdrawn from those factories vs total

	% withdrawn from stressed areas	Comparison with previous reporting year	Identification tool	Please explain
				withdraws. Based on this study, 24% of our direct factory water withdrawals are from water stressed areas, which is lower than in 2016 where 28% was withdrawn from water stressed areas. We perform this study annually to make sure that our focus on water stressed factories remain relevant. Water withdrawals decrease is in line with programs to reduce water-use in water stressed areas. 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 water stressed areas?

Agricultural commodities	The proportion of this commodity produced in water stressed basins is known	The proportion of this commodity sourced from water stressed basins is known	Please explain
Tobacco	Not applicable	Yes	We do not produce agricultural commodities; we source them as raw materials to manufacture our products. In 2017, PMI conducted a water footprint study showing that 53% is due to our agricultural supply chain, 41% to our supply chain, and 6% to our manufacturing processes. In 2017, water baseline studies were conducted in 60 different tobacco growing areas, representing 90% of our tobacco leaf purchases. A water risk assessment system was developed using data from: our 2016 leaf water footprint study, baseline database of 106 growing areas, global and tailored local risk assessment methodologies and guidelines that allowed to understand which areas were water stressed. Brazil, Malawi and U.S., important tobacco-sourcing countries, were selected to pilot and validate the methodology. Studies will continue through 2020 to further understand local risks including water stress risk and build best practices.
Other commodities from W-FB1.1a, please specify	Not applicable	Yes	We do not produce agricultural commodities;we source tthem as raw materials to manufacture our products. In 2017, PMI conducted a water footprint study showing that 53%

Agricultural commodities	The proportion of this commodity produced in water stressed basins is known	The proportion of this commodity sourced from water stressed basins is known	Please explain
(Timber based direct materials)			is due to our agricultural supply chain, 41% to our supply chain, and 6% to our manufacturing processes. We're expanding our water programs by assessing current and future water-related risks more broadly across our value chain. Using as a base the water footprint study, we calculated the amount of direct timber based materials (papers, boards, acetate tow...) measured in weight and sourced from water stressed areas in 2017. In the next years, we plan to engage in one to one conversations with some key suppliers to get specific factory data (primary water consumption data, factory locations...), run WRI tool on water stressed locations and collaborate with our suppliers reduce water stress risks.

W-FB1.2g

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

Agricultural commodities	% of total agricultural commodity sourced in water stressed areas	Please explain
Tobacco	1	In 2017, water baseline studies were conducted in 60 different geographical areas where different tobacco types are grown, representing 90% of our tobacco leaf purchases. A water risk assessment system has been developed, including a global and tailored local risk assessment methodology and guideline. We confirmed that more than half of the tobacco we source is rainfed, the rest requires irrigation. We're expanding our water programs by assessing current and future water-related risks more broadly across our value chain. As we transition to a smoke-free future, the production of smoke-free products will require less tobacco compared to cigarettes. We are supporting our farmers and suppliers to diversify their crop through a multistakeholder approach involving suppliers, NGOs, and other companies active in the agricultural sector. In order to calculate the tobacco sourced from

Agricultural commodities	% of total agricultural commodity sourced in water stressed areas	Please explain
		stressed areas, we used the WRI Aqueduct tool to calculate the tobacco volume grown in areas with high risk of water stress (with an overall physical water risk above 3), and concluding that 1% of the tobacco volume sourced in 2017 was grown in water stressed areas. It is the first time that we have calculated this figure and we plan to improve its measurement by including more primary data from direct material suppliers. In addition, we are looking to reduce the water stress in our footprint by actively collaborating with our suppliers on water efficiency in stressed areas.
Other sourced commodities from W-FB1.2e, please specify (Timber based direct materials)	3	In 2017-2018, a water footprint was developed using the AWARE methodology by WULCA (The WULCA working group's overall goal focuses on providing practitioners, from both industry and academia, with a consistent framework to assess, compare and disclose the environmental performance of products and operations regarding freshwater use). This water footprint provided information on freshwater withdrawals, consumption and water stressed footprints along with different water pollution indicators that will allow us to prioritize programs with our suppliers. Using this water footprint study, we understood that 3% of the timber based direct materials (papers, boards, acetate tow...) measured in weight and sourced in 2017 are from water stressed areas. It is the first time we have calculated this figure and we plan to improve its measurement by including more primary data from suppliers. In addition, we are looking to reduce the water stress in our footprint by actively collaborating with our suppliers on water efficiency projects in stressed areas.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	12.3	Higher	Although globally fresh surface water is not too relevant in terms of volumes (less than 1% of our total water withdrawals), locally we consider it relevant since whenever is possible we use it to reduce water sourced from Municipal waters. In 2017, fresh surface water withdrawals increased by 9.7 megaliters from 2.6 megaliters in 2016. The main cause for this increase in

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
				2017 is a new project to switch some of our operations in Switzerland to use more fresh surface water and a rain harvest project in Indonesia for domestic use which increased our freshwater sourced from previous years. In particular, in Switzerland, we switched some of our operations to use more fresh surface water. The benefit is that instead of using drinkable water for the steam system, we use lake-water. We expect this source to increase slightly over time as we implement more water harvesting and water pump wherever feasible locally.
Brackish surface water/seawater	Not relevant	<Field Hidden>	<Field Hidden>	We do not currently use either brackish surface water or seawater. In all cases, we require higher quality water which can be used onsite. This is because we use the majority of our water for WASH facilities, landscaping, and the manufacturing process itself. Currently, a third of our factories are reusing treated wastewater, such as in Senegal where treated domestic wastewater is used in toilets. We plan to increase these initiatives in years to come as we continue to innovate and increase quality of treated wastewater so it can be reused and take demand off of other sources such as brackish surface water/ seawater.
Groundwater – renewable	Relevant	1543	About the same	Since water quality is relatively important to our operations, inlet water is currently supplied from two main sources: urban network (63%) of municipalities or private suppliers; and groundwater renewable sources (37%) from wells and aquifers, which are metered and verified annually by external auditors. In 2017, 1,543 megaliters were withdrawn from groundwater sources compared to the 1,495 in 2016. In the next years should remain about the same or decrease in line with programs to reduce water-use.
Groundwater – non-renewable	Not relevant	<Field Hidden>	<Field Hidden>	We do not currently use non-renewable groundwater. We currently receive 37% of our water from renewable groundwater from wells and aquifers, which are metered and verified annually by external auditors. Since we are looking to reduce our water stress, it is unlikely that we will locate any future manufacturing facilities in places that require non-renewable groundwater. Currently, a third of our factories are reusing treated wastewater, such as in Senegal where treated domestic wastewater is used in toilets. We plan to increase these initiatives in years to come as we continue to innovate and

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
				increase quality of treated wastewater so it can be reused and take demand off of other sources such as non-renewable groundwater.
Produced water	Not relevant	<Field Hidden>	<Field Hidden>	We do not currently use produced or process water. In all cases, we require higher quality water which can be used onsite. This is because we use the majority of our water for WASH facilities, landscaping, and the manufacturing process itself. Currently, a third of our factories are reusing treated wastewater, such as in Senegal where treated domestic wastewater is used in toilets. We plan to increase these initiatives in years to come as we continue to innovate and increase quality of treated wastewater so it can be reused and take demand off of other sources such as produced water.
Third party sources	Relevant	2597	Higher	We are dependent on having sufficient amounts of high quality freshwater. Water required for production in our factories, is currently sourced from urban network (67%) of municipalities or private suppliers (third party sources) and groundwater wells (33%) from wells and aquifers, which are metered and verified annually by external auditors. In 2017, 2,597 megaliters were sourced from third party sources, 37% more than the 1,896 megaliters in 2016. The increase is due to our new RRP factory included for the first time in our scope. Besides due to our new RRP manufacturing process, our average water consumption increased from 4.0m3 in 2016 to 4.8m³ in 2017 of water for every million units of cigarette equivalent. The expansion of RRP production may increase the withdrawn volumes in the future. We are therefore incorporating new designs, reusing or recycling water with a view 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	557.9	About the same	PMI's discharges approximately 23% of its wastewater into surface water disposal. Wastewater is equally treated in public and on-site water treatment plants, and then discharged into surface water. In 2017 557.9 megaliters were discharged into surface destination, representing a 3% increase vs. 542 megaliters in 2016. This figure may increase slightly if we install in more heat pumps at our factories which could use lake water as sources of withdrawal and discharge as we did in Switzerland. Besides, the expansion of RRP production, which requires more water than conventional, to other sites, may increase the discharged volumes in the future. We are therefore incorporating new designs, reusing or recycling water to limit the increase in discharge volume.
Brackish surface water/seawater	Not relevant	<Field Hidden>	<Field Hidden>	We do not currently discharge to either brackish surface water or seawater. This is in part because we are not located near the ocean and thus are not discharging to these sources. To validate our numbers, PMI's sites are audited annually by SGS and to date, none of these sites have reported discharges to brackish surface water or seawater. We feel confident in the responses since to validate the site level data, SGS conducts a comprehensive annual corporate audit and visits five factories around the world as part of the onsite verification. This year, SGS traveled to Brazil and Italy. Based on the desktop review and site visits, they have not found brackish surface water or seawater discharges. At this point, we do not foresee any change to this water destination.
Groundwater	Relevant	243.3	About the same	PMI's overall wastewater discharge to ground water destination is 10%. Wastewater is equally treated between public and onsite wastewater treatment plants In 2017, groundwater discharges increased by 1% from the 241 megaliters in 2016. The expansion of reduced risk product (RRP) production, which discharge more water than conventional, to other sites, may increase the discharged volumes in the future. We are therefore incorporating new designs, reusing or recycling water to limit the increase in groundwater discharge.
Third-party destinations	Relevant	1677.5	Higher	PMI's overall wastewater discharge destination is 68% to public sewage network or municipal wastewater treatment plant and 33% to surface water/underground disposal. In 2017, third-party discharges increased by 50% from 1,117 megaliters in 2016 due mainly to y the impact of our new reduced risk product (RRP) factory included in our operational scope for the first time. The expansion of RRP production, which discharge more water than conventional, to other sites may

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
				increase the discharged volumes in the future. We are therefore incorporating new designs, reusing or recycling water to limit the increase in discharge.

W1.2j

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

	% recycled and reused	Comparison with previous reporting year	Please explain
Row 1	2-10	Higher	We follow the Reduce, Reuse, Recycle concept in managing water at our manufacturing operations around the world. Our water recycle/reuse increased from 1% in 2016 to 3% in 2017 as PMI implemented initiatives to reduce water use and increase water recovery. Currently, a third of our factories are reusing treated wastewater, such as in Senegal where treated domestic wastewater is used in toilets. We plan to increase these initiatives in years to come as we continue to innovate and increase quality of treated wastewater so it can be reused. We are incorporating new designs, reusing or recycling water with a view to minimum water discharge. In some facilities PMI uses and measures water recycled mostly for utilities or for toilet water and % recycled water is calculated using CDP definition. Since most of the water is used only once in utilities and no further recycled and reused we don't have multiple loops or storage to consider.

W-FB1.3

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

Agricultural commodities	Water intensity information for this produced commodity is collected/calculated	Water intensity information for this sourced commodity is collected/calculated	Please explain
Tobacco	Not applicable	Yes	We do not produce tobacco, we source it as raw materials 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 (kg) sourced. This is the first year we measure this

Agricultural commodities	Water intensity information for this produced commodity is collected/calculated	Water intensity information for this sourced commodity is collected/calculated	Please explain
			index globally, and we expect this number to decrease over time as we implement our water stewardship strategy in our tobacco supply chain. Our current focus is to understand water related issues and build knowledge on water resources management. We want to set water efficiency, local context based targets by 2020 specific to water stressed areas.
Other commodities from W-FB1.1a, please specify (Timber based direct materials)	Not applicable	Yes	We do not produce agricultural commodities, we source them as raw materials to manufacture our products. We calculate our water intensity dividing the water used by our suppliers to produce these commodities using LCA, ecoinvent database and direct supplier information and dividing by total weight of direct materials purchased. These numbers are are preliminary data since it is the first time we have this KPI built globally, and we plan overtime to increase the primary data used to estimate water consumption. We expect that through collaborating with our suppliers we can reduce this number over time.

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

244

Numerator: Water aspect

Freshwater withdrawn

Denominator: Unit of production

Tons

Comparison with previous reporting year

This is our first year of measurement

Please explain

- Our numerator (units m3) includes freshwater withdrawn used to irrigate crops (rainfed water consumption excluded). Water withdrawn has been estimated excluding tobacco crops grown in rain fed areas, while considering crops produced with irrigation practices; measuring the water used during seedbed, transplanting, and field growing stages and considering the systems and technologies used (e.g.: surface/flooding/ overhead/sprinklers/guns/pivot/ drip irrigation, manual/cans/pipes), - Our denominator is Tons of green Tobacco sourced. Currently we are not using this intensity figure for direct engagement with tobacco farmers as part of GAP and we use figures as a baseline. In GAP we request tobacco suppliers and their farmers to maximize water use efficiency by implementing water conservation plans aimed at the rational use of water resources and incorporating locally defined best available irrigation practices. We are collecting water usage data to develop context based target

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Agricultural commodities
Other sourced commodities from W-FB1.3, please specify (Other direct materials)
Water intensity value
0.05
Numerator: Water aspect
Freshwater consumed
Denominator: Unit of production
Tons
Comparison with previous reporting year
This is our first year of measurement
Please explain
Our numerator includes freshwater consumed used in our non-agricultural supply chain related with timber based direct materials which require intensively the use of water (cardboard, shipping cases, acetate tow for filters, printshop materials) and excluding rainfed water consumption. This calculation has been done using LCA, ecoinvent database and direct supplier information. - Our denominator includes total weight of direct materials purchased. - It is the first time we have this KPI built globally, and we plan overtime to increase the primary data used to estimate water consumption. We believe that our active engagement with our suppliers will decrease this KPI and thus our water risk. We use this KPI along with other water scarcity and water risks indicators to prioritize water initiatives with our suppliers.

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

1-25

Rationale for this coverage

Our 2017 water footprint shows that 53% is due to our tobacco farming (irrigation, fertilizers, and pesticides usage) performed by the farmers supplying PMI, 41% to our supply chain, and 6% to our manufacturing. Most crucial suppliers to PMI in terms of climate and water risk are tobacco suppliers. Through our use of LCAs, water stress, and water footprints, we have identified our agricultural supply chain as currently having our largest potential environmental impact. We have therefore prioritized these areas to engage with leaf suppliers on water issues through the implementation of Good Agricultural Practices (GAP) which covers all of the 350,000 farmers across in 28 countries. GAP standards are contractual requirement to be met by all those who grow and supply tobacco to PMI. GAP water management practices guide, covering water scarcity, local impacts, water efficiency and wash. Suppliers Data reporting is a key element of their performance assessment and volume sourced (incentive)

Impact of the engagement and measures of success

Our GAP Implementation Guide lays out extensive agricultural environmental practices covering sustainable water management and soil management/conservation. To assess suppliers' conformity to GAP, the Sustainable Tobacco Program (STP) is used which includes an annual self-assessment and on-site reviews by AB Sustain, an independent company. As part of the on-site review, AB Sustain looks for metrics and performance on reducing water and GHG emissions, eliminating hazardous pesticides, using bio-pesticides, reforestation, soil and waste management. Based on the assessed scores and our measure of success is we expect our leaf suppliers to demonstrate continuous improvements. Results of these assessments are included in our supplier scorecards and used to make future sourcing decisions and allocate volumes to suppliers. Metrics used is % of farmers implementing best practices described in GAP; e.g. Water extraction rates not exceeding long-term recharge rates or water pollution plans.

Comment

In 2017, our Leaf Water Stewardship Strategy was deployed. A water risk assessment system has been developed, including a global risk assessment tool and a tailored local risk assessment methodology and guideline. Three important tobacco-sourcing countries – Brazil, Malawi and U.S. – were selected to pilot and validate the risk assessment methodology. This water risk assessment system helped us manage water resources and risks and to engage with farmers and communities in river basins.

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
Educate suppliers about water stewardship and collaboration
Provide training and support on sustainable agriculture practices to improve water stewardship

% of suppliers by number

51-75

% of total procurement spend

76-100

Rationale for the coverage of your engagement

Of our blue water footprint, 53 percent goes to our Leaf irrigation program, 41 percent is used in our supply chain, and only 6 percent is used in our manufacturing sites. PMI has a large number of suppliers, but those most crucial to our business in terms of water risk are tobacco suppliers/farmers and direct materials (paper, cardboard and filters) supply chain. In 2017, we started to roll out the Responsible Sourcing Principles (RSP), communicating directly with global partners covering 99% of our total spend on global vendors by Dec 2017. Besides, in 2018 we invited our key direct materials suppliers to participate in our CDP Supply Chain Water program. In the frame of our water footprint study conducted in 2017 we engaged with a major filter supplier who have a significant water footprint to review primary data and thus strengthen the accuracy of our water footprint.

Impact of the engagement and measures of success

In 2017, we started to roll out the Responsible Sourcing Principles (RSP), communicating directly with global partners covering 99% of our total spend on global vendors by Dec 2017. We also engaged with a number of suppliers to clarify questions related mainly to the implementation of these principles. We reach out to groups of suppliers to discuss

sustainability topics. For example, our Turkish affiliate organized a supplier sustainability day with the participation of the managing director and senior management. The coverage of the workshop represented over 60% of our direct and indirect procurement spent in the country. As part of the water footprint study, we engaged with a major filter supplier who have a significant water footprint to review primary data and thus strengthen the accuracy of our water footprint. Water usage efficiency on farms is measured through GAP assessments by third parties. Our suppliers are expected to demonstrate year on year improvement in GAP score.

Comment

W1.4c

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

We have engaged with several key account customers on sustainability topics to support their own reduction targets through the CDP supply chain program. We also regularly engage on sustainability topics with other key accounts and stakeholders by responding to supply chain surveys and providing presentations of our water practices. We prioritize our customer engagement based on the alignment between the customer's sustainability targets and PMI's sustainability targets and are continually looking for opportunities to collaborate and innovate. We measure our success through direct feedback from our customers where in some cases, sustainability topics form a part of our business relationship review, as well as, based on attainment of targets. Our measure of success is based on the increase interest from our key customers on getting more information from our environmental program and on how to participate to help further reduce our water footprint.

Every year most affiliates perform voluntary awareness and promotion campaigns programs in order to increase employees' active participation in environmental programs and to make carbon footprint reduction part of the company's culture. Awards and recognition for best practices form a core element of such campaigns. Examples of these campaigns include waste reduction tips as part of the annual eco-week in Turkey, involving employees and their families in tree planting activities in Argentina.

External consultants and third party verification companies: we have a broad number of partners that provide us with technical advice around water stewardship, help us in projects implementation phase and then tracking their progress. Companies like Quantis, SGS, South Pole, AB Sustain, ERM, BSR, Ecofys or The Carbon Trust among many others are critical to our success in reducing our environmental impact. As an example, our collaboration with Quantis in developing 2017 Land-Use Change report https://quantis-intl.com/lucguidance/

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

16

Total value of fines

52965

% of total facilities/operations associated

17

Number of fines compared to previous reporting year

About the same

Comment

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 value chain (6% of total water footprint), we are cognizant of water pollutants resulting from our process. Our wastewater is either treated on-site or sent to treatment facilities prior to discharge respecting local legal regulations and limits.

Pesticides, which are used to protect tobacco crops from pests and diseases, can contaminate aquatic systems by surface run-off and leaching. The contamination can be caused by inappropriate management of the pesticide and can have an impact on aquatic life or 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.
PMI implements GAP and GAP defines the principles and measurable standards to be met by all those who grow and supply tobacco to PMI.
Where the use of synthetic pesticides is necessary, the supplier must take into account environmental and human health risk where there is a choice of different 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 toxicity class I must not be used at all since crop 2018.
Supplier must have a list of recommended pesticides suitable for the local conditions, that cover the most common pests 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 semiochemicals.
Tobacco suppliers promote the use of low-toxicity and pest-targeted pesticides while avoiding preventative treatments, conducting training and other initiatives with their contracted farmer base.
In 2017, we also launched and trained our suppliers on our Responsible Sourcing Principles (RSP) and Implementation Guidelines, which established the foundation for a more comprehensive and systematic approach to addressing supply chain sustainability beyond our agricultural supply chain. The RSP applies to all our suppliers currently not included in the IMP and RSP includes guidelines on water wastewater pollution management.

W-FB3.1a

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

Potential water pollutant

Pesticides and other agrochemical products

Activity/value chain stage

Agriculture – supply chain

Description of water pollutant and potential impacts

Pesticides, which are used to protect tobacco crops from pests and diseases, can contaminate aquatic systems by surface run-off and leaching. 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. PMI requests its leaf suppliers to implement GAP and GAP defines the principles and measurable standards to be met by all those who grow and supply tobacco to PMI. Where the use of synthetic pesticides is necessary, the supplier must take into account environmental and human health risk where there is a choice of different 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 toxicity class I must not be used at all. Supplier must have a list of recommended pesticides suitable for the local conditions, that cover the most common pests and diseases. The list should include low toxicity and pest-specific products and can used 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 HHPs, PMI promotes the use of less hazardous alternative pesticides that include biopesticides such as botanicals, microbials, macrobials and semiochemicals. Note that in order to clasify a pesticide as HHP, we use FAO and WHO guidelines. Tobacco suppliers promote the use of low-toxicity and pest-targeted pesticides while avoiding preventative treatments implementing training and other initiatives with their contracted farmer base. Fertilizers are used to improve tobacco yield, however they can enter groundwater or watercourses, impacting aquatic ecosystems through eutrophication.

Management procedures

Soil conservation practices
Crop management practices
Sustainable irrigation and drainage management
Fertilizer management
Pesticide management
Substitution of pesticides for less toxic or environmentally hazardous alternatives
Follow regulation standards

Please explain

PMI has in place a global Integrated Pest Management (IPM) program to reduce the use of unnecessary pesticides, to promote the use of less hazardous alternatives and to manage them correctly. IPM plans have been implemented in all markets where PMI sources tobacco and PMI has a target to eliminate the use of WHO CPA (Crop Protection Agents)

Toxicity Class I by crop 2018 and to phase-out the use of other HHPs (Highly Hazardous Pesticides) as defined by FAO and WHO guidelines by crop 2020. Tools have been developed to support the implementation of the program in collaboration with the not-for-profit Centre for Agriculture and Bioscience International (CABI). An IPM Toolbox has been developed to support the implementation of IPM program in all origins PMI sources tobacco from; the Toolbox includes an IPM App and a website (www.tobaccoipm.com) with country-specific management sheets for tobacco pests and diseases and factsheets on IPM and CPA management which are frequently updated with newly developed contents. The IPM App has reached approximately 700 users, while the new IPM website has reached more than 6500 views in 2017. The PMI IPM program has establishes national training programs to build up knowledge and commitment among its field technicians and farmers with a train the trainer approach. To support these programs, a Training Guide on Integrated Pest Management in Tobacco was developed and is available as an ebook. In 2017 over 400 Field Technicians and 17000 farmers have been trained on CPA management. A database of global biopesticides and low hazardous pesticides alternatives have been made available to the farmers. A best practice guideline, based on an analysis of guidelines and regulations at international, regional, and national levels, for Personal Protection Equipment (PPE) to be adopted while utilizing CPAs has been produced and distributed. Through GAP PMI promotes the safe disposal or recycling of empty pesticide containers to prevent water contamination. Through GAP PMI promotes the responsible use of fertilizers. PMI encourages the implementation of soil analysis as a base for farmers to adjust fertilization to meet soil fertility and crop nutritional requirements. GAP principles promote the use of fertilizers whose source is known and with available certificates of analysis and that recommended application levels can be applied without negative impact on the environment. PMI promotes the development of water water protection plans.

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, however they can can enter groundwater or watercourses, impacting aquatic ecosystems through eutrophication.

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 GAP (Good Agricultural Practices) program, PMI promotes the responsible use of fertilizers. PMI encourages the implementation of soil analysis as a base for farmers to adjust fertilization to meet soil fertility and crop nutritional requirements. GAP principles promote the use of fertilizers whose source is known, with available certificates of analysis and recommended application levels that can be applied without negative impact on the environment. PMI promotes the development of water protection plans that include the implementation of buffer zones 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.

W3.3

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

Yes, water-related risks are assessed

W3.3a

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

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as a standalone issue

Frequency of assessment

Annually

How far into the future are risks considered?

>10 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
External consultants

Comment

In 2015, ERM conducted a comprehensive Climate change risk assessment (CCRA) for corporate and asset level physical risks and opportunities up to 2025-2030; Quantis developed water and risk footprints in 2017 and 2018 respectively. We used the WRI Aqueduct and IPCC Projections to update these annually. In 2017, we joined Alliance for Water Stewardship and certified our Brazil factory, to understand better local risks. We'll extend to 10 factories before 2020 and the rest 2030.

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?

>10 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
External consultants

Comment

External consultants, ERM and Quantis conducted climate change (CC) risk assessment for corporate and asset level physical risks & opportunities up to 2030 in 2015; water footprints in 2015 and 2018 respectively. We used WRI Aqueduct and IPCC CC Projections to update this annually. We’re 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; flood risk in warehouses and ports.

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?
>10 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
External consultants, ERM and Quantis conducted climate change (CC) risk assessment for corporate and asset level physical risks & opportunities up to 2030 in 2015; water footprints in 2015 and 2018 respectively. We used WRI Aqueduct and IPCC CC Projections to update this annually. We're 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 cities we manufacture in.

W3.3b

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

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	In comparison to other products, tobacco is not particularly water intensive. Water is used in our factories, in filter manufacturing, paper and packaging materials, for staff use and green spaces; and in agriculture, more than half tobacco grown is rain-fed and does not require irrigation. Although

	Relevance & inclusion	Please explain
		relative to other industries, our operations withdraw small volumes of water, water availability is important for our operations and our agricultural supply chain in growing tobacco. For our direct operations, we assess water risks through our company level risk assessment initiatives. External consultants, conducted climate change (CC) risk assessment for corporate & asset level physical risks & opportunities up to 2030 in 2015; water footprints in 2015 and 2018 respectively. This water footprint study showed that 53% comes from our agricultural supply chain, 41% to our supply chain, and 6% to our manufacturing processes. 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. We have committed to certify at least 10 facilities by 2020 and rest by 2030. We're 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 cities where we have manufacture. In 2017, water baseline studies were conducted in 60 different tobacco geographical areas, representing 90% of our tobacco leaf purchases. A water risk assessment system has been developed, including a global and tailored local risk assessment methodology and guideline. Baseline water stress was highlighted as high risk (29% high/extremely high) and availability of water compromised.
Water quality at a basin/catchment level	Relevant, always included	Assessed through company level risk assessment initiatives. We ensure high quality water in our products to protect our consumers and to meet strict Food and Drug Administration regulations. Water quality is also important to our supply chain to ensure high quality raw materials and protect workers' health and livelihoods by providing access to adequate safe Water, Sanitation and Hygiene services (WASH). Our direct operations are addressed as part of our ISO14001 and OHSAS18001 programs and minimum EHS requirements. For instance, tobacco slurry ingredient and final wash water for PMI operations worldwide, should be compliant with the EU Drinking Water directive. Water use is evenly divided between WASH facilities, landscaping, and manufacturing. External consultants, ERM and Quantis conducted climate change (CC) risk assessment for corporate & asset level physical risks & opportunities up to 2030 in 2015; 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 (AWS.) Our factory in Brazil was certified against the AWS Standard in March 2018. We commit to certifying at least 10 more by 2020 and all PMI operations by 2030. AWS standard addresses technical capacity to provide and treat water for both manufacturing and WASH. We're expanding our water programs by assessing current and future water-related risks more broadly across our value chain; such as water scarcity and quality in tobacco growing regions, flood risk in warehouse locations and ports, and water demand in cities where we manufacture. In 2017, water baseline studies were conducted in 60 different tobacco growing areas, 90% of our tobacco leaf purchases. The Malawi pilot helped

	Relevance & inclusion	Please explain
		highlight the lack of access to WASH with small holder farmers, which we have began supporting access to. We strive to ensure access to WASH in all our facilities.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Although relative to other industries, our operations withdraw small volumes of water, access to water and water rights are important to our operations and agricultural supply chain. This is factored into company level risk assessment initiatives. An external consultant conducted a water footprint and risk assessments in 2017. This water footprint study showed that 53% is due to our agricultural supply chain, 41% to our supply chain, and 6% to our manufacturing processes. We use the WRI Aqueduct and IPCC Climate Change Projections to update this periodically. We're expanding our water programs by assessing current and future water-related risks more broadly across our value chain. In 2017, water baseline studies were conducted in 60 different tobacco growing areas, representing 90% of our tobacco leaf purchases. A water risk assessment system was developed, including a global and tailored local risk assessment methodology and guideline. Brazil, Malawi and US, important tobacco-sourcing countries were selected to pilot and validate the methodology. The pilot in Malawi helped highlight the lack of access to adequate safe Water, Sanitation and Hygiene services (WASH). We strive to ensure access to WASH in all our facilities and increase availability on our contracted farms. In Malawi, we began supporting access to WASH services with our small holder farms. Continuous improvement of water management practices in our tobacco supply chain is also addressed through our Good Agricultural Practices program. We respect the vulnerability of water resources and the role of they play in the wider community. We became a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate. In March 2018, our Brazil factory was certified against the AWS Standard. We have committed to certify at least 10 more facilities by 2020 and all of our operations by 2030.
Implications of water on your key commodities/raw materials	Relevant, always included	This is factored into company level risk assessment initiatives through use of internal company understanding of supply and demand issues influenced by engagement activities with key suppliers, especially with tobacco leaf and clove suppliers. In 2017, water baseline studies were conducted in 60 different tobacco growing areas, representing 90% of our tobacco leaf purchases. A water risk assessment system has been developed, including a global and tailored local risk assessment methodology and guideline. We also continually review promising tobacco leaf and clove growing areas and assess if climate change elements could favor increased yield. Brazil, Malawi and US, important tobacco-sourcing countries were selected to pilot and validate the methodology. We discovered more than half of tobaccos grown to supply PMI are rainfed and the remaining require supplemental or full irrigation. As with other agricultural commodities, tobacco leaf and clove prices can be influenced by imbalances in supply and demand, and crop quality can be influenced by variations in weather patterns. Any significant change in tobacco leaf and clove prices, quality and quantity could affect our profitability and our business. We also engage with tobacco suppliers through our Good Agricultural Practices program; and with other suppliers through our Responsible Sourcing Principles (RSP) and Implementation Guidelines which were released in 2017. Additionally,

	Relevance & inclusion	Please explain
		an external consultant conducted water footprints and risk assessments in the last 2 years. They found out that 53% of our blue water footprint is due to our agricultural supply chain, 41% to our supply chain and 6% to our manufacturing. We use the WRI Aqueduct and IPCC Climate Change Projections to update this periodically. We're expanding our water programs by assessing current and future water-related risks more broadly across our value chain; such as water scarcity and quality in tobacco growing regions, flood risk, etc.
Water-related regulatory frameworks	Relevant, always included	This is factored into company level risk assessment initiatives through use of internal company knowledge of regulatory frameworks, water abstraction and discharge consents. Although relative to other industries, our operations withdraw small volumes of water, water-related regulatory frameworks are important for our operations and our agricultural supply chain in growing tobacco. We are subject to international, national and local environmental laws and regulations in the countries in which we do business. We have specific programs across our business units designed to meet and go beyond applicable environmental compliance requirements and 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 Systems and regulatory radar screen. For instance, our water footprint reduction strategy is of conservation, reuse/recycling and zero liquid discharge. We piloted a water footprint study in our Italy site to see if we can pursue water process conservation/reuse and update our corporate water specifications. However, worldwide water quality is regulated by several Water Quality Management Frameworks. Hence, we used the strictest guidelines, provided by the EU Drinking water maximum limits of the chemical substances (controlled by nearly all the regulatory frameworks), product and compliance teams in our water specifications for process water (slurry ingredient and final wash water). 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. We have committed to certify at least ten more facilities by 2020 and all of our operations worldwide by 2030 this will allow us to stay ahead of any water-regulatory frameworks dealing with water abstraction and discharge consents
Status of ecosystems and habitats	Relevant, always included	The status of ecosystems and habitats are important to water availability and quality, both of which are important to our operations and agricultural supply chain. This is factored into company level risk assessment initiatives. For our direct operations, we became a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate. Our Brazil factory was certified against the AWS Standard in March 2018. We have committed to certify at least 10 more facilities by 2020 and all of our operations worldwide by 2030. For our supply chain, through life-cycle and other assessments along our value chain we understand our main areas of impact and therefore where to set priorities. These areas include tobacco farming for carbon footprint reduction and water stewardship action and product end-of-use for action on litter and waste. Water baseline studies were conducted in 60 different tobacco growing areas in 2017, representing 90% of our

	Relevance & inclusion	Please explain
		tobacco leaf purchases. A water risk assessment system has been developed, including a global and tailored local risk assessment methodology and guideline. We're expanding our water programs by assessing current and future water-related risks more broadly across our value chain. For customers, we address these indirectly as litter from cigarette butts and packaging is an issue that comes under regular public scrutiny that also affects our brand reputation. Much of the litter washes into the waterways and causes problems during rain events. In many of our markets, such as the Philippines, Japan and Switzerland, PMI actively supports programs and campaigns for responsible litter disposal.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	This is factored into company level risk assessment initiatives. Lack of access to safe Water, Sanitation and Hygiene services (WASH) poses a risk to farmers' and workers' health and livelihoods. We strive to ensure WASH access in all our facilities and increase availability on our contracted farms. For our direct operations, this is addressed as part of our ISO14001 and OHSAS18001 programs and minimum EHS requirements. For our supply chain, through life-cycle and other assessments along our value chain we understand our main areas of impact and therefore where to set priorities. These areas include tobacco farming for carbon footprint reduction and water stewardship action and product end-of-use for action on litter and waste. Water baseline studies were conducted in 60 different tobacco growing areas in 2017, representing 90% of our tobacco leaf purchases. A water risk assessment system has been developed, including a global and tailored local risk assessment methodology and guideline. Brazil, Malawi and US, important tobacco-sourcing countries were selected to pilot and validate the methodology. The pilot in Malawi helped highlight the lack of access to WASH services in those farms. In Malawi, more than 30% of the rural population lacks access to basic WASH services. There are no indications that the situation of smallholder tobacco farmers and contracted workers would differ much from other rural households. Our first priority is to smallholder farms where PMI's active support in providing WASH services is most needed. We're expanding our water programs by assessing current and future water-related risks more broadly across our value chain.
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 water scarcity and water quality in tobacco growing regions including Malawi and Brazil, 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 for emerging research, run tools like WRI Aqueduct, solicit 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	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 of some of our customers. As such we include customers in our water risk assessments through: i) We are increasingly using life-cycle assessment (LCA) thinking to evaluate 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 product offering, Reduced-Risk Products (RRPs), 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. ii) Our consumer insights research helps us understand the potential market for eco product developments. iii) As part of local stakeholders in the Alliance for Water Stewardship (AWS) Standard which helps better manage water within the local watersheds. We joined the AWS in 2017 and by March 2018, our Brazil factory became the first factory in the country to be AWS certified. We plan to have the 10 factories which ranked highest in our previous risk assessment certified by 2020 and to extend to the rest of our operations until 2030.
Employees	Relevant, always included	Employees are essential in helping us achieve our water reduction and stewardship goals. Through our objective setting, Long-Range Planning process and via employee communications, sharing of tools, guidance and best practices. We gave senior management briefings to all operations employees on sustainability in 2017 and run specific focus days and campaigns. An example of awareness 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 EHS Managers, project teams and other employees who are responsible for water related initiatives and improvements. In 2010, we set a goal of reducing water consumption in our manufacturing facilities by 20% per unit of product by 2015, and we beat that target, achieving a 24% reduction. Our success led us to going beyond the factory based approach to managing water risk of focusing on compliance and water efficiency, and looking at the factory within its watershed in relation to its stakeholders. We joined the AWS in 2017 and by March 2018, our Brazil factory became the first factory in the country to be AWS certified. We plan to have the 10 factories which ranked highest in our previous risk assessment certified by 2020 and to extend to the rest of our operations until 2030. Water quality is also important to protect workers' health and livelihoods by providing access to adequate safe Water, Sanitation & Hygiene services (WASH). We strive to provide access to WASH to all our facilities and contracted farms.
Investors	Relevant, always included	We receive numerous requests annually for information on our sustainability programs as a whole and have opted to respond to the CDP Water Information Request to provide investors with more information and transparency around our water risk management for our direct operations and supply chain. We also communicate through our annual sustainability report and website. Our 2017 PMI Sustainability Report is available on our website. In 2017, we were recognized by the CDP for our leadership and were listed on the CDP A list for climate and water.

	Relevance & inclusion	Please explain
Local communities	Relevant, always included	We respect the vulnerability of water resources we use and the role of those resources in the wider community. We strive to use our water optimally, taking into account the surrounding water basin context and community demand. Our approach to working with communities is based on 3 principles - water preservation (management/pollution prevention), innovation (better irrigation/less water intensive seeds), and engagement (safe water, sanitation and hygiene (WASH). This is factored into company level risk assessment initiatives: i) Manufacturing operations, we joined the Alliance for Water Stewardship (AWS) in 2017 to better manage water within the local watersheds. By March 2018, our Brazil factory became the first factory in the country to be AWS certified. We plan to have the 10 factories which ranked highest in our previous risk assessment certified by 2020 and to extend to the rest of our operations until 2030. In addition, the AWS process of consulting local communities and stakeholders on water issues helps retain our social license to operate. ii) Agricultural supply chain, especially for tobacco-growing, under our Global Agricultural Practices (GAP), we expect our affiliates and suppliers to have a water management plan that takes into account the use and management of water for tobacco production to minimize adverse impacts to other users within water catchment areas, including local communities. The plans also cover access WASH for local communities, workers, and their families. Additionally, we conducted water baseline studies in 60 different tobacco growing areas in 2017. A water risk assessment system has been developed, including a global and tailored local risk assessment methodology and guideline. Brazil, Malawi and US, important tobacco-sourcing countries were selected to pilot and validate the methodology. The pilot in Malawi helped highlight the lack of access to WASH services in small holder farms and we began supporting their access to WASH.
NGOs	Relevant, always included	We believe a multi-stakeholder approach is key to addressing climate change and water security. We work with several NGOs on a global and local level. On a global level, we committed to the UN Global Compact in 2015 and published our Communication on Progress (CoP) in 2017, reporting comprehensively on our sustainability practices. In 2016, we used our first CoP as an engagement tool along with signing up to UNGC Local Networks around the world. We are also part 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 regarding our commitments on climate change adaptation and water, including our support for the Paris Agreement. In 2017, we joined the Alliance for Water Stewardship (AWS) to better manage water within the local watersheds. By March 2018, our Brazil factory became the first factory in the country to be AWS certified. We plan to have the 10 factories which ranked highest in our previous risk assessment certified by 2020; and to all operations by 2030. On a local level, we support local NGOs that help address water risks in our manufacturing and agricultural supply chain. For instance, in 2017 we worked with local suppliers and stakeholders, including NGOs such as Verite as part of our efforts to improve the living and working conditions of migrant workers in tobacco growing areas in Mexico. This includes providing access to safe water, sanitation and hygiene (WASH). We also help address water risks locally through our charitable partnerships to support disaster preparedness and relief efforts

	Relevance & inclusion	Please explain
Other water users at a basin/catchment level	Relevant, always included	We strive to use our water optimally, taking into account the surrounding water basin context and water demand. This is factored through our company level risk assessments. Our approach to working with communities is based on 3 principles - water preservation, innovation (better irrigation/less water intensive seeds), and engagement (safe water, sanitation and hygiene (WASH). Beyond just thinking about the community, we also considering other water users at the local level and working to retain our social license to operate. We interact with local stakeholders primarily through our: i) Manufacturing operations, we joined the Alliance for Water Stewardship (AWS) in 2017 to better manage water within the local watersheds. By March 2018, our Brazil factory became the first factory in the country to be AWS certified. We plan to have the 10 factories which ranked highest in our previous risk assessment certified by 2020 and to all operations by 2030. ii) Agricultural supply chain, especially for tobacco-growing, under our Global Agricultural Practices (GAP), we expect our affiliates and suppliers to have a water management 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 WASH for local communities, workers, and their families. Additionally, we conducted water baseline studies in 60 different tobacco growing areas in 2017. A water risk assessment system has been developed, including a global and tailored local risk assessment methodology and guideline. Brazil, Malawi and US, important tobacco-sourcing countries were selected to pilot and validate the methodology. The pilot in Malawi helped highlight the lack of access to WASH services in small holder farms and we began supporting their access to WASH. We strive to ensure access to WASH in all our facilities and contracted farms.
Regulators	Relevant, always included	Factored into company level risk assessment initiatives through use of internal company knowledge of regulatory frameworks, water abstraction and discharge consents. Although relative to other industries, our operations withdraw small volumes of water, water-related regulatory frameworks are important for our operations and our agricultural supply chain in growing tobacco. We have specific programs across our business units designed to meet and go beyond applicable environmental compliance requirements and 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 Systems and regulatory radar screen. For instance, our water footprint reduction strategy is of conservation, reuse/recycling and zero liquid discharge. We piloted a water footprint study in our Italy site to see if we can pursue water process conservation/reuse and update our corporate water specifications. However, worldwide water quality is regulated by several Water Quality Management Frameworks. Hence, we used the strictest guidelines, provided by the EU Drinking water maximum limits of the chemical substances, product and compliance teams in our water specifications for process water (slurry ingredient and final wash water). We have also become a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds where we operate. Our Brazil factory was certified against AWS Standard in March 2018 and we have committed to certify all of our operations worldwide by 2030. This will allow us to stay ahead of any water-regulatory frameworks dealing with water abstraction and discharge consents. In 2017, water baseline studies were conducted in 60 different tobacco geographical areas,

	Relevance & inclusion	Please explain
		representing 90% of our tobacco leaf purchases, which takes into account regulatory and river basin management authorities' requirements.
River basin management authorities	Relevant, always included	We work with river basin management authorities when appropriate. Annually all our factories are assessed 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 consider stakeholder needs, including those or river management authorities. Our factory in Brazil was certified against the AWS Standard in March 2018. We have committed to certify at least ten more facilities by 2020 and all of our operations worldwide by 2030 this will allow us to stay ahead of any water-regulatory frameworks dealing with water abstraction and discharge consents. As part of our Good Agricultural Practices, we require all tobacco growers that their annual water extraction must not exceed long-term recharge rates or the maximum extraction rate as defined by applicable regulations, whichever is stricter. In 2017, water baseline studies were conducted in 60 different tobacco geographical areas, representing 90% of our tobacco leaf purchases. A water risk assessment system has been developed, including a global and tailored local risk assessment methodology and guideline. Brazil, Malawi and US, important tobacco-sourcing countries were selected to pilot and validate the methodology, which includes takes into account regulatory and river basin management authorities' requirements.
Statutory special interest groups at a local level	Relevant, always included	We work with local special interest groups as appropriate. For example: i) Manufacturing operations: In 2017, we joined the Alliance for Water Stewardship (AWS). By March 2018, our Brazil factory became the first factory in the country to be certified by AWS. We plan to have the 10 factories which ranked highest in our previous risk certified by 2020; and to all operations by 2030. Through this process, we consult with local stakeholders, which may include special interest groups when appropriate. ii) Supply chain: In 2017, we conducted water baseline studies in 60 different tobacco growing areas. Brazil, Malawi and US, important tobacco-sourcing countries were selected to pilot and validate the methodology. We plan to continue validation to other areas in 2018-2020. The Malawi pilot helped highlight the lack of access to WASH services in small holder farms and we began supporting their access to WASH. In 2018, we plan to begin a program of providing and adapting boreholes fitted with hand pumps. We are also investigating more innovative solutions, such as cloud fishing nets (condensing water from air) and ferro-cement water storage tanks. PMI is engaging with local stakeholders to leverage their local expertise and networks. iii) Charitable contributions: In 2017, PMI supported projects to protect and enhance natural resources, implement conservation agriculture, provide clean water, cater for food security, and improve the livelihoods of people living in rural communities. Some of our 2017 contributions went to Caritas Senegal to improve water supply and strengthen food security of communities living in Senegal, Mali and Burkina Faso; to the Semana Foundation to provide safe drinking water through installation of alternative rainwater harvesting systems in two schools in Montes de Maria region of Colombia; and to the Bunyad Literacy Community Council to provide clean drinking water and raise awareness on good hygiene practices in Pakistan.

	Relevance & inclusion	Please explain
Suppliers	Relevant, always included	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). Our suppliers are important partners in achieving our water reduction and stewardship goals. Conducted by Quantis in the last 2 years, our blue water footprint is due to tobacco growing practices (irrigation, fertilizers and pesticides usage performed by the farmers supplying PMI) (53%), supply chain (41%) and our manufacturing (6%). By engaging with suppliers, we are reducing our overall water footprint while working with them to be more resilient. Examples of how we partner: i) For tobacco-growing, under GAP, we expect our suppliers to have a water management 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 WASH for local communities, workers, and their families. Building on GAP, 2017 was the foundational year of our leaf water stewardship strategy, the objectives of which is to partner with the tobacco supply chain to manage and address water resources and risks; and engage with farmers and communities in relevant river basins. In 2017, we conducted water baseline studies in 60 different tobacco growing areas. A water risk assessment system has been developed, including a global and tailored local risk assessment methodology and guideline. Brazil, Malawi and US, important tobacco-sourcing countries were selected to pilot and validate the methodology. Validation of the methodology to other areas will continue in 2018 – 2020. The Malawi pilot helped highlight the lack of access to WASH services in small holder farms and we began supporting their access to WASH. ii) For all other suppliers, in 2017 we released and trained them on our RSP contractual requirements.
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. Where possible, we work to integrate water efficiency projects and reduce our footprint. A water self-assessment tool has been developed and is used 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 March 2018, our Brazil factory became the first factory in the country to be certified by AWS. We plan to have the 10 factories which ranked highest in our previous risk assessment certified by 2020; and all operations certified by 2030. Through this process, we consult with local stakeholders, which may include local water utilities.
Other stakeholder, please specify	Relevant, always included	Through our materiality process that we undertake for our Sustainability Report, we solicit 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. In doing so, we are guided by AccountAbility's Stakeholder Engagement Standard: AA1000. 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. This year, we have also been working to align our work with the SDG's including SDG 14 which addresses Life Below Water since that helps a broader group of stakeholders identify our water program and actions within the broader context of other work. To date, we address both the direct and indirect impacts. For example, litter from cigarette butts and packaging is an issue that comes

	Relevance & inclusion	Please explain
		under regular public scrutiny that also affects our brand reputation. Much of the litter washes into the waterways and causes problems during rain events. In many of our markets, such as the Philippines, Japan and Switzerland, PMI actively supports programs and campaigns for responsible litter disposal.

W3.3d

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

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; water risk due to climate change) of PMI and key supplier assets (e.g. ports & tobacco growing regions). We supplemented this by understanding our blue water footprint composed of tobacco farming practices (such as irrigation, fertilizers and pesticides usage) (53%), rest of supply chain (41%) & manufacturing (6%) conducted in 2017 and 2018. We're assessing current and future water-related risks more broadly 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 Brazil factory by March 2018. By 2020, we plan certification of 10 factories (ranked highest in water risk assessment); and all operations by 2030.
2. Supply chain: GAP results in risk identification & management through country/supplier-specific action plans. We also conducted water baseline studies in 60 different tobacco growing geographical areas in 2017. A water risk assessment system was developed, including a global & tailored local risk assessments. Brazil, Malawi and US, important tobacco-sourcing countries were selected to pilot & validate the methodology. Validation of the methodology to other areas will continue in 2018 – 2020. The purpose of the Global Water Risk Assessment is to use globally available and comparable data to evaluate water risks at a high level. The Global Water Risk Assessment was undertaken by PMI in 2017 and the results were shared with tobacco suppliers. In 2017, we released our RSP (contractual requirements for our direct suppliers and addresses water management).

W4. Risks and opportunities

W4.1

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

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

W4.1a

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

In relation to substantive change, we refer to materiality - material issues are identified in a multidisciplinary way and include those which:
- have the highest potential impact and a realistic probability of occurrence;
- are most relevant to our enterprises and geographic locations; and
- are most important to our stakeholders. In 2020+ risk forecasting terms, higher level risks are defined as those with a potential impact in excess of US$5M or a raw material impact in excess of 1000 metric tonnes of tobacco leaves. These apply to both our direct operations and our tobacco supply chain.

Over the last couple of years, we have been expanding our water programs by first assessing current and future water-related risks more broadly across our value chain. These risks include water scarcity and water quality in tobacco growing regions, flood risk in major tobacco warehouse locations and ports, and water demand in cities where we have manufacturing facilities. Besides our tobacco supply chain, we have developed a water footprint analysis with Quantis to understand water stressed hotpots from which we source materials that are production water intensive.

W4.1b

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

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	6	26-50	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

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
			(CCRA) that highlighted risks for cyclone, floods or severe droughts and a list of factories to be considered as of high risk,

W4.1c

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

Country/Region

Poland

River basin

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

<Field Hidden>

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

<Field Hidden>

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

<Field Hidden>

% company's total global revenue that could be affected

1-25

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 for cyclone, floods or severe droughts and a list of factories to be considered as of high risk.

Country/Region
Indonesia
River basin
Other, please specify (RIVER BASINS)
Number of facilities exposed to water risk
3
% company-wide facilities this represents
1-25
Production value for the metals & mining activities associated with these facilities
<Field Hidden>
% company's annual electricity generation that could be affected by these facilities
<Field Hidden>
% company's global oil & gas production volume that could be affected by these facilities
<Field Hidden>
% company's total global revenue that could be affected
1-25
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 for cyclone, floods or severe droughts and a list of factories to be considered as of high risk,

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Country/Region
Philippines
River basin
Other, please specify (RIVER BASINS)
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
<Field Hidden>

% company's annual electricity generation that could be affected by these facilities
<Field Hidden>
% company's global oil & gas production volume that could be affected by these facilities
<Field Hidden>
% company's total global revenue that could be affected
1-25
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 for cyclone, floods or severe droughts and a list of factories to be considered as of high risk,

W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.
Country/Region
Poland
River basin
Wisla
Type of risk
Physical
Primary risk driver
Flooding
Primary potential impact
Reduction or disruption in production capacity
Company-specific description
In 2017, 23 of our facilities manufactured over 10 B cigarettes each, of which 8 facilities produced over 30 B units each. As of 2017, we own and operate 46 manufacturing sites – our largest being located in 8 countries, including Indonesia, Poland and the Philippines. Annually, our company risk/opportunity identification and management process covers regulatory, physical climate, water, geopolitical and market issues. 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 (e.g. ports & tobacco growing regions) 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/opportunities, which includes flood risk management and mitigation plans discussed with our insurers. Despite having a municipal plan in place that began in 2007 to prevent flooding, a major flood in 2010 caused several deaths and affected homes, roads and infrastructure; disrupting plant/production operations and logistics. There is a potential for flooding of our manufacturing location, based on the CCRA.

Timeframe

4 - 6 years

Magnitude of potential impact

Low

Likelihood

Unlikely

Potential financial impact

1000000

Explanation of financial impact

We estimate the relative magnitude at around $1 M in the short to medium-term (0-5 years) for our Polish operations based on disruptions in production capacity. This is based on our 2015 company assessment of comprehensive climate change risk assessment (CCRA), in which we assessed sites that are in high flood severity zones and estimated the cost of disruption from downtime and future flood risk. We also used Information from our 2007 municipal plan and the 2010 major flood.

Primary response to risk

Develop flood emergency plans

Description of response

External providers are contracted to assess flood and business continuity risk each year. Flood risk assessments are undertaken at the site level to understand how sites are vulnerable to local flooding events. Understanding the scale and nature of this risk is an important initial step in managing the risk. As well as undertaking a risk assessment process, our insurance and business continuity management plans are designed to mitigate the impacts associated with disruptions that may result from flooding events. Our operations are widely distributed across the world, helping to mitigate the effects of any disruption. We have a sophisticated capacity and footprint planning process which mitigates against local or regional operations disturbances. In 2017, we joined the Alliance for Water Stewardship (AWS) and March 2018 our Brazil facility was AWS certified, the first factory in the country. We plan to have the 10 factories which ranked highest in our previous risk assessment certified by 2020; and all operations by 2030. Part of the AWS is responsiveness and resiliency to water-related risks.

Cost of response

1000000

Explanation of cost of response

This estimated recurring cost of external providers contracted to assess flood and business continuity risk annually and related staff costs. Flood risk assessments are undertaken at the site level to understand how sites are vulnerable to local flooding events. Understanding the scale and nature of this risk and conducting a risk assessment, our insurance and business continuity management plans are designed to mitigate the impacts from short and medium-term (0-5 years) flooding events.

Country/Region

Indonesia

River basin

Other, please specify (RIVER BASINS)

Type of risk

Physical

Primary risk driver

Other, please specify (Flooding and cyclones)

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

According to our 2017 Quantis analysis, our Indonesian sites are second of our Philippine sites in using most blue water. We have significant operations in Indonesia. In 2017, 23 of our facilities manufactured over 10 B cigarettes each, of which 8 facilities produced over 30 B units each. We own and operate 46 manufacturing sites – our largest being located in 8 countries, including Indonesia, Poland and the Philippines. We also source our clove primarily from Indonesia and work with 38 3rd-party operators Indonesia who manufacture our hand-rolled cigarettes. Annually, our company risk/opportunity identification and management process covers regulatory, physical climate, water, geopolitical and market issues. 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/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, they are flooding and cyclones. Potential impacts from cyclones could cause loss/disruption of production in manufacturing plants, warehouses, 3rd party operations, suppliers and ports.

Timeframe
4 - 6 years
Magnitude of potential impact
Medium-low
Likelihood
Unlikely
Potential financial impact
2000000
Explanation of financial impact
We estimate the relative magnitude at around $2-3 M in the short to medium-term (0-5 years) for our Indonesian operations based on disruptions in production capacity. This is based on our 2015 company assessment of comprehensive climate change risk assessment (CCRA), in which we assessed sites that are in high cyclone and flood severity zones and estimated the cost of disruption from downtime and future cyclone / flood risk.
Primary response to risk
Develop flood emergency plans
Description of response
External providers are used to assess flood and business continuity risk each year. Flood risk assessments are undertaken at the site level to understand how vulnerable sites are to local flooding events. Understanding the scale and nature of this risk is an important initial step in managing the risk. As well as undertaking a risk assessment process, our insurance and business continuity management plans are designed to mitigate the impacts associated with disruptions that may result from flooding events. Our operations are widely distributed across the world, helping to mitigate the effects of any disruption. We have a sophisticated capacity and footprint planning process which mitigates against local or regional operations disturbances. In 2017, we joined the Alliance for Water Stewardship (AWS) and by March 2018 our Brazil facility was AWS certified, the first factory in the country. We plan to certify the 10 factories which ranked highest in our previous water risk assessment by 2020; and to all operations by 2030. Part of the AWS certification process is responsiveness and resiliency to water-related risks. We also work with our growers to improve the efficiency of their curing bars, which helps mitigate the impacts of climate change. In 2017, approximately 23,000 barns were improved in countries including Indonesia and the Philippines, bringing the total number of barns improved since 2014 to 45,000. We aim to improve a total of 60,000 barns by 2020.
Cost of response
1000000
Explanation of cost of response

This estimated 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. Understanding the scale and nature of this risk and conducting a risk assessment, our insurance and business continuity management plans are designed to mitigate the impacts from short and medium-term (0-5 years) flooding events.

Country/Region
Philippines
River basin
Other, please specify (RIVER BASIN)
Type of risk
Physical
Primary risk driver
Other, please specify (Flooding and cyclones)
Primary potential impact
Reduction or disruption in production capacity
Company-specific description
Based on GermanWatch's annual Climate Risk Index, the Philippines is in the top 5 countries most affected by climate change impacts (including cyclones and flooding) from 1997-2015. According to the Quantis 2017 analysis, our Philippine operations uses the most amount of blue water. In 2017, 23 or our facilities each manufactured over 10 B cigarettes, of which 8 facilities each produced over 30 B units. We own and operate 46 manufacturing sites – our largest of which are located in 8 countries, including Indonesia, Poland and the Philippines. Annually, our company risk/opportunity identification and management process covers regulatory, physical climate, water, geopolitical and market issues. 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/opportunities, which includes flood risk management and mitigation plans discussed with our insurers. Through these assessments we found the primary risk driver to our Philippine operations are flooding and cyclones. Potential for impacts from cyclones could cause loss/disruption of production in manufacturing plants, warehouses, 3rd party operations, suppliers and ports.
Timeframe
4 - 6 years

Magnitude of potential impact
Medium-high
Likelihood
Likely
Potential financial impact
10000000
Explanation of financial impact
The threat of flooding and cyclones, which according to GermanWatch's Climate Risk Index, have been especially catastrophic to the Philippines. We estimate the potential damage to our manufacturing and warehouse sites at US $10-20M in the short to medium-term (0-5 years). This is based on our 2015 company assessment of comprehensive climate change risk assessment, in which we assessed sites that are in high cyclone and flood severity zones and estimated the cost of disruption from downtime.
Primary response to risk
Develop flood emergency plans
Description of response
External providers are used to assess flood and business continuity risk each year. Flood risk assessments are undertaken at the site level to understand how vulnerable sites are to local flooding events. Understanding the scale and nature of this risk is an important initial step in managing the risk. As well as undertaking a risk assessment process, our insurance and business continuity management plans are designed to mitigate the impacts associated with disruptions that may result from flooding events. Our operations are widely distributed across the world, helping to mitigate the effects of any disruption. We have a sophisticated capacity and footprint planning process which mitigates against local or regional operations disturbances. In 2017, we joined the Alliance for Water Stewardship (AWS) and by March 2018 our Brazil facility was AWS certified, the first factory in the country. We plan to certify the 10 factories which ranked highest in our previous water risk assessment by 2020; and to all operations by 2030. Part of the AWS certification process is responsiveness and resiliency to water-related risks. We also promote best practice and water management incentives among our sites and manufacturers. We also work with our growers to improve the efficiency of their curing bars, which helps mitigate the impacts of climate change. In 2017, approximately 23,000 barns were improved in countries including Indonesia and the Philippines.
Cost of response
1000000
Explanation of cost of response
This estimated 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. Understanding the scale and nature of this risk and conducting a risk assessment, our insurance and business continuity management plans are designed to mitigate the impacts from short and medium-term (0-5 years) flooding events.

W4.2a

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

Country/Region

Indonesia

River basin

Other, please specify (RIVER BASINS)

Stage of value chain

Supply chain

Type of risk

Physical

Primary risk driver

Other, please specify (flooding and cyclones)

Primary potential impact

Supply chain disruption

Company-specific description

Water risks due to climate change could have both beneficial and adverse impacts on quality and yield of the crops we use, such as tobacco leaf and cloves. The supplies of tobacco leaf in Indonesia are exposed to physical climate change risks, with cyclones and flooding being most critical. Tobacco leaf growing is strongly influenced by physical climate change such as changes in temperature and precipitation. Crop losses, quality impacts and supply chain manufacturing restrictions could impact PMI's production and sourcing strategy. This could change our crop buying pattern and result in increased operational cost. Also, clove is an important raw material for PMI to use in our local kretek brands. Indonesia produces over 70% of the world's cloves. Clove yields are complex; harvests can vary by up to 60% over a 4 year harvest cycle. Clove production is weather sensitive, climate changes such as intensification of the wet season could impact clove growing areas. This would reduce the supply and increase the price of cloves.

Timeframe

>6 years

Magnitude of potential financial impact
Medium
Likelihood
Likely
Potential financial impact
3000000
Explanation of financial impact
The potential impacts are based on a long term climate change. We estimate the relative magnitude at around $3-4 M in the long-term (>6 years) for our Indonesian growers based on supply chain disruptions. This is based on our 2015 company assessment of comprehensive climate change risk assessment (CCRA), in which we assessed sites that are in high cyclone and flood severity zones and estimated the cost of disruption from crop losses, quality impacts and supply chain manufacturing restrictions.
Primary response to risk
Improve alignment of our procurement policy influencing activity with our water stewardship commitments
Description of response
As part of our procurement strategy, we require all suppliers to follow our Good Agricultural Practices, which helps mitigate climate related risks. We also work with our growers to improve the efficiency of their curing bars, which helps mitigate the impacts of climate change. In 2017, approximately 23,000 barns were improved in countries including Indonesia, Pakistan and the Philippines, bringing the total number of barns improved since 2014 to 45,000. We aim to improve a total of 60,000 barns by 2020. In addition, our substantial inventories of tobacco leaf can help mitigate short term impacts. Our tobacco supply chain is widely spread around the world and there is the opportunity to relocate tobacco crops if some growing areas become more favorable than others.
Cost of response
20000000
Explanation of cost of response
The cost of response is based on program management for Good Agricultural Practices implementation and engagement with clove suppliers to improve crop management practices in Indonesia. Supplier diversification is part of our overall business strategy and we cannot assign a specific cost. We have engaged with our tobacco suppliers to improve crop management practices and are strengthening our supply chain for tobacco at an overall cost of several tens of millions US$.

Country/Region
Pakistan

River basin
Other, please specify (RIVER BASIN)
Stage of value chain
Supply chain
Type of risk
Physical
Primary risk driver
Drought
Primary potential impact
Supply chain disruption
Company-specific description
The supplies of tobacco leaf in Pakistan are exposed to physical climate change risks, with drought being most critical. Crop losses, quality impacts and supply chain manufacturing restrictions could impact PMI's production and sourcing strategy. Tobacco leaf growing is strongly influenced by physical climate change such as changes in temperature and precipitation. Yield, quality and availability of the tobacco crop could be influenced by changes in precipitation and periods of drought. This could change our access to tobacco supplies, impacting our crop buying pattern and increasing operational cost.
Timeframe
>6 years
Magnitude of potential financial impact
Low
Likelihood
Unlikely
Potential financial impact
1000000
Explanation of financial impact
The potential impacts are based on a long term climate change. We estimate the relative magnitude at under $1 M in the long-term (>6 years) for our Pakistan growers based on supply chain disruptions. This is based on our 2015 company assessment of comprehensive climate change risk assessment (CCRA), in which we assessed sites that are in high drought zones and estimated the cost of disruption from crop losses, quality impacts and supply chain manufacturing restrictions.
Primary response to risk
Improve alignment of our procurement policy influencing activity with our water stewardship commitments
Description of response

As part of our procurement strategy, we require all suppliers to follow our Good Agricultural Practices, which helps to mitigate against climate related risks. We also work with our growers to improve the efficiency of their curing bars, which helps mitigate the impacts of climate change. In 2017, approximately 23,000 barns were improved in countries including Indonesia, Pakistan and the Philippines, bringing the total number of barns improved since 2014 to 45,000. We aim to improve a total of 60,000 barns by 2020. In addition, our substantial inventories of tobacco leaf can help to mitigate against short term impacts. Our tobacco supply chain is widely spread around the world and there is also some flexibility in terms of the potential to relocate tobacco crops if some growing areas become more favorable than others.

Cost of response

5000000

Explanation of cost of response

This cost of response is based on program management for Good Agricultural Practices implementation and support provided to farming communities on a water supply project in Pakistan. Supplier diversification is part of our overall business strategy and we cannot assign a specific cost. We have engaged with our tobacco suppliers to improve crop management practices and are strengthening our supply chain for tobacco at an overall cost of several tens of millions US$.

Country/Region

Philippines

River basin

Other, please specify (RIVER BASINS)

Stage of value chain

Supply chain

Type of risk

Physical

Primary risk driver

Other, please specify (drought, flooding and cyclones)

Primary potential impact

Supply chain disruption

Company-specific description

Based on GermanWatch’s annual Climate Risk Index, the Philippines is in the top 5 countries most affected by climate change impacts (including cyclones and flooding) from 1997-2015 resulting to a loss of $2.8 B in purchasing power parity to the country from 1996 - 2015. The supplies of tobacco leaf in Philippines, quality impacts and supply chain manufacturing restrictions could impact PMI’s production and sourcing strategy. Tobacco leaf growing is strongly influenced by physical

climate change such as changes in temperature and precipitation. Yield, quality and availability of the tobacco crop could be influenced by changes in precipitation and periods of drought. This could change our access to tobacco supplies, impacting our crop buying pattern and increasing operational cost.

Timeframe

>6 years

Magnitude of potential financial impact

Medium

Likelihood

Likely

Potential financial impact

3000000

Explanation of financial impact

The potential impacts are based on a long term climate change. We estimate the relative magnitude at around $3-4 M in the long-term (>6 years) for our Philippine growers. This is based on our 2015 company assessment of comprehensive climate change risk assessment (CCRA), in which we assessed sites that are in high drought, cyclone and flood severity zones and estimated the cost of disruption from crop losses, quality impacts and supply chain manufacturing restrictions

Primary response to risk

Improve alignment of our procurement policy influencing activity with our water stewardship commitments

Description of response

As part of our procurement strategy, we require all suppliers to follow our Good Agricultural Practices, which helps to mitigate against climate related risks. We also work with our growers to improve the efficiency of their curing bars, which helps mitigate the impacts of climate change. In 2017, approximately 23,000 barns were improved in countries including Indonesia, Pakistan and the Philippines, bringing the total number of barns improved since 2014 to 45,000. We aim to improve a total of 60,000 barns by 2020. In addition, our substantial inventories of tobacco leaf can help to mitigate against short term impacts. Our tobacco supply chain is widely spread around the world and there is the opportunity to relocate tobacco crops if some growing areas become more favorable than others.

Cost of response

20000000

Explanation of cost of response

This cost of response is based on program management for Good Agricultural Practices implementation in the Philippines. Supplier diversification is part of our overall business strategy and we cannot assign a specific cost. We have engaged with

our tobacco suppliers to improve crop management practices and are strengthening our supply chain for tobacco at an overall cost of several tens of millions US$.

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. Our smoke-free and reduced risk products (RRP) require approximately 4 times more water per unit of product than conventional cigarettes. There is an opportunity to optimize our new process by increasing water recycling and defining specific water quality by use. In 2017, PMI implemented other initiatives to reduce water use and increase water recovery; however, due to our new manufacturing process, our average water consumption increased from our lowest level of 4.0m³ in 2016 to 4.8m³ of water for every million units of product equivalent. As the new manufacturing process matures, we are incorporating new designs, reusing or recycling water with a view to minimum water discharge. It will take us around 1-3 years to realize these opportunities. To better understand our water footprint, in 2017 Quantis discovered our blue water footprint to be composed of agricultural supply chain (53%), supply chain (41%) and our manufacturing (6%). Furthermore, in 2015 we beat our 20% reduction target (from 2010 baseline), achieving a 24% reduction and have since focused on a minimum 1% year-year reduction in the short term, with additional focus on operations present in water scarce areas. Our improvements in water efficiency, conservation and recycling at PMI manufacturing facilities are driven by a water reduction target.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Potential financial impact

2000000

Explanation of financial impact

The Quantis assessment of our water footprint and potential financial savings to increase water efficiency to be around $2-3 M USD in the next 1 - 3 years. The Quantis update of the water footprint of our smoke-free and RPPs will provide us with a better understanding of opportunities on how increase water efficiency. In our industry, the possibility of direct cost of water which could result in potential financial impact is low.

Type of opportunity

Resilience

Primary water-related opportunity

Increased resilience to impacts of climate change

Company-specific description & strategy to realize opportunity

Our success in achieving a 24%, beating our 2015 water reduction target of 20% (2010 baseline), lead us to expand our water stewardship strategy beyond a factory based approach on compliance and water efficiency. We became a member of the Alliance for Water Stewardship to better understand how to conserve the watersheds and water demand in areas where we operate. Coupled with our water efficiency efforts, this increases our resilience to impacts of climate change and strengthens our relationship with our local communities. Our factory in Brazil operating in the Rio Pardo Watershed was certified against the AWS Standard in March 2018. In 2018, we plan to start 4 regional AWS trainings and assessments. We plan to have the 10 factories which ranked highest in our previous risk assessment certified by 2020 and to extend to the rest of our operations until 2030.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low

Potential financial impact

1000000

Explanation of financial impact

In our industry, direct cost of water and resulting potential financial impact expected is low. Moreover, the upfront cost of AWS certification may offset any short-term savings. The cost of AWS certification varies, however based on cost of AWS assessments and certification audits, it could cost more than $8.5K 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 however, we estimate this to be around $1,000,000 for all our operations until 2030. In addition, the AWS process of consulting local communities and stakeholders on water issues helps retain our social license to operate.

Type of opportunity
Resilience
Primary water-related opportunity
Increased supply chain resilience
Company-specific description & strategy to realize opportunity
Majority of our water risks are in our supply chain based on the 2017 Quantis - PMI blue water footprint: tobacco farming (53%, practices such as irrigation, fertilizers and pesticides usage) and supply chain (41%). Water risks due to climate change could have both beneficial and adverse impacts on quality and yield of the crops we use, such as tobacco leaf and cloves. Some benefits include water short growing areas could benefit from increases in precipitation. We manage our growers under our Global Agricultural Practices (GAP), in which suppliers conduct a water management plan. 2017 was a foundational year for our leaf water stewardship strategy and we conducted water baseline studies in 60 different tobacco geographical areas. A water risk assessment system was developed, including a global and tailored local risk assessment methodology and guideline. Brazil, Malawi and US, were selected to pilot and validate the methodology; which will continue to be tested in other countries from 2018-2020. We also released our Responsible Sourcing Program (RSP) Implementation Guidelines in 2017 which sets water guidelines and applies to all suppliers not part of GAP. Working with our suppliers to understand and better manage their water risks will create a resilient supply chain. We continually review promising tobacco leaf and clove growing areas and assess if climate change elements could favor increased yield; and actively researched drought tolerant seed varieties.
Estimated timeframe for realization
>6 years
Magnitude of potential financial impact
Low-medium
Potential financial impact
2000000
Explanation of financial impact
Good water and irrigation management has a positive effect on crop yield and helps minimize uncertainty in supply. Based on our water baseline studies, we estimate this to be around $ 2-3 M USD with long-term impacts (>5 years).

W5. Facility-level water accounting

W5.1

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

Facility reference number
Facility 1

Facility name (optional)
Philip Morris Polska

Country/Region
Poland

River basin
Wisla

Latitude
50.070762

Longitude
20.026857

Primary power generation source for your electricity generation at this facility
<Field Hidden>

Oil & gas sector business division
<Field Hidden>

Total water withdrawals at this facility (megaliters/year)
169.2

Comparison of withdrawals with previous reporting year
About the same

Total water discharges at this facility (megaliters/year)
112

Comparison of discharges with previous reporting year
About the same

Total water consumption at this facility (megaliters/year)

57.3

Comparison of consumption with previous reporting year

Higher

Please explain

The water consumption increased from 42.7 to 57.3 megaliters resulting in a increase of 34%.

Facility reference number

Facility 3

Facility name (optional)

PMFTC Batangas

Country/Region

Philippines

River basin

Other, please specify (RIVER BASINS)

Latitude

14.129355

Longitude

121.118746

Primary power generation source for your electricity generation at this facility

<Field Hidden>

Oil & gas sector business division

<Field Hidden>

Total water withdrawals at this facility (megaliters/year)

165.3

Comparison of withdrawals with previous reporting year

Much lower

Total water discharges at this facility (megaliters/year)

113.8

Comparison of discharges with previous reporting year

Higher

Total water consumption at this facility (megaliters/year)

51.5

Comparison of consumption with previous reporting year
Much lower
Please explain
The water consumption decreased from 102.5 to 51.5 megaliters, resulting in a 50% decrease as a result of different initiatives for reducing water use and increase water recycling along a slight production decrease.

Facility reference number
Facility 2
Facility name (optional)
Philip Morris Indonesia Karawang
Country/Region
Indonesia
River basin
Other, please specify (RIVER BASINS)
Latitude
-6.358696
Longitude
107.289555
Primary power generation source for your electricity generation at this facility
<Field Hidden>
Oil & gas sector business division
<Field Hidden>
Total water withdrawals at this facility (megaliters/year)
227.5
Comparison of withdrawals with previous reporting year
About the same
Total water discharges at this facility (megaliters/year)
133.8
Comparison of discharges with previous reporting year
Lower
Total water consumption at this facility (megaliters/year)
93.7

Comparison of consumption with previous reporting year
Higher
Please explain
The water consumption increased from 90.8 to 93.7 megaliters resulting in a increase of 3%.

Facility reference number
Facility 4
Facility name (optional)
Philip Morris Indonesia Sukorejo
Country/Region
Indonesia
River basin
Other, please specify (RIVER BASINS)
Latitude
-7.698419
Longitude
112.69915
Primary power generation source for your electricity generation at this facility
<Field Hidden>
Oil & gas sector business division
<Field Hidden>
Total water withdrawals at this facility (megaliters/year)
503
Comparison of withdrawals with previous reporting year
Higher
Total water discharges at this facility (megaliters/year)
301.8
Comparison of discharges with previous reporting year
Higher
Total water consumption at this facility (megaliters/year)
201.2
Comparison of consumption with previous reporting year

Higher

Please explain

The water consumption increased from 189 to 201.2 megaliters resulting in a increase of 6.4%.

Facility reference number

Facility 5

Facility name (optional)

Philip Morris Indonesia Handroll

Country/Region

Indonesia

River basin

Other, please specify (RIVER BASINS)

Latitude

-7.331043

Longitude

112.762057

Primary power generation source for your electricity generation at this facility

<Field Hidden>

Oil & gas sector business division

<Field Hidden>

Total water withdrawals at this facility (megaliters/year)

96.7

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

57.8

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

38.9

Comparison of consumption with previous reporting year

Higher

Please explain
The water consumption increased from 38.7 to 38.9 megaliters resulting in a increase of 0.04%.

Facility reference number
Facility 6
Facility name (optional)
PMFTC Marikina
Country/Region
Philippines
River basin
Other, please specify (RIVER BASINS)
Latitude
14.661436
Longitude
121.128043
Primary power generation source for your electricity generation at this facility
<Field Hidden>
Oil & gas sector business division
<Field Hidden>
Total water withdrawals at this facility (megaliters/year)
163.9
Comparison of withdrawals with previous reporting year
Much lower
Total water discharges at this facility (megaliters/year)
1.5
Comparison of discharges with previous reporting year
Lower
Total water consumption at this facility (megaliters/year)
162.3
Comparison of consumption with previous reporting year
Lower
Please explain

The water consumption decreased from 206.9 to 162.3 megaliters, resulting in a 22% decrease as a result of different initiatives for reducing water use and increase water recycling along a slight production decrease.

W5.1a

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

Facility reference number
Facility 1

Facility name
Philip Morris Polska

Fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Brackish surface water/seawater
0

Groundwater - renewable
0

Groundwater - non-renewable
0

Produced water
0

Third party sources
169.2

Comment

Facility reference number
Facility 3

Facility name
PMFTC Batangas

Fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Brackish surface water/seawater
0

Groundwater - renewable
158.2
Groundwater - non-renewable
0
Produced water
0
Third party sources
7.1
Comment

Facility reference number
Facility 2
Facility name
Philip Morris Indonesia Karawang
Fresh surface water, including rainwater, water from wetlands, rivers and lakes
4.5
Brackish surface water/seawater
0
Groundwater - renewable
0
Groundwater - non-renewable
0
Produced water
0
Third party sources
223
Comment

Facility reference number
Facility 4
Facility name
Philip Morris Indonesia Sukorejo

Fresh surface water, including rainwater, water from wetlands, rivers and lakes
0
Brackish surface water/seawater
0
Groundwater - renewable
503
Groundwater - non-renewable
0
Produced water
0
Third party sources
0
Comment

Facility reference number
Facility 5
Facility name
Philip Morris Indonesia Handroll
Fresh surface water, including rainwater, water from wetlands, rivers and lakes
2.2
Brackish surface water/seawater
0
Groundwater - renewable
39.6
Groundwater - non-renewable
0
Produced water
0
Third party sources
54.9
Comment

Facility reference number
Facility 6
Facility name
PMFTC Marikina
Fresh surface water, including rainwater, water from wetlands, rivers and lakes
0
Brackish surface water/seawater
0
Groundwater - renewable
0
Groundwater - non-renewable
0
Produced water
0
Third party sources
163.9
Comment

W5.1b

(W5.1b) For each facility referenced in W5.1, provide discharge data by destination.
Facility reference number
Facility 1
Facility name
Philip Morris Polska
Fresh surface water
0
Brackish surface water/Seawater
0
Groundwater
0
Third party destinations

112
Comment

Facility reference number
Facility 2
Facility name
PMFTC Batangas
Fresh surface water
0
Brackish surface water/Seawater
0
Groundwater
0
Third party destinations
113.8
Comment

Facility reference number
Facility 3
Facility name
Philip Morris Indonesia Karawang
Fresh surface water
0
Brackish surface water/Seawater
0
Groundwater
0
Third party destinations
133.8
Comment

Facility reference number

Facility 4

Facility name

Philip Morris Indonesia Sukorejo

Fresh surface water

301.8

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

0

Comment

Facility reference number

Facility 5

Facility name

Philip Morris Indonesia Handroll

Fresh surface water

28.3

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

29.5

Comment

Facility reference number

Facility 6

Facility name

PMFTC Marikina

Fresh surface water

0

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

1.5

Comment

W5.1c

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

Facility reference number

Facility 1

Facility name

Philip Morris Polska

% recycled or reused

Less than 1%

Comparison with previous reporting year

This is our first year of measurement

Please explain

This is our first year of measuring the volume of water that is recycled or reused. Going forward, we will be able to compare this data to prior years.

Facility reference number

Facility 3

Facility name

PMFTC Batangas

% recycled or reused

Less than 1%

Comparison with previous reporting year

This is our first year of measurement

Please explain

This is our first year of measuring the volume of water that is recycled or reused. Going forward, we will be able to compare this data to prior years.

Facility reference number

Facility 2

Facility name

Philip Morris Indonesia Karawang

% recycled or reused

11-25%

Comparison with previous reporting year

This is our first year of measurement

Please explain

This is our first year of measuring the volume of water that is recycled or reused. Going forward, we will be able to compare this data to prior years.

Facility reference number

Facility 4

Facility name

Philip Morris Indonesia Sukojero

% recycled or reused

Less than 1%

Comparison with previous reporting year

This is our first year of measurement

Please explain

This is our first year of measuring the volume of water that is recycled or reused. Going forward, we will be able to compare this data to prior years.

Facility reference number

Facility 5

Facility name

Philip Morris Indonesia Handroll

% recycled or reused

Less than 1%

Comparison with previous reporting year

This is our first year of measurement

Please explain

This is our first year of measuring the volume of water that is recycled or reused. Going forward, we will be able to compare this data to prior years.

Facility reference number

Facility 6

Facility name

PMFTC Marikina

% recycled or reused

Less than 1%

Comparison with previous reporting year

This is our first year of measurement

Please explain

This is our first year of measuring the volume of water that is recycled or reused. Going forward, we will be able to compare this data to prior years.

W5.1d

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

Water withdrawals – total volumes

% verified

76-100

What standard and methodology was used?

91% of our sites have been ISO 14001 certified in 2017, covering 100% of the facilities in W5.1. On top of that, 100% of sites had EHS&S data verified by external party (SGS). As part of this exercise, 5 sites are verified on-site based on size, risk and globally significance. In 2017, these sites were Santa Cruz (Brazil), Kharkiv (Ukraine), Philsa (Turkey), Crespellano (Italy), Karawang (Philippines). As a result, 25% of our production volume has been 100% verified.

Water withdrawals – volume by source

% verified

76-100

What standard and methodology was used?

91% of our sites have been ISO 14001 certified in 2017, covering 100% of the facilities in W5.1. On top of that, 100% of sites had EHS&S data verified by external party (SGS). As part of this exercise, 5 sites are verified on-site based on size, risk and globally significance. In 2017, these sites were Santa Cruz (Brazil), Kharkiv (Ukraine), Philsa (Turkey), Crespellano (Italy), Karawang (Philippines). As a result, 25% of our production volume has been 100% verified.

Water withdrawals – quality

% verified

76-100

What standard and methodology was used?

91% of our sites have been ISO 14001 certified in 2017, covering 100% of the facilities in W5.1. On top of that, 100% of sites had EHS&S data verified by external party (SGS). As part of this exercise, 5 sites are verified on-site based on size, risk and globally significance. In 2017, these sites were Santa Cruz (Brazil), Kharkiv (Ukraine), Philsa (Turkey), Crespellano (Italy), Karawang (Philippines). As a result, 25% of our production volume has been 100% verified.

Water discharges – total volumes

% verified

76-100

What standard and methodology was used?

91% of our sites have been ISO 14001 certified in 2017, covering 100% of the facilities in W5.1. On top of that, 100% of sites had EHS&S data verified by external party (SGS). As part of this exercise, 5 sites are verified on-site based on size, risk and globally significance. In 2017, these sites were Santa Cruz (Brazil), Kharkiv (Ukraine), Philsa (Turkey), Crespellano (Italy), Karawang (Philippines). As a result, 25% of our production volume has been 100% verified.

Water discharges – volume by destination

% verified

76-100

What standard and methodology was used?

91% of our sites have been ISO 14001 certified in 2017, covering 100% of the facilities in W5.1. On top of that, 100% of sites had EHS&S data verified by external party (SGS). As part of this exercise, 5 sites are verified on-site based on size, risk and globally significance. In 2017, these sites were Santa Cruz (Brazil), Kharkiv (Ukraine), Philsa (Turkey), Crespellano (Italy), Karawang (Philippines). As a result, 25% of our production volume has been 100% verified.

Water discharges – volume by treatment method

% verified

76-100

What standard and methodology was used?

91% of our sites have been ISO 14001 certified in 2017, covering 100% of the facilities in W5.1. On top of that, 100% of sites had EHS&S data verified by external party (SGS). As part of this exercise, 5 sites are verified on-site based on size, risk and globally significance. In 2017, these sites were Santa Cruz (Brazil), Kharkiv (Ukraine), Philsa (Turkey), Crespellano (Italy), Karawang (Philippines). As a result, 25% of our production volume has been 100% verified.

Water discharge quality – quality by standard effluent parameters

% verified

51-75

What standard and methodology was used?

91% of our sites have been ISO 14001 certified in 2017, covering 100% of the facilities in W5.1. On top of that, 100% of sites had EHS&S data verified by external party (SGS). As part of this exercise, 5 sites are verified on-site based on size, risk and globally significance. In 2017, these sites were Santa Cruz (Brazil), Kharkiv (Ukraine), Philsa (Turkey), Crespellano (Italy), Karawang (Philippines). As a result, 25% of our production volume has been 100% verified.

Water discharge quality – temperature

% verified

51-75

What standard and methodology was used?

91% of our sites have been ISO 14001 certified in 2017. We are constantly measuring our water discharge in all our affiliates and we are beyond local requirements. Around 50% 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?

91% of our sites have been ISO 14001 certified in 2017, covering 100% of the facilities in W5.1. On top of that, 100% of sites had EHS&S data verified by external party (SGS). As part of this exercise, 5 sites are verified on-site based on size, risk and globally significance. In 2017, these sites were Santa Cruz (Brazil), Kharkiv (Ukraine), Philsa (Turkey), Crespellano (Italy), Karawang (Philippines). As a result, 25% of our production volume has been 100% verified.

Water recycled/reused

% verified
76-100

What standard and methodology was used?
91% of our sites have been ISO 14001 certified in 2017, covering 100% of the facilities in W5.1. On top of that, 100% of sites had EHS&S data verified by external party (SGS). As part of this exercise, 5 sites are verified on-site based on size, risk and globally significance. In 2017, these sites were Santa Cruz (Brazil), Kharkiv (Ukraine), Philsa (Turkey), Crespellano (Italy), Karawang (Philippines). As a result, 25% of our production volume has been 100% verified.

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?
Yes, we have a documented water policy that is publicly available

W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Description of water-related standards for procurement Reference to international standards and widely-recognized water initiatives Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs	Our commitment to water stewardship is company-wide, extending through our operations and supply chain, including the sourcing of tobacco raw material. We are AWS members, and have certified our first cigarette manufacturing facility. SDG 6 is embedded in our Sustainability Program, including Good Agricultural Practices. We are committed to building capacity with our stakeholders and tobacco suppliers by jointly assessing risks in our growing areas. In our supply chain, water related procurement standards are set forth through our GAP program, our risk assessment 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 suppliers and stakeholders, including watershed action and the development of seed varieties that are drought and flood tolerant. We have more formally committed to water stewardship through our environmental commitment to be published in Q3 2018

	Scope	Content	Please explain
		Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	

W6.2

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

Yes

W6.2a

(W6.2a) Identify the position(s) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Board Chair	In 2017, the highest level of direct oversight for water-related issues within PMI was with the Product Innovation and Regulatory Affairs Committee of the Board of Directors. The Committee comprised 9 out of the 13 Directors and was chaired by Harold Brown (Counselor, Center for Strategic and Int. Studies). In 2018, as part of our continued focus on sustainability, the Board has added oversight of our sustainability strategies (including water) and performance to the charter of the Board's Nominating and Corporate Governance Committee that advises the Board on sustainability matters. Part of the Board's oversight is a focus on management's efforts to enhance shareholder value responsibly and sustainably.

W6.2b

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	The Board established Committees to assist with the performance of its responsibilities and is regularly informed of the company's performance, future plans, and significant issues affecting the business. The Board meets several times per year with additional meetings held as necessary. The Board of Directors believes that environmental, social, and governance (ESG) factors relevant to the company's business are important to PMI's long-term success, and in 2017, the Product Innovation and Regulatory Affairs Committee was responsible for reviewing and monitoring PMI's programs on societal alignment issues, including water stewardship with the PMI's CEO and the VP Operations. Since 2018, the Board's Nominating and Corporate Governance Committee is responsible to oversee our sustainability strategies and performance, and advises the Board on sustainability matters. The four other committees (Audit, Compensation and Leadership Development, Finance, Product Innovation and Regulatory Affairs) assist the board with a full range of activities that also include sustainability related matters.

W6.3

(W6.3) Below board level, provide the highest-level management position(s) or committee(s) with responsibility for water-related issues.

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

Other C-Suite Officer, please specify (Senior Vice President, Operations)
Vice President, Social & Economic Affairs, who reports to the President, External Affairs & General Counsel

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

Water Stewardship is embedded within our overall business strategy, our Guidebook for Success (Code of Conduct) and our Responsible Sourcing Principles. It's integrated into normal business activities and forms part of our annual Long Range Planning process which reviews and sets business direction. In 2017, the strategy was developed/reviewed based on prior year performance, regulatory/external developments, risk/opportunity assessments, stakeholder interest and business changes, through functional management teams up to our Senior Management Team (Management Board). Our Senior VP of Operations is a member of PMI's Senior Management Team (Management Board); he reports to PMI's CEO and is delegated with operational responsibility. In 2017, the SVP Operations was responsible for reviewing and monitoring PMI's objectives, strategies and action plans related to forest issues with the CEO and reported to the Prod. Innovation and Regulatory Affairs Committee of the Board of Directors

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

Sustainability committee
Sustainability Team

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Half-yearly

Please explain

Currently, our Senior Management Team is responsible for reviewing sustainability matters, including water-related issues – strategy, key programs, and budget — through a cross-functional representation, coordinated by the Sustainability Team led by the Vice President Social & Economic Affairs, who reports to the President External Affairs & General Counsel, a member of PMI's Senior Management Team. The Sustainability Team strives to equip our Company with the relevant know-how and expertise in view of the changing nature of our business. From an operational perspective, the Sustainability Team manages and coordinates our sustainability work across PMI functions and regions seeking to ensure it is embedded at all levels of the

organization. Finally, three cross-functional working groups have been created to manage environmental, social and reporting matters that are overseen by committees composed of senior function heads.

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

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

Yes

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

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

	Who is entitled to benefit from these incentives?	Indicator for incentivized performance	Please explain
Monetary reward	Corporate executive team Chief Executive Officer (CEO) Other, please specify (Sustainability Managers, Employees)	Reduction of product water intensity Efficiency project or target – upstream in the value chain Increasing access to workplace WASH	1) Chief Executive Officer (CEO) Our CEO specifically covers EHS results in the assessment of our annual company-wide performance that is reviewed by the Compensation and Leadership Development Committee of the Board of Directors. Accordingly, these results are included in our overall performance rating which determines the cash bonuses for the management group and other eligible employees. Executive management covering EHS topics are specifically appraised each year for performance against targets. 2) Management group Executive management covering EHS topics are specifically appraised each year for performance against targets. The assessment of Environment and Health and Safety (EHS) results directly influences the annual performance rating of our SVP Operations and certain members of our Management Team. This covers the annual cash incentive compensation and long term restricted stock incentive compensation elements for those roles. 3) All employees Specific company awards such as the CEO Award and Recognition for Excellence Awards, which are either cash or stock, are available for Energy Managers, EHS Managers, project teams and other employees who are responsible for water change related initiatives and improvements. 4) Environmental manager Managers, team members and others have targets set out in their annual performance objectives and are assessed against those targets in their annual performance appraisal. Water targets are set annually for at manufacturing facilities.

	Who is entitled to benefit from these incentives?	Indicator for incentivized performance	Please explain
Recognition (non-monetary)	Other, please specify (Employees) *Management Group, Sustainability Manager*	Reduction of product water intensity Efficiency project or target – upstream in the value chain Increasing access to workplace WASH	Behavior change related indicator; Annually many affiliates continued to perform voluntary awareness and promotion campaigns/ programs in order to increase employees' active participation in EHS programs and to make water stewardship part of the company's culture. Awards and recognition for best practices form a core element of such campaigns Water 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 Operations "Lead, Lean and Learn" (3L) program which encourages innovation, continuous improvement and employee engagement.
Other non-monetary reward	No one is entitled to these incentives	<Field Hidden>	

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 to a set of internal policies, which we call our Guidebook for Success. These policies cover our mandatory requirements and processes in relation to Environment, Health and Safety (EHS) and Sustainability, which includes our water strategy; corporate contributions; and interaction 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 and practices. 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 high 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.

W7. Business strategy

W7.1

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

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	16-20	Water security is embedded within our overall business strategy as part of climate change risk management. Water security is vital and integrated in our normal business activities and forms part of our annual Long Range Planning process, which reviews and sets business direction. The EHS and Sustainability teams undertake annual strategy reviews based on prior year performance, regulatory/external developments, risk/opportunity assessments, stakeholder interest and business changes. With the ongoing challenge of water security, we find it important to look further into the future. Since the physical risks of climate change have the potential to materially impact our business, we have conducted climate risks assessments which have looked out to 2030 and 2040 since that is where we start seeing climate trends shift. We also chose that time horizon because it is hard for the climate/water risk models to get more granular and to accurately interpret the data. This time horizon is also aligned with our risk planning and climate change goals, allowing us to implement actionable goals with tangible long-term effects that impact our business (16-20 years versus 50 years).
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	16-20	The strategy is developed through functional management teams up to the Senior Management Team, CEO, the Product Innovation and Regulatory Affairs Committee of Board of Directors and then cascaded. Our strategy is aligned with our annual Long Range Planning process. It also focuses on efficient water use through our operations and value chain contextualized to the water basins we are operating in. In addition, PMI's Board of Directors believes that environmental, social, and governance factors relevant to the business are critical to PMI's long-term success. Part of the Board's oversight is a focus on management's efforts to enhance shareholder value responsibly and sustainable. The Board's sustainability oversight was more formally established at the beginning of 2018 when its Corporate Governance Committee was given the mandate to oversee the sustainability strategy and performance. With the ongoing challenge of water security, we find it important to look further into the future. We have conducted climate risks assessments which have looked out to 2030 and 2040 since that is where we start seeing climate trends shift. It is hard for the climate/water risk models to get

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
			more granular and to accurately interpret the data beyond the 16-20 year horizon. This time horizon is also aligned with our risk planning and climate change goals, allowing us to implement actionable goals with tangible long-term effects that impact our business.
Financial planning	Yes, water-related issues are integrated	16-20	Our tobacco supply chain is widely spread around the world, which helps to mitigate against climate related risks like water scarcity, droughts or flooding; there is also the opportunity to relocate tobacco crops if some growing areas become more favorable than others. In addition, our substantial inventories of tobacco leaf can help to mitigate against short term impacts. We have engaged with our clove suppliers to improve crop management practices and are strengthening our supply chain for clove at an overall cost of several tens of millions US$. The estimated cost is also based on program management for Good Agricultural Practices implementation. With the ongoing challenge of water security, we find it important to look further into the future. Since the physical risks of climate change have the potential to materially impact our business, we have conducted climate risks assessments which have looked out to 2030 and 2040 since that is where we start seeing climate trends shift. It is hard for the climate/water risk models to get more granular and to accurately interpret the data beyond the 16-20 year horizon. This time horizon is also aligned with our risk planning and climate change goals, allowing us to implement actionable goals with tangible long-term effects that impact 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?

	Water-related CAPEX (+/- % change)	Anticipated forward trend for CAPEX (+/- % change)	Water-related OPEX (+/- % change)	Anticipated forward trend for OPEX (+/- % change)	Please explain
Row 1	0	0	189	-50	OPEX - a net increase of 189% in our OPEX driven mostly by our new RRP facility in Italy that due to lack of proper infrastructure had to use external waste treatment plant until proper on site WTP was fully functional. If we adjust the 2016 baseline to account with the RRP impact, our total water-related opex in 2017 would have increased by 3% vs 2016. In 2018 we expect this cost to get reduced by at least 50%. Water-related OPEX is not significant to our business (less than 0.1%). CAPEX - we only segregate CAPEX that is water-related in certain circumstances, often

	Water-related CAPEX (+/- % change)	Anticipated forward trend for CAPEX (+/- % change)	Water-related OPEX (+/- % change)	Anticipated forward trend for OPEX (+/- % change)	Please explain
					the project drivers are varied and the water-related element is not financially significant. The level of projects compared to 2017 is similar and therefore 0% change has been entered for CAPEX.

W7.3

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

	Use of climate-related scenario analysis	Comment
Row 1	Yes	Due to the nature of our business where our business relies on agricultural crops, physical risks are the primary driver for us. We have conducted a physical climate risk analysis of our direct operations and our agricultural suppliers growing regions using IPCC physical risk scenarios. The climate risk analysis evaluated impacts from the reasonable worst case (RCP 8.5) which is prudent to apply when assessing these risks.

W7.3a

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

Yes

W7.3b

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

	Climate-related scenario(s)	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	Other, please specify (RCP 8.5)	Our evaluation of water security impacts uses the IPCC RCP 8.5 scenario which allows us to model and better understand the potential worst case impacts across our operations and value chain. The scenario analysis uses various metrics	In comparison to other products, tobacco is not particularly water intensive. To mitigate future challenges, we continue to assess water security in the geographies where our tobacco is grown. In 2017, water baseline studies were conducted in 60

	Climate-related scenario(s)	Description of possible water-related outcomes	Company response to possible water-related outcomes
		including crop loss, business disruption to contextualize risks to our operations in the future. Some of the challenges identified include increased risk of drought and cyclones in some of our tobacco growing regions as well as some of our facilities. For example, in the Philippines, based on our scenario analysis, there is an increasing risk of crop loss from droughts with losses estimated at greater than 10 percent and cyclones. This would also affect our manufacturing operations in the region, potentially increasing the number of downtime days in the future.	different geographical areas where specific types of tobacco are grown. The selected areas represent 90% of PMI's global purchases of tobacco leaf. A water risk assessment system has been developed, including a global risk assessment tool and a tailored local risk assessment methodology and guideline. Three important tobacco-sourcing countries – Brazil, Malawi and U.S. – were selected to pilot and validate the risk assessment methodology. IN our manufacturing facilities, water is not a major input to conventional tobacco product manufacturing. We also continue to support and invest in growing practices that enable the tobacco crop to be resilient to the changing water scenarios. We continue to reduce water use across our facilities through improvement in water efficiency by implementing new process designs, conservation, and reusing or recycling water where possible.

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

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 factory became the first factory in the country to be AWS certified. Based on the results and learnings from this pilot, we will roll out the AWS Standard globally. As a priority, we plan to certify the ten factories which ranked highest in our previous risk assessment by 2020 and to extend to the rest of our operations until 2030. Based on the results derived from the AWS certification, we will consider implementing a water valuation practice in order to favor water stewardship on those sites identified as with higher risks.

W8. Targets

W8.1

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

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Site/facility specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	PMI is committed to be a good steward of water resources by minimizing water use and effluent discharge in our factories; assess water risks where we operate and work with stakeholders in shared watersheds towards the four water stewardship outcomes (good water governance, sustainable water balance, good water quality and habitat protection); and implement good agricultural practices in our tobacco supply chain. We understand that setting company-wide science based targets for GHG carbon reductions, doesn't apply for water withdrawal were consumption, and pollution typically have an impact only in the basin in which they occur. That's why our approach is along with reducing water intensity in our products we work to understand the water risks in our operations, agricultural and non-agricultural supply chain and then create specific targets to mitigate any risks. As an example is our target to certify under the Alliance for Water Stewardship standard in all our top 10 highest water stressed factories by 2020.

W8.1a

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

Target reference number
Target 1

Category of target
Water consumption

Level
Site/facility

Primary motivation
Water stewardship

Description of target
In 2015, we exceeded our goal to reduce 20% our water consumption in our manufacturing facilities from a 2010 baseline. Due to the recent uncertainty on RRPs impact, in 2016 and 2017 we set an interim target of average 1% reduction year on year and to shift focus from general water savings approach in manufacturing and leaf to a focus on water scarce areas and to extend to our entire value chain.

Quantitative metric
% reduction per unit of production

Baseline year
2010
Start year
2016
Target year
2017
% achieved
100
Please explain
In 2017, we achieved a 1.4% average water reduction vs 2010 water intensity. The result is due to the different initiatives to reduce overall water consumption, increase water efficiency in process, utilities and landscaping. This result was also impacted by the extended of our manufacturing centers scope to produce our new smoke-free products. The process to manufacture our new smoke-free products required approximately four times more water per unit of product than for conventional cigarettes. Our efforts are geared towards improving water efficiency throughout that process by implementing new process designs, reusing or recycling water, and by using rainwater harvesting where feasible, with a view to minimum water discharge.

Target reference number
Target 2
Category of target
Community engagement
Level
Site/facility
Primary motivation
Risk mitigation
Description of target
In order to understand our factories local context and to engage with communities surrounding our factories regarding relative water related issues we created a roadmap to assess and certify under the Alliance for Water Stewardship standard the ten factories which ranked highest in our previous risk assessment by 2020 and to extend to the rest of our operations by 2030. This is an important target because it promulgates the use of the AWS international standard for sustainable water use within the organization. Reinforcing our commitment to a rigorous and data driven approach to evaluating water. Our AWS team and our 1,600 employees are fully engaged to ensure that our factory meets the AWS standard, including engaging with local

authorities, the farming community and civil society groups. After our first pilot in Brazil we plan to extend our efforts globally and hope this commitment 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

2010

Start year

2017

Target year

2020

% achieved

10

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 factory became the first factory in the country to be certified by AWS. Based on the results and learnings from this pilot, we will roll out the AWS Standard globally. As a priority, we plan to certify the ten factories which ranked highest in our previous risk assessment by 2020 and to extend to the rest of our operations until 2030.

Target reference number

Target 3

Category of target

Water pollution reduction

Level

Other, please specify (Tobacco Supply Chain)

Primary motivation

Reduced environmental impact

Description of target

PMI has targets to eliminate WHO Toxi1 pesticides by 2018 and other Highly Hazardous Pesticides (HHPs) as defined by FAO/WHO guidelines by 2020. The level of hazard of a pesticide is an intrinsic toxicological property. HHPs are pesticides

that are acknowledged to present particularly high levels of acute or chronic hazards to health or the environment according to internationally accepted classification systems. As per the definition given in the Guidelines on Highly Hazardous Pesticides by FAO and WHO, a pesticide can be classified as an HHP if it meets one of the following criteria: highly acute toxic (WHO Tox1), carcinogenic, mutagenic, toxic for reproduction or listed in Montreal protocol (ozone depleting), Rotterdam (restricted or banned for health or environmental reasons) Stockholm convention (Persistent Organic Pollutants).

Quantitative metric

% reduction in concentration of pollutants

Baseline year

2015

Start year

2015

Target year

2020

% achieved

87

Please explain

PMI is testing 100% of its tobacco purchased for pesticides residues. PMI is making important steps towards the elimination of WHO Tox1 and other HHPs. In 2017, 99% of our tobacco purchase did not contain any WHO Tox1 and 87% free from HHPs.

W8.1b

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

Goal

Engagement with suppliers to help them improve water stewardship

Level

Basin level

Motivation

Water stewardship

Description of goal

As part of the local Alliance for Water Stewardship roll out we are performing in our factories, we want to engage with local suppliers (tobacco suppliers, farmers or direct material suppliers) to promote the standard and exchange best practices. By

2020, we plan to have 10 of our sites AWS certified and all our major sites by 2030. This is an important goal because it promulgates the use of the AWS international standard for sustainable water use within the organization. Reinforcing our commitment to a rigorous and data driven approach to evaluating water. Our AWS team and our 1,600 employees are fully engaged to ensure that our factory meets the AWS standard, including engaging with local authorities, the farming community and civil society groups. We look forward to building on this success in Brazil to extend our efforts globally and hope this commitment will inspire other companies in our value chain and beyond to take similar steps on water stewardship.

Baseline year

2017

Start year

2017

End year

2030

Progress

In 2017, we piloted the adoption of the standard for water stewardship in our factory in Brazil, using the opportunity to learn how such standards could also support our tobacco supply chain work. We engaged locally with a major tobacco supplier, visited different tobacco farms and informed about our plans to other local stakeholders in order to promote the standard. Different pilots will be done in the next years and we will use the opportunity to promote water stewardship at local level. We are measuring progress through the roll-out of these pilots, as well as, the best practices that emerge. Currently, we have just completed a pilot in Brazil and are working to scale up into several additional pilots.

Goal

Promotion of sustainable agriculture practices

Level

Basin level

Motivation

Risk mitigation

Description of goal

PMI expects suppliers to develop and implement a water conservation plan that aims at the rational use of water resources and incorporates locally defined best available irrigation practices including efficient irrigation systems such as drip irrigation, timing, and amount of water distributed, based on water use efficiency measurements. It must consider water recirculation and reuse, maintenance of the water distribution network, and the minimization of water use. We operate in areas where we assessed water scarcity and drought risks. One of the element of our strategy is the adoption by the farmers of irrigation

practices more efficient, reducing water withdrawal rates. The increasing number of farmers using drip irrigation has an impact on reducing water withdrawal rates and is supporting the achievement of our risk mitigation objectives. We started more than 10 years ago implementing GAP and water management practices; for example, based on the information collected in the water baseline studies conducted in 2017 we estimated that more than 40% of the tobacco purchased by PMI in Italy is produced in field areas which have in place drip irrigation systems to reduce water usage, vs surface and/or overhead irrigation practices, with a pick adoption rate of more than 80% in the north of Italy in Verona area; we target to possibly have 100% of the farmer using drip irrigation by 2030.

Baseline year

2007

Start year

2007

End year

2030

Progress

We continue to measure progress against this goal by the amount of farmers that we have using drip irrigation. We are measuring the effectiveness of the program in areas where we can track effectiveness of these programs over longer time frames such as in Italy. In 2017, we estimated that more than 40% of the tobacco purchased by PMI in Italy is produced in field areas which have in place drip irrigation systems to reduce water usage, vs surface and/or overhead irrigation practices, with a pick adoption rate of more than 80% in the north of Italy in Verona area; we target to possibly have 100% of the farmer using drip irrigation by 2030.

W9. Linkages and trade-offs

W9.1

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

Yes

W9.1a

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

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Decreased energy use

Description of linkage/tradeoff

Energy is often required to drive water-consuming processes like humidification, refrigeration (e.g. water cooled towers) or steam production. Improving the efficiency of processes and equipment supports the reduction of both water and energy consumption. To facilitate this, our Energy Management Program (EMP) was developed to help achieve our CO2e reduction target of 30% by 2020 compared to our 2010 baseline for our manufacturing affiliates. This program, although focusing on energy, also delivers water savings. The management focus provided by the EMP provides a context for general resource optimization. Based on this program, we have made improvements around the world including: Steam-system optimization or reduction in Indonesia, Argentina, Poland, Switzerland, Canada, Germany, Lithuania, Russia, and Pakistan; Chiller-system improvements in Indonesia, Kazakhstan, and Russia; and more efficient humidification in Turkey and Canada.

Policy or action

Examples of how the EMP have been applied include: Optimization of steam systems results in decreases in both energy and water use; Installation of energy and water metering devices at all facilities allows a better understanding of water consumption and allows targeted improvement actions; Development and use of a “Ready mode” on specific equipment has helped to reduce the consumption of electricity, gas, steam and water.; Installation of new high efficiency chillers to improve both electricity and water consumption. For example, in our Indonesia factory, we upgraded our chilled water system and saved energy, water, and money.

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Other, please specify (Increase tobacco crop yield)

Description of linkage/tradeoff

Future scenarios of increasing population and climate change pose additional focus on soil and water sustainable management and farmer productivity gains have a key role to play. PMI launched Good Agricultural Practices (GAP) in 2002, which promotes practices to improve farmers’ yields and crop quality. Yield improvements is linked to a reduction in greenhouse gases and water withdrawn while improving farmer income and the access to land for food crops, helping strengthen food security and nutrition. Through the adoption of GAP, over the last 8 years, we estimate an yearly average yield increase (kilos per hectare) of around 2.5% (based on internal data collected in PMI sourcing countries). The increased

productivity per hectare can be used as a proxy to estimate around 2.5% net reduction per year in terms of land cropped to grow tobacco to fulfill PMI requirements as well a decrease in water usage and other crop inputs.

Policy or action

PMI is committed to the sustainable production of tobacco in conditions that limit as much as possible the impact on the natural environment, and that improve the socioeconomic circumstances of the people and communities involved in its production. PMI, via the Global Agricultural Practices (GAP) program, focuses actions to enable tobacco farmers to have access to the information, systems and tools needed to be successful business owners who minimize the environmental impacts of their activities, builds a sustainable supply chain in the long term, and aims to create a positive impact on livelihood of local farming communities; this entails management of their water risks such as water access and sufficient availability for sustainable development. Working with our suppliers and farmers to understand and better manage their water risks will create a more resilient supply chain. We regularly review Climate Change elements impacting tobacco growing areas in order to adapt GAP implementation, with the aim to further increase yield while minimizing impact on the environment; as an example we actively research drought and flood tolerant tobacco seed varieties.

W10. Verification

W10.1

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

No, we do not currently verify any other water information reported in our CDP disclosure

W11. Sign off

W-FI

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

W11.1

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

	Job title	Corresponding job category
Row 1	Andre Calantzopoulos, Chief Executive Officer (CEO)	Chief Executive Officer (CEO)

W11.2

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

Yes