

BACKGROUND

For PMI, sustainability means creating long-term value while minimizing the negative externalities associated with our products, operations, and value chain. From the hundreds of thousands of tobacco farmers from which we source tobacco to the millions of consumers of our products, we have an important impact on society and the environment—Impact that we are committed to addressing.

Our environmental strategy, as outlined in our Environmental Commitment and described in our annual Integrated Report aims to engage with employees, suppliers, customers, communities, and other stakeholders to minimize negative environmental impacts on climate, water, biodiversity, and forests.

Forests provide key ecosystem services among which are watershed protection, habitats for biodiversity, livelihoods for communities, and climate regulation. Forests store carbon, and their conversion to other land uses releases greenhouse gas emissions. The United Nations estimates that forests are home to 80 percent of the world's terrestrial biodiversity, and they provide a livelihood for approximately 70 million indigenous people.²

International, multi-stakeholder initiatives are in place to combat deforestation,³ yet forest coverage continues to decrease at an alarming pace: The area of primary forest worldwide has decreased by over 80 million hectares since 1990, and the rate of deforestation was estimated between 2015 and 2020 at still 10 million hectares per year.⁴

Deforestation and the progressive degradation of forest are global issues largely driven by palm oil, industrial wood fiber, beef and soy productions. As highlighted in our CDP Forests submissions, wood fiber is the commodity of relevance for PMI.

We have set ambitious environmental targets, and we acknowledge that we cannot achieve them alone. The engagement beyond our own operations is key, as the supply chain is where the most significant sustainability impacts occur, especially when it comes to deforestation, forest degradation, and loss of ecosystem services. Combating forest loss is a significant part of our environmental management efforts devoted to halting deforestation and to playing an active role in protecting the forest capital in our entire value chain.

We evaluated the environmental impact of our manufacturing facilities to set priorities and define actions to minimize it. As of today, our analysis shows that deforestation and forest degradation are not salient risks linked to our facilities. Our periodic risk assessment highlighted, however, two raw material supply chains that present a risk of deforestation: (i) tobacco leaf, and (ii) paper and pulp-based products. Given the differences between these supply chains and the need to develop tailor-made responses, we have defined within the Zero Deforestation Manifesto specific commitments for tobacco leaf and paper and pulp-based products.

In our value chain, from tobacco growing to manufacturing and distribution of cigarettes and smoke-free products, we consider the risk related to deforestation to be represented by the use of wood fiber materials. In tobacco cultivation, deforestation risks are indirect and relate to wood fuel provision, land use change, and use of timber for barn construction. We believe that land use and construction materials-related risks are however very limited for the following two main reasons: i) the volumes of tobacco we need are decreasing as we increase our share of smoke-free products in our product portfolio (the production of smoke-free products needs less tobacco and, based on evidence, makes the conversion of natural ecosystem to tobacco farms unlikely); and ii) the mitigation activities we have implemented within our sustainability initiatives have resulted in a minimal exposure to deforestation risks related to barn construction materials.

These relevant wood fiber materials are mainly:

- Wood fuel⁵ for curing tobacco leaf; and
- Paper and pulp-based materials:
 - Board and paper for primary packaging⁶;
 - Board and paper for secondary6 packaging;
 - Marketing materials:
 - Fine paper for cigarettes and heated tobacco units; and
 - Cellulose acetate tow for filters.



OUR COMMITMENTS

We are committed to sourcing wood-based materials from traceable, sustainable, and legal sources, while protecting the rights and livelihoods of local communities. Specifically, we are committed to:

- Zero gross³ deforestation of primary⁷ and protected⁸ forest associated with the tobacco supply chain by 2020;
- Zero net⁹ deforestation of managed natural forest⁸ and no conversion of natural ecosystems¹⁰ in the tobacco supply chain by 2025;
- Net positive impact on forests associated with the tobacco supply chain by 2025;
- Zero gross deforestation of primary and protected forest associated with the supply chain of paper and pulp-based materials by 2025; and
- Zero net deforestation of managed natural forest and no conversion of natural ecosystems in the paper and pulpbased products supply chain by 2030.

This Zero Deforestation Manifesto complements and details the deforestation-related aspects described in our environmental commitment. Our work to combat deforestation leverages our company's governance and management structures for sustainability, which are detailed in our annual Integrated Report.

As Chief Executive Officer, I am asking everyone at PMI and all our business partners to uphold this Zero Deforestation Manifesto. —André Calantzopoulos, CEO, Philip Morris International

OUR APPROACH

To achieve these commitments, we follow a three-step approach:

- Annual risk assessment of the status of forest cover and deforestation risk assessment for tobacco and paper and pulp-based materials supply chains where we operate with our suppliers. This aims to define priorities and target areas for action. We will update and adjust our management of forest-related risks based on the results of the risk assessment on a regular basis.
- **Supplier and farmer engagement:** We design and deploy activities with suppliers and farmers of tobacco and paper and pulp-based products to traceable and sustainable raw material sourcing.
- **Third-party verification:** To deliver on these commitments, we will either source materials that are certified to an internationally recognized standard, or we will use third-party verification systems that specifically address tobacco and paper and pulp-based products.

Monitoring and verification mechanisms are referred to in the specific tobacco and paper and pulp commitments further in this document. Human rights and especially the rights of local communities that are linked to forest for their livelihoods are a centerpiece of our strategy. For this reason, we aim to a free, prior, and informed consent (FPIC)¹¹ when engaging directly or through our commercial partners with indigenous people and local communities linked to forests playing a role in our supply chain.

We will publish progress against our zero deforestation commitments and related targets in our annual Integrated Report and other channels. PMI commits to completing the CDP Forest program submission on a yearly basis.



ZERO DEFORESTATION COMMITMENT: TOBACCO SUPPLY CHAIN

Each year, PMI purchases tobacco from farmers contracted by PMI and our third-party leaf suppliers in various countries around the world.

Our ambition is to maintain a sustainable tobacco supply chain based on three key activities:

- 1. Fair treatment and safe working and living conditions for the farmers and farm workers that grow the tobacco crops and the suppliers involved in crop production.
- 2. Responsible stewardship of the environment in the farms where the tobacco is grown and the associated natural areas through specific actions guided by our environmental policies on climate, water, and biodiversity.
- 3. Continuous improvement of the crop quality and farm productivity to ensure farm profitability; sustainable intensification of tobacco productivity to reduce land requirements, releasing pressure on natural ecosystems—all conforming to PMI quality requirements and the law.

We recognize that the production of tobacco we purchase poses potential risk to forests, mainly:

- Wood fuel from forests that are harvested to provide a source of energy for curing of a tobacco type known as flue cured Virginia;
- Construction where forests are harvested to provide wood as construction material for curing barns for the tobacco type Burley; and
- Land use change from tobacco farming where forests are cleared to open space for growing tobacco.

OUR COMMITMENTS

In our tobacco supply chain, we are committed to:

- Zero gross deforestation of primary and protected forest associated with the tobacco supply chain by 2020;
- Zero net deforestation of managed natural forest and supply chain by 2025; and
- Net positive impact on forests associated with the tobacco supply chain by 2025.

PMI's long-term approach has been based on our Good Agriculture Practices Program (GAP) program, in place since 2002. The GAP program defines the principles and standards we expect to be met by all those who grow and supply tobacco to PMI. Additionally, in 2017 we developed our Responsible Sourcing Principles (RSP), laying out the approach and performance requirements PMI expects all its suppliers to adopt in the areas of human rights, environmental management, and business integrity. Through GAP and RSP application and monitoring. we aim to achieve tangible and measurable improvements in our supply chain to prevent deforestation and biodiversity loss.

Our progress has involved engaging with suppliers and farmers setting clear goals, working with them to implement dedicated programs and tackling the three main areas of risk to ultimately achieve a net positive impact. We measure our progress through specific monitoring arrangements.

To address the risk from using wood fuel for curing, we have

developed principles, guidelines, and tools for the sustainable management of fuel sources including sustainable forest management practices, awareness of risk associated with forest losses, and use of alternative renewable biomass. We have reached at the end of 2020 the target of no harvesting no conversion of natural ecosystems in the tobacco of primary and protected forests, and we aim to maintain and verify this result on an annual basis. We are on target to meet the following by 2025:

- Wood fuel self-sufficiency (this includes renewability attributes of the source and forest degradation avoidance); and
- Wood fuel traceability to the source of harvest.

To achieve our targets, we have developed a monitoring framework for sustainable curing fuels (called the "Monitoring Framework") that we apply to all relevant suppliers. The Monitoring Framework is structured around four principles:

- 1. Know your fuel source—by recording and verifying the fuels used to cure our tobacco and their sources;
- 2. Be sustainable—by demonstrating the sustainability of the source of all fuels to cure tobacco:
- 3. Be transparent and replicable—by implementing robust processes to fulfill auditing and reporting requirements; and
- 4. Engage stakeholders—by training and raising awareness on monitoring activities.



The practical delivery of these principles is governed by operating criteria, indicators, and underlying requirements. The Monitoring Framework is currently being implemented by all suppliers of flue cured Virginia tobacco. A third-party audit assesses conformity with the Monitoring Framework to ascertain sustainability and traceability of 100 percent of the fuel used to cure tobacco by contracted farmers.

- To address the risk of deforestation from using wood for barn construction, we have focused on the two countries with the most significant risks to forest: Malawi and Mozambique. We will continue to work with suppliers to improve the lifespan of curing barns and to enforce the use of sustainable timber materials.
- To go beyond zero deforestation and support a forest positive future, we work on forest-land restoration and enhancement with our suppliers. By 2025, we aim to go beyond sustainable wood fuel¹² sourcing for tobacco curing to enhance biodiversity and natural habitat by restoring forestland in our supply chain.
- To address the risks resulting from land-use change, we monitor the impact of land-use changes due to tobacco cultivation and design mitigation actions when needed. Mitigation actions aim to avoid, minimize, and restore any negative impact from land-use change.

ZERO DEFORESTATION COMMITMENT: PAPER AND PULP-BASED MATERIALS SUPPLY CHAIN

PMI purchases paper and pulp-based materials that are used in the manufacture of our products. Our sourcing includes:

- Board and paper for packaging;
- Board and paper for secondary packaging;
- Marketing materials;
- Fine paper for cigarettes and heated tobacco units; and
- Cellulose acetate tow for filters.

The production of paper and pulp-based products leads to deforestation when forests are cleared for plantation expansion or when pulp and paper are sourced from unsustainable sources leading to disturbances that compromise the natural cycles of a forest. Halting deforestation is a global challenge, and we have a role to play by ensuring the products we source come from sustainable sources. To do this, we will meaningfully engage with our suppliers and their suppliers and involve other relevant stakeholders to contribute to halt deforestation.

OUR COMMITMENTS

We are committed to:

- Zero gross deforestation of primary and protected forest associated with PMI's paper and pulp-based materials supply chain by 2025; and
- Zero net deforestation of managed natural forest in the paper and pulp-based products PMI's supply chain and no conversion of natural ecosystems by 2030.

Our risk assessment shows that suppliers of different material categories present various degrees of maturity in relation to managing country-based deforestation risks. PMI therefore has an opportunity to lead the shift toward a more environmentally sustainable pulp-based material sector deploying our strategy based on the risks in the various geographies where we source our materials.



Over the next few years we will:

- Engage with our suppliers to communicate our expectations, gain their commitments on our Manifesto, increase our understanding of their current practices and collaborate to set and achieve targets for the materials they supply;
- Evaluate suppliers through self-assessment and a risk-based due diligence process that will allow us to identify risk exposure and areas where our support is needed;
- Conduct baseline studies to establish requirements for low-, medium-, and high-risk scenarios, including traceability requirements for virgin fiber back to the source of harvest;
- Develop action plans with relevant suppliers to track and measure progress in achieving the objectives;
- Increase where appropriate the use of recycled materials and/or the share of third-party certified product such as Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) and equivalents or rely on third-party verification by reputable organizations; and
- Include deforestation risk as a criterion for supplier selection and adjust our sourcing strategy if required.

END NOTES

- 1. **Supplier**—When referring to the tobacco supply chain, "supplier" refers to PMI affiliates with tobacco leaf operations or leaf entities contracted by PMI for the supply of tobacco.
 - When referring to the pulp and paper supply chain, "supplier" refers to the entities contracted by PMI for the supply of pulp and paper products.
- 2. UN SDG. SDG 15 Life on Land. 2019. https://www.un.org/sustainabledevelopment/biodiversity/
- 3. **Deforestation**—Loss of natural forest as a result of: i) conversion to agriculture or other non-forest land use; ii) conversion to a tree plantation; or iii) severe and sustained degradation.
 - This definition pertains to no-deforestation supply chain commitments, which generally focus on preventing the conversion of natural forests.
 - Severe degradation (scenario iii in the definition) constitutes deforestation even if the land is not subsequently used for a non-forest land use.
 - Loss of natural forest that meets this definition is considered to be deforestation regardless of whether or not it is legal.

Accountability Framework, Definitions | Accountability Framework 2020 (accountability-framework.org)

- 4. FAO and UNEP. 2020. The State of the World's Forests 2020. Forests, biodiversity and people. Rome. https://doi.org/10.4060/ca8642en
- 5. **Wood fuel**—All types of biofuels derived directly and indirectly from trees and shrubs grown on forest and non-forest lands, from silvicultural activities, harvesting and logging, as well as industrial byproducts.
 - FAO, Biomass Energy in the Asia-Pacific Region: Current Status, Trends and Future Setting, 2009. (This document is based on FAO. UBET. Unified Bioenergy Terminology. 2004).
- 6. **Primary packaging** A primary packaging component means a packaging component that is or may be in direct contact with the final product.



Secondary packaging - A secondary packaging component means a packaging component that is not and will not be in direct contact with the final product, i.e. up to shipping cases and case labels.

PMI internal definition

- 7. **Natural forest**—Natural forests possess many or most of the characteristics of a forest native to the given site, including species composition, structure, and ecological function. Natural forests include:
 - a) Primary forests that have not been subject to major human impacts in recent history.
 - b) Regenerated (second-growth) forests that were subject to major impacts in the past (for instance by agriculture, livestock raising, tree plantations, or intensive logging) but where the main causes of impact have ceased or greatly diminished and the ecosystem has attained much of the species composition, structure, and ecological function of prior or other contemporary natural ecosystems.
 - c) Managed natural forests where much of the ecosystem's composition, structure, and ecological function exist in the presence of activities such as: harvesting of timber or other forest products, including management to promote high-value species; low-intensity, small-scale cultivation within the forest, such as less-intensive forms of swidden agriculture in a forest mosaic.
 - d) Forests that have been partially degraded by anthropogenic or natural causes (e.g., harvesting, fire, climate change, invasive species, or others) but where the land has not been converted to another use and where degradation does not result in the sustained reduction of tree cover below the thresholds that define a forest or sustained loss of other main elements of ecosystem composition, structure, and ecological function.

The categories "natural forest" and "tree plantation" are mutually exclusive.

Accountability Framework, Definitions | Accountability Framework 2020 (accountability-framework.org)

- 8. **Protected forest**—A protected area is a clearly defined geographical space, recognised, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. (IUCN Definition 2008) About Protected Areas | IUCN
- 9. **Zero net deforestation**—No net loss in forest area between two points in time, taking into account both losses from deforestation and gains from forest regeneration and restoration. Zero net deforestation would typically be assessed with reference to a given geographic area (e.g., a district, state, nation, or globe) and a given timeframe.

Accountability Framework, Definitions | Accountability Framework 2020 (accountability-framework.org)

- 10. **Natural Ecosystem**—An ecosystem that substantially resembles—in terms of species composition, structure, and ecological function—one that is or would be found in a given area in the absence of major human impacts. This includes human-managed ecosystems where much of the natural species composition, structure, and ecological function are present.
 - a) Natural ecosystems include: Largely "pristine" natural ecosystems that have not been subject to major human impacts in recent history.
 - b) Regenerated natural ecosystems that were subject to major impacts in the past (for instance by agriculture, livestock raising, tree plantations, or intensive logging) but where the main causes of impact have ceased or greatly diminished and the ecosystem has attained species composition, structure, and ecological function similar to prior or other contemporary natural ecosystems.
 - c) Managed natural ecosystems (including many ecosystems that could be referred to as "semi-natural") where much of the ecosystem's composition, structure, and ecological function are present; this includes managed natural forests as well as native grasslands or rangelands that are, or have historically been, grazed by livestock.
 - d) Natural ecosystems that have been partially degraded by anthropogenic or natural causes (e.g., harvesting, fire,



climate change, invasive species, or others) but where the land has not been converted to another use and where much of the ecosystem's composition, structure, and ecological function remain present or are expected to regenerate naturally or by management for ecological restoration.

Accountability Framework, Definitions | Accountability Framework 2020 (accountability-framework.org)

11. **Free Prior Informed Consent (FPIC)**—A collective human right of indigenous peoples and local communities to give and withhold their consent prior to the commencement of any activity that may affect their rights, land, resources, territories, livelihoods, and food security. It is a right exercised through representatives of their own choosing and in a manner consistent with their own customs, values, and norms.

Accountability Framework, Definitions | Accountability Framework 2020 (accountability-framework.org)

- 12. **Sustainable wood fuel**—Sustainable wood fuels cover wood from:
 - a) Legal plantations that are sustainably managed, including on-farm planting;
 - b) A sustainably managed secondary forest or degraded forest with no measurable deforestation; and
 - c) Identified invasive exotic species that have not been planted and require removal.

Sustainable wood-fuels exclude wood fuels derived from:

- d) Unsustainable managed natural forests where deforestation is measurable:
- e) Plantations resulting from conversion of natural forests; and
- f) Primary and protected forests where exploitation is forbidden under any management practices.

FAO, n.d. Sustainable Forest Management (modified).