



PMI Zero Deforestation Manifesto and Commitments

Zero Deforestation Manifesto

Background

For PMI, sustainability means creating long term value for our shareholders and for society, 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 the communities and the environment, impact that we are committed to address. While operating in a highly regulated environment, we strive to go beyond mere compliance to achieve a sustainable smoke-free future. We want to understand and continuously address potential sustainability issues in our global value chain by working with our business partners and other stakeholders to proactively identify, manage and reduce risks, and create shared value.

Our environmental strategy aims to:

- Minimize the risk of negative environmental impacts through carbon footprint reduction, sustainable waste management, water stewardship and biodiversity and forest conservation with the aim to achieve positive impact over the long-term
- Understand and explore opportunities arising from global environmental trends, such as how to adapt tobacco cultivation to climate change
- Engage with our employees, suppliers ¹, customers, and with communities and other stakeholders beyond the boundaries of our operations to fulfill our commitments

We understand where our main impacts lie in our manufacturing facilities and can therefore set priorities and define actions to minimize them. These mainly relate to energy and water consumption and waste generation.

In our tobacco supply chain, we deliver on our environmental commitments through our Good Agricultural Practices (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 for PMI. Additionally, in 2017 we published our Responsible Sourcing Principles laying out the process and performance requirements PMI expects all its suppliers to adopt in the areas of human rights, environmental management and business integrity. Through their application, our goal is to achieve tangible and measurable improvements in our supply chain.

We have set ambitious targets and we acknowledge that we cannot achieve them alone. The engagement beyond our own operations is key, as it is where the most significant sustainability impacts occur, especially when it comes to deforestation. Deforestation is a global issue that is largely driven by agriculture: Palm oil, timber, beef and soy productions are the main factors. Combating forest loss is critical for PMI, and a significant part of our environmental management efforts is devoted to halting deforestation.

Forests provide key ecosystem services such as watershed protection, habitats for biodiversity, livelihoods for communities and climate regulation. The United Nations estimates that forests are home to 80% of the world's terrestrial biodiversity, and they provide a livelihood for approximately 70 million indigenous people ². Forests store carbon, so its conversion to other land uses releases greenhouse gas emissions (agriculture, forestry and land use account for about 24% of total global greenhouse gas emissions, second only to the electricity and heat production). International multi-stakeholder initiatives are in place to combat deforestation, yet forest cover continues to decrease at an alarming rate: Each year, an average of 13 million hectares are lost ³. PMI is committed to combating deforestation.

In our value chain, from tobacco growing to manufacturing and distribution of cigarettes and smoke-free products, we use raw materials composed of wood fiber. These materials are mainly:

- Wood fuel ⁴ for curing tobacco leaf



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- Paper and pulp-based products:
 - Fine paper for cigarettes and heat sticks
 - Board and paper for packaging
 - Cellulose acetate tow for filters

Our regular corporate risk assessment has highlighted 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 complemented our zero deforestation manifesto with specific commitments for tobacco leaf, and paper and pulp-based products.

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 net deforestation of primary and High Conservation Value ⁵ (HCV) forest associated with the tobacco supply chain by 2020
- Zero net deforestation of primary and HCV forests associated with the supply chain of paper and board by 2022
- Zero net deforestation of primary and HCV forests associated with the supply chain of other significant pulp-based products including cellulose acetate tow by 2025
- Zero net deforestation of natural forest ⁶ in the tobacco supply chain by 2025
- Zero net deforestation of natural forest in the paper and pulp-based products supply chains by 2030
- Net positive impact on forests associated with the tobacco supply chain by 2025

Our approach to achieve this

To achieve these commitments, we follow a two-pronged approach:

- **Supplier engagement:** We work with suppliers of tobacco and paper and pulp-based products to move towards traceable and sustainable raw material sourcing
- **Third-party verification:** To deliver these commitments in a credible and transparent way, we will either source materials that are certified to an internationally recognized standard, or we will use third-party verification systems that are specific to tobacco and paper and pulp-based products

We monitor our impact on deforestation through our deforestation risk assessment, which is part of our company-wide risk assessment processes and allows us to track changes in risk exposure. We will update and adjust our management of forest-related risks based on the results of the risk assessment on a regular basis.

Specific monitoring and verification mechanisms are referred to in the separate tobacco and paper and pulp commitments hereafter.

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

This Zero Deforestation Manifesto complements and details the deforestation-related aspects described in our Environmental Commitment.

The oversight of our sustainability strategies and performance lies with the Nominating and Corporate Governance Committee of the Board of Directors. Within the Company, the Environment Working Group and the Sustainability Committee are responsible for the coordination of environmental sustainability programs.

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.



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Zero Deforestation Commitment: Tobacco Supply Chain

Each year, PMI purchases tobacco from farmers contracted by PMI and our third-party leaf suppliers in about 25 to 30 countries around the world.

Our ambition is to build 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, specifically the farms where the tobacco is grown and the associated farming community lands
3. Continuous improvement of the crop quality and farm productivity to ensure farm profitability and conformance to PMI quality requirements and regulatory expectations

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

- **Wood fuel:** Forests are cut down to provide wood as a source of energy for curing of a tobacco type known as flue cured Virginia
- **Land use change** from tobacco farming: Forests are cleared to open space for growing tobacco
- **Construction:** Forests are cut down to provide wood as construction material for curing barns

Our commitments:

In our tobacco supply chain, we are committed to:

- Zero net deforestation of primary and High Conservation Value (HCV) forest associated with the tobacco supply chain by 2020
- Zero net deforestation of natural forest in the tobacco supply chain by 2025
- Net positive impact on forests associated with the tobacco supply chain by 2025

Our approach to achieve this

PMI's long-term approach has been based on our GAP program, in place since 2002, which includes measures to prevent deforestation and biodiversity loss. We have been engaging with suppliers and farmers setting clear goals, working with them to implement dedicated programs and tackling the three main areas of risk to eventually 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 effective management of sustainable fuel sources including sustainable forest management practices, awareness of risk associated with forest losses and use of alternative renewable biomass. We are working to meet the following targets by 2020:

- No harvesting of Old Growth Forest ⁷ (this includes primary forest ⁸ and HCV)
- Wood fuel self-sufficiency (this includes renewability attributes of the source and forest degradation avoidance)
- Wood fuel full traceability

To achieve our targets, we have developed a Monitoring Framework for Sustainable Curing Fuels (called "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 tobaccos 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;
4. Engage stakeholders – by training and raising awareness on monitoring activities.

The "on-the-ground" 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



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cured Virginia tobacco. A third-party audit assesses conformity with the Monitoring Framework to ascertain sustainability and traceability of 100% of the fuel used to cure tobacco by contracted farmers.

- 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.
- To address the risk of deforestation from using wood for barn construction, we have focused on the two

countries with significant risks: Malawi and Mozambique. We will continue to work with suppliers to improve the lifespan of barns and to enforce the use of sustainable timber materials.

- To support a forest positive future, we work on forest-land restoration with our suppliers. By 2025, we aim to go beyond sustainable wood fuel⁹ sourcing for tobacco curing and enhance biodiversity and natural habitat, by restoring hundreds of hectares of forest-land.

PMI is committed to completing the CDP Forest program submission on a yearly basis.



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Zero Deforestation Commitment: Paper and Pulp-Based Products Supply Chain

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

- Fine paper for cigarettes and heated tobacco units
- Board and paper for packaging
- 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 is sourced from unsustainable sources. 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 net deforestation of primary and HCV forests associated with the supply chain of paper and board to PMI by 2022
- Zero net deforestation of primary and HCV forests associated with PMI's supply chain of other significant pulp-based products including cellulose acetate tow by 2025
- Zero net deforestation of natural forest in the paper and pulp-based products PMI's supply chains by 2030

Our approach to achieve this

Our risk assessments show that suppliers of different material categories present various degrees of maturity in relation to managing deforestation risks. PMI therefore has an opportunity to lead the shift toward a more environmentally sustainable pulp-based material sector.

- To help achieve our zero deforestation commitment we will conduct baseline studies to establish targets that will increase:
 - Traceability of virgin fiber
 - Share of third party certified or verified products

– Use of recycled material

- We will engage with our suppliers to communicate our expectations, increase our understanding of their current practices and collaborate to set targets for the materials they supply.
- Suppliers will be evaluated through due diligence and self-assessment process that will allow us to identify risk exposure and areas where our support is needed.
- We will develop action plans with relevant suppliers to track and measure progress in achieving the objectives.
- We will monitor and engage with suppliers sourcing from high-risk countries such as Indonesia and Brazil.
- We will include deforestation as a criteria for supplier selection and adjust our sourcing strategy if required.
- If necessary, we will adapt our sourcing strategy to either focus on sourcing a larger share of materials certified by the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) or rely on third party verification by reputable organizations.

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Endnotes

- 1 **Supplier** – When referring to the tobacco supply chain, “supplier” always refers to PMI affiliates with tobacco leaf operations and y leaf suppliers 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 products.
- 2 *UN SDG. SDG 15 Life on Land. 2019.* <https://www.un.org/sustainabledevelopment/biodiversity/>
- 3 *FAO. 2010. Global Forest Resources Assessment 2010. Rome.* www.fao.org/forestry/fra/fra2010/en/
- 4 **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 by-products.
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).
- 5 **High Conservation Value** – Refers to biological, ecological, social or cultural values that are outstandingly significant or critically important at the national, regional or global level. The HCV approach is the three-step process in which HCVs are identified, managed and monitored.
High Conservation Value Resource Network, 2018. <https://hcvnetwork.org/>
- 6 **Natural Forest** – Areas with tree cover that are not classified as plantations, in which all or almost all trees and other plants are indigenous species, and many of the principal characteristics and key elements of native ecosystems such as complexity, structure and diversity are present. Includes primary forest, old growth forests, degraded forests, natural regeneration and secondary forests.
FAO, Definitions Related to Planted Forests, 2003. <http://www.fao.org/docrep/007/ae347e/ae347e02.htm>
- 7 **Old Growth Forest** – Those forests that possess all of the characteristics of old growth for a particular forest type (community). Moreover, forests that meet some threshold (could be age, logging status, tree size, etc.), determined by a specific political and (or) scientific process are considered “old growth.”
Old Growth and Primary Forests, 2003. http://www.nativetreesociety.org/oldgrowth/index_oldgrowth.htm
- 8 **Primary forest** – A primary forest is a forest that has never been logged and has developed following natural disturbances and under natural processes, regardless of its age. It is preferred to direct human disturbances as the intentional clearing of forest by any means (including fire) to manage or alter them for human use. Also included as primary are forests used inconsequentially by indigenous and local communities living traditional lifestyles relevant for the conservation and sustainable use of biological diversity.
CBD, Definitions, 2015. <https://www.cbd.int/forest/definitions.shtml>
- 9 **Sustainable wood fuel** – Sustainable wood fuels covers wood from:
 - Legal plantations that are sustainably managed, including on-farm planting
 - A sustainable managed secondary forest or degraded forest
 - Identified invasive exotic species, which have not been planted and require removalEnvironmentally sustainable wood-fuels exclude wood fuels derived from:
 - Unsustainable managed natural forests
 - Plantations resulting from conversion of natural forests
 - Old Growth Forest under any management practice*FAO, n.d. Sustainable Forest Management.*