

# TOWARDS A NET POSITIVE IMPACT ON NATURE PMI'S AMBITION ON BIODIVERSITY AND WATER

DECEMBER 2022

Aspirations set in 2022 to guide our long term work  
on biodiversity protection and on water stewardship



PHILIP MORRIS INTERNATIONAL



Protecting biodiversity is critical to maintaining the quality and resilience of ecosystems on which both business and society rely. On the heels of the 2022 United Nations Biological Diversity Conference (COP15), we are especially mindful that when it comes to preserving ecosystems, developing nature-based solutions, and building natural capital, there's a real need to create strong and collaborative connections between different stakeholders, including private sector, science and policy in order to achieve nature-positive solutions.

COP15 will see the adoption of the post-2020 Global Biodiversity Framework. The framework will provide a strategic vision and a global roadmap for the conservation, protection, restoration and sustainable management of biodiversity and ecosystems for the next decade. The lead-up to COP15 and related meetings has provided us, as well as the broader global community, with opportunities to strengthen our efforts and to continue our work to achieve the Aichi Biodiversity Targets.

Our company currently manages those environmental impacts derived from its business operations through two main strategies: **Tackling Climate Change** and **Preserving Nature**. We believe that to effectively tackle climate change, our carbon reduction targets need to go hand in hand with nature-related goals. Accordingly, and seeking to align with COP15 discussions and outcomes, this report introduces new ambitions related to water and biodiversity connected to our strategy to preserve nature.

For our objective of preserving biodiversity, we are aiming to **protect nature by achieving no net loss on ecosystems connected to PMI's value chain by 2033 and contribute towards a net positive impact on nature by 2050**. We are also introducing a new ambition to **scale solutions towards a positive impact on water resources, measured as volume of water optimized, by 2033, and to contribute to a positive impact on water resources by 2050**. These ambitions have been intentionally structured around a 10-year span, from 2023 to 2033, to align with COP15 discussions and outcomes, as well as to maximize their impact. This dedicated report provides an overview of our new aspirations and the strategies we have developed and will continue to deploy in order to make them a reality.

Nature loss poses both risks and opportunities for business, now and in the future. We believe that having the right kind of data to understand how nature impacts our company's immediate financial performance—or the longer-term financial risks that may arise from how our company (positively or negatively) impacts nature—is paramount. Accordingly, we are vocal about our support of progress being made by the Taskforce on Nature-related Financial Disclosures (TNFD), are members of the TNFD Forum, and are committed to supporting the progress of TNFD with revision of draft documents and participation in pilot activities to test the beta releases of the standard.

As we continue to transform for good, learn, and discover better ways to develop solutions that have meaningful impact, our company will continue to work toward minimizing negative externalities and to move longer-term in a direction that seeks net positive impact on society—which includes the responsible and sustainable management of our planet's natural resources. We hope our transparency and willingness to engage will spark dialogue with those who can help accelerate the pace of change. I invite you to reach out and share your feedback, to question, to challenge, and above all, to engage with us as we remain dedicated to making our company better, focused on sustainability, and committed to our purpose.

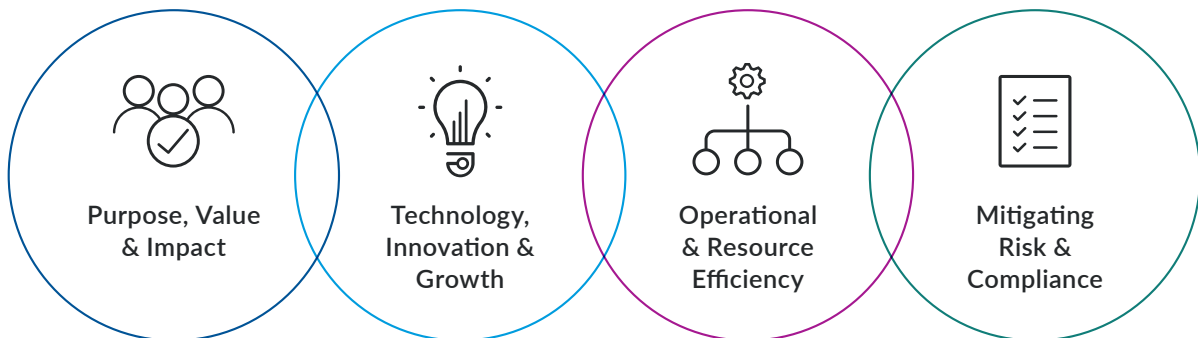
**Jennifer Motles**  
Chief Sustainability Officer, PMI



# Anchoring sustainability at the core of strategy

## Embedding sustainability in all we do

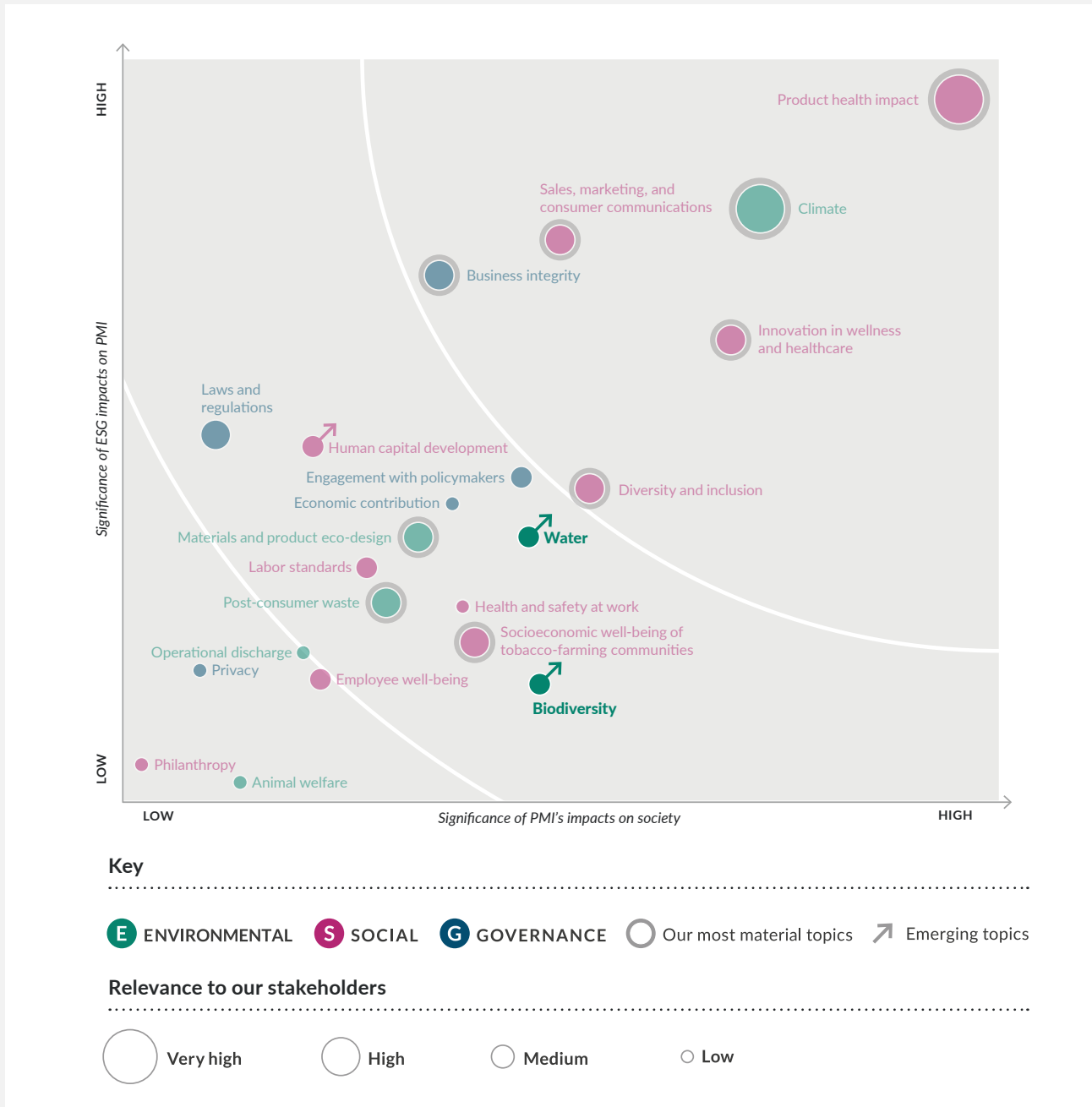
For PMI, sustainability is more than just a means to minimize negative externalities and mitigate risks while maximizing operational efficiency and resource optimization. We see it as a fundamental opportunity for innovation, growth, and purpose-led, impact-driven, long-term value creation.



→ Read more about [PMI's sustainability efforts](#)

# Sustainability materiality assessment

A robust sustainability materiality analysis allows us to identify, assess, and prioritize ESG topics on which we should focus. In line with the principle of double materiality, it consists of a fivefold approach.



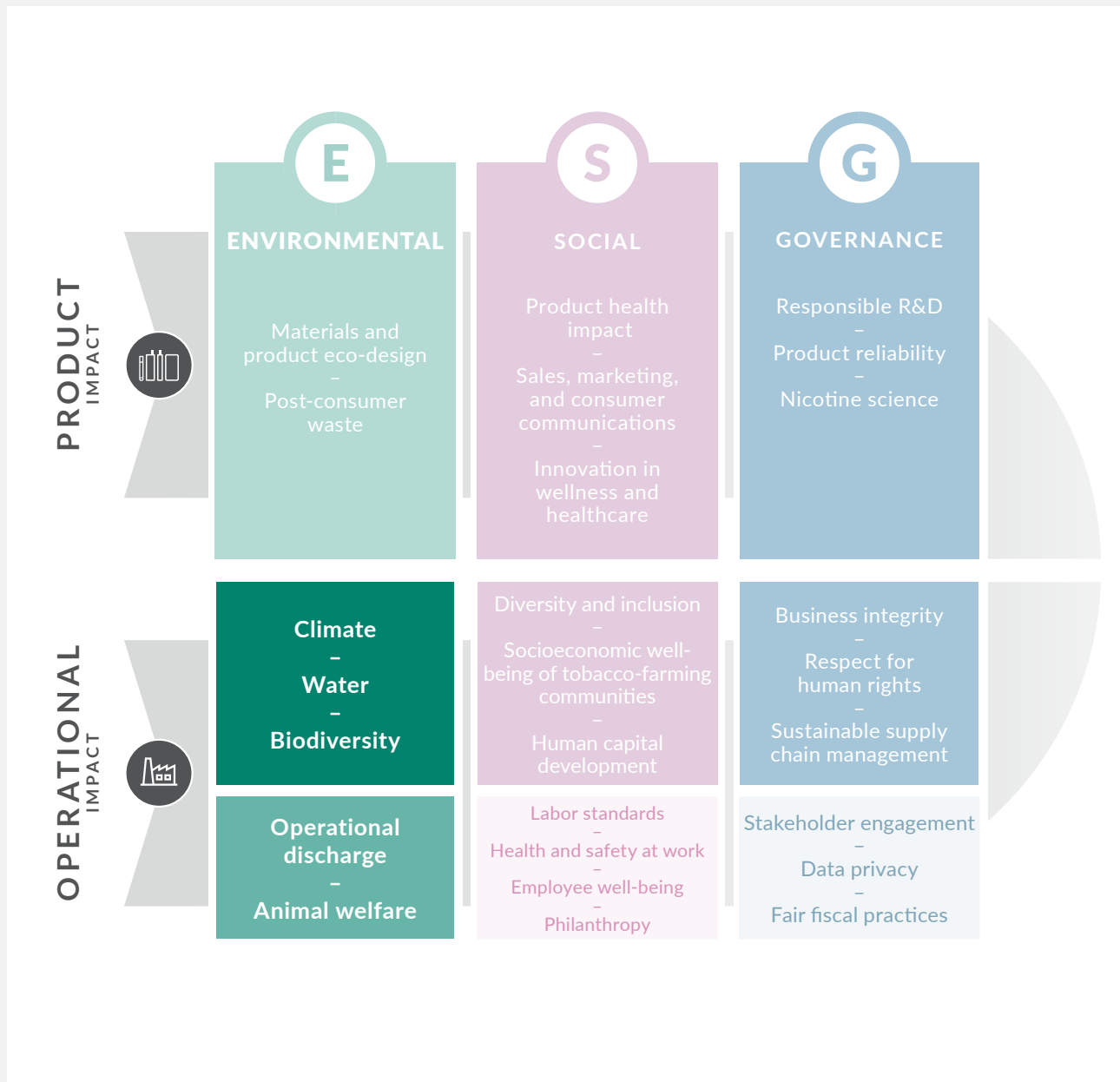
→ Learn more about our sustainability materiality assessment and how we identify our **ESG priorities**

→ Read PMI's **Sustainability Materiality Report**

*Note: In this report 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 U.S. Securities and Exchange Commission.*

# ESG framework

Our ESG framework showcases these priority ESG topics. This framework recognizes two distinct forms of issues: those that relate to our products (what we produce) and those related to our business operations (how we produce).































# Our sustainability strategy

- Impact-driven approach to sustainability
- Separate identification of environmental and social impacts
- Distinct forms of social and environmental impacts
  - **PRODUCT IMPACT:** those impacts generated by our products (what we produce)
  - **OPERATIONAL IMPACT:** those impacts generated by our business operations (how we produce)
- 8 impact-driven strategies: 4 on product impacts + 4 on operational impacts
- 9 governance-related topics define our ability to successfully address environmental and social issues



# 2025 Roadmap

**11 headline goals connected to 8 strategies.** Our roadmap outlines our key commitments and informs the route of our long-term plan.

	Goals	Priority ESG topics and primary SDGs
<b>PRODUCT IMPACT</b> 	<b>Purposefully phase out cigarettes</b> 	<b>1</b> Intentionally work toward phasing out cigarettes by ensuring that smoke-free products represent at least 30% of our shipment volumes and more than half of our net revenues by 2025 while continuing to reduce our combustible shipment volume <b>Product health impact</b> 
	<b>Maximize the benefits of smoke-free products</b> 	<b>2</b> Develop and commercialize science-based smoke-free alternatives, making them available in 100 markets (of which at least half in low- and middle-income markets) and continuing to increase the total number of users <b>3</b> Deploy robust youth access prevention programs in indirect retail channels and ensure that sales of our products abide by our Marketing Codes <b>Product health impact; Sales, marketing, and consumer communications</b> 
	<b>Seek net positive impact in wellness and healthcare</b> 	<b>4</b> Leverage scientific and development capabilities to generate at least USD 1 billion in annual net revenues from products in wellness and healthcare <b>Innovation in wellness and healthcare</b>  
	<b>Reduce post-consumer waste</b> 	<b>5</b> Reduce post-consumer waste and prevent littering by implementing comprehensive programs covering all our consumables <b>6</b> Follow eco-design and circularity principles for all smoke-free electronic devices <b>Materials and product eco-design; Post-consumer waste</b>  
	<b>Foster an empowered and inclusive workplace</b> 	<b>7</b> Nurture a more diverse culture that promotes equity and inclusion by providing access to lifelong learning to all our employees and improving gender and local representation in management globally <b>Diversity and inclusion; Human capital development</b>    
	<b>Improve the quality of life of people in our supply chain</b> 	<b>8</b> Eradicate systemic child labor in our tobacco supply chain <b>9</b> Ensure all contracted tobacco farmers make a living income, and partner with our direct suppliers to promote a living wage for their workers <b>Socioeconomic well-being of tobacco-farming communities</b>  
<b>OPERATIONAL IMPACT</b> 	<b>Tackle climate change</b> 	<b>10</b> Achieve carbon neutrality in our operations and accelerate our decarbonization toward net zero across our value chain <b>Climate</b>  
	<b>Preserve nature</b> 	<b>11</b> Promote biodiversity, address critical water challenges, ensure no conversion of natural ecosystems, and halt deforestation in both our tobacco and pulp and paper supply chains <b>Biodiversity; Water</b>  

# Our Sustainability Index

Progress on our Roadmap measured by a set of key performance indicators that collectively form our Sustainability Index, which links executive compensation and ESG performance.

## PRODUCT IMPACT



Key performance indicators	2021 performance	2025 aspirations	KPI weight	Contribution to total index score		
① Smoke-free product shipment ratio (smoke-free/total)	12.8%	>30%	85%			
② Smoke-free product adjusted net revenue ratio (smoke-free/total)	29.1%	>50%				
③ Number of markets where PMI smoke-free products are available for sale	71	100				
④ Proportion of markets where PMI smoke-free products are available for sale that are low- and middle-income markets	43%	>50%				
	⑤ Total number of users of PMI's smoke-free products (in millions) <sup>1</sup>	21.7				
⑥ Proportion of shipment volume covered by markets with youth access prevention programs in place in indirect retail channels.	91%	>90%				
	⑦ Annual net revenue from wellness and healthcare products (in billions USD)	0.1			≥1	
⑧ Proportion of shipment volume covered by markets with anti-littering programs in place for combustible cigarettes	n/a	≥80%			15%	
⑨ Proportion of shipment volume covered by markets with end-of-life take-back programs in place for smoke-free consumables	9 pilots	≥80%				
	⑩ Proportion of PMI smoke-free devices with eco-design certification	n/a				
⑪ Cumulative number of smoke-free electronic devices refreshed or repaired since 2021 (in thousands)	62	1,000				

<b>Product Sustainability</b>	100%	67%
-------------------------------	------	-----

## OPERATIONAL IMPACT



⑫ Proportion of women in senior roles	31.1%	35%	50%	
	⑬ Proportion of PMI employees who have access to structured lifelong learning offers	n/a		
⑭ Cumulative number of human rights impact assessments conducted since 2018, with findings addressed	5	10		
	⑮ Prevalence of child labor among contracted farmers supplying tobacco to PMI	1.8%		
⑯ Proportion of contracted farmers supplying tobacco to PMI who make a living income	67%	100%		
	⑰ Net carbon emissions in scope 1+2 (in thousands of metric tons)	357		
⑱ Absolute carbon emissions reduction in scope 3 versus 2019 baseline (in line with science-based target)	17%	25%	50%	
	⑲ Proportion of tobacco purchased at no risk of deforestation of managed natural forest and no conversion of natural ecosystems	37%		

<b>Operational Sustainability</b>	100%	33%
-----------------------------------	------	-----

<b>SUSTAINABILITY INDEX</b>		100%
-----------------------------	--	------

<sup>1</sup> During 2022, we intend to develop a new 2025 aspiration related to the total number of users of PMI smoke-free products.

→ Read more about the mechanics of the Sustainability Index and the definitions and methods underlying its constituent KPIs in [PMI's ESG KPI Protocol](#).





## Preserve nature

### The right thing to do

We collectively depend on soil, land, forests, and water, which provide resources and services critical to human existence. Moreover, a healthy natural ecosystem plays a vital role in tackling climate change, with land and oceans absorbing and storing carbon from the atmosphere. Yet biological richness and natural resources are being lost at an alarming rate. Global scientific studies indicate that 1 million plant and animal species face extinction, thousands of species are already extinct, and several million hectares of natural forest are lost each year despite international efforts to counter the trend. The unsustainable use of natural resources can lead to soil loss and erosion, diminished landscape and recreational value, and a subsequent loss of economic value. Often, it is the world's most impoverished communities that are most vulnerable to the negative impacts of changes in climate, biodiversity, and ecosystem function. Protecting forests and regenerating ecosystems can help prevent the worst impacts of extreme climate events and improve livelihoods.

### The business case

Our business activities rely on healthy ecosystems. The degradation and loss of natural capital can cause disruptions and increase production costs. The raw materials used in our products rely on fertile soil, stable climate conditions, and access to water. In our agricultural supply chain especially, even small changes in the balance of ecosystems can lower crop productivity, increase production costs linked to remediation and adaptation measures, and negatively impact farmers' livelihoods. Promoting the efficient use of natural resources and taking steps to protect, preserve, and improve them help manage risks and prepare us to meet regulatory frameworks that may emerge in response to increased awareness of our limited environmental resources, ecosystem degradation, and biodiversity loss. Further, we understand that we all have a role to play to halt the destruction of natural habitats and will play our part in helping address this global issue.

## Preserving natural ecosystems

We are committed to the responsible and sustainable management of natural resources. We understand that forestry management, biodiversity protection, water stewardship, and waste reduction are deeply intertwined. Moreover, robust ecosystems capture and store carbon from the atmosphere, thus playing a key role—alongside efforts to reduce GHG emissions from man-made activities—in combating climate change. We seek to account for those synergies and consider our impacts holistically when designing and deploying our nature-related strategies and programs.

We have set targets and initiatives tied to various aspects of natural capital, with a particular focus on the highest-risk segments of our value chain. Our ambitions for biodiversity and water strengthen PMI's actions to address the environmental impacts of its business operations and reflect the company's priorities, as defined by its sustainability materiality analysis.

### Protecting biodiversity

We strive to reduce the negative impacts of our operations and sourcing activities on habitats and ecosystems while looking for ways to contribute to the diversity of plant and animal life.

We believe companies have a critical role to play in tackling biodiversity loss by promoting conservation in partnership with both international organizations driving for global ambitions and local stakeholders who understand their surroundings and experience effects on the ground. We participate in international forums such as CSR Europe's Biodiversity & Industry Platform, WBCSD's working groups on

nature and forests, and Business for Nature, and we leverage the work of the Science Based Targets Network (SBTN). As of 2021, we also participate in the member forum of the TNFD, providing support and contributing to collective action. We call on governments to adopt a common and ambitious framework during the 15th meeting of the Conference of the Parties (COP15) to the Convention on Biological Diversity (CBD) to set the stage for worldwide action on biodiversity.

We understand that building a meaningful global approach to biodiversity requires the conscious cross-pollination of various strategies and interventions. The combined effects of nature degradation, climate change, water scarcity, and forest loss—among other factors—are creating a biodiversity crisis. To respond appropriately to this crisis, we must account for the synergies and interdependencies of environmental impacts along our value chain and put biodiversity protection at the nexus of our climate, forest, and water strategies. Over the past couple of years, we have focused on gaining visibility into and an understanding of our impacts on biodiversity. We have started to account for biodiversity impacts related to our business, in 2019 testing the Mean Species Abundance (MSA) metric on selected business areas. We participated in CSR Europe's 2020 evaluation of the maturity of biodiversity practices.

In 2021, we partnered with the Biodiversity Consultancy to identify the main impacts related to our tobacco supply chain. Our aim was to align strategy development with the SBTN approach to set interim targets that have measurable, actionable, time-bound objectives that will be revised



once the global goals for nature have been formally set by the Global Biodiversity Framework. Our work, combined with an in-depth assessment in 2022, supported the identification of the following priority areas along our value chain:

- In our tobacco supply chain, our focus should be on the tobacco cultivation process, including the curing stage for flue-cured tobacco, which carries risks related to degradation of the natural environment linked to loss of ecosystem area, chemical pollution, and invasive species.
- In our non-tobacco supply chain, emphasis needs to be put on the deforestation risks linked to the sourcing of paper and pulp-based materials.
- In our direct operations, attention should be paid to the proximity of our sites to protected and key biodiversity areas and the implementation of good environmental practices at manufacturing sites.
- Downstream in our value chain, we should concentrate on preventing the littering of our product consumables.

### Managing water responsibly

From tobacco cultivation to manufacturing, our products require water. Our agricultural supply chain accounts for around half of our water footprint. The second-largest share of our water use (around 40%) derives from other sectors of our supply chain—in particular, the processes by which the filters, paper, and packaging materials we source are manufactured. Our direct operations are not particularly water intensive, representing around 5% of our water footprint, with fresh


water used for manufacturing, sanitation, and other processes.

Water is a renewable yet finite resource shared by all. We can help combat water scarcity and advance global health and food security by responsibly managing our impacts on water, especially in water-stressed regions.

Mindful that a significant portion of our water footprint comes from our agricultural supply chain, we conduct an annual global water risk assessment complemented by local water risks assessments to evaluate and understand water risk, helping us make informed decisions and effectively manage water resources. Our efforts focus on optimizing water through farm- and landscape-level interventions and on protecting water quality.

We also have a long-standing approach to driving water stewardship in our direct operations, including our manufacturing sites, guided by periodic risk assessments. In particular, we are focused on improving water efficiency and protecting the quality of the water returned to the environment from our factories.

OUR ASPIRATIONS

 Sustainability Index

Maintain

**Zero**  
gross deforestation of primary and protected forests associated with our tobacco supply chain

**100%**  
of tobacco purchased without detection of residues attributable to the use of highly hazardous pesticides

**Zero**  
virtually zero production waste to landfills


**>70%**  
of flue-cured tobacco purchased cured with renewable fuel sources (self-sufficient firewood or biomass)

2022

**Zero**  
virtually zero waste to landfill

**3.1**  
water ratio in our manufacturing facilities (water withdrawn in cubic meters per million cigarettes equivalent)

2025

**Zero**   
net deforestation of managed natural forest and no conversion of natural ecosystems in our tobacco supply chain

**Net positive**  
impact on forests associated with our tobacco supply chain

**Zero**  
gross deforestation of primary and protected forest associated with our supply of paper and pulp-based materials

**100%**  
of our tobacco-growing areas covered by local water risk assessments (cumulative since 2018)

**100%**  
of our manufacturing facilities certified to the Alliance for Water Stewardship (AWS) standard

2030

**10**  
At least 10 million cubic meters of water optimized in our tobacco-growing areas (cumulative since 2019)

**Zero**  
net deforestation of managed natural forest and no conversion of natural ecosystems in the paper and pulp-based products supply chain

2033

**No net loss\***  
Protect nature by achieving no net loss on ecosystems connected to PMI's value chain by 2033

**Towards positive impact\*\***  
Scale solutions towards a positive impact on water resources, measured as volume of water optimized and restored, by 2033

2050

**Net positive\***  
Contribute towards a net positive impact on nature by 2050

**Positive impact\*\***  
Contribute towards a positive impact on water resources by 2050

\*Aspirations set in 2022 to guide our long-term work on biodiversity protection

\*\*Aspirations set in 2022 to guide our long-term work on water stewardship





# PMI'S AMBITION ON BIODIVERSITY

---



## PMI's ambition on biodiversity

Our ambition to contribute towards a net positive impact on nature will be reflected in our behaviors, actions, and how we engage with stakeholders in our value chain. Pressures on nature cannot be tackled individually. Only a holistic approach building on interlinks between programs and activities lead to achieving targets to reduce the impact of pressures on nature. PMI's has already delivered reduction on drivers of nature loss with its biodiversity strategy, related programs, and the new activities we foresee to enhance our contribution to mitigate impact and support natural ecosystems and their services by 2033.

PMI's zero deforestation and no natural ecosystem conversion program operated to protect natural habitats, particularly to biodiversity sites of global importance and protected areas. In its supply chain, PMI:

- Has already achieved zero gross deforestation on primary and protected forests in 2020 (ecosystem use change pressure) for tobacco.
- Is on track to the zero net deforestation on natural managed forests target that prescribes sustainable management of resources to our suppliers.
- Is implementing zero gross and net deforestation targets for paper and pulp-based materials respectively in 2025 and 2030.

A dedicated monitoring verification and reporting (MVR) program with results validated through external assurance is the backbone of robust progresses against targets. Energy sources are a key topic in our work towards the decarbonization of PMI supply chain as well as in our manufacturing sites. PMI promotes the switch from fossil to low carbon renewable alternatives including biomass. We define criteria for sustainable biomass in alignment with the most robust forestry standards and in synergy with our zero deforestation manifesto.

PMI's overall ambition on biodiversity is to contribute in the longer-term with its programs and actions towards a longer term net positive impact in line with the [Global Biodiversity Framework](#).

We aim to work across our value chain to protect ecosystems connected to it and achieve **no net loss by 2033**, implement meaningful actions against identified relevant pressures on nature and contribute towards a **nature positive impact by 2050**.

To achieve its ambition, PMI is already working to avoid and reduce impacts to biodiversity in the following areas:

- Sustainable management of working lands with a focus on regenerative practices.
- Restoring affected biodiversity in ecosystems connected to PMI's value chain.
- Promoting transformative actions beyond our industry sector applying landscape approaches.

PMI recognizes the importance of taking early actions to start bending the curve of biodiversity loss and will set area targets for its most significant existing biodiversity footprint in line with the [Global Biodiversity Framework](#) and Science-Based Targets Network.

At PMI, we are committed to doing our part to achieve the UN SDG agenda, and our approach to biodiversity is aligned with the following goals:



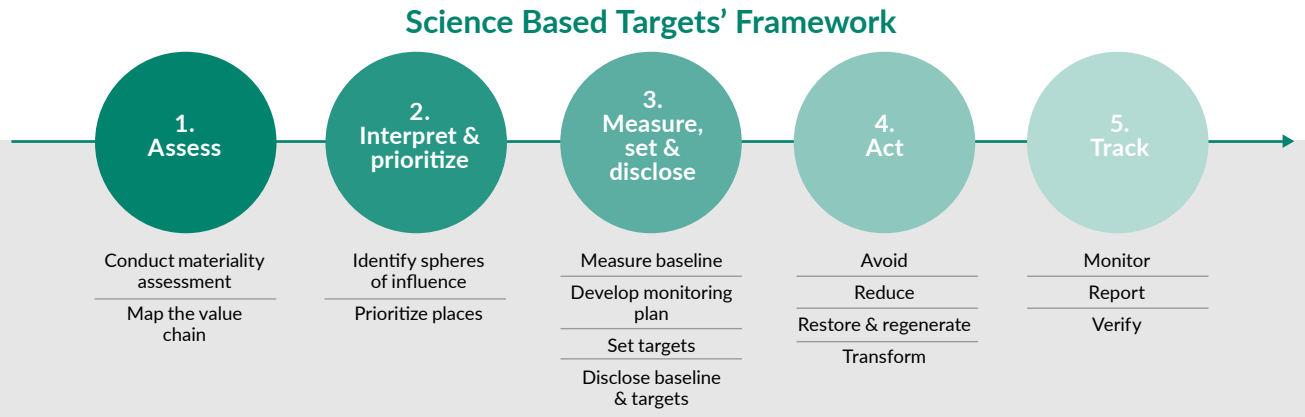
### Key business themes addressed by PMI's ambition relative to SDG 15 (source SDG Compass)

- 1 DEFORESTATION AND FOREST DEGRADATION
- 2 LANDSCAPES FOREST MANAGEMENT AND FIBER SOURCING
- 3 NATURAL HABIT DEGRADATION
- 4 TERRESTRIAL AND INLAND FRESHWATER ECOSYSTEMS



## Our approach

To define our approach to biodiversity, we aligned with the Initial Guidance for Business from the **Science Based Targets for Nature (SBTN)** by the Science Based Targets Network.



Visual taken and edited from the Science Based Targets for Nature: Initial Guidance for Businesses

### 1. Assess

Our most recent company-wide sustainability materiality assessment, conducted in 2021, highlights the importance of addressing biodiversity. In 2022, we applied the SBTN approach to define, within biodiversity as an overarching topic, the materiality level of the different themes it encompasses. We applied the mitigation hierarchy lens, data availability, and expert guidance to come to first outcomes on assessing our impacts. We included paper and pulp-based materials considering their interlinks with natural ecosystems and their protection.

### 2. Interpret & prioritize

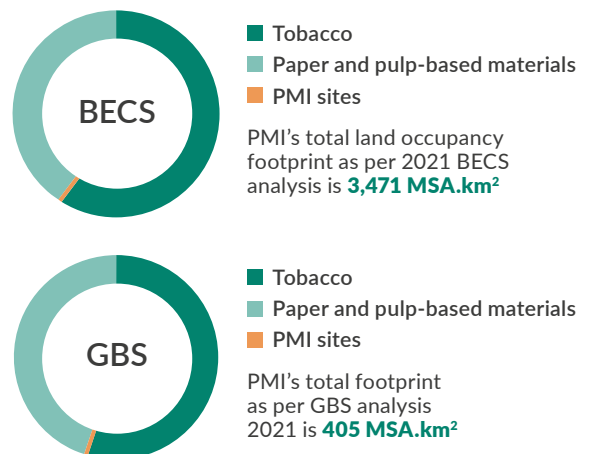
In 2022, PMI completed two analyses to better understand its footprint and define key action areas:

1. Biodiversity extent, condition and significance (BECS) land-based assessment.
2. Global biodiversity score (GBS) resource use-based assessment.

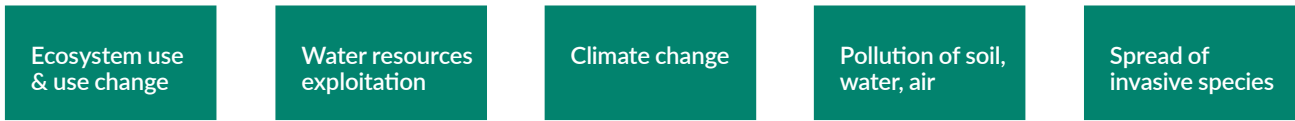
#### OUTCOMES

- Ecosystem use and use change in the supply chain was identified as the greatest driver of potential biodiversity loss for land-based impacts.
- Pollution and water use were identified as the main pressures on natural resources for non-land-based impacts. PMI currently uses the **Integrated Biodiversity Assessment Tool** ([www.ibat-alliance.org](http://www.ibat-alliance.org)) to determine priorities in addressing impacts through spatial analysis.

#### Results of PMI biodiversity footprint



## PRESSURES



### Mean Species Abundance (MSA)

Uses coefficients of biodiversity loss to account interlinks and dependencies with intensity of associated pressures. For example, 1 MSA.km<sup>2</sup> represents an area of complete biodiversity loss. This metric is used to prioritize areas of action.

### Biodiversity Extent, Condition, and Significance (BECS)

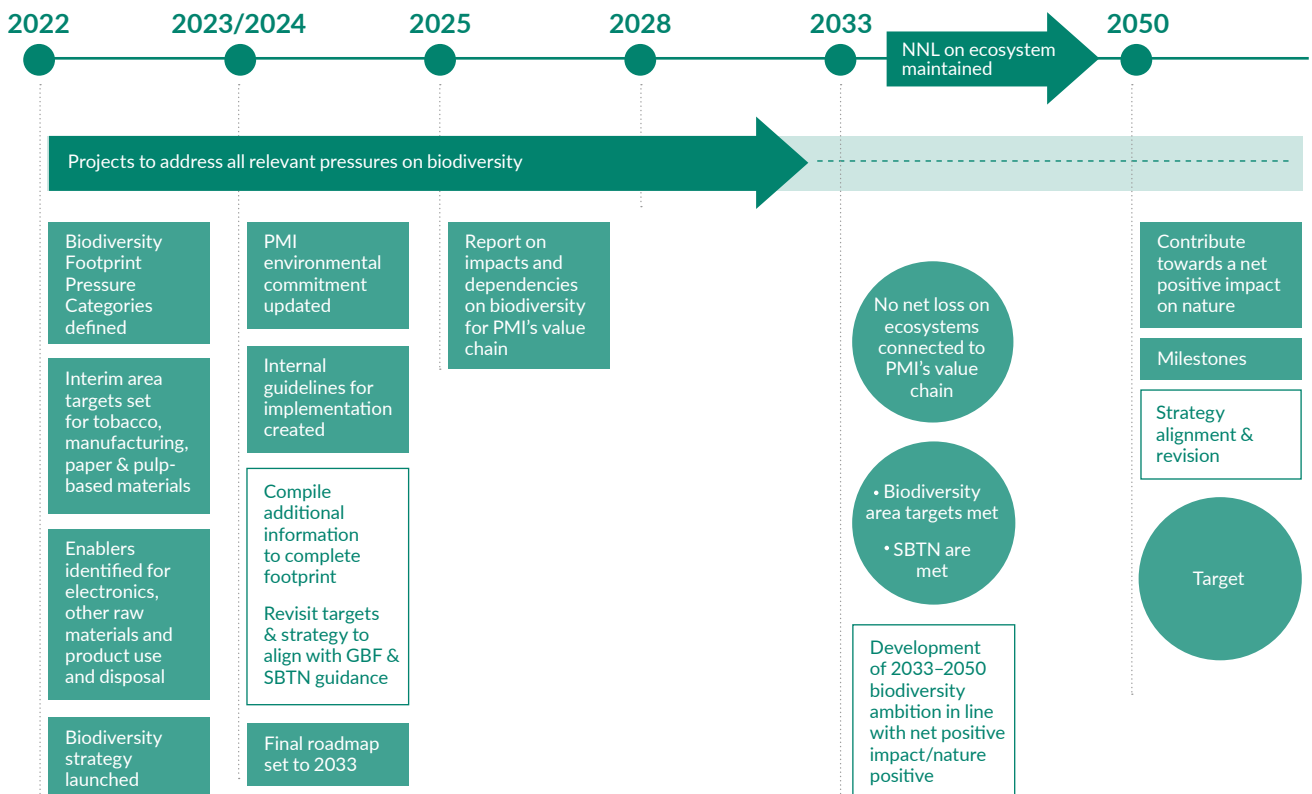
Estimate land occupancy footprint (in MSA) and biodiversity significance. Results highlight areas of high biodiversity significance and related footprint.

### Global Biodiversity Score (GBS)

Estimates a quantitative footprint (in MSA) of non-land use biodiversity pressures. Results provide the magnitude of main biodiversity impacts and their biodiversity risk.

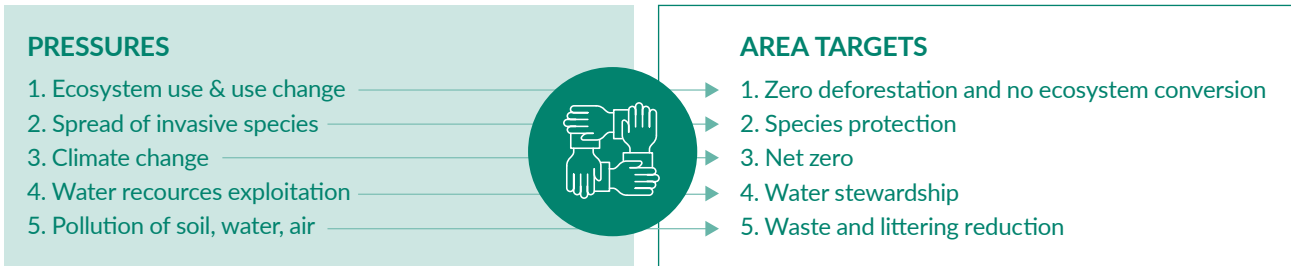
## 3. Measure, set, and disclose

In 2022, we identified the most relevant pressure categories, set interim area targets, and identified enablers towards contributing to net positive impact on biodiversity. In 2023 we will continue this work by updating our **Environmental Commitment** to align it to our biodiversity strategy development, develop internal guidelines, and set the final roadmap to 2033. In 2023/24, we will align with relevant updates on international methodologies such as Science Based Targets for Nature (SBTN) and showcase participating in working groups on biodiversity. We plan to disclose our first full value chain report on dependencies and impacts on biodiversity by 2025 and to address the identified pressures leveraging PMI's current programs and new activities, we aim to have specific projects to address all relevant pressures for the business areas in scope by 2028.



**2033 no net loss**  
 The point at which business-related impacts on biodiversity are balanced by measures from the mitigation hierarchy, to leave no degradation on natural ecosystems at end balance.

**2050 net positive impact**  
 Impacts on biodiversity are outweighed by actions taken to avoid and reduce such impacts, rehabilitate affected ecosystems, and offset any residual impacts.



## 4. Act: the theory of change

Our theory of change is based on counterbalancing the impact on biodiversity that PMI activities can generate across the value chain. Each action embeds challenges and different step-wise approaches to solve them. We are embracing SBTN guidance on the mitigation hierarchy following the AR<sup>3</sup>T framework as a blueprint for action in engaging key stakeholders, including our business partners and other stakeholder groups to promote landscape and jurisdictional approaches.

AR <sup>3</sup> T Framework
<p><b>AVOID</b></p> <p>Avoid new impacts compared to 2023 baseline with focus on no gross conversion of natural habitats.</p>
<p><b>REDUCE</b></p> <p>Reduce and minimize existing unavoidable impacts through the application of sustainable and regenerative practices and measure progress across the 5 highlighted pressures on nature.</p>
<p><b>RESTORE &amp; REGENERATE</b></p> <p>Restore affected biodiversity areas to balance degradation caused by ecosystem loss and validate outcomes on net gains.</p>
<p><b>TRANSFORM</b></p> <p>Transform business models within and beyond sectors to include regenerative practices to foster long-term sustainability of ecosystem and resource use.</p>





PMI'S AMBITION  
ON WATER  
STEWARDSHIP

---

## PMI's ambition on water stewardship

Water stewardship at PMI is key to the responsible and sustainable management of natural resources. **PMI's ambition is to preserve water resources and respect the natural cycle of water while also providing benefits to biodiversity, climate change, and social impact.** Water stewardship means reducing water use through efficiency measures, promoting water recycling, protecting watersheds, preventing water pollution, enhancing recharge, and promoting sustainable water management in collaboration with stakeholders. Caring for water and people's well-being also extends to preserving water quality and promoting safe access to water, sanitation, and hygiene services (WASH). PMI water stewardship aims to build resilience in watersheds, from tobacco and our raw materials supply chain to our own operations; results can be achieved only through understanding water-related risks and addressing them, engaging with stakeholders for scaling solutions to impact and through the use of a science-based approach supported by robust methodologies and implementation tools. Our ambition and strategy actions are reflected in our aim to be an active stakeholder in the watershed where we operate directly or through business partners to:

**Scale solutions towards a positive impact on water resources, measured as volume of water optimized and restored, by 2033**

**Contribute towards a positive impact on water resources by 2050**

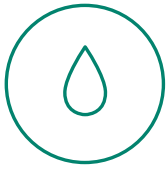
**At PMI, we are committed to doing our part to achieve the UN SDG agenda and our approach to water stewardship is aligned with the following goals:**



### Key business themes addressed by PMI's ambition relative to SDG 6 (source SDG Compass)

- 1 SUSTAINABLE WATER WITHDRAWALS
- 2 IMPROVED WATER QUALITY THROUGH EFFLUENT TREATMENT
- 3 IMPROVED WATER EFFICIENCY
- 4 EQUAL, AFFORDABLE, AND SAFE, WASH FOR EMPLOYEES AND COMMUNITIES
- 5 PROTECTION OF WATER-RELATED ECOSYSTEMS AND BIODIVERSITY

## OUR APPROACH



**WATER  
FOOTPRINT  
& RISK  
ASSESSMENT**



**PURPOSE  
ALIGNMENT**



**STAKEHOLDER  
EXPECTATIONS**



**WATER  
STRATEGY  
BEST  
PRACTICES**



**LEADER'S  
BENCHMARK**

PMI assesses risks and impacts to prioritize opportunities while closing information gaps. This builds awareness, both internally and with key watershed stakeholders, on where PMI can make a difference to create shared value for the business, its suppliers, and society more broadly. For our tobacco supply chain, we assess risk through both global [leveraging tools like the WRI's Water Risk Atlas Aqueduct | World Resources Institute ([wri.org](http://wri.org))] and local water risk assessments. Local risk assessments are performed on the ground engaging key stakeholders and contextualizing the response to local water conditions using a PMI tailor-made methodology. Tobacco growing areas (TGAs) and water stewardship projects are prioritized based on resulting risk indices, including irrigation water dependency and outcomes from the [Integrated Biodiversity Assessment Tool \(www.ibat-alliance.org\)](http://www.ibat-alliance.org). For direct operations, PMI adopts a similar approach to monitor risks and prioritize actions for its **manufacturing sites**. Factory water withdrawals and consumption, exposure to water risks, and product type-specific attributes are assessed on a regular basis to allow better interactions with watershed stakeholders. Aligned with PMI's continuous improvement approach, we are extending the application of risk assessment tools to direct materials **beyond our tobacco supply chain** to detail our risk map over additional watersheds.



## FROM AMBITIONS TO TARGETS

In 2022, with the assistance of Bluerisk ([blueriskintel.com](http://blueriskintel.com)) and Valuing Impact (Home | [valuingnature.com](http://valuingnature.com)), our technical partners on water, PMI held a series of workshops with subject matter experts across key company functions to co-create the ambition and targets for our water stewardship strategy. Guided by our long-term net positive vision, our ambition was set on contributing to a positive impact on water resources by 2050 in alignment with our biodiversity strategy.

**PMI already has goals in place to optimize water resources with a target of a cumulative 10 million cubic meters by 2030, addressing shared water challenges in its tobacco supply chain.**

In our **tobacco supply chain** we will:

- Further focus on restoring water resources in areas that have identified water-related risks such as baseline water stress or seasonal variability.
- Strengthen the good agricultural practices already in place by promoting regenerative agriculture and measuring the impact of it.
- Continue to collect water withdrawal and irrigation data annually.
- Continue to improve our tools to better understand volumes that need to be restored to achieve our targets and contribute to net positive impacts.

**In 2033, we aim to continue to optimize irrigation and restore volumes to address water consumption at farm level and risks at watershed level.**

In our **manufacturing operations**, we will renew the focus on water by driving efficiency in water consumption at the factory level and further working on water discharge to protect water habitats. Reach 100% of our factories\* with AWS (Alliance for Water Stewardship) certification by 2025, building on the value added by the certification with a strong stakeholder engagement.

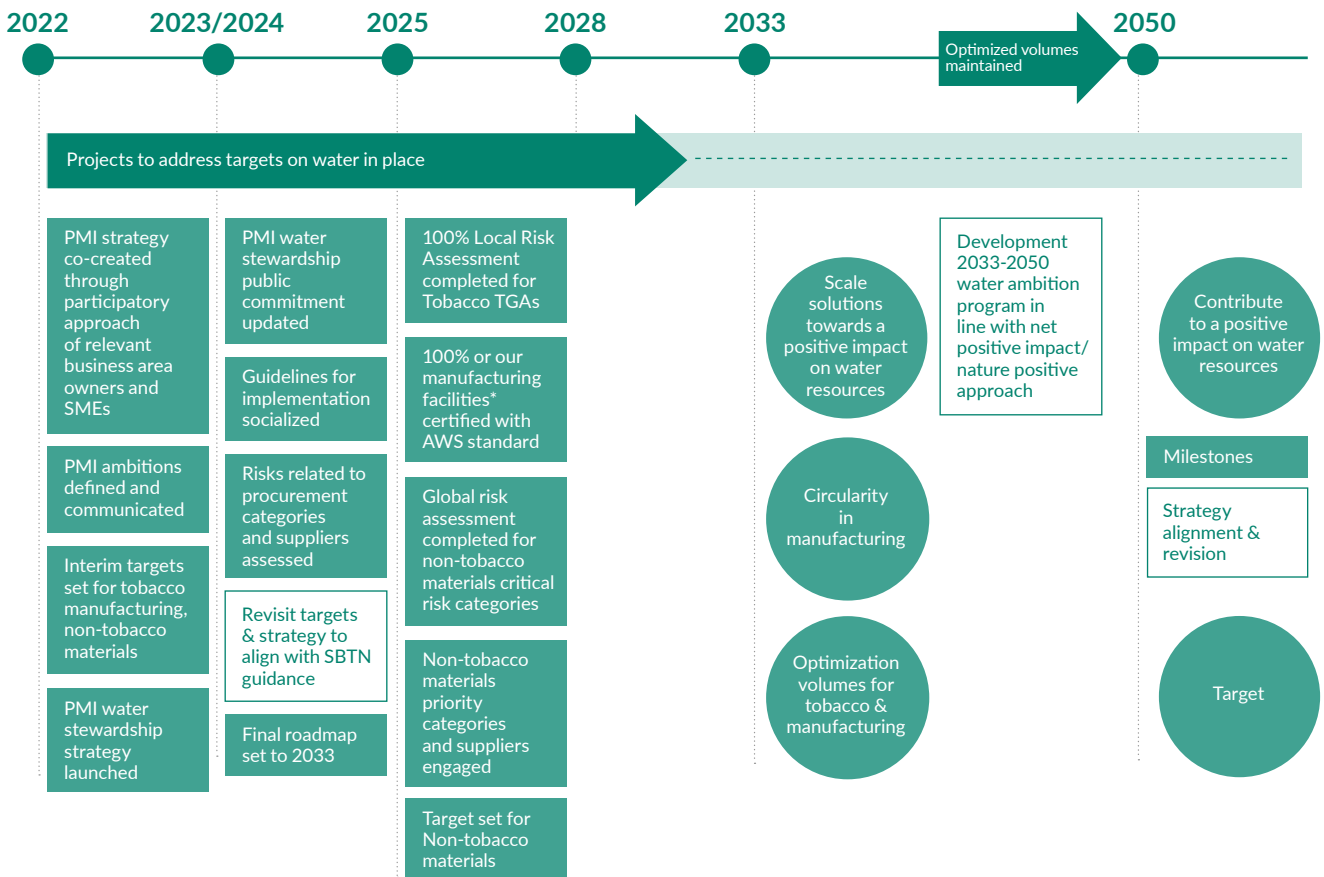
For our **priority factories**, we will:

- Promote water circularity, increasing plant water use efficiency and maximizing beneficial use of water discharged.
- Balance remaining water consumption through restoration activities.

**By 2033 we aim to achieve water circularity with a mix of efficiency improvements and restoration activities for priority factories.**

**For our non-tobacco materials** such as electronics, paper and pulp-based and agricultural products, PMI will work collaboratively with suppliers and key stakeholders to drive water circularity and resilience starting from priority areas in its supply chain. This entails, as the first step, expanding our water risk assessment process to cover the most relevant categories of materials.

\* Prioritization based on production volume, type of product, water consumption, and internal capacity



\*Prioritization based on production volume, type of product, water consumption, and internal capacity

## Scale solutions at watershed level

Water is a shared resource, valued across industries, communities, and ecosystems.

PMI's water stewardship strategy is based on collaboration, understanding both the risks and the potential impact on stakeholders. We will implement our targets by fostering collaboration with our business partners to catalyze action toward the desired outcomes.

We aim to expand our stakeholder engagement to develop projects that deliver co-benefits across the communities and watersheds where we operate.

We will measure project impacts by looking beyond water and assessing natural, human, and social capital in an integrated approach.



## Compensate for impacts

The largest share of the water footprint across our value chain is related to the growing of tobacco. Our contracted farmers utilize on average over 100 million cubic meters of water for irrigation each year, with annual fluctuations depending on grown volumes, sourcing origins and climate variability. To mitigate water-related risks and to help reduce shared water challenges, PMI is following WRI's volumetric water benefit accounting methodology to measure progress on our target to optimize cumulative 10 million m<sup>3</sup> of water by 2030. To date, a variety of water stewardship projects that address shared water challenges have been implemented to progress on this target with a strong emphasis on community-based projects. This includes Brazil where we support farmer communities to fence and protect areas around streams against biological contamination from cattle and agrochemicals runoff, or in Turkey where farmers harvest rainwater to use in the dry season.

PMI is revising its 2030 target in line with 2033 ambition on water, to continue to optimize irrigation and restore volumes to address water risks at watershed level. We will further connect our strategy with PMI's biodiversity ambition, promoting regenerative agriculture and streamlining projects we implement to deliver benefits beyond water. We strongly pursue a holistic vision of an integrated environmental stewardship to achieve our ambition to a positive impact on water resources.

The production of smoke-free consumables is more water-intensive than the manufacturing of cigarettes. While the public health benefits of smoke-free products justify the trade-off of increased water intensity, our accelerated efforts to enhance efficiency in the manufacturing process and our end-to-end water stewardship strategy will help mitigate this increased water demand and contribute to our net positive targets.

“

Today’s accelerated rate of biodiversity loss poses extraordinary risks for society and business: Taking action to reverse this trend is of paramount importance and everyone’s role to play. As a global player with a large-scale value chain, we recognize our key role in taking actions to reverse biodiversity losses. In doing so, we will leverage positive changes we are continuing to implement in our own operations and across our value chain together with our business partners. PMI’s strategy on biodiversity and water consolidates existing targets and actions to address impacts of our business on nature, while also updating our directional ambition for 2033 and expressing longer-term goals for 2050, to contribute to a nature-positive future in line with the Post 2020 Global Biodiversity Framework.

**Massimo Andolina, Senior Vice President, PMI Operations**



”

PMI’s ambition on biodiversity and water gives us renewed energy to carry forward and increase the impact of our programs to preserve nature. We believe that a constant effort at the landscape level is key to transforming the relationship we have with ecosystems and local stakeholders in the mutual goal of protecting nature and the resulting ecosystem services generated by it. We are on track to a deforestation-free supply chain. Our updated strategy looks rigorously at the most relevant pressures on nature with focus on ecosystem use and use change including sustainable management and protection of water resources across our value chain, in alignment with the Post 2020 Global Biodiversity Framework and leveraging guidance from the Science Based Targets for Nature. We will publish our first value chain report on biodiversity footprint

and dependencies by 2025. We aim to achieve no net loss at 2033, meaning that we will protect the integrity of natural ecosystems connected with PMI and its business partners, and we extend our ambition to 2050 to contribute towards a nature positive future.

**Claudia Berardi, Director, Environmental Sustainability, PMI Operations**



”



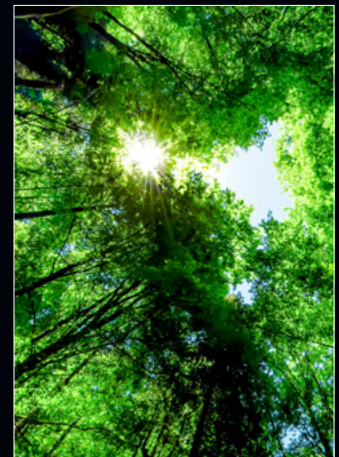
## Additional resources



→ [Philip Morris Integrated Report 2021](#)



→ [Philip Morris Low Carbon Transition Plan](#)



→ [PMI Zero Deforestation Manifesto and Commitments](#)

Find out more on our initiatives to **preserve nature**

[Discover more resources](#)

Read more on <https://www.pmi.com/sustainability>



PHILIP MORRIS INTERNATIONAL