

Welcome to your CDP Forests Questionnaire 2020

F0. Introduction

F_{0.1}

(F0.1) Give a general description of and introduction to your organization.

Philip Morris International Inc. (PMI) is a leading international tobacco company. PMI has its executive headquarters in New York, US, has its primary listing on the New York Stock Exchange (NYSE: PM), and has its Operations Center in Lausanne, Switzerland. PMI manufactures and sells cigarettes, smoke-free products and associated electronic devices and accessories, and other nicotine-containing products in markets outside of the U.S. We have a wide range of cigarette brands, including the world's best-selling international cigarette Marlboro. Our smoke-free product portfolio includes heat-not-burn and nicotine-containing vapor products. In 2019, PMI net revenues amounted to USD 29.8 billion excluding excise taxes on products worth USD 50.2 billion, on a like-for-like basis; 18.7% of PMI's net revenues in 2019 related to the sale of smoke-free products. PMI's 2019 total shipment volume for cigarette and heated tobacco units was 766.4 billion (706.7 billion cigarettes and 59.7 billion heated tobacco units).

We are building our future on smoke-free products that are a much better consumer choice than continuing to smoke cigarettes. Our vision is that these products ultimately replace cigarettes to the benefit of adult smokers, society, our company and our shareholders. This ambition is at the very core of our corporate strategy and sits atop our sustainability priorities. For PMI, sustainability means creating long term value while minimizing the negative externalities associated with our products, operations and value chain. We are committed to address the impact on the communities and the environment across our value chain. We have a global footprint: as of December 31, 2019, PMI had a workforce of around 73,500 people worldwide and operated 38 production facilities globally. In 2019, our tobacco was sourced from over 335,000 contracted farmers across 24 countries, and our products were sold in over 180 markets.

To help us prioritize our focus and resources in areas where we can have the greatest impact, we refreshed our sustainability materiality analysis in 2019. Climate protection, littering prevention and product eco-design and circularity are tier 1 environmental topics that are prioritized in our sustainability strategy.

Engagement beyond our own operations is key, as this is where the most significant sustainability impacts occur, especially when it comes to climate change and carbon emissions. Our business has a significant, global supply chain organized by five main categories:

- 1. Agricultural products: ranging from tobacco growers to producers of other agricultural products, such as clove, menthol and guar gum.
- 2. Direct materials used to produce cigarettes and other tobacco products, such as acetate tow (for cigarette filters) and paper (both cigarette paper and for packaging materials).
- 3. Machines for our cigarette and heated tobacco products factories, a highly specialized industry.
- 4. Electronic devices for heated tobacco and vapor products.



5. 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.

The description above is a summary and is qualified in its entirety by reference to the full text of PMI's Annual Report on Form 10-K for the year ended 2019 filed with the U.S. Securities and Exchange Commission, and the full text of PMI's Integrated Report 2019 Remarks for this disclosure:

- In this submission, "PMI," "we," "us" and "our" refer to Philip Morris International Inc. and its subsidiaries;
- In this submission, we reference information reported in the 2020 Proxy Statement dated March 26th, 2020; 10-K filed February 7th, 2020 with the SEC; and PMI's Integrated Report 2019;
- Trademarks and service marks in this submission are the registered property of, or licensed by, the subsidiaries of Philip Morris International Inc;
- -Expectations, aspirational targets and goals set forth in this submission do not constitute financial projections;
- Smoke-Free Products or Reduced-Risk Products (RRPs) the terms PMI uses to refer to products that present, are likely to present, or have the potential to present less risk of harm to smokers who switch to these products versus continued smoking. PMI has a range of RRPs in various stages of development, scientific assessment and commercialization;
- Materiality: In this submission and in related communications, the terms "materiality," "material" and similar terms, when used in the context of economic, environmental, and social topics, are defined in the referenced sustainability standards, and are not meant to correspond to the concept of materiality under the U.S. securities laws and/or disclosures required by the US Securities and Exchange Commission.

F_{0.2}

(F0.2) State the start and end date of the year for which you are reporting data.

	Start Date	End Date
Reporting year	January 1, 2019	December 31, 2019

F0.3

(F0.3) Select the currency used for all financial information disclosed throughout your response.

USD

F_{0.4}

(F0.4) Select the forest risk commodity(ies) that you are, or are not, disclosing on. For each forest risk commodity selected, identify the stages of the supply chain which best represents your organization's area of operation.



	Commodity disclosure	Stage of the value chain	Explanation if not disclosing
Timber products	Disclosing	Manufacturing	
Palm oil	Not disclosing	Manufacturing	PMI sources roughly 8,000 metric tons of vegetal glycerin derived from the production of biodiesel using palm oil as feedstock. The palm oil needed to produce this amount of vegetal glycerin is less than 0.01% of global palm oil production. According to PMI's deforestation risk assessment if PMI's market share of the commodity is lower than 2% and the commodity is sourced on a small scale where the overall impact on deforestation is low then the commodity does not represent a material risk of deforestation. Results from PMI's deforestation risk assessment within the value chain indicated that palm oil does not represent a material risk of deforestation for PMI due to the very low amount of palm oil that goes into PMI products. Palm oil based or containing glycerin represents less than 1.5% of the total Direct Material weight [tons] sourced by PMI based on agricultural raw material. Finally, palm oil-based glycerine is widely sourced from fully or partly RSPO certified suppliers, lowering again the risk of deforestation.
Cattle products	This commodity is not produced, sourced or used by our organization		
Soy	Not disclosing	Manufacturing	PMI sources around 750 metric tons of vegetal glycerin derived from the production of biodiesel using soy as feedstock. The soy needed to produce this amount of vegetal glycerin is less than 0.0002% of global soy production. According to PMI's deforestation risk assessment if PMI's market share of the commodity is lower than 2% and the commodity is sourced on a small scale where the overall impact on deforestation is low then the commodity does not represent a material risk of deforestation. Results from PMI's deforestation risk assessment within the value chain indicated that soy does not represent a material risk of deforestation for PMI due to the very low amount of soy that goes



Other - Rubber	This commodity is not produced, sourced or used by our organization		into PMI products: Soy oil based or containing glycerin represents close to 0% of the total Direct Material weight [tons] sourced by PMI based on agricultural raw material.
Other - Cocoa	Not disclosing	Manufacturing	PMI sources roughly 320 tons of cocoa products for flavour production. This amount compared with the global production of cocoa stands at about 0.007%, a very low volume. According to PMI's deforestation risk assessment if PMI's market share of the commodity is lower than 2% and the commodity is sourced on a small scale where the overall impact on deforestation is low then the commodity does not represent a material risk of deforestation. Cocoa powder represents close to 0% of the total Direct Material weight [tons] sourced by PMI based on agricultural raw material and above 85% of the cocoa volume is sourced from companies holding cocoa sustainability certifications.
Other - Coffee	This commodity is not produced, sourced or used by our organization		

F_{0.5}

(F0.5) Are there any parts of your direct operations or supply chain that are not included in your disclosure?

No

F1. Current state

F1.1

(F1.1) How does your organization produce, use or sell your disclosed commodity(ies)?

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Activity



Using as input into manufacturing process for power generation Using as input into product manufacturing Distributing/packaging

Form of commodity

Paper

Boards, plywood, engineered wood

Primary packaging

Secondary packaging

Tertiary packaging

Cellulose-based textile fiber

Wood-based bioenergy

Other, please specify

Fine paper

Source

Smallholders

Multiple contracted producers

Contracted suppliers (manufacturers)

Country/Area of origin

Argentina

Australia

Austria

Belarus

Belgium

Bosnia & Herzegovina

Brazil

Bulgaria

Canada

Chile

China

Croatia

Czechia

Denmark

Estonia

Finland

France

Germany

Hungary

Indonesia

Ireland

Italy

Latvia

Lithuania

Luxembourg

Malawi



Malaysia

Mozambique

Netherlands

New Zealand

Norway

Pakistan

Philippines

Poland

Portugal

Romania

Russian Federation

Serbia

Slovakia

Slovenia

Spain

Sweden

Switzerland

Thailand

Ukraine

United Kingdom of Great Britain and Northern Ireland

United States of America

Uruguay

% of procurement spend

6-10%

Comment

The percentage is calculated based on the total supply chain spend which includes direct and indirect materials and services, technical procurement, RRP devices, R&D and Leaf Procurement. The countries of origin listed are the countries from where the wood-based materials are sourced from, either as wood fuels or as paper and pulpbased products for packaging materials. Both board and paper used for packaging together account for 3% of the total supply chain spend described above. Fine papers are specialty papers that are used exclusively for tobacco products and account for around 3% of the total supply chain spend described above. Acetate tow used in our filters, made out of acetate cellulose, and accounts for around 3% of the total supply chain spend described above. The spend with firewood and biomass from wood fiber used in the tobacco curing process for the flue cured tobacco purchased in 2019 is estimated at less than 1% of the total supply chain spend described above, summing up to around 10%. The disclosure is organized using the same categories (i.e. board and paper, fine papers, acetate tow and firewood and biomass from wood fiber) used by PMI to manage the supply chain of timber products. The same categories were used in the deforestation risk assessment of PMI's value chain, which has been the basis for setting priorities for further managing deforestation risks. Therefore, PMI has decided to use the same categories in its disclosure. This share is based on the total supply chain spend as described above.



F1.2

(F1.2) Indicate the percentage of your organization's revenue that was dependent on your disclosed forest risk commodity(ies) in the reporting year.

	% of revenue dependent on commodity	Comment
Timber products	100%	100% of PMI heated tobacco units, cigarettes and other nicotine-containing products require timber derivative products. Additionally, PMI uses board and paper for packaging of the majority of PMI's products.

F1.5

(F1.5) Does your organization collect production and/or consumption data for your disclosed commodity(ies)?

	Data availability/Disclosure
Timber products	Consumption data available, disclosing

F1.5a

(F1.5a) Disclose your production and/or consumption data.

Forest risk commodity

Timber products

Data type

Consumption data

Volume

977,812

Metric

Metric tons

Data coverage

Full commodity production/consumption

Please explain



F1.5b

(F1.5b) For your disclosed commodity(ies), indicate the percentage of the production/consumption volume sourced by national and/or sub-national jurisdiction of origin.

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Bahia

% of total production/consumption volume

7 61

Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Bahia refers to biomass from wood fiber. Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data [information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered). The volume sourced from one specific supplier, which did not provide quantitative origin data, was assigned as originated solely from Bahia. Considering this supplier sources from Florida (US) and Bahia (BR) (publicly available information), the assumption reflects the worst-case scenario as Brazil is considered a forest risk country.

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Espirito Santo



% of total production/consumption volume

0.2

Please explain

Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered).

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Mato Grosso do Sul

% of total production/consumption volume

0.26

Please explain

Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered).

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Minas Gerais

% of total production/consumption volume

0.55

Please explain

Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are



based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered).

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Sao Paulo

% of total production/consumption volume

0.42

Please explain

Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered).

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Santa Catarina

% of total production/consumption volume

5.94

Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Santa Catarina refers to firewood.



Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Rio Grande do Sul

% of total production/consumption volume

10.48

Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Rio Grande do Sul refers to firewood.

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Parana

% of total production/consumption volume

4.73

Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information and the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Parana refers to firewood.

Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered).



Forest risk commodity

Timber products

Country/Area of origin

Argentina

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Buenos Aires

% of total production/consumption volume

0.05

Please explain

Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered).

Forest risk commodity

Timber products

Country/Area of origin

Argentina

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Salta

% of total production/consumption volume

0.43

Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Salta refers to firewood. PMI developed deforestation risk maps for countries where farmers use firewood for tobacco curing and where medium to high deforestation risks were identified in the initial high-level global deforestation assessment. A deforestation risk map was developed for Argentina. As an input for the development of the deforestation risk map, PMI requires tobacco leaf suppliers to provide the exact location of their contracted farmers to create the map.



Additionally, PMI has also identified the distance that tobacco farmers travel to source firewood through the development of local forest risk maps with the support of an external consultant. Therefore, PMI can identify the municipality where the wood fuel is sourced from.

Forest risk commodity

Timber products

Country/Area of origin

Argentina

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Jujuy

% of total production/consumption volume

0.08

Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Jujuy refers to firewood. PMI developed deforestation risk maps for countries where farmers use firewood for tobacco curing and where medium to high deforestation risks were identified in the initial high-level global deforestation assessment. A deforestation risk map was developed for Argentina. As an input for the development of the deforestation risk map, PMI requires tobacco leaf suppliers to provide the exact location of their contracted farmers to create the map. Additionally, PMI has also identified the distance that tobacco farmers travel to source firewood. Therefore, PMI can identify the municipality where the wood fuel is sourced from.

Forest risk commodity

Timber products

Country/Area of origin

Colombia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Capitanejo

% of total production/consumption volume



0.03

Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Capitanejo refers to firewood.

Forest risk commodity

Timber products

Country/Area of origin

Mozambique

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Zambezia

% of total production/consumption volume

5.6

Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Zambezia refers to firewood. PMI developed deforestation risk maps for countries where farmers use firewood for tobacco curing and where medium to high deforestation risks were identified in the initial high-level global deforestation assessment. A deforestation risk map was developed for Mozambique. As an input for the development of the deforestation risk map, PMI requires tobacco leaf suppliers to provide the exact location of their contracted farmers to create the map. Additionally, PMI has also identified the distance that tobacco farmers travel to source firewood. Therefore, PMI can identify the municipality where the wood fuel is sourced from.

Forest risk commodity

Timber products

Country/Area of origin

Indonesia



State or equivalent jurisdiction

Specify state/equivalent jurisdiction Riau

% of total production/consumption volume

0.04

Please explain

Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered).

Forest risk commodity

Timber products

Country/Area of origin

Thailand

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Kanchanaburi

% of total production/consumption volume

0.2

Please explain

Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered).

Forest risk commodity

Timber products

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Lombok

% of total production/consumption volume

3.46



Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Lombok refers to firewood and biomass from wood fiber. PMI developed deforestation risk maps for countries where farmers use firewood for tobacco curing and where medium to high deforestation risks where identified in the initial high-level global deforestation assessment. A deforestation risk map was developed for Indonesia in 2016 and reviewed with additional information in 2018. As an input for the development of the forest risk map, PMI requires tobacco leaf suppliers to provide the exact location of their contracted farmers. Additionally, PMI has also identified the distance that tobacco farmers travel to source firewood. Therefore, PMI can identify the municipality where the wood fuel is sourced from.

Forest risk commodity

Timber products

Country/Area of origin

Philippines

State or equivalent jurisdiction

Specify state/equivalent jurisdiction llocos Norte

% of total production/consumption volume

0.83

Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Ilocos Norte refers to firewood.

Forest risk commodity

Timber products

Country/Area of origin

Philippines

State or equivalent jurisdiction

Specify state/equivalent jurisdiction



Ilocos Sur

% of total production/consumption volume

1.95

Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Ilocos Sur refers to firewood.

Forest risk commodity

Timber products

Country/Area of origin

Philippines

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Claveria

% of total production/consumption volume

0.16

Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding and the source of curing fuel. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Tabuk refers to biomass from wood fiber.

Forest risk commodity

Timber products

Country/Area of origin

Mexico

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Nayarit

% of total production/consumption volume

0.32



Please explain

In 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding the source of curing fuel. PMI's monitoring framework has been verified by a third party since 2018. The curing fuel originated from Nayarit refers to biomass from wood fiber.

Forest risk commodity

Timber products

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction Sabah

% of total production/consumption volume

0.11

Please explain

Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered). In the case of one specific supplier the qualitative information provided specified origins in Malaysia (Sabah) and Indonesia without details of the volume split by origin. Considering both countries are defined as forest risk countries, an equal split of the volume between these origins was assumed.

Forest risk commodity

Timber products

Country/Area of origin

Australia

State or equivalent jurisdiction

Don't know

% of total production/consumption volume

0.08

Please explain



Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered). In this case, supplier did not provide the expected level of details, stating origin at country level only and mentioning a regional information too vague to be considered.

Forest risk commodity

Timber products

Country/Area of origin

Brazil

State or equivalent jurisdiction

Don't know

% of total production/consumption volume

1.32

Please explain

Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered). In this case, supplier did not provide the expected level of details, stating origin at country level only and mentioning several states or jurisdiction of origin with no split of respective volumes.

Forest risk commodity

Timber products

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Don't know

% of total production/consumption volume

1.5

Please explain

Direct Materials' traceability data are tracked on a yearly basis for paper and pulp-based products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as



quantitative data (in percentage of total volume delivered). In this case, supplier did not provide the expected level of details, stating origin at country level only and mentioning several states or jurisdiction of origin with no split of respective volumes.

Forest risk commodity

Timber products

Country/Area of origin

Any other countries/areas

State or equivalent jurisdiction

% of total production/consumption volume

50.48

Please explain

The above-mentioned volume refers to the sum of wood fuels for tobacco curing and paper and pulp-based direct materials sourced in 2019 which did not originate from forest risk countries as per CDP Guidance (Austria, Belarus, Belgium, Bosnia, Bulgaria, Canada, Chile, China, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malawi, Netherlands, New Zealand, Norway, Pakistan, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, Uruguay, U.S.A). Nonetheless, in 2019 PMI continued to implement a harmonized and verifiable monitoring framework to allow monitoring of progress towards PMI's goals on sustainable leaf curing fuel in the markets from where we source Virginia Flue-Cured. As part of this monitoring framework, tobacco leaf suppliers are required to report on the location of their contracted tobacco farmers and to collect information regarding the source of firewood. PMI's monitoring framework has been verified by a third party since 2018. Direct Materials' traceability data are tracked on a yearly basis for paper and pulpbased products (acetate tow, board and paper used for packaging and fine papers). They are based on previous year actuals deliveries. We request suppliers to provide qualitative data (information requested down to Forest Management Units location) as well as quantitative data (in percentage of total volume delivered). For the countries not identified as a high-risk country in our risk analysis, suppliers were not requested to disclose at a level of detail beyond country level.

Forest risk commodity

Timber products

Country/Area of origin

Unknown origin

State or equivalent jurisdiction



% of total production/consumption volume

3.17

Please explain

Despite our efforts to engage with our paper and pulp-based direct material suppliers to provide quantified traceability data, we have faced reluctance to disclose such level of information from some players of specific paper and pulp-based products industries. Furthermore, some major partners of ours have explained that such information is proprietary and refer to trade secrets of their product manufacture. The tree species they use in the recipe of their products is an element that distinguish acetate tow grades and qualities from their competitors. Hence by disclosing the countries of origin as well as the proportional quantities in use, competitors could recover on their competitive, distinctive advantages.

F_{1.6}

(F1.6) Has your organization experienced any detrimental forests-related impacts?
Yes

F1.6a

(F1.6a) Describe the forests-related detrimental impacts experienced by your organization, your response, and the total financial impact.

Forest risk commodity

Timber products

Impact driver type

Physical

Primary impact driver

Forest fires

Primary impact

Supply chain disruption

Description of impact

With climate change causing weather patterns across the globe to change dramatically, local impacts become increasingly evident. The occurrence of forest fires during 2019 were cause for global alarm, affecting also countries from where we source tobacco. The losses in forest cover, primary but also secondary ones, contribute to land use change adding to the pressure on the demand for sustainable wood-based materials. The curing of Virginia Flue-Cured tobacco (FCV) is a process highly dependent on fuels, for which firewood and biomass are commonly used (58% of the FCV sourced by PMI in 2019 was cured with wood fuels). For example, 100% of the FCV volume sourced in



2019 from Brazil was cured with firewood and woodchips coming from sustainably managed secondary forests. In Brazil alone an estimated 1.4 million hectares of primary forest were lost during last year, with fires playing a large role in the destruction of natural ecosystems. Due to an increase in forest cover loss, the availability of sustainable wood products from secondary forests is impacted, generating knock on effects in the supply of sustainable and traceable firewood and wood-based fuels for tobacco curing in line with PMI's requirements. The impacts experienced so far have not been substantive according to the company's definition of financial and strategic substantive impact (threshold of \$5 million). However, PMI continues to monitor them as they could potentially become more substantial.

Primary response

Tighter supplier performance standards

Total financial impact

4.500.000

Description of response

PMI is responding to this issue by involving multiple stakeholders within and beyond the company, with its senior management (for example, our SVP Operations) and sustainability teams for the creation of policies, procedures and targets to achieve full traceability and sustainability of wood fuels for tobacco curing. Within PMI's supply chains, we work with tobacco leaf suppliers through the application of the Monitoring Framework (MF) for Sustainable Curing Fuels that all tobacco suppliers should comply with by 2020. The MF verification process is performed by a third-party and the first cycle will be concluded by 2020. Outcomes to date include the development of PMI's forests policy and traceability commitment (which have led to the sourcing of more than 85% sustainable wood fuels for tobacco curing in 2019), development of a deforestation risk assessment, and country specific programs to tackle deforestation. E.g., in Brazil a thorough analysis of the forest management system relevant to the local wood-based fuel supply was done in 2019 following a multi stakeholder approach. The results of this assessment were used by local farmers and suppliers to drive actions to ensure the requirements of the MF are met. The indicated financial impact (\$4.5 million) refers to the set annual budget, incl. costs associated to execute our Good Agricultural Practices Program, initiatives to address deforestation issues in our tobacco supply chain and costs to implement and verify the MF.

Forest risk commodity

Timber products

Impact driver type

Reputational and markets

Primary impact driver

Uncertainty about product origin and/or legality

Primary impact



Brand damage

Description of impact

Deforestation is a global issue with local impact. PMI sources tobacco from some markets subject to risk based on their current or future risk of deforestation, bringing concerns at reputational level on how to tackle issues. This is the case for PMI's sourcing from tropical and subtropical countries such as Brazil and Indonesia, where deforestation continues to be an issue threatening local populations and natural ecosystems. Failing to address deforestation and to secure sustainable, deforestationfree raw materials from at risk countries could prevent PMI from achieving its Zero Deforestation Manifesto (ZDM) targets and damage the brand. In 2019, attention from public and international organizations on environmental impacts from tobacco industry continued to increase. Land use change and associated impacts on ecosystem services were particularly relevant, e.g. as published in 2019 in an article by the Swedish Royal Academy of Science. Even though PMI has significantly increased traceability of its paper and pulp-based materials, there is a share that remains uncertain (3.17%). PMI will prioritize engagement with these suppliers in the future to ensure their products are in line with PMI's ZDM requirements. The impacts experienced so far have not been substantive according to the company's definition of strategic and financial substantive impact (\$5 million). However, PMI continues to monitor them as they could potentially become more substantial.

Primary response

Greater traceability of forest-risk commodities

Total financial impact

4,500,000

Description of response

PMI is responding to this issue by involving multiple stakeholders within and beyond the company. Within the company, PMI has involved its senior management (for example, our SVP Operations) and sustainability teams for the creation of policies, procedures and targets to achieve zero deforestation supply chains. As part of this effort, PMI set a target to source 100% of the wood fuel for tobacco curing as traceable and sustainable with progress being audited by a third party by 2020. Within PMI's supply chains, the company is working with tobacco leaf suppliers through the application of the Monitoring Framework (MF) for Sustainable Curing Fuels that all tobacco leaf suppliers should comply with. Outcomes to date include the development and implementation of PMI's forests policy and traceability commitment (which led to sourcing of over 85% sustainable wood fuels for tobacco curing in 2019), the development of a deforestation risk assessment, and country specific programs to tackle deforestation. The indicated financial impact (\$4.5 million) includes the costs associated with the set annual budget to execute our Good Agricultural Practices Program and initiatives to also address deforestation issues in our tobacco supply chain. The annual budget is allocated to initiatives to catalyze the adoption of improved and innovative practices by the farmers in our supply chain, such as adoption of bulk tobacco curing barns. It also includes the costs to implement and verify the MF.



F2. Procedures

F2.1

(F2.1) Does your organization undertake a forests-related risk assessment?

Yes, forests-related risks are assessed

F2.1a

(F2.1a) Select the options that best describe your procedures for identifying and assessing forests-related risks.

Timber products

Value chain stage

Direct operations Supply chain

Coverage

Full

Risk assessment procedure

Assessed as part of other company-wide risk assessment system

Frequency of assessment

Annually

How far into the future are risks considered?

> 6 years

Tools and methods used

Internal company methods
External consultants
National specific tools and databases
Other, please specify
Big Chain Tool

Please explain

External consultants were hired to develop PMI's deforestation risk assessment. The scope of the assessment included PMI's entire value chain, focusing on global materials sourced for manufacturing purposes, that could be linked to agriculture or mining (main drivers of deforestation). The risk assessment follows a relevance assessment to prioritize materials through two indicators: global deforestation impact of the material, and PMI's sourcing origins, weighted by PMI's market share per material. The analysis included national specific data on land use cover, deforestation trends, emissions from deforestation, availability of certified materials, corruption, and other data for all markets. To assess the deforestation impact of land use change, PMI used the BigChain Tool (BCT). The BCT was used to execute a rapid screening of deforestation linked to



commodity production and identify risks on a geographic basis. The BCT assessed impact of land use change associated with the expansion of tobacco farming for all countries where PMI sources tobacco. From this prioritization exercise, targeted risk assessments were implemented for tobacco leaf and priority paper and pulp-based products. Furthermore, deforestation risk maps were developed for countries where farmers use firewood for tobacco curing and where medium to high deforestation risks were identified. Internal company methods were used to assess risks associated with the use of timber for tobacco curing barn construction. The PMI global forest risk map was refreshed in 2019, updating indicators for deforestation risks and the volume allocation per market. The results showed that five countries (AR, BR, ID, MZ, TZ) had deforestation that could be associated with tobacco farming. Nonetheless, as a result of a low potential impact and strong mitigation actions already in place, such as the implementation of PMI's Monitoring Framework, the overall estimated risk for PMI is low. These methods were selected as PMI considered that only through a combination of methods PMI could assess all the risks associated to its different commodities. processes and locations. These have been effective at identifying all the relevant risks for PMI's operations, which has enabled the company to engage key suppliers and develop strategies to mitigate risks from those materials that could represent the highest risks to forests.

F2.1b

(F2.1b) Which of the following issues are considered in your organization's forests-related risk assessment(s)?

Availability of forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

This issue is important because the availability of timber is key as fuel for tobacco curing, and to produce paper and pulp-based products such as fine papers and cellulose acetate tow for the manufacture of heated-tobacco units and cigarettes. Therefore, assessing the availability of timber is important to ensure PMI's future ability to manufacture its main products. Decreased availability of timber would impact the entire value chain. To assess this issue, PMI uses its comprehensive deforestation risk assessment as the main tool to identify forest-related risks in our supply chain and derive further interventions (including national specific tools and databases, and internal monitoring tools). As a result, the Monitoring Framework for Sustainable Leaf Curing Fuel (internal company methods) was developed and its implementation enables tobacco leaf suppliers to show that their contracted farmers have identified traceable and sustainable fuel sources year on year. They can do so by providing proof of longterm contracts with compliant fuel vendors or by presenting a dedicated study on the sustainable sourcing of the fuel. The assessment also considers existing mitigation actions implemented by tobacco leaf suppliers, for example, the establishment and sustainable management of farmer-owned woodlots to ensure the availability of



sustainable wood fuel now and in the future. Results from the assessment are used to inform PMI's sustainability and sourcing strategies, and to identify key suppliers who may require further technical assistance and capacity building. Through a third-party PMI then assesses the share of tobacco leaf suppliers and farmers that comply with the Monitoring Framework requirements, validating the effectiveness of program and safeguarding the future availability of sustainably sourced wood fuel.

Quality of forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

The type of wood and tree species used as fuel for tobacco curing (i.e. tobacco drying process) can impact the curing efficiency and therefore the amount of fuel needed to cure the Virginia tobacco. Virginia tobacco is flue-cured, which means that the leaves are placed in curing barns, where heated air is generated to dry the leaves. As tobacco is the main ingredient in the manufacture of PMI's products, this issue can impact the entire value chain. To assess this issue, PMI uses its comprehensive deforestation risk assessment as the main tool to identify forest-related risks in our supply chain and derive further interventions (including national specific tools and databases, and internal monitoring tools). As a result the Monitoring Framework for Sustainable Leaf Curing Fuel (internal company methods) was developed and its implementation enables tobacco leaf suppliers to identify the tree species used for firewood, guarantee that their origin is sustainable and report on their use for tobacco curing. Results from the assessment are used internally to develop initiatives that encourage farmers to use more efficient types of fuel, for example through the prioritization of wood fuels with higher calorific properties to reduce fuel consumption and optimize the curing process, with the provision of technical assistance to farmers on how to manage biomass fuels to optimize their performance.

Impact of activity on the status of ecosystems and habitats

Relevance & inclusion

Relevant, always included

Please explain

This issue is important to PMI because of our supply chain and the nature of the materials we source, can be linked to deforestation activities and have an impact on ecosystems and habitats. Failure to comply with ecosystems and habitats conservation regulations across our supply chain could generate potential negative impacts on PMI's brand reputation which could affect PMI's revenue and PMI's business. PMI assesses this issue through a deforestation risk assessment of its entire value chain, involving external consultants and using national specific databases. Results show the main deforestation risks arise from the use of firewood and the sourcing of paper and pulp-based products. The risk assessment covered all the paper and pulp-based products suppliers and countries of origin, as well as all the countries where firewood is used for tobacco curing. Additionally, PMI developed deforestation risk maps for countries where



farmers use firewood for tobacco curing and where medium to high deforestation risks were identified in the initial high-level global deforestation assessment (BigChain Tool). Forest risk maps for relevant countries were updated in 2019 by also analyzing the impact of tobacco curing on forests surrounding tobacco farms. Results from this assessment are used to inform PMI's sustainability strategy and to develop additional initiatives to mitigate the identified risks. For example, the Monitoring Framework was developed as a result of the identification of global deforestation risks associated with tobacco curing. Through the Monitoring Framework concrete measures towards forest protection, including ecosystem and habitat conservation, are required and implemented. In 2019 PMI formalized its commitment to sourcing wood-based materials from traceable, sustainable and legal sources, while protecting the rights and livelihoods of local communities, through its Zero Deforestation Manifesto (ZDM), and set ambitious targets to drive the path towards its commitment, further supporting our efforts towards ecosystems and habitats conservation. The results of the forest risk maps are shared with tobacco leaf suppliers to develop forest risk mitigation plans focusing on farmers who are in proximity to forests at risk of deforestation.

Regulation

Relevance & inclusion

Relevant, always included

Please explain

As a global company, PMI must comply with all regulations in more than the 180 countries where it sells its products. As wood-based materials are key for the manufacture of PMI products, any change to the regulatory framework of timber and the use of forest resources might impact PMI's entire value chain. PMI assesses this issue as part of the company's deforestation risk assessment using internal company methods, external consultants and national databases. PMI complies with all applicable laws and meets and often exceeds relevant standards, particularly in those countries where national standards are lower than PMI's ones. The analysis considered regulations in countries where PMI sources paper and pulp-based products, focusing on identifying countries where regulations might not be strong enough to ensure that the products are being sustainably sourced. Results from the assessment are used to identify paper and pulp-based products' suppliers who operate in higher risk countries, based on the assessment methodology, and implement corrective actions. For tobacco suppliers, PMI uses the Monitoring Framework for Sustainable Curing Fuels, which considers compliance with local regulations such as the need for permits, registrations etc. at the supplier level. Additionally, PMI continuously monitors the legislative landscape to anticipate any change, to support ensuring that the regulatory requirements are met, as well as support further development of strategies internally and in collaborations with our suppliers.

Climate change

Relevance & inclusion

Relevant, always included



Please explain

This issue is important to PMI because it's a fundamental global issue and has tangible physical and other impacts on our value chain that requires mitigation and adaptation measures. More concretely, our products heavily rely on the production of high-quality agricultural commodities, which can be impacted by climate change. We monitor on a yearly basis crop loss data related to extreme climate events collected through regular field reports, which can negatively impact not only tobacco but also wood-based materials we source, causing supply chain disruptions. PMI works directly with its suppliers and farmers, acknowledging they have a key role to play in climate protection. For this reason, PMI has set strong commitments towards climate protection: i) through its Zero Deforestation Manifesto, by preserving the forest capital and striving to generate net positive impact on forests associated with the tobacco supply chain, ii) through its commitment to achieve carbon neutrality in our direct operations (scope 1+2) by 2030 and across our value chain (scope 1+2+3) by 2050. As tobacco accounted for around 40% of PMI's carbon footprint in our 2010 baseline, PMI set goals and developed strategic initiatives to reduce GHG emissions related to tobacco growing including the emissions generated by the fuels used for the tobacco curing process. To assess this issue, PMI uses its deforestation risk assessment in combination with other internal company methods, national databases and external consultants. A GHG emission factor has been assigned to unsustainable firewood identified through the deforestation risk assessment. At the corporate level, PMI uses its GHG emission inventory to track emission reductions and flag potential deviations to ensure swift responses. At the supplier level, PMI uses the Monitoring Framework for Sustainable Leaf Curing Fuel which allows the calculation of emissions from tobacco flue-curing. The results of these assessments are used to inform PMI's sustainability and business strategies, particularly to identify key suppliers or geographies where additional programs, projects or initiatives are required to continue advancing towards PMI's carbon emission reduction goals and climate protection efforts.

Impact on water security

Relevance & inclusion

Relevant, always included

Please explain

This issue is important to PMI because it's a fundamental global issue and has tangible physical impacts on our value chain that require mitigation and adaptation measures. More concretely, our products heavily rely on the production of high-quality agricultural commodities, which can be impacted by water related issues. We monitor on a yearly basis crop loss data related to drought collected through regular field reports, flood and precipitation events, which can negatively impact not only tobacco but also wood-based materials we source, causing supply chain disruptions. About 50% of the tobacco PMI sources is irrigated, water availability and water quality being consequently essential. To maintain water quality and availability to the levels needed for tobacco cultivation it is paramount to protect natural areas upstream of the tobacco farms, positively contributing to the local water cycle. To assess this issue, PMI uses a set of risk assessments based on internal and external methods, in combination with existing tools



(including WRI Aqueduct, Life Cycle Assessment, Alliance for Water Stewardship Standard), national databases, and support from external consultants. As a result of the deforestation risk assessment the upstream natural conservation areas are prioritized for protection. Combined with the results of the water risk assessment, prioritized targeted interventions are defined to improve water security conditions across our supply chain. Results from these assessments are used to identify geographies, facilities and suppliers that are exposed to water risks. This information is the basis for PMI's water stewardship, both to develop projects and inform the company's sourcing strategy.

Tariffs or price increases

Relevance & inclusion

Relevant, always included

Please explain

This issue is important for PMI because tariff or price increase can have a negative impact on the profitability of the business or lead to product price increase, which could alter the demand for our products, and potentially affecting the entire value chain. This issue is assessed through the company-wide risk assessment and is part of procurement and supplier management. PMI uses internal company methods to identify any potential changes in tariffs or prices, as part of a broader strategy to gain visibility within the supply chain. As part of the assessment, PMI monitors total volumes, order controls, anti-diversion plans and tracking and tracing.

We also collaborate and exchange with the supply chain partners during Quarter/Annual Business Reviews to gain on market intelligence in pulp and timber markets. leveraging on their on the ground networks.

Assessment results are used to identify priority areas and suppliers that need to be engaged to mitigate risks arising from tariffs or price increases and inform the company's procurement strategies. The tariffs or price increases criteria are not contemplated as standalone elements, but in combination with the Zero Deforestation commitments, anticipating, if necessary, an adjustment of the sourcing strategy to either focus on sourcing certified materials by the FSC and the PEFC or rely on third party verification by reputable organizations.

To further mitigate risks, PMI manages inventories and stocks for all direct materials to be able to mitigate this potential impact, additionally, PMI has a diversified strategy where sourcing is spread across different areas. PMI also aims to develop long term relationships with suppliers and to have a strong and stable supplier base.

Loss of markets

Relevance & inclusion

Relevant, always included

Please explain

This is an important issue for PMI because a market's inability to supply due to unavailability of paper and pulp-based raw materials and/or products caused by non-sustainable forestry management practices would affect PMI's entire value chain and



therefore would have a negative impact on PMI's profits. This issue is assessed through the company-wide risk assessment and it is part of procurement and supplier management.

PMI uses internal company methods to identify any potential loss of markets (regulation trends follow up, supply chain partners review leveraging on their on the ground networks etc.), as part of a broader strategy to secure a sustainable supply chain. As part of the assessment, PMI monitors total volumes of products, order controls, anti-diversion plans and tracking and tracing. PMI uses results from this assessment to identify the potential loss of markets and inform the company's procurement strategies. To further mitigate risks, PMI manages inventories and stocks for all direct materials to be able to mitigate this potential impact, additionally, PMI has a diversified strategy where sourcing is spread across different areas. PMI also aims to develop long term relationships with suppliers and to have a strong and stable supplier base. Finally, PMI has committed through its Zero Deforestation Manifesto, if necessary, to adjust its sourcing strategy to either focus on sourcing certified materials by the FSC and the PEFC or rely on third party verification by reputable organizations.

Brand damage related to forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

This is an important issue for PMI because the risk of brand damage due to PMI sourcing of materials associated with deforestation may potentially affect sales and hence affect revenue and profits, impacting the entire value chain. This issue is assessed through PMI's materiality assessment, performed with the support of a third party and following the Global Reporting Initiative Standards requirements, which specifically assess the topic of forest conservation, as well as through our deforestation risk assessment, which focuses on identifying social, reputational, and environmental risks associated with wood-based fuels and materials in all countries, using internal company methods, external consultants, and national databases. For the pulp and paper industries, the risk assessment performed by external consultant is based on country and supplier profiles. Country profiles are developed based on desk research and provide an overview of the pulp and paper industry, and its associated risks in each of the countries. Supplier profiles are designed based on a scorecard with the most relevant elements that would indicate the extent to which each supplier is managing or mitigating its deforestation risks. Screening public information serves as a first step to identify high priority suppliers, and as a preparation stage for further supplier engagement For the tobacco supply chain, the analysis was focused on three drivers: i) land use change from tobacco farming expansion ii) use of biomass as a curing fuel iii) use of wood for tobacco curing barns. The combination of these three risk drivers defines the materiality of the deforestation risk for each tobacco sourcing market where PMI operates.

These methodologies are used to identify potential risks associated with deforestation within PMI's direct operations and supply chain. PMI uses results from its deforestation risk assessment to inform the company's decision-making processes related to



business, sourcing and sustainability strategies, in order to prevent brand damage. Examples of concrete actions taken from the risk assessment include the development of the Monitoring Framework for Sustainable Curing Fuels, the engagement with suppliers through our PMI's Responsible Sourcing Principles (RSP), the PMI's Zero Deforestation Manifesto, as well as specific projects with key suppliers.

Corruption

Relevance & inclusion

Relevant, always included

Please explain

This issue is important to PMI because it can affect the operations of PMI in certain countries where corruption could be an issue. PMI has a robust infrastructure for monitoring compliance with its Principles and Practices, supported by its Guidebook for Success (Code of Conduct), where strict standards on how to operate to avoid corruption practices are outlined. PMI assesses this issue through a deforestation risk assessment of its entire value chain, involving external consultants and national specific databases. The assessment focuses on the origin of PMI's paper and pulp-based products and uses country specific data by the Transparency International Corruption Index as one of the variables to identify countries with a high-risk profile. Results from this assessment are used to inform PMI's sourcing strategy and to identify those suppliers that require additional engagement to guarantee that there is no corruption associated to their products. It is also supported by our STEP program (Sustainable Transformation Enable Performance) which aims at supporting the deployment of our Responsible Sourcing Principles within our Supply Chain and which contain Business Ethics Management assessment criteria.

Social impacts

Relevance & inclusion

Relevant, always included

Please explain

Continued engagement and partnerships with civil society remain essential to the company's success. PMI is aware that farming communities can be affected by environmental issues such as deforestation, which can in turn affect their capacity to grow tobacco and other crops, and therefore their livelihood. For this reason, PMI supports smallholder farmers and their communities to improve their environmental, social and economic conditions. PMI works hard to protect the environment through sustainable practices across its businesses and to address both existing social and environmental challenges, such as child labor in tobacco growing, and emerging topics pertaining to its business transformation, such as helping tobacco farmers to diversify their crops.

PMI assesses this issue through its sustainability materiality assessment, performed with the support of a specialized third party and following the Global Reporting Initiative Standards requirements, which specifically assess the impact of our identified 26 topics on sustainable development (outward impacts on the environment and society, inward



impacts on our business); as well as through a deforestation risk assessment of its entire value chain, involving external consultants and national specific databases PMI considers social impacts such as the presence of mechanisms within the forestry sector to guarantee indigenous populations' rights and the prevention of other social conflicts, including illegal logging in countries where paper and pulp-based products are sourced. This indicator is based on information from the Illegal Logging Portal, the Forest Legality Initiative, Earthworm and others.

Results from the country assessment are used to prioritize paper and pulp-based products' suppliers for further engagement. Results show that the biggest risks associated with the paper and pulp-based products' industry are linked to the destruction of primary forests. Consequently, our first set of targets described in our Zero Deforestation Manifesto aims at ensuring zero deforestation in Primary and HCV's in our board and paper for packaging supply chain by 2022 and in other significant pulp-based products including cellulose acetate tow by 2025. PMI is exploring how to further engage and collaborate with pulp and paper suppliers sourcing from countries that were ranked as high risk.

Other, please specify

Relevance & inclusion

Please explain

F2.1c

(F2.1c) Which of the following stakeholders are considered in your organization's forests-related risk assessments?

Customers

Relevance & inclusion

Relevant, always included

Please explain

Customers are relevant and always included in our forest-related risk assessment as they are increasingly expecting brands to demonstrate their sustainability performance and manage their environmental impacts, especially related to deforestation and climate change. Failure to respond to PMI's customers' concerns could potentially negatively impact its business (for example a potential impact on sales). PMI engages with customers and civil society through a series of methods including ongoing dialogue, corporate communications, formal gatherings, attendance and contribution to forums and events, reports and consultations. Additionally, PMI considers results and trends arising from consumer surveys regarding sustainability.

Employees



Relevance & inclusion

Relevant, always included

Please explain

Employees are relevant and always included in our forest-related risk assessment as they are the ones driving the implementation of PMI's goals and targets, and also managing supplier relationship. In the development of the deforestation risk assessment of PMI's entire value chain, all relevant employees are directly engaged throughout the deployment of the assessment. Engagement is done through meetings, electronic communication to receive information from relevant employees, including feedback on the results of the assessment. Employee groups include members of various teams such as procurement, environment, health and safety, corporate affairs, agricultural programs among others. For example, employees of corporate affairs focus on risks related to reputation and brand damage, whereas employees from the procurement team focus on ensuring supply of materials and maintaining strong supplier relationships. PMI uses additional methods to engage employees in forest related issues including training, ongoing dialogue, consultation, internal communication channels, surveys and questionnaires, forums, events, reports and publications. An example of this was the engagement for the sustainability materiality assessment, where employees' feedback was gathered. Their feedback in addition to the other results of the materiality assessment inform PMI's 2025 sustainability roadmap, including the climate protection strategy, for which our forest conservation commitments act as key enablers for mitigation actions. Local environmental awareness campaigns combined with tree planting activities are frequently organized at local level with the participation of employees and their families.

Investors

Relevance & inclusion

Relevant, always included

Please explain

Investors are included because they are one of the most important stakeholders by supporting PMI's to reach its smoke free vision, and they have to be informed of the performance of the company in all aspects. PMI engages with Investors through various methods including ongoing dialogue on forests and sustainability issues, corporate communications and reports such as the Sustainability Report, investor calls and ad-hoc requests public disclosures such as CDP, ESG ratings such as the SAM Corporate Sustainability Assessment, attendance and contributions to forums and events. An example was the engagement in the sustainability materiality assessment, where investors' feedback was gathered. Their feedback in addition to the other results of the materiality assessment inform PMI's 2025 sustainability roadmap, including the climate protection strategy, for which our forest conservation commitments act as key enablers for mitigation actions. Another example of PMI's engagement with investors is its request for their feedback on the company's sustainability strategy and performance, including forest related issues.



Local communities

Relevance & inclusion

Relevant, always included

Please explain

Local communities where we operate are a relevant stakeholder in our value chain and always included in our forest related risk assessment. Local communities are crucial to PMI's business and long-term success as they can play a key role at supporting the livelihoods of tobacco farmers as well as at protecting the local environment. For this reason, assessing and ensuring sustainable local business conditions, and involving local communities and farmers in the sustainable sourcing of firewood for tobacco curing is paramount for PMI. Local communities can represent different levels of engagement in evaluating deforestation related risk; in our tobacco supply chain we engage with farmers, firewood vendors and woodlot managers whose actions can have an impact on the state of sustainability of the area where they operate impacting environment and people much beyond their direct relationship with tobacco. They are engaged directly and through PMI's tobacco leaf suppliers, through different methodologies including ongoing dialogue, surveys and questionnaires, training, formal gatherings, forums and events, memberships and partnerships, consultation processes and others. For example, in 2019, through the implementation of our Monitoring Framework for Sustainable Curing Fuels, PMI and its tobacco suppliers directly engaged with local farmers, firewood vendors and communities in Pakistan and the Philippines to conduct the fuelwood sustainability studies to ensure the availability and traceability of sustainable fuelwood in these areas. Additionally, as part of the Monitoring Framework, all PMI's tobacco leaf suppliers must have a stakeholder engagement plan that includes local communities when relevant. Another example is the development of the forest risk maps for which local farmers and other stakeholders are interviewed. For example, in 2019, the global forest risk maps were updated as well as the forest risk map for the Philippines, which had originally been developed in 2017.

NGOs

Relevance & inclusion

Relevant, always included

Please explain

NGOs are included because they can often provide support and technical expertise to manage PMI's deforestation risks. PMI engages with NGOs in various ways, depending on the location of the organization as well as their area of expertise. Engagement methods include ongoing dialogue, consultations and other collaborations on a project basis. An example is PMI's deforestation risk assessment, which uses information developed by NGOs to assess both paper and pulp-based products' suppliers and countries from where PMI sources paper and pulp-based products (for example, reports of unsustainable practices, transparency rankings among others). Another example is PMI's Monitoring Framework for Sustainable Curing Fuels. As part of this framework, NGOs sometimes work directly with PMI's tobacco leaf suppliers to help them



implement initiatives to reach the targets on sustainability and traceability. PMI also engages with NGOs directly through interviews for the development of forest risk maps and similar products. In 2019 the global forest risk map was updated as well as the forest risk map for the Philippines, which had originally been developed in 2017. These maps are updated, on average, every two to three years as it is not expected that the conditions change year to year. In 2019 PMI engaged with PEFC in China to develop a country risk profile. The objective is to understand in detail the forest related risks in the country and how these might impact PMI's forest related risks in China. Another example was the engagement in the sustainability materiality assessment, where NGO's feedback was gathered. The results of the materiality assessment inform PMI's 2025 sustainability roadmap, including our climate protection strategy, for which our forest conservation commitments act as key enablers of mitigation actions.

Other forest risk commodity users/producers at a local level

Relevance & inclusion

Relevant, always included

Please explain

Other stakeholders are included because deforestation impacts at the regional or local level cannot be effectively addressed by a single company. Deforestation has several drivers and it is important for PMI to understand and involve other users to address this problem, as well as identify the extent to which every stakeholder can contribute. PMI engages with these stakeholders through a combination of methods, including ongoing dialogue, training, forums and events and other as necessary. PMI considers other users as part of its deforestation risk assessment, particularly those involved in the company's paper and pulp-based products' supply chain. An example is PMI's activity in Pakistan where the company is engaging with firewood vendors who not only supply tobacco farmers with firewood for tobacco curing but also for other uses.

Regulators

Relevance & inclusion

Relevant, always included

Please explain

Regulators are included because they define the rules under which PMI operates. There is a risk that regulations changes affect PMI's operations and its supply chain.

Regulators were included as stakeholders to be engaged as part of the Monitoring Framework for Sustainable Leaf Curing Fuels. All PMI's tobacco leaf suppliers must have a stakeholder engagement plan where relevant regulators are identified and engaged based on specific topics, and where pertinent information is exchanged. PMI engages regulators through various methods including ongoing dialogue where appropriate and as per local regulations, training, formal gatherings, attendance and contribution to forums and events. An example is the engagement between tobacco leaf suppliers in the Philippines with the Department of Environment and Natural Resources (DENR) along with the National Tobacco Association through meetings and workshops. As part of this engagement, supplier and the DENR have been sharing information to



understand the availability of firewood in the regions and to manage the risk of deforestation by ensuring that farmers have access to legal sources of firewood. Furthermore, in our non-leaf supply chain, our board and paper suppliers engage on a regular basis with regulators at sub national, national or regional levels, e.g.: EU Commission, FFIF (Finnish forest industries federation), SFIF (Swedish Forest Industries Federation), CEPI (Confederation of European Paper Industries and FEFCO (European Corrugated Packaging Association).

Suppliers

Relevance & inclusion

Relevant, always included

Please explain

Tobacco leaf suppliers are included because they are the ones who contract tobacco farmers and ensure PMI targets and standards are met. If tobacco leaf suppliers are not considered, there is a risk that PMI cannot achieve its targets. Suppliers are engaged through various methods and projects including ongoing dialogue, surveys and questionnaires, training, corporate communications, consultations, contractual relationships, and other ad hoc activities. For example, PMI works closely with tobacco leaf suppliers in the development of supplier-specific forest risk maps. Tobacco leaf suppliers provide relevant information related to their operations as well as feedback on forest risk map once developed. The final forest risk map is the result of a collaborative effort. Additionally, PMI is working to strengthen the engagement with suppliers of paper and pulp-based products, including cellulose acetate tow to validate the findings of the deforestation risk assessment related to such products, and that serves as a basis to monitor the compliance and progress towards our Zero Deforestation Manifesto commitments and guidelines. We engage with our suppliers to communicate our expectations, increase our understanding of their current practices and collaborate on targets setting to guarantee Zero Net Deforestation in line with PMI's Zero Deforestation Manifesto commitments for the materials they supply. Suppliers are evaluated through a due diligence and self-assessment process that allow us to identify risk exposure and areas where our support is needed. We develop actions plan with relevant suppliers to track and measure performance improvements. We are monitoring and engaging with suppliers sourcing from high-risk countries such as Indonesia and Brazil. Another example was the engagement for the sustainability materiality assessment, where business partners' feedback was gathered. Their feedback in addition to the other results of the materiality assessment inform PMI's 2025 sustainability roadmap, including the climate protection strategy, for which our forest conservation commitments act as key enablers for mitigation actions.

Other stakeholders, please specify

Relevance & inclusion

Please explain



F3. Risks and opportunities

F3.1

(F3.1) Have you identified any inherent forests-related risks with the potential to have a substantive financial or strategic impact on your business?

	Risk identified?
Timber products	Yes

F3.1a

(F3.1a) How does your organization define substantive financial or strategic impact on your business?

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

As part of the Company's annual Integrated Risk Assessment (IRA) process we have conducted a Climate Change Risk Assessment to evaluate and understand the impact of climate change on PMI business and a Deforestation Global Risk Assessment. When assessing risks related to Climate Change and Deforestation, we consider long term horizons (2030 and 2040 scenarios), multiple climate related indicators aligned with forest-related indicators, and impact drivers including but not limited to climate change and deforestation events that may:

- influence or impact our operations (e.g.: raw material sourcing, factories, finish goods distribution);
- affect a large number of areas where we source tobacco and/or other raw materials, impacting the continuity of supply for years, and consequently driving related cost up;
- trigger a competition in resources demand,
- natural disaster, water scarcity, change in weather pattern and extreme weather events impacting the availability of raw materials.

Between 2018 and 2019 PMI performed a climate change risk and opportunity assessment following the Taskforce on Climate-Related Financial Disclosures (TCFD) methodology. This allowed the evaluation of transition risks in addition to the physical ones considering impact drivers such as cost, asset efficiency and reputation.

As part of our IRA process, we have put in place an extensive risk control program by which to assess the physical risks of climate change. Locations with values exceeding \$30 million range



are surveyed by engineers from our property insurer, who provide recommendations to us on the magnitude of environmental risks and the cost of management. Recommendations for risk management are given if the expected reduction in the financial impact of the risk exceeds the cost to comply by a factor of 10 or more. Internally, we focus on recommendations above the \$50 million range as management of identified risks can involve substantial internal capital investment and disruption to operations including our supply chain.

In 2020 and beyond (2020+) risk forecasting terms, we assumed as substantive impacts those in excess of \$5 million or a raw material impact in excess of 1000 metric tonnes of tobacco leaves. This definition is applicable to PMI's agricultural supply chain. Over the last couple of years, we have been expanding our forest programs by first assessing current and future forest-related risks more broadly across our value chain. These risks include availability of forest resources, and impact on deforestation.

F3.1b

(F3.1b) For your disclosed forest risk commodity(ies), provide details of risks identified with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Forest risk commodity

Timber products

Type of risk

Reputational and markets

Geographical scale

Global

Where in your value chain does the risk driver occur?

Supply chain

Primary risk driver

Increased commodity prices

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Wood-based materials are key materials to produce and market PMI products. For example, firewood and biomass is used for tobacco curing, while paper and pulp-based products are used to produce cigarettes and is also used in all packaging. In some geographies the tobacco purchased by PMI is highly dependent on wood fuel for the curing process and accounts for a significant portion of the overall curing fuel consumption. For example, the Virginia flue cured tobacco sourced by PMI in 2019 from Brazil and Mozambique was cured solely with wood fuel; while both are defined as forest risk countries. Increased ecosystem vulnerability fueled by additional deforestation could decrease the availability of wood-based materials in the future. This



can impact PMI's ability to manufacture cost-competitive products if firewood for tobacco curing or paper and pulp-based products such as fine papers or cellulose acetate tow needed for the manufacture of cigarettes become more expensive. Such increase in our production costs might directly affect our revenue or even our competitiveness if we would increase the price of our products due to increase in production costs.

Timeframe

>6 years

Magnitude of potential impact

Medium-low

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact (currency)

60,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial

In 2020+ risk forecasting terms, we assumed as substantive risks those with a potential impact in excess of \$5M or a raw material impact in excess of 1000 metric tonnes of tobacco leaves in our tobacco supply chain. Over the last couple of years, we have been expanding our forest programs by first assessing current and future forest-related risks, including the availability of forest resources, and impact on deforestation.

To estimate financial impacts from this risk, PMI used public data sources on typical cost shares for firewood and similar agricultural products, and estimates potential price increments resulting from supply chain disruptions due to increased ecosystem vulnerability. PMI assessed that poor enforcement of regulation could lead to increased ecosystem vulnerability impacting farmers' production cost due to an estimated 16% price increase in the acquisition of sustainable firewood, increasing PMI's procurement costs above our metric for substantive financial impact. PMI estimated financial impacts by using the modelled increments in firewood costs, along with total volumes of purchased tobacco and the ratio of volume being cured using fossil fuels as well as renewable fuel sources on an annual basis. It was then assumed that the PMI procurement expenditure on tobacco would remain constant in a business as usual scenario and increase by the same rate as diesel price under climate change scenarios (16%), resulting on a financial impact estimation of \$60M.

Primary response to risk



Engagement with suppliers

Description of response

In 2016 PMI developed a Monitoring Framework (MF) for Sustainable Leaf Curing Fuels that tobacco leaf suppliers should comply with by 2020, with a verification process starting in 2018. The audits are performed by a third-party and the first cycle will be concluded by 2020 PMI has continued to enforce the MF and expects all suppliers to be compliant and ensure that 100% of the firewood and biomass used for tobacco curing is sustainable and traceable by 2020. The MF is an ongoing process and continues to be implemented in all countries where PMI sources Flue Cured Virginia tobacco (FCV). The implementation of the MF and the associated supplier engagement is expected to address the risk of increased ecosystem vulnerability by providing an understanding of the deforestation risk associated with tobacco curing through the development of forest risks maps. Tobacco leaf suppliers then must develop a forest risk mitigation plan to manage the identified deforestation risks. PMI considers that the response has been effective and that tobacco leaf suppliers who have developed forest risks maps are equipped to develop risk mitigation plans. Since its development, the MF has been an effective mechanism to identify and prevent any potential risks associated with disruptions in the supply chain. In 2019 PMI was able to track 85% of the curing fuel incl. firewood and biomass, ensuring that it is sustainably sourced according to its standards.

Cost of response

4,500,000

Explanation of cost of response

The cost of response is based on the annual budget allocated in 2019 to environmental projects (incl. implementation of the Monitoring Framework and associated activities to enable farmers to use sustainable fuels for tobacco curing) under the Good Agricultural Practices program across all regions, accounting for approx. \$4.5 million in expenditures. The set annual budget (i.e. we set a single investment amount into the program and it is not possible to provide a breakdown) is allocated to initiatives, such as to catalyze the adoption of improved and innovative practices by the farmers in our supply chain. It includes the costs to implement and verify the Monitoring Framework. It is expected that the same level of associated costs will continue after 2020.

Forest risk commodity

Timber products

Type of risk

Regulatory

Geographical scale

Global

Where in your value chain does the risk driver occur?

Supply chain



Primary risk driver

Poor enforcement of regulation

Primary potential impact

Increased production costs

Company-specific description

PMI sources a portion of materials from some countries known for their limited enforcement of regulation. Despite our high ethical standards and rigorous control and compliance procedures aimed at preventing and detecting unlawful conduct, given the breadth and scope of our international operations, we may not be able to detect all potential improper or unlawful conduct by our employees and partners. Additionally, if protected areas or timber harvest regulations are not enforced and if PMI does not have certainty that regulation designed to ensure sustainability of materials is enforced, PMI invests in additional measures to verify that the material is sustainable in those countries. For example, PMI sources Virginia flue cured tobacco from Philippines and Malawi, among other countries, and, based on the development of country-specific forest risk maps, we have identified possible deforestation risks in these countries, both of which rely solely on wood fuel for the curing process. Even though forests are protected by law, this is not always enforced, therefore, PMI's procurement costs may increase due to the additional measures PMI is implementing to ensure all firewood and biomass used as curing fuel is sustainable (for example, local risk assessment procedures, additional engagement with local suppliers, development of sustainability projects).

Timeframe

Current - up to 1 year

Magnitude of potential impact

Medium-low

Likelihood

Very likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact (currency)

60,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial

In 2020+ risk forecasting terms, we assumed as substantive risks those with a potential impact in excess of \$5M or a raw material impact in excess of 1000 metric tonnes of



tobacco leaves in our tobacco supply chain. Over the last couple of years, we have been expanding our forest programs by first assessing current and future forest-related risks, including availability of forest resources, and impact on deforestation. To estimate financial impacts from this risk PMI used public data sources on typical cost shares for firewood and similar agricultural products, and estimates potential price increments resulting from supply chain disruptions due to increased ecosystem vulnerability. PMI estimated that poor enforcement of regulation could lead to the risks of increased ecosystem vulnerability impacting farmers' production cost due to an estimated 16% price increase in the acquisition of sustainable firewood, increasing PMI's procurement costs above our metric for substantive financial impact. PMI estimated financial impacts by using modelled increments in firewood costs, along with total volumes of purchased tobacco and the ratio of volume cured using fossil fuels as well as renewable fuel sources on annual basis. It was then assumed that the PMI procurement expenditure on tobacco would remain constant in a business as usual scenario and increase by the same rate as diesel price under climate change scenarios (16%), resulting on a financial impact estimation of \$60M.

Primary response to risk

Engagement with suppliers

Description of response

In 2016 PMI developed a Monitoring Framework (MF) for Sustainable Leaf Curing Fuels that tobacco leaf suppliers should comply with by 2020, with a verification process starting in 2018. The audits are performed by a third-party and the first cycle will be concluded by 2020. The MF requires tobacco leaf suppliers to ensure that 100% of the firewood and biomass used for tobacco curing is sustainable and traceable by 2020. The MF is an ongoing process and it is being implemented in all countries where PMI sources Flue Cured Virginia tobacco (FCV). PMI actively engages with tobacco suppliers to support them in the implementation of the MF. Its implementation and the associated supplier engagement are expected to address the risk of poor enforcement of regulation by requiring tobacco leaf suppliers to ensure that all biomass used as fuel is sustainable. This will then be audited by a third party. PMI considers that the response has been effective and that tobacco leaf suppliers implementing the Monitoring Framework are addressing this risk. Currently, above 85% of the curing fuel incl. firewood and biomass, is sustainable and traceable, which has decreased the risk and is expected to prevent future impacts. Additionally, to address poor enforcement of regulation and other risks, in 2017 PMI published its Responsible Sourcing Principles. These principles provide process and performance requirements applicable to all suppliers including environmental, social and governance topics.

Cost of response

4,500,000

Explanation of cost of response

The cost of response is based on the annual budget allocated in 2019 to environmental projects (incl. implementation of the Monitoring Framework and associated activities to enable farmers to use sustainable fuels for tobacco curing) under the Good Agricultural



Practices program across all regions, accounting for approx. \$4.5 million in total expenditures. The set annual budget (i.e. we set a single investment amount into the program and it is not possible to provide a breakdown) is allocated to initiatives to catalyze the adoption of improved and innovative practices by the farmers in our supply chain. It includes the costs to implement and verify the Monitoring Framework. It is expected that the same level of associated costs will continue after 2020.

Forest risk commodity

Timber products

Type of risk

Reputational and markets

Geographical scale

Global

Where in your value chain does the risk driver occur?

Supply chain

Primary risk driver

Increased cost of certified sustainable material

Primary potential impact

Increased production costs

Company-specific description

There is no mature market for certified wood fuel. This is a challenge for PMI to source certified sustainable materials. For the case of wood-based curing fuels, for example, PMI is already requiring tobacco leaf suppliers to ensure the fuel's sustainability and traceability through specific on the ground activities, which have increased tobacco procurement costs as a result of PMI's increased engagement with the tobacco leaf suppliers in various activities.

The fine papers and acetate tow supply chains have worked hard to catch up on their lag in offering certified sustainable material vs the packaging board and paper supply chain. Latest estimate shows that close to 50% of our fine paper suppliers, and 95% of our acetate tow suppliers are now either part of certified chain of custody, and/or sourcing their wood from 100% certified sources. However, as stated in the Zero Deforestation Manifesto, PMI contemplates the purchase of certified material as being part of the solution, in addition to a robust wood fiber traceability, share of third party verified products, and use of recycled material. So far, the market dynamics on the supply side do not reflect a competitive offer for certified product to keep our business in a financially viable and sustainable position. In summary, today we source non-certified products from certified sources

Timeframe

1-3 years



Magnitude of potential impact

Medium-low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

21,000,000

Potential financial impact figure - maximum (currency)

89,000,000

Explanation of financial

The latest review into our board and paper (B&P) used for packaging, acetate tow (AT), fine papers (FP) and shipping case (SC) supply chains showed that a substantive cost increase is to be expected should PMI decide to adjust its sourcing strategy and buy certified products. A range of mark up going from 3% (\$21M) to 5% (\$29M) of the yearly purchasing spend is a fair estimate of this cost increase applicable to these 4 commodities (FP, AT,B&P and SC).

Added to the upper range is the potential impact from the tobacco leaf supply chain (\$60M). To estimate financial impacts from this risk, PMI used public data sources on typical cost shares for firewood and similar agricultural products, and estimates on potential price increments resulting from supply chain disruptions due to increased ecosystem vulnerability. PMI estimated that risks of increased ecosystem vulnerability could raise farmers' production cost due to an estimated 16% price increase in the acquisition of sustainable firewood, increasing PMI's procurement costs above our metric for substantive financial impact (\$5M). PMI estimated financial impacts through modelled increments in firewood costs, along with total volumes of purchased tobacco and the ratio of volume being cured using fossil fuels and renewable fuel sources annually. It was assumed that PMI procurement expenditure on tobacco would remain constant in business as usual scenario and increase by the same rate as diesel price under climate change scenarios.

Primary response to risk

Engagement with suppliers

Description of response

In 2016 PMI developed a Monitoring Framework (MF) for Sustainable Leaf Curing Fuels that tobacco leaf suppliers should comply with and that should be audited by a third-party by 2020. The MF requires tobacco leaf suppliers to ensure that 100% of the firewood and biomass used for tobacco curing is sustainable and traceable by 2020. The MF is an ongoing process and it is being implemented in all countries where PMI sources Flue Cured Virginia tobacco (FCV). PMI actively engages with tobacco leaf



suppliers to support them in the implementation of activities to comply with the MF. With the implementation of the MF and the associated supplier engagement PMI expects to mitigate the risk of future curing fuel cost increase by ensuring its availability and sustainability through a timely engagement with tobacco leaf suppliers and verification mechanism to ensure that all biomass used as fuel is sustainable. This will then be audited by a third party. PMI considers that the response has been effective and that tobacco leaf suppliers implementing the MF are addressing this risk. Currently, above 85% of the curing fuel incl. firewood and biomass, is sustainable and traceable, which has decreased the risk and is expected to prevent future impacts. Furthermore, an assurance and monitoring framework is being designed and will be implemented in the non Leaf supply chains as of 2021.

Cost of response

5,000,000

Explanation of cost of response

The cost of response is based on the annual budget allocated in 2019 to environmental projects (incl. implementation of the Monitoring Framework and associated activities to enable farmers to use sustainable fuels for tobacco curing) under the Good Agricultural Practices program across all regions, accounting for approx. \$4.5 million in total expenditures. The set annual budget (i.e. we set a single investment amount into the program and it is not possible to provide a breakdown) is allocated to initiatives to catalyze the adoption of improved and innovative practices by the farmers in our supply chain. It includes the costs to implement and verify the Monitoring Framework. It is expected that the same level of associated costs will continue after 2020. The cost of response for the non-Leaf supply chains is the estimated expenditure (\$0.5 million) to design and implement the assurance framework across the supply base, as well as implementing a monitoring framework supported by innovative technologies to deliver the expected tangible results supporting our zero net deforestation commitments. Future potential costs to implement other specific initiatives needed to catalyze adoption of improved and innovative practices in our non leaf supply chains are not yet evaluated and therefore not included in this figure.

The full cost of response (\$5 million) is the sum of these \$4.5M for the tobacco supply chain and \$0.5M for non tobacco supply chains.

Forest risk commodity

Timber products

Type of risk

Physical

Geographical scale

Global

Where in your value chain does the risk driver occur?



Supply chain

Primary risk driver

Increased severity of extreme weather events

Primary potential impact

Supply chain disruption

Company-specific description

Most of our wood-based materials are sourced from regions (Nordic European Countries, Russia accounting for more than 50% of our wood/pulp origin) that are going through changes in weather/precipitation patterns (e.g. more rain, less snow) – that could impact trees growth, soils degradation and logging/harvesting periods, creating potential future resource availability limitations. This would inevitably increase the prices of the pulp-based material we purchase. In addition, in Asia, some of the paper and pulp-based products we purchase originate from concessions that are located in peatland areas vulnerable to major fire events.

Timeframe

4-6 years

Magnitude of potential impact

Medium

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

40,000,000

Potential financial impact figure - maximum (currency)

120,000,000

Explanation of financial

For PMI a risk of lack of sustainable and traceable wood-based materials' availability in the supply chain due to impacts of extreme weather events or other causes will inevitably be translated in prices increase for the paper and pulp-based products we purchase in an estimated range of 5% to 15% of the 2019 total spend with these material categories.

Primary response to risk

Engagement with suppliers

Description of response



Our active risk management strategy aims to reduce the likelihood of supply chain disruptions due to physical climate risks through biodiversity and forest conservation. In 2019 PMI published the Zero Deforestation Manifesto (ZDM) aiming to achieve positive environmental impacts over the long term, including a set of targets to protect forests in our supply chain. As part of the ZDM, PMI is working with suppliers of paper and pulpbased products to move towards traceable and sustainable raw material sourcing. Achieving PMI's ZDM commitments will not only protect the forests but will also contribute to the development of ecosystems and communities that are more resilient to impacts from climate change, such as increased severity of weather events. To achieve our ZDM commitments PMI actively engages suppliers to communicate our sustainability expectations, increase our understanding of their current practices on deforestation risk mitigation and their exposure to physical climate risks. PMI considers its current approach to be effective as no major disruptions in the supply chain have taken place. PMI will continue to adapt and improve its strategy in the future, aiming to strengthen monitoring processes and progress towards targets, particularly in high-risk countries such as Indonesia and Brazil.

Cost of response

500,000

Explanation of cost of response

The cost of response is the estimated internal investment (\$0.5 million), which should cover the design and implementation of the assurance framework across the supply base, as well as the implementation of a monitoring framework supported by innovative technologies to deliver the expected tangible results supporting our zero net deforestation commitments. Future potential costs to implement other specific initiatives needed to catalyse adoption of improved and innovative practices in our non-leaf supply chains are not yet evaluated and therefore not included in this figure.

F3.2

(F3.2) Have you identified any forests-related opportunities with the potential to have a substantive financial or strategic impact on your business?

	Have you identified opportunities?
Timber products	Yes

F3.2a

(F3.2a) For your selected forest risk commodity(ies), provide details of the identified opportunities with the potential to have a substantive financial or strategic impact on your business.

Forest risk commodity

Timber products



Type of opportunity

Resilience

Where in your value chain does the opportunity occur?

Supply chain

Primary forests-related opportunity

Improved supply chain engagement

Company-specific description & strategy to realize opportunity

PMI identified an opportunity to improve the company's resilience by managing forest risks related to the sourcing of tobacco by engaging the company's tobacco suppliers. The company has developed a strategy to increase resilience through the development and application of the Monitoring Framework for Sustainable Leaf Curing Fuels. As part of this framework, tobacco suppliers should comply with a series of sustainability criteria to prevent deforestation and should be audited by a third party by 2020. The implementation of the Monitoring Framework since 2016 has increased PMI's engagement with tobacco suppliers and allowed us to closely collaborate with them, securing our supply of sustainably cured tobacco and increasing the company's resilience to price fluctuations. To realize the opportunity, PMI is working closely with tobacco suppliers by supporting them with technical assistance when they face challenges related to tobacco curing fuels sustainability and traceability associated to the implementation of the monitoring framework. This might entail several measures such as holding strategy sessions with the suppliers, financing country-specific risk assessments and providing technical advice. PMI through its regional offices holds inperson meetings with tobacco leaf suppliers to discuss sustainability matters including their progress on curing fuel sustainability and traceability. PMI also organizes conference calls and meetings as needed to provide technical assistance. It is expected that as a result of this engagement, suppliers will be able to prove sustainability and traceability in conformity with the Monitoring framework principles when audited by a third party. For example, in 2019, PMI continued to work closely with tobacco leaf suppliers in the Philippines and Pakistan to support them in efforts to increase clarity and shared understanding of current regulations on firewood woodlot surveys among all tobacco leaf suppliers in the country. In 2019, PMI Leaf Brazil concluded the work on the study, which demonstrated the sustainability of the wood fuel sources used by the farmers contracted by PMI's suppliers, in collaboration with local suppliers guiding them and leading an industry common approach.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential impact

Medium-high

Likelihood

Virtually certain

Are you able to provide a potential financial impact figure?



Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

30,000,000

Potential financial impact figure - maximum (currency)

60,000,000

Explanation of financial impact figure

The potential financial impact reflects estimated benefits for farmers across our tobacco supply chain. We do not estimate direct potential financial benefits to PMI but rather indirect benefits to the company through supply chain improved resilience, including mitigation of future cost increments in the acquisition of raw materials. Another intangible benefit for PMI would be to position itself as a leading company collaborating with its suppliers to implement actions that contribute to a more sustainable future. To estimate financial impacts from this opportunity, PMI used public data sources on typical cost shares for firewood and similar agricultural products, as well as estimates on potential price increments resulting from supply chain disruptions due to increased ecosystem vulnerability. PMI estimated that this opportunity could reduce by 16% farmers' expected future costs related to acquisition of firewood, leading to the identification of a substantive opportunity according to our \$5M metric. PMI estimated financial impacts by using the modelled increments in firewood costs, along with total volumes of purchased tobacco and the ratio of volume being cured using fossil fuels as well as renewable fuel sources on an annual basis (lower range at 25% and upper range at 50%). It was then assumed that the PMI procurement expenditure on tobacco would remain constant in a business as usual scenario and increase by the same rate as diesel price under climate change scenarios.

Forest risk commodity

Timber products

Type of opportunity

Resilience

Where in your value chain does the opportunity occur?

Supply chain

Primary forests-related opportunity

Ensuring supply chain resilience

Company-specific description & strategy to realize opportunity

Over 50% of our wood-based direct materials originate from regions experiencing changes in weather/precipitation patterns, e.g. more rain, less snow, namely Nordic European Countries and Russia, posing potential future resource availability limitations.



The resilience of our pulp-based materials supply chain and the associated natural ecosystems to climate change increases if forests are sustainably managed and will support to mitigate the risk on resource availability and price fluctuation.

Through PMI's Responsible Sourcing Principles, we set mandatory requirements to all our suppliers and aim to achieve measurable, tangible improvements in our supply chain. With the publication of its Zero Deforestation Manifesto (ZDM), PMI has increased the focus on its wood-based material supply chain.

To help achieve our zero deforestation commitments, we engage with our suppliers to communicate our expectations, increase our understanding of their current practices and set targets for the materials they supply. We have performed webinars, individual interviews and onsite visits In 2019 we performed an audit at one of our wood-based material suppliers located in Asia resulting in 17 proposed corrective actions based on 14 findings (incl. non-conformities and areas for improvement). To evaluate the implementation of these actions by the supplier PMI will conduct an Environmental and Land Rights Due Diligence Follow Up Audit in 2020.

Estimated timeframe for realization

>6 years

Magnitude of potential impact

Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

As PMI is still analysing options to realize this opportunity no direct financial benefits have been estimated for the company in relation to the opportunity in the short to medium, or even long, term. The estimation of financial benefits will be revisited once PMI has a more comprehensive understanding of the different direct and indirect environmental benefits that could arise from this opportunity, as well as a framework to account and report on them (for example, natural capital). However, the outcome of this opportunity would enable PMI to build a stronger and more resilient value chain, and that would be capable of positioning itself as a leading company collaborating with its suppliers to implement actions that contribute to a more sustainable future. It is expected that other companies may also benefit from this strategic opportunity once



suppliers, such as those producing cellulose acetate tow and fine papers, are able to increase the offer of verified sustainable materials.

F4. Governance

F4.1

(F4.1) Is there board-level oversight of forests-related issues within your organization?

Yes

F4.1a

(F4.1a) Identify the position(s) of the individual(s) (do not include any names) on the board with responsibility for forests-related issues.

Position of individual	Please explain
Board-level committee	PMI's Board of Directors (BoD) and its Committees are responsible to foster the company's long-term success, incl. to set broad corporate policies, strategic direction, and oversee management, who is responsible for daily operations. The BoD and its Committees are ultimately responsible to oversee the company's direction and management on sustainability issues incl. forest-related issues such as deforestation, and increased pressure on forest resources, affecting our direct operations and/or our supply chain, which may impact PMI's ability to operate. As example of a forest-related decision made in 2019,the BoD approves the company's annual budget, which encompasses the implementation of our sustainability strategy and the Zero Deforestation Manifesto commitments (incl. supplier specific and other forest-related projects), and receives updates on the company's performance and targets vs. budget thru the year incl. those related to achieving sustainability and climate change targets.
Board-level committee	Since 2018 the Nominating and Corporate Governance Committee (NCGC) of the Board, composed by 6 BoD members, at the time of the publication of the 2020 proxy statement, oversees PMI's sustainability strategies and advises the board on sustainability matters, incl. forest-related issues, aiming to actively reduce potential negative impacts of our business on the environment and forest resources. As an example of a climate-related decision-making process in 2019 the NCGC reviewed the 2018 Sustainability Report which represent the main external communication of PMI on sustainability performances, including our forest related Zero Deforestation Manifesto commitments.
Board-level committee	The Audit Committee of the BoD, composed by 6 BoD members, at the time of the publication of the 2020 proxy statement, oversees the assessment and management of the company risks and provide recommendations to executive management on climate change related risks, which may lead to increased pressure on natural resources, including forest resources, and conflict with other users, affect our direct



operations and/or our supply chain, and thus potentially impacting PMI's ability to operate.

F4.1b

(F4.1b) Provide further details on the board's oversight of forests-related issues.

	Frequency that forests-related issues are a scheduled agenda item	Governance mechanisms into which forests- 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 corporate responsibility strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding strategy Reviewing and guiding strategy Reviewing innovation / R&D priorities Setting performance objectives	The Board of Directors (BoD) oversees the company's full range of activities including establishing corporate policies, setting strategic direction, and overseeing Management, which is responsible for the day-to-day operations of the company, using the selected governance mechanism. The BoD approves the company's annual budget and receives updates on the company's performance and targets against the budget, including those related to forests. The BoD has established various standing Committees to assist with the performance of its responsibilities including a Corporate Risk Governance Committee comprising the COO, the CFO, the Vice President and Controller, the Vice President Corporate Audit, and the Vice President and Chief Ethics & Compliance Officer. The BoD meets typically 6 times per year with additional meetings held as necessary and is regularly informed by Management and the Nominating and Corporate Governance Committee (NCGC) of the company's performance, future plans, R&D priorities and significant issues affecting the business The NCGC oversees, the Company's sustainability strategies and performance and advises the BoD on sustainability matters. In 2019 the NCGC reviewed the 2018 sustainability report, including our forest related Zero Deforestation Manifesto commitments and recommendations for engagement. The Committee reflected on potential audiences for the engagement based on the information in the report and made engagement recommendations to the CSO.



(F4.2) Provide the highest management-level position(s) or committee(s) with responsibility for forests-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on forests-related issues	Please explain
Other C-Suite Officer, please specify Senior Vice President, Operations	Both assessing and managing forests-related risks and opportunities	Quarterly	A member of the Company Management, the Senior Vice President, Operations (SVP, Operations) is tasked with addressing climate change risk across all activities of the company, incl. forest-related ones. Our SVP, Operations reports directly to PMI's Chief Operating Officer (COO) and is delegated with operational responsibility, including maintaining robust business resiliency, risk assessment processes, and strategies to support business continuity. Our SVP, Operations examines and monitors climate change-related issues, incl. deforestation and other forest related risks, ensuring that risk assessment and management are integrated into long-range plans, objectives, budgets, and performance review processes. He is responsible for addressing these issues as mismanagement of these can lead to natural disasters, water scarcity, change in weather patterns, agricultural instability, which may impact PMI's ability to operate. SVP Operations leads the Operations Sustainability Function that reports directly to him and is tasked to drive environmental strategies and embed them into the core of our business, due to the strategic importance of climate-related issues on our operations. He is informed of progress towards achieving the objectives in monthly meetings with the Operations Management Team (OMT) reporting to him, and during quarterly functional reviews of the Operations Sustainability



			function and management team, as defined per PMI's internal business reporting processes.
Chief Operating Officer (COO)	Both assessing and managing forests-related risks and opportunities	Quarterly	Our COO is also a member of PMI's Company Management and reports to the CEO; he is updated regularly by the SVP, Operations on climate change issues, incl. forest related issues. In 2019, the COO and SVP, Operations were the highest management level of climate-related issues. They were responsible for monitoring and reviewing PMI's objectives, strategies, and action plans related to climate change, incl. deforestation and other forest related issues, with the CEO, and for reporting their findings to the Nominating and Corporate Governance Committee and Audit Committee of the Board of Directors.
Other, please specify External Engagement Committee	Other, please specify Overseeing PMI's sustainability work	Quarterly	The External Engagement Committee (EEC) – composed of the company's CEO, COO, and President External Affairs and General Counsel, as well as senior leaders from various functions – has the mandate to develop and deploy strategies and programs to propel better choices for consumers. This includes the oversight of PMI's sustainability work, incl. deforestation and other forest related issues. PMI's sustainability materiality analysis was updated in 2019, reprioritizing the most relevant sustainability topics for PMI, considering both internal and external perspectives. To help manage these priority topics from a global and sustainability perspective, the EEC decided on Jan 9, 2020, to allocate ownership of each topic to a member of PMI's Company Management. The nominated Company Management members are expected to organize from time to time "sustainability board" meetings to review progress and decide on next steps for their respective priority topic. The Chief Sustainability Officer will participate



			and support the respective Company Management members at these sustainability board meetings.
Chief Sustainability Officer (CSO)	Other, please specify Leading the integration of sustainability, including forest topics, across PMI	Annually	The Chief Sustainability Officer (CSO), reports to the President External Affairs and General Counsel, a member of the Company Management. The CSO leads the integration of sustainability, incl. deforestation and other forest related issues across our business, and heads PMI's sustainability team. He is a member of the External Engagement Committee (EEC) and, at least once a year, updates the Nominating and Corporate Governance Committee of the Board on progress.

(F4.3) Do you provide incentives to C-suite employees or board members for the management of forests-related issues?

	Provide incentives for management of forests-related issues	
Row 1	Yes	

F4.3a

(F4.3a) What incentives are provided to C-Suite employees or board members for the management of forests-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive?	Performance indicator	Please explain
Monetary reward	Corporate executive team Chief Executive Officer (CEO) Other, please specify Sustainability Managers, Employees, Management Group	Achievement of commitments and targets	The BoD considers that environmental, social and governance (ESG) factors, including protecting the environment and forest resources as relevant to the company's business and long-term success. Progress against the strategic priorities is included in our overall performance rating which determines the cash bonuses for the management group and other eligible employees. Executive management covering sustainability, including EHS topics are specifically appraised each year for performance against targets, including those related to forests. The assessment of EHS results (which includes



			annual performance against our zero deforestation targets) directly influences the annual performance rating of our SVP Operations and certain members of our Company Management including the COO and business unit managers. This covers the annual cash incentive compensation elements for those roles. These indicators were selected as they are aligned with the company's vision and they allow PMI to objectively quantify the progress of the company in the field of sustainable forest management and sustainability. PMI uses progress towards its sustainability targets as the threshold of success, therefore rewards are provided if progress is either linear to the overall target, or exceeding a linear trend. This is measured by a series of indicators including results from PMI's progress towards its Zero Deforestation Manifesto targets.
Non- monetary reward	Corporate executive team Chief Executive Officer (CEO) Other, please specify All employees	Achievement of commitments and targets	Behavior change related indicator: annually many affiliates continued to perform voluntary awareness and promotion campaigns/ programs in order to increase employees' active participation in sustainability, including Environment and Health and Safety (EHS) programs, covering a range of topics such as environmental awareness, energy consumption reduction, waste reduction, tree planting and community gardens. Awards and recognition for best practices form a core element of such campaigns and are awarded in line with the achievement of sustainability commitments and targets. Achievement of commitments and targets was selected as an indicator of success as it allows PMI to objectively quantify the progress of the company in the field of forests and sustainability. Our carbon footprint reduction targets are also part of our sustainability objectives and commitments. PMI uses progress towards its sustainability targets as the threshold of success, therefore rewards are provided if progress is either linear to the overall target, or exceeding a linear trend. This is measured by a series of indicators including results from PMI's



monitoring framework, GHG accounting, water
accounting, as well as other internal metrics such
as the rapid progress towards the acceleration of
our smoke free vision.

(F4.4) Did your organization include information about its response to forests-related risks in its most recent mainstream financial report?

No, but we plan to do so in the next two years

F4.5

(F4.5) Does your organization have a policy that includes forests-related issues?

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

F4.5a

(F4.5a) Select the options to describe the scope and content of your policy.

	Scope	Content	Please explain
Row 1	Company-wide	Commitment to eliminate deforestation Commitment to remediation, restoration and/or compensation of past harms Commitment to protect rights and livelihoods of local communities Commitments beyond regulatory compliance Commitment to transparency Commitment to stakeholder awareness and engagement Commitment to align with the SDGs Recognition of the overall importance of forests and other natural ecosystems Description of business dependency on forests	natural forest, net positive impact and restoration of



Recognition of potential PMI's Good Agricultural Practices program has been business impact on active since 2002, while our Monitoring Framework for forests and other natural Sustainable Leaf Curing Fuel has been in place since habitats 2016, with third party audits carried out since 2018, and has been our main initiative to tackle deforestation Description of forest risk risks. PMI collects data on multiple environmental commodities, parts of the indicators and monitors the percentage of farmers business, and stages of being in line with best practices. Results from these value-chain covered by initiatives are used internally to track PMI progress the policy towards its forest commitments, to identify and engage List of timebound suppliers and farmers failing to adopt best practices (or milestones and targets being in areas deemed as high risk), and to make Description of forestsdecisions regarding projects to be implemented. related standards for procurement An example of this decision making process includes our work in the Philippines in 2019; through our risk assessment, we identified a change in tobacco farmer base sourcing areas, updated the relevant local risks maps, identified farmers in close proximity to forests ecosystems, and developed management plans and training sessions with 3,200 farmers to be able to trace

their firewood and comply with PMI's policy.

F4.5b

(F4.5b) Do you have commodity specific sustainability policy(ies)? If yes, select the options that best describe their scope and content.

	Do you have a commodity specific sustainability policy?	Scope	Content	Please explain
Timber products	Yes	Company-wide	Commitment to eliminate deforestation Commitment to remediation, restoration and/or compensation of past harms Commitment to protect rights and livelihoods of local communities	Our public forest policy called "Zero Deforestation Manifesto" and our Responsible Sourcing Principles cover the use of wood fuel for curing tobacco in our agricultural supply chains, as well as paper and pulpbased products used for manufacturing purposes in all countries where PMI operates and sources materials from. These materials are key to the manufacturing of PMI's products and therefore essential to the company's



Commitments beyond regulatory compliance Commitment to transparency Commitment to stakeholder awareness and engagement Commitment to align with the SDGs Recognition of the overall importance of forests and other natural ecosystems Description of business dependency on forests Recognition of potential business impact on forests and other natural ecosystems Description of forest risk commodities, parts of the business, and stages of valuechain covered by the policy List of timebound commitments and targets Description of forests-related standards for procurement

business; any disruptions on the availability or in their quality could directly translate in financial impacts for PMI. PMI's dependency on forests and its associated ecosystem services is covered in our policy, which is revised and updated, if necessary, on an annual basis. PMI recognizes that its operations can have potential impacts on forests and natural habitats both through its direct operations, and through its supply chain and has established time bound commitments and targets beyond regulatory compliance to tackle them, including commitments to achieve zero net deforestation of High Conservation Value forests, zero net deforestation of natural forest, net positive impact and restoration of forests associated with the tobacco supply chain. These are applicable to all habitats and biomes within PMI's supply chain, for example, Miombo in Malawi, or semievergreen dry forests in Indonesia. PMI's Good Agricultural Practices program has been active since 2002, while our Monitoring Framework for Sustainable Leaf Curing Fuel has been in place since 2016 and has been our main initiative to tackle deforestation risks. PMI collects data on multiple environmental indicators and monitors the percentage of farmers being in line with best practices. Results from these initiatives are used internally to track PMI progress towards its forest commitments, to identify and engage suppliers and farmers failing to adopt best practices (or being in areas deemed as high risk), and to make decisions regarding programs or projects to be implemented. An example of this decision making



process includes our work in the
Philippines in 2019; through our risk
assessment, we identified a change
in tobacco farmers sourcing areas,
updated the relevant local risks
maps, identified farmers in close
proximity to forests ecosystems, and
developed management plans and
training sessions with 3,200 farmers
to be able to trace their firewood and
comply with PMI's policy.

(F4.6) Has your organization made a public commitment to reduce or remove deforestation and/or forest degradation from its direct operations and/or supply chain?

Yes

F4.6a

(F4.6a) Has your organization endorsed any of the following initiatives as part of its public commitment to reduce or remove deforestation and/or forest degradation?

Other, please specify

PMI is a member of WBCSD Forest Solutions Group since 2019 in line with our strategy of protecting forests and promoting their sustainable management through adoption of shared best practices and benchmark with other sectors' champion companies.

F4.6b

(F4.6b) Provide details on your public commitment(s), including the description of specific criteria, coverage, and actions.

Forest risk commodity

Timber products

Criteria

Zero gross deforestation/ no deforestation

Zero net deforestation

Restoration and compensation to address past deforestation and conversion Avoidance of negative impacts on threatened and protected species and habitats

No trade of CITES listed species

No land clearance by burning or clearcutting

No conversion of High Conservation Value areas



Secure Free, Prior and Informed Consent (FPIC) of indigenous people and local communities

Adoption of the UN International Labour Organization principles

No sourcing of illegally produced and/or traded forest risk commodities

No sourcing of forest risk commodities from unknown/controversial sources

Operational coverage

Supply chain

% of total production/ consumption covered by commitment

100%

Cutoff date

2006

Commitment target date

2026-2030

Please explain

To achieve our Zero Deforestation Manifesto (ZDM) forest commitments we have two core action areas: supplier engagement and third-party verification. As a result of the deforestation risk assessment of our value chain, we identified priority suppliers to be engaged. In 2018 we developed a plan for third party audits covering: land rights (including FPIC), environmental compliance, environmental management, resource consumption and waste minimization. Based on a risk assessment in our packaging board and paper supply chain, we conducted an audit in 2019 at one of our major supplier with the support of expert third parties in environmental and human rights fields. A corrective action plan was proposed by the supplier to address the findings, and a follow up audit is planned until the end of 2020. Since 2018 we implement a third-party audit process to verify the compliance of our suppliers with the Monitoring Framework (MF) for Sustainable Leaf Curing Fuels. As part of this, suppliers must submit traceability evidence proving that their firewood is legal and that there was no conversion of natural habitats for its production, with a cut-off date of 2006. Through the implementation of the MF we expect our zero net deforestation commitments to be achieved. As a result of the MF third party verification we have confirmed that 97% of the flue cured tobacco we purchased in 2019 did not pose any risk of deforestation to Old Growth Forest (primary and high conservation value forests). Another example of our work with farmers to prevent deforestation and contribute to compensate areas where past deforestation has taken place is the adoption of live barns in Malawi and Mozambique, where termites eat the timber traditionally used in curing barns, requiring farmers to replace them regularly by further cutting trees. To tackle this issue, PMI developed the concept of the "live barn" - a structure of living trees which support the curing poles and remain in place for many years. Since 2014, PMI suppliers have grown more than 80,800 such barns. In 2019 more than 12,000 of the planted barns have grown to the right dimensions and are being used to cure tobacco. By 2020, our plan is that all contracted Burley farmers in Malawi and Mozambique will have live barns planted. This program will help farmers prevent deforestation and restore the environment and enhance biodiversity.



F5. Business strategy

F5.1

(F5.1) Are forests-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

Are forests-	Long-term	Please explain
related issues	time	
integrated?	horizon	
	(years)	
Yes, forests-related issues are integrated	(years) 11-15	Forests related issues have been integrated in PMI's long-term business objectives since 2016, when PMI worked with Business for Social Responsibility (BSR) to identify the areas that are most significant to both our business sustainability and to our stakeholders and prioritized them, including risks, opportunities and emerging themes that required management action and business planning. In 2019, we worked with BSD Consulting, an ELEVATE company, to carry out a comprehensive sustainability materiality assessment and further strengthen PMI's sustainability materiality assessment process. The assessment, which fostered transparency and credibility, enabled us to further embed sustainability across the company, and specifically forest-related issues which came out as an important topic to be incorporated into PMI's sustainability strategy. Since 2016, PMI has continued to integrate forests issues in long-term business objectives, particularly through the development of metrics and frameworks to inform our business strategy, as well as the establishment of targets and goals to ensure a sustainable supply of raw materials. In 2019 PMI continued to use its Monitoring Framework to verify suppliers' sustainability attributes and identify additional sustainability risks. As Brazil was identified as a high-risk region for the company, PMI is now working with its agronomy team, tobacco suppliers, an external agency and a local university to further validate the sustainability of firewood sources. Through such case studies PMI makes sure that the company is on track to ensure a sustainable supply of raw materials, which are essential both for the elaboration of the company's products and long-term business objectives. The
	Are forests-related issues integrated? Yes, forests-related issues	related issues integrated? time horizon (years) Yes, forests-related issues



			indicated time frame was chosen as it is aligned with the
			company's forests related targets.
Strategy for long-term objectives	Yes, forests-related issues are integrated	11-15	Achieving sustainable tobacco production is a strategic objective for PMI. For this reason, the company has set goals and developed strategic plans to avoid deforestation, and reduce greenhouse gas emissions from the use of timber based fuels for tobacco curing, all of which has been integrated in our long-term strategy through the following three strategic initiatives: Reduce fuel consumption rate via curing efficiency improvement and curing barn optimization programs; Move from unsustainable timber fuels to sustainable curing fuel sources; Encourage fuel switching to less polluting fuels and the use of biomass as an alternative to unsustainable wood or fossil fuels, where appropriate. For example, to implement the strategic initiative to move from unsustainable to sustainable curing fuel sources, PMI has adopted a Global Roadmap for sustainable firewood, which includes the following three global targets: 1. No Old Growth Forest cut 2. Renewable sources/Self-sufficient firewood 3. Full traceability. The global roadmap for sustainable firewood provides a timeline for the achievement of the three above targets, the set timeline for its achievement is until 2020. As an example, in 2019, as a result of our roadmap implementation 51% of flue-cured tobacco we purchased was cured using renewable and traceable fuels (vs. 45% in 2018) and verified by a third party. The time horizon was chosen because PMI wants to demonstrate its efforts and leadership on sustainability, climate change and forest-related issues in accordance with its business strategy which considers the transition to a smoke free world. Additionally, we developed Science Based Targets to be achieved by 2030 and 2040. In 2019, PMI continued to enforce its monitoring framework, as well as its risk assessment focusing on tobacco leaf, and paper and pulp-based products.
Financial planning	Yes, forests- related issues are integrated	11-15	Sustainable tobacco production is key for PMI and the company has set goals and developed strategic plans to avoid deforestation and reduce greenhouse gas emissions from tobacco curing. As PMI is working



towards achieving these goals, human and financial resources are allocated into long-term financial planning for forest related issues. For example, PMI developed its Monitoring Framework for Sustainable Leaf Curing Fuels that tobacco leaf suppliers should comply with and that should be audited by a third party by 2020. The Monitoring Framework requires tobacco leaf suppliers to ensure that 100% of the firewood and biomass used for tobacco curing is sustainable and traceable. The Monitoring Framework is an ongoing process and it is being implemented in 12 countries where PMI sources Flue Cured Virginia (FCV) tobacco, including Brazil, Argentina and Philippines, which represent some of PMI's main FCV origins. Since its design, careful financial planning including actions, and resources have been allocated to facilitate the achievement of PMI's forest-related objectives. For example, PMI's financial planning considers that sustainable wood fuel may come at a higher cost due to the increased efforts in traceability and verification in different geographies. These potential costs increments are integrated into PMI financial planning, but also into PMI's sustainability programs which aim to address potential risks and opportunities. PMI supported suppliers and farmers committed to achieve full sustainability driving efficiency by promoting collective purchase access to shared sustainable firewood suppliers. This approach was deployed between 2018 and 2019 in Pakistan, Brazil and Philippines.

F6. Implementation

F6.1

(F6.1) Did you have any timebound and quantifiable targets for increasing sustainable production and/or consumption of your disclosed commodity(ies) that were active during the reporting year?

Yes

F6.1a

(F6.1a) Provide details of your timebound and quantifiable target(s) for increasing sustainable production and/or consumption of the disclosed commodity(ies), and progress made.



Target reference number

Target 1

Forest risk commodity

Timber products

Type of target

Traceability

Description of target

We are committed to promote the sourcing wood-based materials from traceable, sustainable and legal sources, while protecting the rights and livelihoods of local communities. We have set a target to achieve 100% of the tobacco purchased without risk of deforestation of Old Growth Forest (primary and high conservation value forests) by 2020. With the achievement of this target we expect to ensure zero gross deforestation of primary forests within our tobacco supply chain and contribute to our zero net deforestation commitments.

Linked commitment

Zero net/gross deforestation

Traceability point

Forest management unit

Third-party certification scheme

Start year

2015

Target year

2020

Quantitative metric

Target (number)

Target (%)

100

% of target achieved

97

Please explain



Sustainable tobacco production is key for PMI and the company has set goals and developed strategic plans to reduce greenhouse gas emissions from tobacco curing as well as to tackle the risk of deforestation. The 3 strategic initiatives are: • Reduce fuel consumption rate via curing efficiency improvement and curing barn optimization programs; • Move from unsustainable to sustainable curing fuel sources; • Encourage fuel switching to less polluting fuels and the use of biomass as an alternative to unsustainable wood fuels or fossil fuels where appropriate. Following the deforestation risk assessment and identified risks and opportunities PMI has adopted a Global Roadmap for sustainable firewood, which includes the following three global targets: 1. No Old Growth Forest cut 2. Renewable sources/Self-sufficient firewood 3. Full traceability. The global roadmap for sustainable firewood provides a timeline for the achievement of the three targets above, the set timeline for their achievement is until 2020. PMI has been implementing a harmonized and verifiable Monitoring Framework for Sustainable Leaf Curing Fuel (referred to as Monitoring Framework) to monitor the progress towards its global targets. The monitoring framework is composed of four principles, and Principle 2 "Be Sustainable" focuses on sustainability and traceability of the fuel source. The purpose is to ensure that all origins switch to fuels of a demonstrated sustainable source such as biomass from waste agricultural residues or wood fuel from sources which are proven to be sustainably managed (in accordance with the PMI defined criteria of sustainable wood fuel and required traceability). PMI is supporting and engaging in capacity building activities with tobacco leaf suppliers to ensure they are able to comply with the Monitoring Framework by 2020 and beyond. Through the third-party verification process, we keep an unbiased track of our progress against our target of 100% by 2020 is on track and properly being reported.

Target reference number

Target 2

Forest risk commodity

Timber products

Type of target

Assess and/or verify compliance

Description of target

We have set a target to reach 100% compliance with PMI's Monitoring Framework for Sustainable Leaf Curing Fuel in countries from which we source tobacco and that were identified with risk of deforestation of Old Growth Forest through our deforestation risk assessment. The achievement of this target will ensure zero gross deforestation of primary forests within our tobacco supply chain and contribute to our zero net deforestation commitments.

Linked commitment

Zero net/gross deforestation



Traceability point

Third-party certification scheme

Start year

2017

Target year

2020

Quantitative metric

Target (number)

Target (%)

100

% of target achieved

70

Please explain

Sustainable tobacco production is key for PMI and the company has set goals and developed strategic plans to reduce greenhouse gas emissions from tobacco curing as well as to tackle the risk of deforestation. The 3 strategic initiatives are: • Reduce fuel consumption rate via curing efficiency improvement and curing barn optimization programs; • Move from unsustainable to sustainable curing fuel sources; • Encourage fuel switching to less polluting fuels and the use of biomass as an alternative to unsustainable wood fuels or fossil fuels where appropriate. Following the deforestation risk assessment and identified risks and opportunities PMI has adopted a Global Roadmap for sustainable firewood, which includes the following three global targets: 1. No Old Growth Forest cut 2. Renewable sources/Self-sufficient firewood 3. Full traceability. The global roadmap for sustainable firewood provides a timeline for the achievement of the three targets above, the set timeline for their achievement is until 2020. PMI has been implementing a harmonized and verifiable Monitoring Framework for Sustainable Leaf Curing Fuel (referred to as MF) to monitor the progress towards its global targets. The MF is composed of four principles, and Principle 2 "Be Sustainable" focuses on sustainability and traceability of the fuel source and is represented by 5 indicators. The purpose is to ensure that all origins switch to fuels of a demonstrated sustainable source such as biomass from waste agricultural residues or wood fuel from sources which are proven to be sustainably managed (in accordance with the PMI defined criteria of sustainable wood fuel). PMI is supporting and engaging in capacity building activities with tobacco leaf suppliers to ensure they are able to comply with the MF by 2020 and beyond. Through the annual third-party verification process, which



includes on-site visits, we ensure the progress against our target of full compliance by 2020 with the MF in the high-risk countries from where we source tobacco is on track and properly being reported, out of which the compliance on the 5 indicators of Principle 2 are assessed.

Target reference number

Target 3

Forest risk commodity

Timber products

Type of target

Engagement with direct suppliers

Description of target

To be defined as sustainable, tobacco production depends, among other criteria, on the sustainable management of forests in the growing areas we source tobacco from. We have therefore set clear goals and programs to tackle deforestation and prevent forest degradation in our tobacco supply chain together with our direct suppliers. We engage with and expect all our direct suppliers to support us in the implementation of our Zero Deforestation Manifesto and the achievement of the target of 100% of zero net deforestation of natural forest in our tobacco supply chain by 2025. With the achievement of this target we expect to ensure zero net deforestation of natural forests within our tobacco supply chain.

Linked commitment

Zero net/gross deforestation

Traceability point

Third-party certification scheme

Start year

2019

Target year

2025

Quantitative metric

Target (number)

Target (%)



100

% of target achieved

45

Please explain

PMI's environmental strategy aims to mitigate the risk of negative environmental impacts through carbon footprint reduction, sustainable waste management, water stewardship and biodiversity and forest conservation with the aim to generate positive impact in the long-term. The engagement beyond our own operations is key, as it is where the most significant environmental impacts occur, especially when it comes to deforestation. Combating forest loss is critical for PMI as we depend on wood-based materials for our products, and a significant part of our environmental management efforts is devoted to halting deforestation and allow for forests to provide ecosystem services that are at the base of sustainable raw material production. The most relevant source of risk of deforestation from tobacco arises from the Virginia flue-cured (FC) curing process where firewood is used. To address the risk and prevent deforestation in its supply chain, PMI has implemented several programs including Good Agriculture Practices (GAP), the Monitoring Framework for Sustainable Leaf Curing Fuel (MF) and the Responsible Sourcing Practices (RSP) that prescribe the environmental protection. For the tobacco supply chain, we have set a target of zero net deforestation of natural forest for firewood by 2025. We work with all our direct suppliers to move towards traceable and sustainable wood fuels together with a thorough verification process by a third-party to assure the protection of forests against deforestation. In 2019 45% of the firewood used is the curing process of the FC sourced by PMI was traceable to forest management unit and verified by a third-party through our MF program. In order to further support the achievement of the 2025 target of 100% PMI aims to implement a more stringent forest monitoring tool to complement the implementation of the MF with higher level of traceability. Our direct suppliers are fundamental for the success of the program, incl. the successful deployment of the forest monitoring tool, and the achievement of the targets. They have the direct connections to farmers that rely on firewood for curing and, in most of the cases, the direct access to the forest woodlot managers that need to provide evidence of the traceability and sustainable management of the forest, according to the MF requirements, to be validated as an accepted vendor for firewood.

F6.2

(F6.2) Do you have traceability system(s) in place to track and monitor the origin of your disclosed commodity(ies)?

	Do you have system(s) in place?	Description of traceability system	Exclusions
Timber	Yes	PMI has a harmonized and verifiable monitoring framework	Not
products		to monitor progress towards its sustainable leaf curing fuel	applicable
		roadmap's goals. Principle 2 of the monitoring framework	



focuses on sustainability and traceability and has one specific indicator focusing on tracing and documenting all the wood fuel used for tobacco curing activities to the source. This information is provided to farmers and curing centers annually and is used by PMI to identify sources of fuel that would not meet PMI's sustainability criteria. PMI requires the following documentation for audits:

- a. Purchased fuel: receipts of purchased fuels, including the name of the vendor and the amount of fuel purchased. For biomass, a verification of the source of the fuel is needed, including a report containing evidence of source. Suppliers with intermediaries need to provide a study from reliable sources such as universities, international organizations (e.g. FAO) and research institutes, describing the source of the purchased fuel.
- b. Farmer and community woodlot, commercial plantations from tobacco leaf suppliers and self-collected biomass: evidence that proves the source and amount of purchased fuel by specific source. For example, tobacco leaf suppliers in the Philippines using wood pellets to cure tobacco can submit contracts and receipts from the wood pellets supplier, and the correspondent government permits certifying the timber plantation.

Third party audits took place in 2019 and will continue in 2020. It is expected that the traceability system will continue beyond 2020.

For its paper and pulp-based products supply chain, PMI uses its STEP (Sustainable Transformation Enables Performance) program as a supplier due diligence and performance program to assess supplier compliance with our Responsible Sourcing Principles (RSP). Suppliers are requested to answer a set of questions related to environmental compliance including source of origin traceability data. We also check whether their organization have active certifications in place for its paper and pulp-based products, such as FSC and PEFC. PMI also requests suppliers to provide details on origins at national or subnational level as well as proportional breakdowns on an annual basis. In 2019, 94% of our paper and pulp-based products' volume were traceable at least at national level, and at sub national level for high-risk countries.



F6.2a

(F6.2a) Provide details on the level of traceability your organization has for its disclosed commodity(ies).

Forest risk commodity	Point to which commodity is traceable	% of total production/consumption volume traceable
Timber products	Forest management unit	57.3
Timber products	Municipality or equivalent	3.8
Timber products	State or equivalent	23.5
Timber products	Country	12.2
Timber products	Not traceable	3.2

F6.3

(F6.3) Have you adopted any third-party certification scheme(s) for your disclosed commodity(ies)? Indicate the volume and percentage of your certified production and/or consumption.

Forest risk commodity

Timber products

Third-party certification scheme

No certified production/consumption for this commodity

Certification coverage

% of total production/consumption volume certified

Form of commodity

Volume of production/ consumption certified

Metric

Please explain

PMI is not specifying third-party certification schemes for its disclosed commodities, as these are sourced in line with the company's own sustainability sourcing standards which are specific to tobacco production through its Monitoring Framework for Sustainable Curing Fuels. Furthermore, PMI's sourcing of wood-based materials is defined and ruled by the company's Zero Deforestation Manifesto and commitments (i.e.



forest policy) which targets traceability of virgin fibers, share of third party certified or verified products and use of recycled materials to achieve our goals. Certification standards are continuously evolving and through our participation in forest management working groups and direct exchange of technical information we have established a dialogue to explore different possibilities of collaboration. Through STEP supplier due diligence program, suppliers are requested to answer a set of questions related to environmental compliance, among which, whether they have certified sustainable paper and pulp-based products sourcing practices in place, source of origin traceability, and active certifications in place for these products, such as FSC and PEFC.

F6.4

(F6.4) For your disclosed commodity(ies), do you have a system to control, monitor, or verify compliance with no conversion and/or no deforestation commitments?

	A system to control, monitor or verify compliance	Comment
Timber products	No, but we plan to develop one within the next two years	As stated in our Zero Deforestation Manifesto (ZDM) PMI is committed to sourcing wood-based materials from traceable, sustainable and legal sources, while protecting the rights and livelihoods of local communities. Through our extensive supplier engagement programs (e.g. Monitoring Framework in Leaf, and STEP in Procurement) PMI collects information and verifies the traceability and sustainability of the wood-based materials it sources. A monitoring system to specifically ascertain compliance or detect non-compliance with our no conversion and no deforestation commitments is currently under investigation and is expected to be implemented within the next two years. This tool will support the achievement of the targets specified in our ZDM.

F6.6

(F6.6) For your disclosed commodity(ies), indicate if you assess your own compliance and/or the compliance of your suppliers with forest regulations and/or mandatory standards.

	Assess legal compliance with forest regulations
Timber products	Yes, from suppliers

F6.6a

(F6.6a) For you disclosed commodity(ies), indicate how you ensure legal compliance with forest regulations and/or mandatory standards.

Timber products



Procedure to ensure legal compliance

PMI's Good Agricultural Program (GAP) is a contractual requirement for all our leaf suppliers and contracted farmers, and mandates that local legal requirements are to be strictly followed. The program prescribes the compliance with forest regulations for the sustainable wood-based materials in our agricultural supply chain. GAP's implementation is supported on the ground by qualified and trained field technicians and is verified yearly through a third party. Furthermore, for the Virginia flue cured tobacco markets, the Monitoring Framework (MF) for Sustainable Leaf Curing Fuels requires tobacco leaf suppliers to ensure that 100% of the firewood and biomass used for tobacco curing is sustainable and traceable, ensuring compliance with local forest regulations. Since 2018 a third-party audit is in place to ensure and verify the MF implementation, with the first audit cycle expected to be concluded in 2020. STEP (Sustainable Transformation Enables Performance) is the supplier due diligence and performance program to achieve supplier compliance with our Responsible Sourcing Principles (RSP). STEP is based on the risk management approach that guides our supply chain due diligence management framework. It serves as the backbone for sustainably managing our first-tier suppliers; in some cases, second-tier suppliers are also included. Through STEP supplier due diligence program, suppliers are requested to answer a set of questions related to environmental compliance including if they have in place a procedure to regularly update its register of applicable environmental legislation and regulations, through which the compliance with forest regulations and/or mandatory standards are addressed. In addition, high-risk suppliers undergo a desktop audit. According to the questionnaire results and, as applicable, desktop audit, the supplier risk profile may be re-evaluated and require further due diligence. E.g., a medium-risk supplier that did not achieve the minimum acceptable RSP compliance will be required to undergo a desktop and/or an on-site audit. Following both types of audits, corrective action plans are defined and implemented. PMI considers these programs and tools to be sufficient to ensure legal compliance within operations and supply chain, as these are aligned with all local regulation as well as PMI's policies, which are often more stringent.

Country/Area of origin

Argentina

Australia

Brazil

Colombia

Indonesia

Malaysia

Mexico

Mozambique

Philippines

Thailand

Law and/or mandatory standard(s)

General assessment of legal compliance Australia Illegal Logging Prohibition Act



Forest Law - Argentina Brazilian Forest Code Other, please specify

Responsible Sourcing Principles; Good Agricultural Practices; Monitoring Framework for Sustainable Leaf Curing Fuel

Comment

As stated in our Zero Deforestation Manifesto we are committed to sourcing woodbased materials from traceable, sustainable and legal sources.

Also, a general assessment of legal compliance is performed through our STEP program that assess suppliers' due diligence. During this process, we ask our suppliers to demonstrate by providing physical evidences that they keep and regularly update a register of environmental legislation, that their environmental strategy and plans in place meet relevant local environment protection legislation, and that they have a documented Environmental Management System that has undergone a third party assurance / certification to ISO 14001:2015 or equivalent which requires a monitoring of legal environmental compliance.

F6.7

(F6.7) Are you working with smallholders to support good agricultural practices and reduce deforestation and/or conversion of natural ecosystems?

	Are you working with smallholders?	Type of smallholder engagement approach	Smallholder engagement approach	Number of smallholders engaged	Please explain
Timber products	Yes, working with smallholders	Supply chain mapping Capacity building Financial and commercial incentives	Supplier questionnaires on environmental and social indicators Developing or distributing supply chain mapping tool Supplier audits Offering on-site technical assistance and extension services Providing agricultural inputs	317,000	Through PMI's Good Agricultural Program (GAP) all our tobacco leaf suppliers and contracted farmers are engaged, with an estimated 317,000 smallholder farmers (out of 335,000) covered by the program in 2019. GAP's implementation is supported on the ground by qualified and trained field technicians (FT) and verified yearly through a third party. Through the regular on- site visits by the FT a range of activities is performed, from the



Disseminating dissemination of technical technical materials, materials provision of agricultural inputs (e.g. crop Organizing protection agents), to capacity data collection on social building events and environmental Investing in indicators. In pilot projects collaboration with our Supporting suppliers, capacity smallholders to building and training clarify and sessions are organized secure land and offered to tenure smallholder farmers to increase capabilities on the ground and support the correct implementation of GAP and to prevent and reduce deforestation and/or conversion of natural ecosystems at the growing areas we source from. Based on a continuous improvement approach pilot projects with a focus on innovative solutions and trial of good agricultural practices are developed and implemented within our tobacco supply chain, incl. those aimed at smallholder farmers. In 2019, Philip Morris Brazil in partnership with Aliança da Terra, started a pilot project to trial the Produzindo Certo Platform (PCP), with the aim of bringing to partner farmers a materialization tool for more sustainable production cycle, supporting their social-



		environmental
		development. The
		approach consists of
		three phases: i)
		environmental diagnosis
		of the farm; ii)
		development of an
		action plan and iii)
		monitoring and
		evaluation of achieved
		results. The farmers join
		the platform by voluntary
		engagement and commit
		to the implementation of
		the action plan
		established for the farm.
		The program considers
		the farm's forestry
		management assessing
		legal conformity,
		monitoring of areas of
		preservation and native
		vegetation, firewood
		consumption and
		firefighting equipment.
		The pilot covered 123
		smallholder farmers in
		Rio Grande do Sul (BR).
		Furthermore, for the
		Virginia flue cured
		tobacco markets, the
		Monitoring Framework
		(MF) for Sustainable
		Leaf Curing Fuels
		requires tobacco leaf
		suppliers to provide
		capacity building
		activities to local
		stakeholders, incl. smallholder farmers.
		Since 2018 a third-party
		audit is in place to verify
		the MF implementation,
		with the audit cycle



		expected to be
		concluded in 2020.

F6.8

(F6.8) Are you working with your direct suppliers to support and improve their capacity to comply with your forests-related policies, commitments, and other requirements?

	Are you working with direct suppliers?	Type of direct supplier engagement approach	Direct supplier engagement approach	% of suppliers engaged	Please explain
Timber products	Yes, working with direct suppliers	Capacity building	Offering on- site training and technical assistance Organizing capacity building events	51-60%	Following the publication of our Zero Deforestation Manifesto (ZDM), we have organized Webinars and training sessions with our most relevant suppliers, covering topics related to deforestation risks, in our tobacco supply chain, as well as in the paper and pulp-based products supply chain (Tier 1 are acetate tow, shipping cases and fine papers). From 117 suppliers a total of 53 participated in the webinar and training sessions. These suppliers account for 58% of the 2019 tobacco spend and 90% of the 2019 paper and pulp-based products spend. In 2019 6 webinars were carried out aimed at sharing with our supplier base the content of the commitments taken by PMI towards our long term forest positive strategy, as well as our two-pronged approach: First - engaging with suppliers of tobacco, and paper and pulp-based products to move towards traceable and sustainable raw material sourcing; second, Third-party



		verification. A survey was answered by 55% of the webinars' participants. Among the list of 7 questions, 96% found that PMI successfully outlined the objectives of ZDM. 97% consider that objectives and commitments set by the ZDM are realistic and achievable in the timeframe indicated by
		PMI.

F6.9

(F6.9) Are you working beyond your first-tier supplier(s) to manage and mitigate deforestation risks?

	Are you working beyond first tier?	Type of engagement approach with indirect suppliers	Indirect supplier engagement approach	Please explain
Timber products	Yes, working beyond first tier	Supply chain mapping Capacity building	Supplier questionnaires on environmental and social indicators On-site meetings with indirect suppliers Supplier audits Offering on-site training and technical assistance Disseminating technical materials Participating in workshops Investing in pilot projects	Through PMI's Good Agricultural Program (GAP) all our tobacco leaf suppliers and contracted farmers are engaged, with an estimated 335,000 suppliers (first and second tiers) covered by the program in 2019. GAP's implementation is supported on the ground by qualified and trained field technicians (FT) and is verified yearly through a third party. Through the regular on-site visits by the FT a range of activities is performed, from the dissemination of technical materials, provision of agricultural inputs (e.g. crop protection agents), to data collection on social and environmental indicators. In collaboration with our suppliers, capacity building and training sessions are organized and offered to smallholder farmers to increase capabilities on the ground and support the correct implementation of GAP and to prevent and reduce deforestation and/or



conversion of natural ecosystems at the growing areas we source from. Based on a continuous improvement approach pilot projects with a focus on innovative solutions and trial of good agricultural practices are developed and implemented within our tobacco supply chain, including indirect suppliers. In 2019, Philip Morris Brazil in partnership with Aliança da Terra, started a pilot project to trial the Produzindo Certo Platform (PCP), with the aim of bringing to partner farmers a materialization tool for more sustainable production cycle, supporting their social-environmental development. The approach consists of three phases: i) environmental diagnosis of the farm; ii) development of an action plan and iii) monitoring and evaluation of achieved results. The farmers join the platform by voluntary engagement and commit to the implementation of the action plan established for the farm. The program considers the farm's forestry management assessing legal conformity, monitoring of areas of preservation and native vegetation, firewood consumption and firefighting equipment. The pilot covered 123 smallholder farmers in Rio Grande do Sul (BR). Furthermore, for the Virginia flue cured tobacco markets, the Monitoring Framework (MF) for Sustainable Leaf Curing Fuels requires tobacco leaf suppliers to provide capacity building activities to local stakeholders, incl. indirect suppliers. Since 2018 a thirdparty audit is in place to ensure and verify the MF implementation, with the audit cycle expected to be concluded in 2020.

F6.10

(F6.10) Do you participate in external activities and/or initiatives to promote the implementation of your forests-related policies and commitments?



Forest risk commodity

Timber products

Do you participate in activities/initiatives?

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Activities

Involved in multi-partnership or stakeholder initiatives

Initiatives

WBCSD Forests Solutions Group

Jurisdictional approaches

Please explain

PMI is a member of WBCSD's Forest Solutions Group (FSG), a global platform for the forest sector value chain. Building and sharing business solutions to lead sustainable development in the forest products sector. FSG's mission is to advance the bioeconomy and a thriving forest sector that sustains healthy productive forests & people's well-being. FSG members adhere to a set of membership principles and report on key performance indicators to demonstrate leadership and prove progress on sustainability. As an FSG member PMI must demonstrate leadership and commitment to sustainable development through active participations to working sessions and implementing outcomes of these sessions. To track and show individual and joint progress in sustainability, the FSG reports annually on the group's performance across six core environmental and societal commitments. As a sign of our shared commitment and as a condition of our FSG membership, PMI endorses and adheres to a set of Membership Principles and Responsibilities. The FSG reports annually on associated Key Performance Indicators (KPIs) and collect supporting information to measure and show our joint progress in sustainability in accordance with internationally recognized reporting practices and standards. PMI's participation in the FSG enables first-hand application of the outcomes from discussions and efforts shared by the group, which is characterized by thought leaders from companies highly committed to generate positive impact through sustainable management of forest capital. These outcomes support PMI's ever evolving sustainability strategy, that benefits from the collaborative exchange between member companies (including some of PMI's suppliers) within the FSG, while validating the progress and results against our forest-related commitments, including our Zero Deforestation Manifesto.

Forest risk commodity

Timber products

Do you participate in activities/initiatives?

Yes



Activities

Involved in jurisdictional approaches

Initiatives

Jurisdictional approaches

Other, please specify

Monitoring Framework for Sustainable Leaf Curing Fuels

Please explain

PMI, through its commitment to sustainability and traceability of wood fuels used in the curing of Virginia flue cured tobacco purchased, developed its Monitoring Framework (MF) for Sustainable Leaf Curing Fuels. The MF must be implemented by our suppliers in all flue-cured sourcing markets. Through a set of stringent indicators PMI verifies the suppliers' compliance with a third-party audit process. Concretely, Principle 2 of the MF focuses on sustainability and traceability of the wood fuel and has one specific indicator focusing on tracing and documenting all the wood fuel used for tobacco curing activities to the source. This information is provided to farmers and curing centers annually and is used by PMI to identify sources of fuel that would not meet PMI's sustainability criteria. To meet the MF standards, the sustainability and traceability criteria used must be also aligned to the ones implemented by local governmental institutions. This allows local suppliers to provide valid documentation to support their assertion of compliance, supporting conformity against the MF, and, therefore, supporting the overall achievement of PMI's environmental strategy.

In the past in certain jurisdictions such alignment was not yet fully observed. In these cases, PMI and its suppliers jointly with national and local administrations defined the interface to ensure the necessary traceability mechanism is in place and to enable the sustainability criteria for compliance to be reported against the MF. In the Philippines, for example, our suppliers engaged with the Department of Environment and Natural Resources (DENR) in the provinces growing flue-cured tobacco for PMI to review the applicable criteria for traceability and sustainability of wood fuels and align to their existing Technical Bulletin (TB). As a result, a new TB was issued by the DENR, publishing the set of criteria in line with the MF applicable to the local jurisdictions. This publication enabled local suppliers to ensure the MF requirements are properly implemented by local farmers and defined a more straightforward process to request tree plantation and harvesting permits. This jurisdictional approach is expected to increase social and environmental benefits by ensuring sustainable forest management according to both approaches (DENR/MF).

Forest risk commodity

Timber products

Do you participate in activities/initiatives?

Yes



Activities

Engaging with non-governmental organizations

Initiatives

Jurisdictional approaches

Please explain

To achieve the targets of 100% sustainable and traceable firewood, PMI is currently engaged in industry efforts to collaborate with NGOs and other stakeholders in areas such as reforestation, availability of sustainable firewood, among others. This approach is currently being implemented in Brazil and Philippines where all PMI tobacco leaf suppliers come together and plan an industry strategy and collaborate with other stakeholders to achieve sustainability and traceability of fuel sources. For example, in Brazil, the implementation of the Monitoring Framework has triggered all three main tobacco leaf suppliers to form an industry approach to manage sustainability and traceability of firewood. PMI and tobacco leaf suppliers in Brazil have defined a roadmap to collectively update the sustainability study every 3 years from 2019 onwards. Taking an industry approach will help strengthen the efforts to achieve 100% sustainability and traceability of firewood.

Forest risk commodity

Timber products

Do you participate in activities/initiatives?

Yes

Activities

Involved in industry platforms

Initiatives

Jurisdictional approaches

Please explain

PMI is a member of the Sustainable Tobacco Program (STP), a due diligence platform for sustainable agricultural supply chains. The initiators and STP Companies are formed by the tobacco industry's largest companies (outside of monopolies), which includes PMI. The STP was developed by the STP Companies supported by external technical consultants as a collaborative effort with industry participants. Subject matter experts and STP Companies' suppliers of tobacco leaf are consulted throughout the process. The results are reported in the due diligence platform, which is set up to evolve and support the sector to continuously improve its impacts towards sustainable supply



chains.

STP Companies are committed to the sustainable production of tobacco to enable a consistent supply of tobacco products that meet adult tobacco users' expectations, as well as quality and regulatory requirements. The STP Companies define sustainable tobacco production as the efficient production of quality tobacco in conditions that limit as much as possible the impact on the natural environment and that improve the socioeconomic conditions of the people and communities involved in its production. Sustainable tobacco production is the logical outcome of farmers and suppliers consistently applying the Sustainable Tobacco Programme.

The STP implementation is verified on an annual basis, reporting on suppliers' compliance against the STP, which supports the achievement of PMI's sustainability strategy, including our forest-related commitments.

F6.11

(F6.11) Is your organization supporting or implementing project(s) focused on ecosystem restoration and protection?

Yes

F6.11a

(F6.11a) Provide details on your project(s), including the extent, duration, and monitoring frequency. Please specify any measured outcome(s).

Project reference

Project 1

Project type

Forest ecosystem restoration

Primary motivation

Voluntary

Description of project

Auera is a voluntary project developed by PMI Brazil (PMB) in partnership with Embrapa (Brazilian Agricultural Research Corporation from Ministry of Agriculture, Livestock, and Food Supply) to manage biodiversity at farm level through practices that bring conservation benefits for the environment and to farmers through ecosystem services. In the past vacuum in regulatory requirements disincentivized farmers to keep Permanent Preservation Areas (PPAs) or Legal Reservations on their land, while encouraging the opening up of new production areas to increase their revenue streams with little concern about protecting local biodiversity and natural resources. Additionally, past agricultural management practices resulted in erosion, an influx of invasive exotic plant species and degradation of remaining areas of native vegetation, all of which caused some sort of ecological imbalance.

In response, through its Good Agricultural Practices (GAP) Program, PMI has been



supporting sustainable tobacco production, with the environmental requirements of the program focusing on protecting, maintaining and promoting Biodiversity.

The Auera Project is split into 3 phases: pre-diagnostics, full diagnostics and interventions on farms in southern Brazil.

The pre-diagnostics phase aims at verifying the current level of sustainability in areas contracted to grow tobacco for the company. This snapshot is used to define KPIs that will be monitored and analyzed in the full diagnostics phase, detailing the interventions required to maintain and improve balance in forest ecosystems.

Interventions will focus on creating tobacco farming areas that are benchmarks in sustainability. This will include recovering degraded areas, protecting water sources, creating ecological corridors, eliminating invasive exotic species from PPAs and improve the balance of ecosystem services to help maintain local fauna and flora.

KPIs will be defined during the final phase of the project to characterize natural resources, farm biodiversity management and protection, agricultural forestry systems to reinstate environmental conditions, reinstate and promote biodiverse crops and maximize their use to drive crop diversification and sustainability.

Start year

2019

Target year

2022

Project area to date (Hectares)

15,686

Project area in the target year (Hectares)

Country/Area

Brazil

Latitude

-29.725173

Longitude

-52.464501

Monitoring frequency

Six-monthly or more frequently

Measured outcomes to date

Other, please specify
Pre-diagnosis completed

Please explain

The program is monitored through periodical meetings, videoconferences and call sessions. Interim results are discussed and analyzed by the project's executive



committee, which has an equal number of members from Embrapa Clima Temperado, Philip Morris Brasil and PMI's regional team. The pre-diagnostics phase resulted in the identification of further areas for action, among which the monitoring of biodiversity to be fully implemented at PMB operations; and the training of internal stakeholders and local farmers on the topics related to biodiversity. Specific interventions to improve the sustainable tobacco production model continue to be assessed and include, among others, ecosystem restoration, identification of endangered species, and removal of invasive species. Some KPIs identified during the pre-diagnostics phase include:

- Soil Mesofauna and Macrofauna
- Presence of a Permanent Protection Area
- · Presence and diversity of honeybees
- · Endangered species by region
- · Cultivation and use of bioactive plants
- Presence of ecological corridors

The Auera's training pillar includes in its scope a broad training program for qualification. The training plan was first implemented in 2019 and will continue through 2022 with specific sustainability and biodiversity protection courses developed in partnership with Embrapa. Training courses are conducted with both PMB employees involved in the initiative and contracted farmers, combining awareness and technical guidelines for developing and implementing interventions on farms participating in the program. So far 85 PMB employees and field technicians (FT) were trained.

The project's next phase will be the conduction of the full diagnostic, applying the KPIs identified during the pre-diagnostic phase, focusing on soil, water, fauna, flora, air and waste. Once the detailed diagnostic phase is concluded, Embrapa will produce a range of materials on all the issues mentioned above for distribution to the farming community. Due to the COVID-19 emergency in Brazil, the project suffered some delays and is has been extended until 2022 (versus 2021 original end date).

F7. Verification

F7.1

(F7.1) Do you verify any forests information reported in your CDP disclosure?
Yes

F7.1a

(F7.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module

F6. Implementation

Data points verified



To prove that firewood is renewable and traceable, we use our Monitoring Framework, to verify the sustainability attributes of how our suppliers and their farmers are managing deforestation risks.

Verification standard

The Framework is an internal standard that aligns with international best practices and standards, and it is verified by a third party. It requires full chain of custody not only for tier 1 suppliers but also for many tier 2 suppliers.

Please explain

The proportion of tobacco we currently purchase that is cured at no risk of deforestation stands at approximately 97%. Monitoring and supplier engagement go hand in hand. To ensure fuel sources are sustainable, we support suppliers and farmers in planting trees to supply renewable firewood for tobacco curing. Suppliers report twice a year on their performance according to our Monitoring Framework, in addition a self-assessment and a third-party verification are performed annually.

F8. Barriers and challenges

F8.1

(F8.1) Describe the key barriers or challenges to eliminating deforestation and/or conversion of other natural ecosystems from your direct operations or from other parts of your value chain.

Forest risk commodity

Timber products

Coverage

Supply chain

Primary barrier/challenge type

Supply chain complexity

Comment

The use of firewood as fuel for tobacco curing are the areas of our supply chain with forest-related risks. In some countries, the supply chain for firewood as fuel for tobacco curing can be very informal, with tier 2, tier 3 or tier 4 suppliers. For example, some farmers collect firewood themselves, or purchase it from firewood vendors, who may obtain it from various producers or intermediaries. Given the difficulties to change local market practices, achieving traceability and ensuring sustainability present challenges. As we progress with the implementation of our Monitoring Framework and its verification



by a third-party we expect these challenges to be addressed in the short to medium term

Forest risk commodity

Timber products

Coverage

Supply chain

Primary barrier/challenge type

Cost of sustainably produced/certified products

Comment

Traceability exercise down to the expected granularity level is very complex. It requires extensive resources to compile and compute data in a precise and usable way. Also, in some cases, wood species, origins and proportional quantities used are considered proprietary by suppliers and are not shared.

Market dynamics affecting supply and demand of certified wood is also a barrier. With only a few percentage points of global forests being covered by third-party certification schemes due to the high complexity of these schemes' requirements, the mark up costs linked to materials made from certified wood remain budget demanding for large corporate having high demands.

F8.2

(F8.2) Describe the main measures that would improve your organization's ability to manage its exposure to deforestation and/or conversion of other natural ecosystems.

Forest risk commodity

Timber products

Coverage

Supply chain

Main measure

Investment in monitoring tools and traceability systems

Comment

Even if forest certification is a voluntary process, the costs for small forest holders can be prohibitive. Expanding collaborative group certificates, according to credible standards such as FSC, will be essential to expand certification and increase the availability of certified materials.

In order to improve our traceability and monitoring capabilities, we are planning to invest



in technological and innovative solutions, also leveraging on the engagement of our suppliers, to enhance the collection, analysis and validation of the traceability data that would serve the purpose of better managing inherent deforestation and/or conversion of other natural ecosystems risks laying in our supply chain.

F17 Signoff

F-FI

(F-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.

F17.1

(F17.1) Provide the following information for the person that has signed off (approved) your CDP forests response.

	Job Title	Corresponding job category	
Row 1	Chief Executive Officer (CEO)	Chief Executive Officer (CEO)	

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms