



PHILIP MORRIS INTERNATIONAL

## INTEGRATED REPORT 2022

we were

we are transforming for good

we will be



About PMI

Philip Morris International (PMI) is a leading international tobacco company working to deliver a smoke-free future and evolving its portfolio for the long term to include products outside of the tobacco and nicotine sector.

The company’s current product portfolio primarily consists of cigarettes and smoke-free products. Since 2008, PMI has invested more than USD 10.5 billion to develop, scientifically substantiate and commercialize innovative smoke-free products for adults who would otherwise continue to smoke, with the goal of completely ending the sale of cigarettes. This includes the building of world-class scientific assessment capabilities, notably in the areas of pre-clinical systems toxicology, clinical and behavioral research, as well as post-market studies. In November 2022, PMI acquired Swedish Match – a leader in oral nicotine delivery – creating a global

smoke-free champion led by the companies’ IQOS and ZYN brands. The U.S. Food and Drug Administration (FDA) has authorized versions of PMI’s IQOS Platform 1 devices and consumables and Swedish Match’s *General* snus as Modified Risk Tobacco Products (MRTPs). As of December 31, 2022, PMI’s smoke-free products were available for sale in 73 markets, and PMI estimates that approximately 17.8 million adults around the world had already switched to IQOS and stopped smoking. Smoke-free products accounted for approximately 32% of PMI’s total full-year 2022 net revenues. With a strong foundation and significant expertise in life sciences, PMI announced in February 2021 its ambition to expand into wellness and healthcare areas and, through its Vectura Fertin Pharma subsidiary, aims to enhance life through the delivery of seamless health experiences.

➔ For more information, please visit [www.pmi.com](http://www.pmi.com) and [www.pmscience.com](http://www.pmscience.com)

About this report at a glance

We are pleased to present PMI’s Integrated Report 2022, which aims to provide an objective description of our business model, strategy, performance, and prospects in relation to our priority economic, environmental, social, and governance topics. Contents of this report are shaped by a formal sustainability materiality assessment conducted in 2021 (read more about it [here](#)).

Unless otherwise indicated, the data contained herein cover our operations worldwide for the full calendar year 2022 or reflect the status as of December 31, 2022. Where not specified, data comes from PMI financials, nonfinancials, or estimates.

Unless explicitly stated, the data, information, and aspirations in this report do not incorporate PMI’s Vectura Fertin Pharma business (consolidating the 2021 acquisitions of wellness and healthcare companies Fertin Pharma A/S, Vectura Group plc., and OtiTopic, Inc.), nor the late 2022 acquisition of Swedish Match AB. As we evolve and continue to integrate these business acquisitions, we will, where material and feasible, include them into our ESG reporting in future reporting periods.

This report is accompanied by a set of publications available for download on PMI.com or planned to be issued shortly after this report publication:

- [Reporting indices](#) mapping content of this report against the Universal Standards of the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB)
- [Performance data](#) available in one place for download
- [ESG Highlights](#) summarizing the content of this report
- Country-level [case studies and market stories](#) shedding light on our work in various sustainability areas
- [ESG KPI Protocol 2022](#), providing details on calculation methods, definitions, and the scope of key sustainability performance indicators
- [PMI’s Task Force on Climate-related Financial Disclosures \(TCFD\) Report 2022](#)

➔ [Read more about this report here](#)

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PRODUCT  
IMPACT



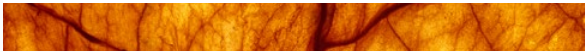
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OPERATIONAL  
IMPACT



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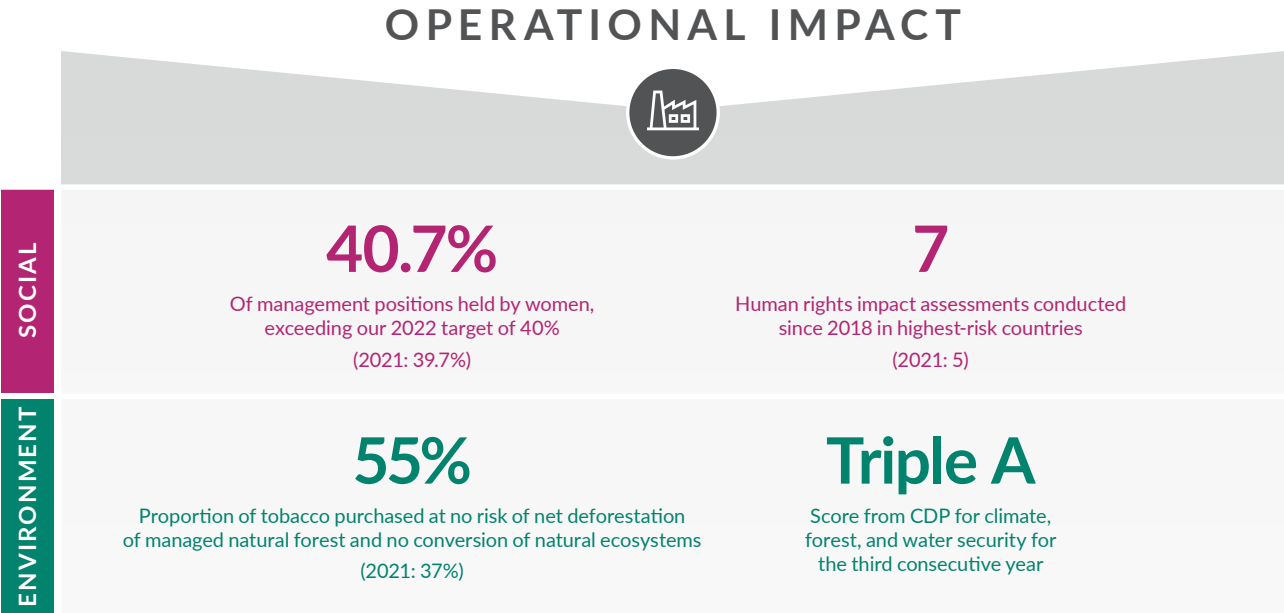
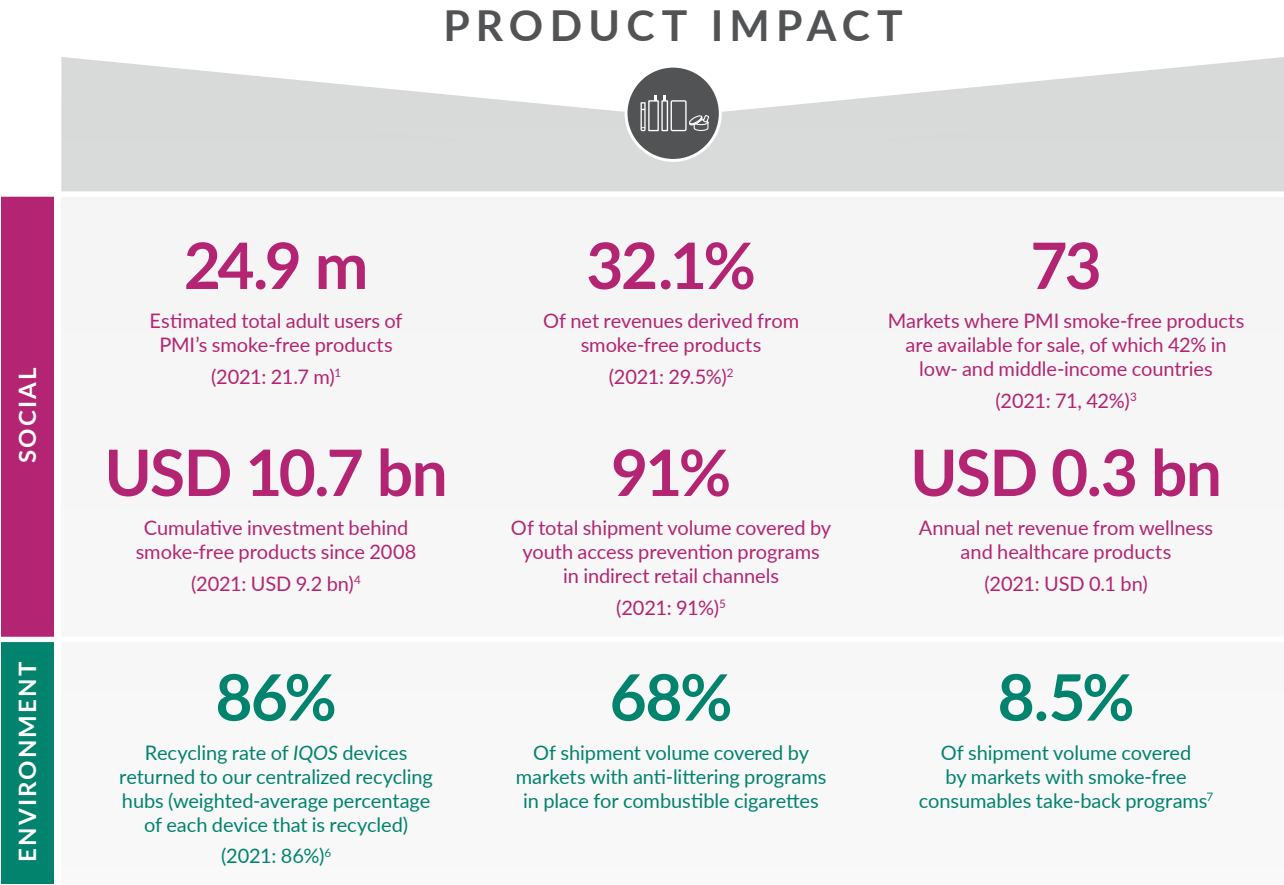


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# 2022 highlights



1 Figures pertain to total IQOS users. See [Glossary](#).  
2 For definition of net revenues related to smoke-free products, see [Glossary](#). 2022 figure includes Swedish Match net revenues from November 11, 2022 (acquisition date) to December 31, 2022. 2021 data exclude the impact related to the Saudi Arabia customs assessments.  
3 Including Swedish Match and excluding PMI Duty Free. Classification of low- and middle-income countries is based on World Bank report issued in July 2022.  
4 Investments reflect research, product and commercial development, production capacity, scientific substantiation, and studies on adult smoker understanding.  
5 Total shipment volume includes cigarettes, other tobacco products (OTPs), and smoke-free product consumables. See [PMI's ESG KPI Protocol 2022](#) for further details.  
6 Recycling rate: percentage of the weight of each device that is recycled, weighted-average depending on device type and processing facility (includes 80% recycling and 6% energy recovery). 2022 data cover CIRCLE hubs in Hungary and Japan.  
7 Shipment volume includes heated tobacco units, e-vapor cartridges, and e-vapor disposables. See [PMI's ESG KPI Protocol 2022](#) for further details.

# PMI's Statement of Purpose

PMI aims to completely replace cigarettes as soon as possible with smoke-free products that are scientifically substantiated to be less harmful than smoking and to evolve in the longer term into a broader lifestyle, consumer wellness, and healthcare company.

Our company's purpose is clearly articulated in PMI's Statement of Purpose, a declaration issued by our Board of Directors. The Statement of Purpose also recognizes those stakeholders most critical to long-term value creation and sustainability.

Excerpts from PMI's Statement of Purpose:

- “The Company is actively accelerating the decline of cigarette smoking beyond what traditional tobacco control measures can achieve alone.”
- “PMI remains committed to accelerating the end of smoking and laying the foundations of a strong business in areas of wellness and healthcare as we strive to develop commercially successful products that have a net positive impact on society.”
- “PMI's key stakeholder constituencies, which are fundamental to both the achieving of its purpose and to the pace of its progress, will be affected in different ways by PMI's transformation.”
- “PMI believes that with the right regulatory encouragement and support from civil society, cigarette sales can end within 10 to 15 years in many countries.”

## About PMI's Statement of Purpose

On March 24, 2022, PMI published its [2022 Proxy Statement](#), which contained a Letter from the Board of Directors that corresponds to PMI's Statement of Purpose. The groundwork for the Statement of Purpose was laid in the [2017 Proxy Statement](#) in a letter to shareholders from the Board of Directors announcing for the first time our company's smoke-free vision. It was reaffirmed in the [2020 Proxy Statement](#).

## Message from PMI's Executive Chairman



André Calantzopoulos  
Executive Chairman



PMI announced a bold change of vision in 2016: to base its future success on smoke-free products, with the aim for these products to completely replace cigarettes as soon as possible for those who continue to use nicotine. The company has been disrupting itself from the inside out since then, focusing its resources on the development, the scientific substantiation, and the commercialization of smoke-free products that are less harmful than smoking. In the process, it has accumulated learnings and broadened its capabilities. This has allowed us to expand our purpose beyond the sole goal of phasing out cigarettes, with an intent to evolve into a broader lifestyle, consumer wellness, and healthcare company commercializing products that go beyond tobacco and nicotine.

PMI's purpose is grounded in science, technology, and sustainability, and sets PMI's long-term horizon. Clarity of purpose is fundamental to guide our efforts and resource allocation. It enables the company to maintain consistency and coherence as it transforms rapidly in order to leave cigarettes behind and ventures into areas that represent new avenues of growth.



[→ Read PMI's full Statement of Purpose](#)





## Message from our Chief Executive Officer



**“Our company continued to transform at a pace and scale unprecedented compared to analogous transitions.”**

Despite its many tests, 2022 was a remarkable year that brought our employees closer and saw us make measurable strides toward achieving our purpose.

**As I look back, I see not so much the challenges as everything that we were able to accomplish together.**

Our company continued to transform at a pace and scale unprecedented compared to analogous transitions. Almost seven years since we announced our vision of a smoke-free future, the volume of combustible tobacco products made and sold by our company has decreased by 27 percent. This past year, we kept our relentless focus on that ambition, dedicating 99 percent of our research and development and 74 percent of our commercial expenditure to smoke-free products. I can proudly report that, in 2022, smoke-free products represented 32.1 percent of our net revenues, and we estimate that, by year-end, almost 25 million adults were using our main smoke-free product, IQOS.

To further accelerate progress, we achieved two critical milestones in 2022: our acquisition of Swedish Match and the agreement to take full control of IQOS in the U.S. as of April 30, 2024. With over 30 million adult smokers, the U.S. represents an immense opportunity to strengthen our smoke-free position and achieve a future without cigarettes. Swedish Match will also be a crucial component of our growth. Like us, they are committed to a smoke-free future. Bringing together our two companies has expanded our portfolio and geographic footprint, placing a future free from cigarettes more firmly in our grasp. This Integrated Report does not comprehensively account for the impact of this acquisition due to its recent nature, but we look forward to sharing the progress achieved through the integration of our two businesses in our next report.

**Our sustainability strategies continue apace as we seek to tackle the impacts of both our products (what we produce) and our operations (how we produce).**

Managing the social impacts of our products by ensuring that they do not reach unintended audiences is a priority, and we continue to put in place youth access prevention safeguards in our direct and indirect retail channels. Mindful of the importance of reducing post-consumer waste, we made progress in implementing take-back programs for our smoke-free devices and consumables. We increased our repair capabilities, piloted IQOS ILUMA Refresh in Japan, and are on track to reach a cumulative one million smoke-free electronic devices refreshed or repaired by 2025.

On the social side of our operations, we expanded access to structured lifelong learning offers to an estimated 80 percent of PMI employees. To accelerate our progress on human rights, we published a strengthened Human Rights Commitment and completed our sixth and seventh human rights impact assessments, in Brazil and Malaysia. In our tobacco supply chain, we are on track to reduce the prevalence of child labor among the farms from which PMI buys tobacco and to increase the proportion of contracted farmers supplying tobacco to PMI who make a living income.

On the environmental side, CDP recognized our leadership with a Triple A score for the third consecutive year. We continued decarbonizing our direct operations and saw 13 PMI factories certified as carbon neutral. Moreover, the Science Based Targets initiative has validated our 2040 net-zero science-based target (scope 1+2+3). We are progressing well toward our target to purchase tobacco at no risk of deforestation of managed natural forests and no conversion of natural ecosystems. In conjunction with the UN Biodiversity Conference (COP 15) in December, we announced new long-term biodiversity and water ambitions and strategies, aligned with the post-2020 biodiversity framework adopted by parties to the convention.

**To further substantiate our commitment to sustainability, we introduced PMI's bespoke Sustainability Index, representing 30 percent of our long-term performance-based equity executive compensation.**

While we progressed well on our work to address our priority ESG issues, we know that we must accelerate efforts in some areas.

Climate change, rising levels of natural resource scarcity, and an increasingly fragmented and too often disrupted global supply chain—coupled with unforeseen events such as the war in Ukraine and its far-reaching impacts—have hampered our ability to reduce our scope 3 emissions as quickly as we planned to. Nevertheless, we continue working towards reaching our goals and focus on crafting and implementing innovative solutions to drive better sourcing and supply chain management that promotes resilience in the short term and allows us to achieve our decarbonization ambitions for scope 1, 2 and 3 in the long term.

We continue to work towards improving our gender balance in senior roles. We remain committed to achieving a more diverse, equitable, and inclusive workplace, including increased female representation in leadership positions. We are cognizant that a diverse workplace can increase innovation and foster better solutions, and will help our business grow.

Our geographic expansion to make our smoke-free products available in more markets was slower than previous years, partly as a consequence of supply chain disruption linked to the war in Ukraine. We will continue our focus on the rollout of IQOS ILUMA and to work on obtaining appropriate regulatory and fiscal frameworks in markets in order to further our successful geographic expansion.

Our ability to respond and adapt to change and sudden disruptions will continue to be tested over time, and I am confident that the resilience of our people and the strength of our purpose will allow our organization to prosper. Our Integrated Report 2022 provides visibility into not only how we are performing today but how we are building preparedness to succeed in coming years. **It is my hope that this report will spark dialogue and that our stakeholders will accept our invitation to judge us not for the company we were but for the company we are today (including the tangible progress we have made thus far) and, importantly, the one that we are working hard to become.** It is through constructive engagement that we will accelerate the pace of meaningful and impactful change and complete our transformation, for good.

**Jacek Olczak**  
Chief Executive Officer

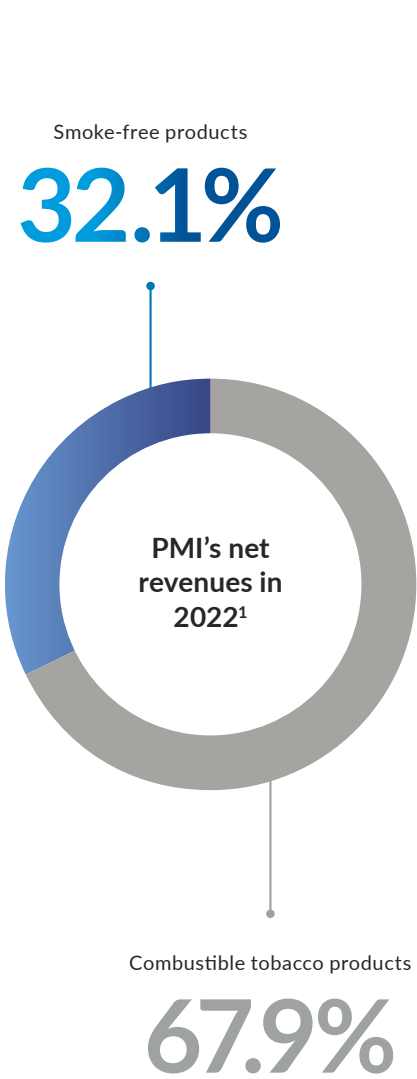
**“Our ability to respond and adapt to change and sudden disruptions will continue to be tested over time, and I am confident that the resilience of our people and the strength of our purpose will allow our organization to prosper.”**





# Our global footprint

## Our product portfolio



### Smoke-free products

Our smoke-free product portfolio is composed of three main product categories: heated tobacco, e-vapor, and oral nicotine. Our leading smoke-free product is a heated tobacco product (also referred to as heat-not-burn product) commercialized under the IQOS brand that uses sophisticated electronics to heat tobacco in a controlled manner to release flavors and nicotine without combustion. Our e-vapor products, commercialized in 2022 under the IQOS VEEV and VEEBA brands, generate an aerosol by heating an e-liquid formulation. We are also present in oral nicotine products, including in nicotine pouches with the brand SHIRO, as well as with the leading brand ZYN following the acquisition of Swedish Match in November 2022.



### Combustible tobacco products

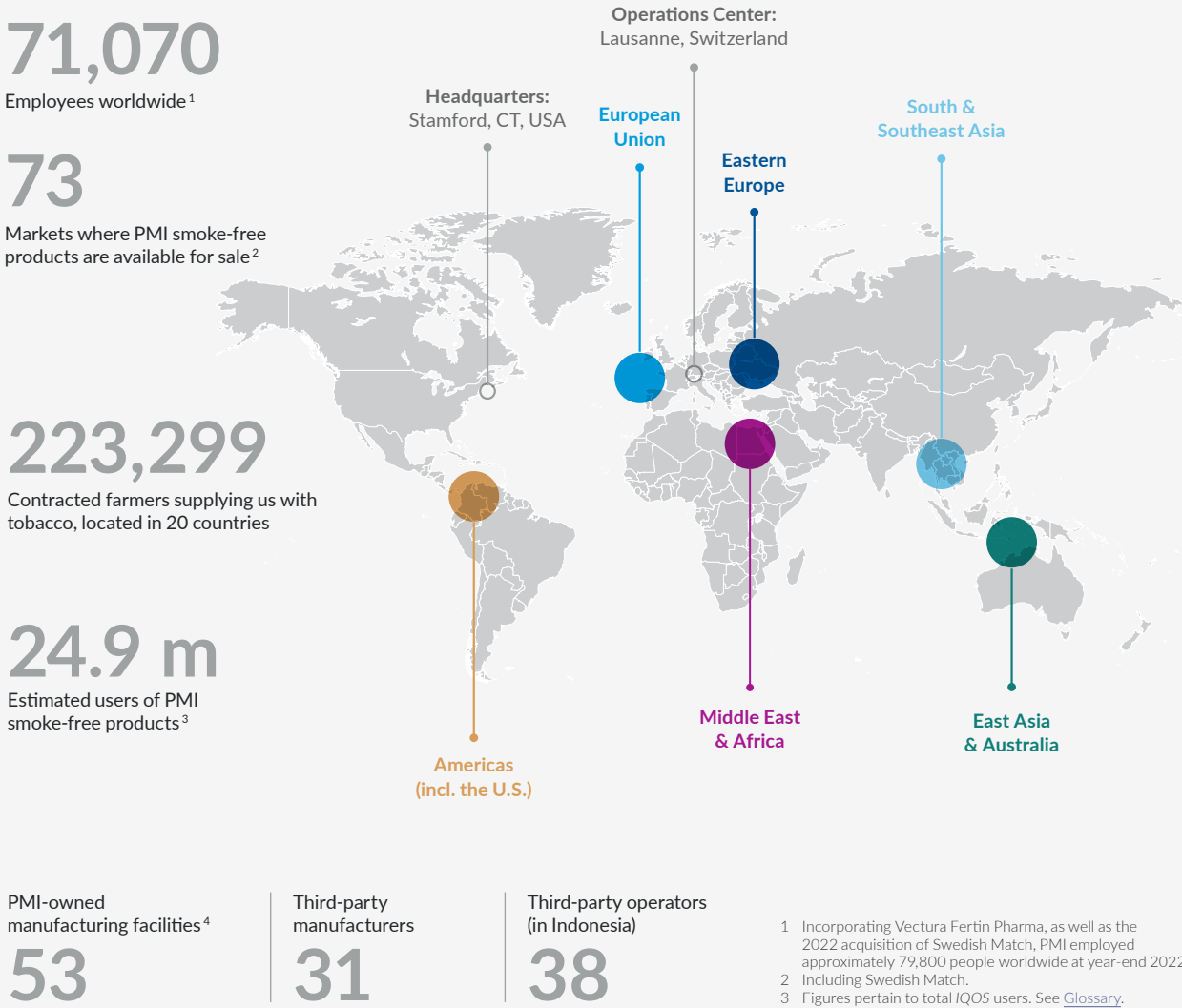
We seek to maintain our competitive position in the cigarette market while we transition away from combustible tobacco products. This helps to finance our R&D into smoke-free alternatives, their manufacturing and commercialization, and to accelerate our transformation, while opening the way for the industry to follow our lead. In addition, it gives us faster and direct access to trade and adult smokers. Our cigarette brands are sold in around 175 markets, in many of which they hold the number one or number two market share position. Our portfolio includes a wide range of premium, mid-price, and lower-price brands, including Marlboro, L&M, Chesterfield, Philip Morris, and Parliament, which are among the 15 most popular brands in the international cigarette market (which excludes China and the U.S.).

<sup>1</sup> For definition of net revenues related to smoke-free products and combustible tobacco products, see [Glossary](#). Including Swedish Match net revenues from November 11, 2022 (acquisition date) to December 31, 2022.

## 2022 overview by PMI segment

	European Union	Eastern Europe	Middle East & Africa	South & Southeast Asia	East Asia & Australia	Americas (incl. the U.S.)	Swedish Match	Wellness and Healthcare
Proportion of PMI's total 2022 net revenues generated by each segment	38%	12%	12%	14%	16%	6%	1%	1%
Proportion of 2022 net revenues derived from smoke-free products in each segment	40%	35%	9%	1%	58%	5%	78%	100%
Proportion of global workforce by segment	28%	8%	4%	35%	5%	10%	9%	2%
Number of PMI-owned manufacturing facilities in each segment	13	3	4	10	2	6	14	1

Notes:  
Figures in the above table are rounded. For definition of net revenues derived from smoke-free products, see [Glossary](#).  
As of December 31, 2022, we managed our business in six geographical segments, a Swedish Match segment (reflecting operating results from November 11, 2022 (acquisition date) to December 31, 2022) and a Wellness and Healthcare segment (which includes the operating results of our new Wellness and Healthcare business, Vectura Fertin Pharma). See [Glossary](#).



<sup>1</sup> Incorporating Vectura Fertin Pharma, as well as the 2022 acquisition of Swedish Match, PMI employed approximately 79,800 people worldwide at year-end 2022.  
<sup>2</sup> Including Swedish Match.  
<sup>3</sup> Figures pertain to total IQOS users. See [Glossary](#).  
<sup>4</sup> Including Swedish Match and Vectura Fertin Pharma.



## Message from our Chief Financial Officer



**“A clear roadmap agreed upon by political, regulatory, and public health stakeholders, and supported by both civil society and business, offers the best prospect for further accelerating the end of smoking.”**

Nearly seven years ago, when our company announced its smoke-free vision and related intention to stop selling cigarettes, some responded with skepticism, arguing that if we were serious about it, we would stop selling cigarettes immediately.

Over the years, we have tried to explain the complexity of our endeavor. First, we estimate that approximately 130 million adults smoke our cigarette brands. Considering that there are over a billion smokers worldwide, if we were to stop selling cigarettes overnight and those brands suddenly became unavailable, other manufacturers and vendors (both legal and illicit) would quickly step in to meet the demand. Consequently, just as many people as before would smoke, and we would have accomplished nothing from a public health perspective.

Second, and perhaps most important, **our intention is not only to make our company smoke-free—we want to make cigarettes obsolete. This requires system-level change.** This requires that we work with multiple stakeholders to address root causes, build collective responses, and craft permanent solutions that involve a change not just in attitudes and behaviors but also in laws and policies. Only in this way can we create a paradigm shift to a new system in which cigarettes no longer exist. A clear roadmap agreed upon by political, regulatory, and public health stakeholders, and supported by both civil society and business, offers the best prospect for further accelerating the end of smoking.

As I reflect on the magnitude of the challenge, I see parallels with many facets of our sustainability efforts. **Tackling climate change, promoting biodiversity and protecting natural ecosystems, minimizing post-consumer waste, reducing all forms of inequality, and advancing human rights demand the same kind of systemic approach**—and are among the many issues we are working to address within our value chain, both upstream and downstream.

The pace of our progress on all fronts is influenced by factors beyond our immediate control. We operate on a global scale in a fast-paced world. Global trends intersect with our strategies and initiatives and inform how we interact with the external environment. **Safeguarding our long-term success requires that we monitor, anticipate, and respond to the challenges and opportunities shaping our reality today and in the future**, ever mindful that the change we seek cannot be achieved in silos.

Recent and current events—from the pandemic to the ongoing war in Ukraine—have deeply impacted the everyday life of people across the globe, economic systems, and business operations. They have exacerbated various environmental, economic, political, and social trends, providing even more evidence of the urgent need to build resilience by pivoting and adapting together.

**Sustainability is a cornerstone of our corporate strategy, and we work hard to address ESG issues that are material to PMI. We acknowledge, however, that there is a limit to how much we can do or influence on our own.** To create long-standing, impactful, and sustainable solutions, we must partner and work with other parts of society—just as we do in our work to achieve a smoke-free future.

Companies that claim to be transforming seem to be everywhere. Yet when one examines more closely whether organizations are truly redefining what they are and what they do, one finds that cases of successful change are exceptionally rare. Transformation is never easy because change takes time. At present, our company is in mid-stride: with one foot in our past, operating in a fiercely competitive legacy cigarette business, and one foot in our bold future, building an entirely novel and improved category of products. While our commitment to transformation is unwavering, we cannot complete the journey alone. The kind of systemic change PMI is driving can only be achieved through a collaborative multistakeholder approach, a fact that we recognize in our Statement of Purpose. **PMI’s reputation is based on the perceptions of its various stakeholders. Our ability to build and maintain trust and legitimacy relies on consistency and coherence—on ensuring that our words match our actions.**

**“Transformation is never easy because change takes time. At present, our company is in mid-stride: with one foot in our past, operating in a fiercely competitive legacy cigarette business, and one foot in our bold future, building an entirely novel and improved category of products.”**

We are committed to transforming, for good. Delivering a smoke-free future is our priority and primary focus. **Success requires that we reposition our core business while actively investing in new areas of growth, keeping the longer-term horizon in sight, and working relentlessly to earn the trust and confidence of our stakeholders.** We recognize the magnitude of the challenge and remain committed to continuing to lead, tracking and reporting on our progress transparently to ensure cigarettes become obsolete as soon as possible.

**Emmanuel Babeau**  
Chief Financial Officer



# Megatrends

We operate on a global scale in a fast-paced world. Our long-term success requires that we monitor, anticipate, and respond to the challenges and opportunities shaping our reality today and in the future.

Global trends intersect with our strategies and initiatives and inform how we interact with the external environment. Several trends discussed in this section existed before COVID-19 and the war in Ukraine (and their far-reaching impacts) but have been amplified and accelerated by these crises, disrupting supply chains and business operations and making the trends even more impactful.

	Capitals impacted	Drivers	How we are responding	Strategy
<div></div> <div><h3>Healthier lifestyles</h3><p>Society is more attuned to mental well-being and physical health, leading to a push for more health-conscious choices, active lifestyles, mental health support, and improved nutrition. Businesses are expected to expand and shift their portfolios to incorporate new services and product offerings that contribute to better health, paying attention to the evolving needs of each generation. Moreover, to attract, retain, and optimize talent, employers are expected to prioritize mental and physical well-being in the workplace, an issue that has grown more complex with the increased prevalence of remote and hybrid work.</p></div>	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	<ul style="list-style-type: none"><li>• Demographic shifts</li><li>• Consumer preferences</li><li>• Public health policy and regulation</li><li>• Employee expectations</li></ul>	<ul style="list-style-type: none"><li>• Initiating portfolio shifts driven by consumer centricity insights</li><li>• Implementing workplace health and well-being programs and initiatives</li></ul>	<div></div> <div></div> <div></div> <div></div>
<div></div> <div><h3>Climate and nature urgency</h3><p>Climate change, biodiversity loss, deforestation, water insecurity, and other ecological crises threaten more than supply chains and physical infrastructure; they endanger progress and business growth by exacerbating system-level disruptions that affect our stakeholders. Policy, regulatory, civil society, and market forces continue to spur a transition to low-carbon solutions, investments in renewable energy, and actions to safeguard ecosystems. They are also leading businesses to embed eco-design and circular considerations in the early stages of product development and cultivate strategies to address post-consumer waste.</p></div>	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	<ul style="list-style-type: none"><li>• Civil society and consumer activism</li><li>• Investor focus</li><li>• Environmental policy and regulatory developments</li><li>• Impending institutional consensus on nature-related measurement and reporting frameworks</li></ul>	<ul style="list-style-type: none"><li>• Conducting integrated risk assessments and robust accounting of greenhouse gas (GHG) emissions to define new—and validate existing—strategies</li><li>• Setting transparent, strategic, and science-based targets and disclosing our progress</li><li>• Investing in—and developing—scalable solutions that produce co-benefits for climate and nature</li><li>• Supporting and partnering with experts, science-based initiatives, and advocacy organizations</li></ul>	<div></div> <div></div> <div></div>
<div></div> <div><h3>Inequality</h3><p>Globalization, rapid economic growth, and widespread improvements in livelihoods in recent decades have failed to close—and have even exacerbated—the deep divides within and across countries. Worsening inequalities have in turn triggered civil society to become more attuned to—and vocal about—social injustices. Attention is now focused on the role businesses can play in addressing social inequality and promoting human rights by ramping up their diversity, equity, equality, and inclusion efforts. In addition to the societal benefits, such actions strengthen the private sector's ability to recruit and retain talent.</p></div>	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	<ul style="list-style-type: none"><li>• Civil society and consumer activism</li><li>• Investor focus</li><li>• Human rights and other societal policy and regulatory developments</li><li>• Impending institutional consensus on social-related measurement and reporting frameworks</li></ul>	<ul style="list-style-type: none"><li>• Expanding the scope of our human rights impact assessments</li><li>• Promoting living incomes and wages throughout our value chain</li><li>• Collaborating across our value chain and broader business community to address inequalities in our supply chain</li><li>• Providing a workplace that affords employees equal pay for equal work, equal access to opportunities, and freedom from discrimination and harassment</li></ul>	<div></div> <div></div>
<div></div> <div><h3>Erosion of trust</h3><p>Against the backdrop of the other megatrends presented on this page, stakeholder expectations of businesses are shifting, and regulatory developments are moving forward at pace. Companies are expected to demonstrate irreproachable behavior and transparency, providing trustworthy information on their impacts along their value chain and meeting mandatory reporting requirements in a range of jurisdictions. Simultaneously, companies must contend with rising levels of mistrust—including of science—exacerbated by misinformation on social media channels. There is an increased demand for capital markets to shift from perceived short-term, siloed, and sometimes extractive behavior to a model of long-term, inclusive, and sustainable capitalism, unfortunately still mostly relying on negative screening or exclusions.</p></div>	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	<ul style="list-style-type: none"><li>• Mistrust of institutions</li><li>• Geopolitical turmoil</li><li>• Diminishing confidence in science</li><li>• Expectation of increased transparency</li><li>• Social media platforms</li><li>• ESG integration</li></ul>	<ul style="list-style-type: none"><li>• Promoting transparency by reporting against the most relevant and widely used sustainability standards</li><li>• Linking financing instruments to ESG performance</li><li>• Developing an ESG KPI Protocol with a path to providing assurance on key nonfinancial data</li><li>• Linking long-term compensation transparently and objectively to ESG performance</li></ul>	<div></div>
<div></div> <div><h3>Technological progress</h3><p>New technologies are emerging rapidly. Companies are implementing automation and digital solutions that increase transparency, maximize efficiencies, create opportunities for robust R&amp;D activity and product innovation, and have implications on employability for workers. Boosted by a rapid flow of data and information, today's unprecedented pace of change has wide-reaching implications across industries. Within this context, concerns and risks around data privacy and cybersecurity are on the rise, and many actors are working to enhance data and infrastructure protection.</p></div>	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	<ul style="list-style-type: none"><li>• Shift to online channels</li><li>• Impact of automation on employment</li><li>• Growing availability of data and information</li><li>• Cybersecurity and data privacy concerns</li></ul>	<ul style="list-style-type: none"><li>• Investing in new technologies and acquisitions to accelerate our company's transformation, expand our smoke-free product offerings, and drive progress in sustainability priority areas</li><li>• Making data-based decisions and investments in targeted operational improvements</li><li>• Strengthening cybersecurity and data privacy policies and practices</li><li>• Enriching employee lifelong learning and upskilling offers</li></ul>	<div></div>

### Capitals

Human

Natural

Manufactured

Social

Intellectual

Financial

### Sustainability strategy

Purposefully phase out cigarettes

Maximize the benefits of smoke-free products

Seek net positive impact in wellness and healthcare

Foster an empowered and inclusive workplace

Improve the quality of life of people in our supply chain

Reduce post-consumer waste

Tackle climate change

Preserve nature

Fundamentals

[Read more about our sustainability strategy here](#)





# Industry trends

## Market trends

### Overview of the global nicotine business

Products within the global tobacco and nicotine business fall into three main categories: combustible tobacco products, smoke-free products, and therapeutic cigarette replacements (often known as nicotine replacement therapies or NRTs).

Combustible tobacco products (e.g., cigarettes, fine-cut tobacco, pipe tobacco, cigars, and cigarillos) burn tobacco to deliver nicotine.

Smoke-free products deliver nicotine without combustion. These products include heated tobacco (also known as heat-not-burn), e-vapor, and oral nicotine products such as snus and nicotine pouches. By eliminating combustion, these products present, or have the potential to present, less risk of harm to adults who switch to them versus continued smoking.

Therapeutic cigarette replacements, which include nicotine gum and patches, aim to help smokers quit smoking. These products deliver nicotine and require a pharmaceutical approval process to be followed; in some countries, their use requires prescriptions from medical professionals.

### Prevalence of tobacco smoking worldwide

Combustible tobacco products currently represent the largest share of the global tobacco and nicotine business, with cigarettes remaining the dominant tobacco product used by nicotine consumers worldwide.

The World Health Organization (WHO) projects a decline in smoking prevalence (age 15+), from 21.1 percent in 2010 to an estimated 15.4 percent in 2025.<sup>1</sup> At the same time, the global adult population is growing by around 70 million people per year. The net effect of this declining smoking prevalence and growth in population is a forecast of just under 1.1 billion smokers in 2025—essentially the same as in 2010.<sup>2</sup> Even if the WHO member states achieve their accelerated target for reduced smoking prevalence (a 30 percent reduction in the prevalence of tobacco use by 2025 versus 2010), we estimate that there will still be around 956 million smokers in 2025.

1 WHO, [Global Report on Trends in Prevalence of Tobacco Use 2000-2025](#), fourth edition (November 2021).  
2 WHO, [Global Report on Trends in Prevalence of Tobacco Smoking 2015](#)

### Emergence of smoke-free alternatives

In recent years, the development, commercialization, and subsequent adoption of various smoke-free products have led to rapid growth of the category. Within the nicotine industry, smoke-free products are beginning to replace combustible tobacco products. Overall, we estimate this segment share has grown 4 points since 2019 and currently accounts for over 8 percent of the estimated international nicotine industry volume (which excludes China and the U.S.).

In particular, the heated tobacco segment volume grew in the international market (which excludes China and the U.S.) at a compound annual growth rate (CAGR) of 25 percent over the past three years, driven both by increased adoption in the initial launch markets and geographic expansion. This is the largest smoke-free category by both retail value and volume in the international market (which excludes China and the U.S.).

### Industry volume split 2019–2022

	2022	2019
Combustible tobacco products	92%	96%
Smoke-free products	8%	4%
of which, heated tobacco products	5%	3%

Note: See [Glossary](#). Data exclude China and the U.S.

### Competition

As in other consumer goods sectors, manufacturers in the tobacco and nicotine industry compete primarily on product quality, brand recognition, brand loyalty, user experience (convenience), taste and sensory experience, R&D, packaging, customer service, marketing, advertising, and retail price.

### Our global share 2022, including cigarettes and heated tobacco units

	2022
China National Tobacco Corporation	~32.2%
PMI	14.0%
British American Tobacco	~12.1%
Japan Tobacco	~10.3%
Imperial Brands	~4.2%
Altria Group	~1.6%
Other	~25.6%

Note: Global market includes China and the U.S.  
Source: PMI financials or estimates

### Smoke-free products

There is increasing competition in smoke-free products with more tobacco manufacturers shifting their resources toward developing, acquiring, and commercializing these products.

To date, competition in the heated tobacco category is primarily among manufacturers of combustible tobacco products. Within the e-vapor category, “open tank” products (which feature a chamber that can be refilled with e-liquid) is a heavily fragmented category and relatively commoditized among small or local manufacturers. In contrast, global tobacco manufacturers are increasingly present in the “closed tank” products category (featuring disposable products or reloadable systems that use prefilled cartridges); this category is evolving rapidly and involves a number of startups.

Oral nicotine products are mainly produced by major tobacco manufacturers and traditional oral nicotine manufacturers. Key players are building internal capabilities in the oral nicotine segment or acquiring existing players in this category.

### Overview of major smoke-free product categories



#### HEATED TOBACCO

Heats tobacco

Uses real tobacco

Nicotine naturally present in tobacco

No smoke, no ash, no burn



#### E-VAPOR

Vaporizes e-liquid

No tobacco

Nicotine derived from tobacco added to e-liquid

No smoke, no ash, no burn



#### ORAL NICOTINE

##### Snus

Tobacco pouch designed for oral use

Nicotine naturally present in tobacco

No smoke, no ash, no burn

##### Nicotine pouches

Nicotine containing pouch designed for oral use

No tobacco

Nicotine derived from tobacco

No smoke, no ash, no burn



Despite advances in science and technology that present the opportunity to phase out combustible tobacco products, the business strategy of all international cigarette manufacturers—with the exception of PMI—appears to be focused on continuing to grow cigarette sales while expanding their portfolios to also include smoke-free alternatives.

To date, we are the only company to have committed to phasing out cigarettes, encouraging adult smokers who would otherwise continue to smoke to switch completely to better alternatives.

We remain optimistic that the growing interest in the smoke-free category can both allow us to continue advancing our transformation and also lead the industry to adopt a similar strategy, thereby accelerating the end of smoking.

Combustible cigarettes

The global combustible cigarette sector includes four large international manufacturers—British American Tobacco, Japan Tobacco, Imperial Brands, and PMI—along with two major manufacturers focused primarily on their respective domestic markets: China National Tobacco Corporation in China and Altria Group, Inc. in the U.S. (Altria is the parent company of Philip Morris USA, which operates exclusively in the U.S. and is not affiliated with Philip Morris International).

Our perspective

At PMI, we aim to base our success on a future in which we no longer make or sell cigarettes, the most harmful form of nicotine consumption. In stark contrast with our competitors, PMI's value proposition is not to expand its portfolio of both combustible and smoke-free products to offer more choice to consumers. Rather, our goal is to lead an industry-wide transformation whereby cigarettes are phased out completely.

Our strategy is centered on researching and developing better products than cigarettes, promoting broad access to them by adult smokers who would otherwise continue to smoke, and working to ensure these products replace cigarettes and make smoking obsolete as soon as possible. To achieve this, we are actively shifting and reallocating resources, setting ambitious goals connected to this strategy, and transparently reporting on our progress.

Our 2022 acquisition of Swedish Match will allow us to incorporate a leading oral nicotine portfolio into the PMI family to create a global smoke-free champion, cement the foundation of our future in the U.S. marketplace, and accelerate the pace at which our company becomes smoke-free.

By 2025, we target that less than 50 percent of our adjusted net revenues will derive from combustible tobacco product sales. As of year-end 2022, PMI smoke-free products represented 32.1 percent of our annual net revenues and 15.1 percent of our total shipment volume.<sup>1</sup>

PMI total international share (in %)

Category	2022	2021	2020
Cigarettes	23.6%	23.7%	24.6%
Heated tobacco units	4.1%	3.5%	3.0%
Total	27.6%	27.2%	27.6%

Source: PMI financials or estimates.  
Note: International market excludes China and the U.S., reflects cigarettes and HTUs, and includes cigarillos in Japan. Sum of share of market by product categories might not foot to total due to roundings.

<sup>1</sup> For definition of net revenues related to smoke-free products, see [Glossary](#). Including Swedish Match net revenues from November 11, 2022 (acquisition date) to December 31, 2022.

Regulation and taxation

The harms associated with smoking have led policymakers, legislators, and regulators to impose rigorous restrictions on cigarettes, including high excise taxes, minimum age requirements, and designated areas for smoking. Additional restrictions and mandates apply to packaging design and health warnings, ingredients and flavors, marketing and advertising, and promotions and other forms of sponsorship. Much of the regulation that shapes the tobacco industry's operating environment is driven by the WHO's Framework Convention on Tobacco Control (FCTC) and its MPOWER measures. The FCTC has established a global agenda to reduce the prevalence of tobacco use and nonsmokers' exposure to tobacco smoke. While there is currently no global consensus on how best to regulate or tax smoke-free products, a growing number of authorities recognize that the risk profile of these products differs from cigarettes and should be regulated differently to promote their adoption as a better alternative for those adult smokers who would otherwise continue to smoke.

Our perspective

PMI supports a comprehensive approach to the regulation of all nicotine-containing products. In addition to discouraging initiation and promoting cessation, commonsense regulation should encourage adults who smoke and would not otherwise quit to switch completely to scientifically substantiated smoke-free alternatives, which can be a better choice than continued smoking. We advocate for a comprehensive and risk-proportionate regulatory framework that recognizes that not all tobacco- and nicotine-containing products are the same. Regulation and taxation should subject the most harmful products to the most restrictive measures while encouraging those adults who would otherwise continue to smoke to switch to the less harmful alternatives now available. At the same time, acceptability of smoke-free products for adult smokers must be balanced against the objective of minimizing use by unintended audiences, in particular youth. Any regulation needs to account for this. Therefore, we support putting in place safeguards against unintended use and robust post-market monitoring of real-world data to assess the actual impact of policy interventions, and to allow targeted and timely policy adjustments. Such an approach would significantly accelerate the phasing out of combustible tobacco products and promote public health.

Illicit trade prevention

The increasingly interconnected and digitalized global economy provides more opportunities for criminal networks engaged in illicit activities such as the sale of counterfeit products, wildlife smuggling, narcotics, human trafficking, and excise fraud.

The illicit tobacco trade provides a cheap and unregulated supply of tobacco products. It undermines public health policies across the world, hampers efforts to reduce smoking prevalence, damages legitimate businesses, stimulates organized crime, increases corruption, and reduces government tax revenue. It is estimated that illicit trade accounts for as much as 10 to 12 percent of global cigarette consumption and that governments worldwide lose USD 40 to 50 billion in tax revenues each year as a result.<sup>1</sup>

Many countries have initiated or are considering actions to prevent the illicit trade of tobacco products. In 2012, the FCTC adopted the Protocol to Eliminate Illicit Trade in Tobacco Products, which includes supply chain control measures, such as the implementation of tracking and tracing technologies and effective controls on manufacturing and transactions in tobacco and tobacco products in Free Zones. The protocol came into force in September 2018, and parties to it have started implementing its measures via national legislation.

<sup>1</sup> U.S. Department of State, [The Global Illicit Trade in Tobacco: A Threat to National Security](#), 2015

Our perspective

To prevent the smuggling and counterfeiting of our products, we focus on securing our supply chain and leveraging product security technology and innovation to protect our products. These internal efforts are coupled with strong cross-sectoral collaboration. Illicit trade is a high-profit, low-risk crime that needs to be tackled by public-private coalitions able and willing to drive change. At PMI, we collaborate with law enforcement and other government authorities all over the world to counter illicit trade. To this end, we invest in global programs and promote the implementation and enforcement of effective regulations, such as the WHO's FCTC Protocol to Eliminate Illicit Trade in Tobacco Products. Public-private partnership and impactful regulatory frameworks are fundamental to achieving positive progress.

[➔ Read more about our approach and actions on PMI.com.](#)



# Stakeholder engagement

PMI regards stakeholder engagement as fundamental to the creation of shared and sustainable value. Actively seeking open dialogue with our stakeholders allows us to understand their expectations and respond accordingly. Continuous engagement also enables us to build a shared understanding of contingency issues, proactively respond to concerns, identify potential areas of compromise, stay abreast of global trends and market expectations, and find solutions that are good for our stakeholders and business.

While PMI's commitment to its transformation is unwavering, we recognize that we cannot complete the journey alone. Signed by every member of our Board of Directors, PMI's [Statement of Purpose](#) articulates our company's purpose and transparently specifies those stakeholders most critical to long-term value creation and sustainability.

Our periodic sustainability materiality assessments provide valuable insights and allow us to gauge the relevance of various topics among key stakeholder groups.

Our stakeholder engagement incorporates both structured and ad hoc interactions. Above all, it is guided by transparency, integrity, and respect, and governed by our [Code of Conduct](#) and its accompanying policies (Principles and Practices), summarized in this [overview of our engagement principles](#).

The table to the right features the most significant topics discussed with our key stakeholder groups and our responses to them; however, it is not an exhaustive list. For further details on our approach and engagement with key stakeholder groups, as well as our sustainability-related memberships and alliances, please see our dedicated page on [PMI.com](#).

Stakeholder groups	
 <b>Consumers</b> Adult smokers and other adult nicotine product users	
 <b>Employees</b> Employees, management, work councils, trade unions	
 <b>Supply chain and business partners</b> Farmers and farmworkers, farmers' associations, contractors, suppliers, wholesalers, business partners, third-party-operated manufacturers	
 <b>Finance community</b> PMI shareholders, equity and fixed-income investors, lending institutions, insurance companies, financial analysts, rating agencies	
 <b>Regulators</b> Policymakers, intergovernmental organizations, regulatory bodies, standard setters, government authorities (including legislators), customs organizations	
 <b>Public health community</b> Scientific community, academia, researchers, public health agencies	
 <b>Civil society</b> Academia, local communities, civil society organizations, nongovernmental organizations (NGOs), multistakeholder organizations and initiatives, media	

Key topics discussed	How we are responding	
<ul style="list-style-type: none"><li>• Access to and benefits of smoke-free products compared with continued smoking</li><li>• Scientifically substantiated claims</li><li>• Product innovation and circularity</li><li>• Quality and services</li></ul>	<ul style="list-style-type: none"><li>• Investing in R&amp;D and strategic acquisitions to propel our smoke-free vision and meet consumer needs</li><li>• Moving from a business-to-business (B2B) to an increasingly consumer-centric model to commercialize smoke-free products and support users in their conversion journey</li></ul>	<ul style="list-style-type: none"><li>• Broadening access to smoke-free products for adult smokers and nicotine users by working to improve consumer awareness and product availability, affordability, and acceptability</li><li>• Embedding eco-design and circularity principles in product development and launching take-back services for our products' end-of-life</li></ul>
<ul style="list-style-type: none"><li>• Company culture and purpose</li><li>• Diversity, equality, equity, and inclusion</li><li>• Health, safety, and well-being (including work-life balance)</li><li>• Job security, talent attraction, lifelong learning opportunities, retention</li><li>• Protection of employee data</li></ul>	<ul style="list-style-type: none"><li>• Consistently and clearly embedding our <a href="#">purpose</a> across our company culture</li><li>• Promoting living wages, equal pay for equal work, and equal access to opportunities</li><li>• Providing flexible work, paid parental leave, and volunteer time</li><li>• Raising awareness around mental health and supporting employee well-being via a variety of programs and initiatives</li></ul>	<ul style="list-style-type: none"><li>• Upholding workplace health and safety</li><li>• Fostering an inclusive environment that unlocks the potential of diversity among our workforce</li><li>• Promoting global employee resource groups, on a variety of diversity dimensions</li><li>• Expanding employee access to lifelong learning programs to promote upskilling and reskilling</li></ul>
<ul style="list-style-type: none"><li>• Supply and delivery challenges</li><li>• Opportunities for growth and innovation</li><li>• Working conditions (including wages, health and safety, and other labor-related matters)</li><li>• Responsible commercialization</li><li>• ESG performance and expectations</li></ul>	<ul style="list-style-type: none"><li>• Grounding supply chain strategy in our <a href="#">Responsible Sourcing Principles</a></li><li>• Transitioning to an increasingly diversified supply chain</li><li>• Promoting safe and fair working conditions throughout our supply chain</li></ul>	<ul style="list-style-type: none"><li>• Seeking science-based reduction of our scope 3 greenhouse gas emissions and collaborating with our suppliers to address other environmental challenges</li><li>• Assessing, monitoring, and helping improve the sustainability performance of our critical suppliers</li></ul>
<ul style="list-style-type: none"><li>• Future-proofed business model</li><li>• Growth and returns from smoke-free transformation</li><li>• Regulatory and fiscal environment</li><li>• Governance and remuneration</li><li>• Capital allocation</li><li>• ESG priorities, risks, and performance</li><li>• Technological advancements to drive product innovation, commercialization, and operational efficiency</li><li>• Quality of reporting on ESG and business transformation</li></ul>	<ul style="list-style-type: none"><li>• Continuing to grow our smoke-free business while staying competitive in the cigarette category during our transition</li><li>• Periodically refreshing our <a href="#">sustainability materiality assessment</a></li><li>• Reporting progress via our <a href="#">Integrated Report</a> and <a href="#">Business Transformation Metrics</a></li></ul>	<ul style="list-style-type: none"><li>• Linking executive compensation to ESG performance, including via our <a href="#">Sustainability Index</a></li><li>• Integrating our smoke-free transformation into our <a href="#">financing strategy</a></li><li>• Supporting PMI's smoke-free and wellness and healthcare ambitions via disciplined investments</li></ul>
<ul style="list-style-type: none"><li>• Risk-proportionate regulatory framework for smoke-free products</li><li>• Responsible marketing and commercialization, including youth access prevention</li><li>• Illicit trade prevention</li><li>• Environmental and social welfare</li><li>• Fiscal and regulatory compliance</li><li>• Data protection and cybersecurity</li><li>• Standards for transparency and quality reporting</li></ul>	<ul style="list-style-type: none"><li>• Transparently publishing our scientific findings on smoke-free products <a href="#">PMIscience.com</a></li><li>• Paying taxes commensurate with our economic activities</li><li>• Deploying youth access prevention safeguards across retail channels</li><li>• Implementing and monitoring compliance with internal codes and standards, especially <a href="#">PMI's Code of Conduct</a></li></ul>	<ul style="list-style-type: none"><li>• Preventing illicit trade via tracking and tracing processes and technologies and funding <a href="#">PMI IMPACT</a></li><li>• Improving the sophistication and standardization of our ESG reporting</li></ul>
<ul style="list-style-type: none"><li>• Product innovation to reduce health impacts at individual and population levels</li><li>• Scientific research, including scientific methods and protocols, data and results</li><li>• Business transformation strategy and progress in phasing out cigarettes</li><li>• Youth access prevention</li><li>• Research transparency and data</li><li>• Product environmental impact</li></ul>	<ul style="list-style-type: none"><li>• Developing science-based, less harmful alternatives to smoking and expanding our smoke-free product portfolio</li><li>• Investing in smoke-free product innovation R&amp;D</li><li>• Publishing findings and other scientific publications on <a href="#">PMIscience.com</a></li></ul>	<ul style="list-style-type: none"><li>• Acquiring like-minded, science-driven companies to continue evolving into a broader lifestyle, consumer wellness, and healthcare company</li><li>• Initiating studies such as real-world evidence studies analyzing the impact at the population level of the introduction of smoke-free products</li></ul>
<ul style="list-style-type: none"><li>• ESG performance</li><li>• Sustainability strategy and reporting</li><li>• Business transformation</li><li>• Product innovation</li></ul>	<ul style="list-style-type: none"><li>• Partnering with leading civic organizations to improve our ESG performance and implement impactful solutions</li><li>• Joining leading corporate sustainability membership organizations (<a href="#">see here</a>)</li><li>• Sharing data and progress with academic organizations, enabling them to write case studies analyzing our progress, challenges, and opportunities</li></ul>	<ul style="list-style-type: none"><li>• Leveraging a range of media channels to promote open dialogue and discussions about business impacts and corporate strategy</li><li>• Transparently disclosing our ESG performance, sustainability materiality assessments, progress, challenges, opportunities, and aspirations</li></ul>



# Strategy

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Our 2025 Roadmap p30

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# Value creation

## Resources and relationships



### Human

Our success depends on developing the skills, knowledge, and experience of our 71,070 directly employed people worldwide.<sup>1</sup> Our employees represent 133 nationalities and 42% of them are women.



### Intellectual

Innovation underpins our business transformation. In 2022, we invested USD 642 million in R&D, of which 99% continues to be dedicated to smoke-free products. Innovation also guides improvements in our processes, from sourcing to manufacturing, logistics, and sales. Our acquisition of leading innovative companies to advance our nascent wellness and healthcare business represents a significant addition to our R&D through access to valuable patents and expertise.



### Natural

In 2022, we sourced around 281,000 tons of packed tobacco, a material vital to our products. Other raw materials and natural resources we use include paper and pulp-based products, metals, water, and energy. We seek to source these materials sustainably and use them efficiently.



### Manufactured

Our facilities—such as our R&D centers, 53 factories,<sup>2</sup> 48 consumer call centers, and 285 IQOS stores—and our nearly 21,700 vehicles allow us to develop, manufacture, deliver, and commercialize a multi-category smoke-free product portfolio to meet the demands of our consumers.



### Social

Building stakeholder trust is essential. We develop and sustain relationships with a network of over 30,000 suppliers, 223,299 contracted farmers supplying us with tobacco, around 130 million adult consumers of our cigarette brands, and approximately 24.9 million users of IQOS<sup>3</sup>, which is one of our smoke-free products. Our relationships also extend to the retailers of our products, the communities in which we operate, regulators and other government officials, nongovernmental organizations (NGOs), and the multistakeholder initiatives in which we participate.



### Financial

Our business activities require financial capital, which we strive to allocate efficiently to optimize value and drive sustainable growth. This capital is provided by our equity and debt holders, as well as by the cash flow generated by our operations. Our company's market capitalization as of December 31, 2022 was approximately USD 157 billion, and PMI's net debt was USD 39.9 billion. At that time, PMI's long-term credit was rated A2 by Moody's, A- by Standard & Poor's and A by Fitch.

## Expanding our resources and relationships via strategic acquisition

With the acquisition of Swedish Match, we expect to accelerate the achievement of our shared smoke-free ambitions, switching more adults who would otherwise continue to smoke to better alternatives faster than either company could achieve separately. This combination impacts our value creation model, and, consequently, the capitals described above.

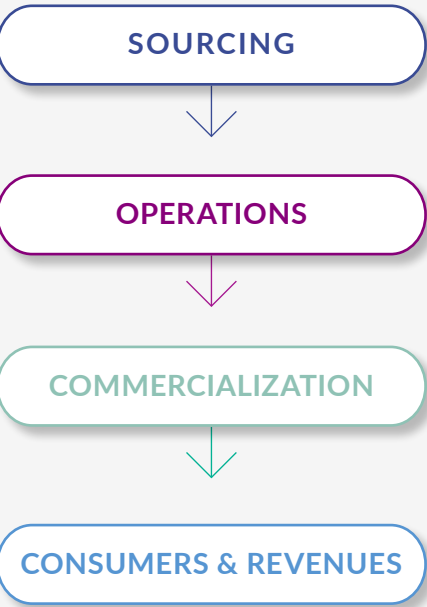
## Key activities

### Our mission

**Accelerate the end of smoking by offering adult smokers who would otherwise continue to smoke scientifically substantiated better alternatives than smoking and evolve in the longer term into a broader lifestyle, consumer wellness and healthcare company.**

### Our value chain transformation

To achieve this mission, all segments of our value chain—including sourcing, operations, commercialization, and consumers and revenues—are undergoing rapid transformation. Learn more by viewing our expanded value chain transformation infographic on [PMI.com](https://www.pmi.com).



## Value created in 2022



### Human

- Expanded lifelong learning program to 80% of PMI employees across the organization
- Heightened employees' sense of belonging and ability to connect with colleagues based on shared characteristics or life experiences by facilitating employee resource groups in partnership with external subject matter experts



### Intellectual

- Reached around 2,500 patents granted in IP5 jurisdictions that relate to smoke-free products
- Published 511 scientific publications since 2008 to share our methods and findings
- Completed 251 toxicological assessment studies, 26 clinical assessment studies, and 58 perception and behavior studies on smoke-free products since 2015
- Invested a cumulative USD 10.7 billion in smoke-free products since 2008<sup>1</sup>



### Natural

- Reduced total value chain CO<sub>2</sub>e emissions (scope 1+2+3) by 11% and emissions from direct operations (scope 1+2) by 39% versus 2019
- Purchased 55% of tobacco at no risk of deforestation of managed natural forest and no conversion of natural ecosystems, and maintained 100% of tobacco purchased at no risk of deforestation of primary and protected forests
- Covered 68% of shipment volume by markets with anti-littering programs in place for combustible cigarettes
- Covered 8.5% of shipment volume by markets with end-of-life take-back programs in place for smoke-free consumables<sup>2</sup>
- Optimized 4.9 million cubic meters of water in our tobacco supply chain since 2019
- Achieved 86% recycling rate of IQOS devices returned to our centralized recycling hubs (weighted-average percentage of each device that is recycled)<sup>3</sup>
- Refreshed or repaired a cumulative number of 157,000 smoke-free electronic devices since 2021
- Achieved virtually zero waste to landfill in 97% of our factories



### Manufactured

- Expanded the versions of smoke-free heat-not-burn and e-vapor devices we commercialize to meet the needs and preferences of adult smokers
- Extended the number of markets in which PMI smoke-free products are available for purchase to 73, of which 30 are in low- and middle-income markets<sup>4</sup>



### Social

- Reached approximately 24.9 million IQOS users, of whom an estimated 17.8 million have switched to IQOS and stopped smoking<sup>5</sup>
- Maintained high proportion of shipment volume (91%) covered by youth access prevention programs in our indirect retail channels
- Continued to monitor and reduce prevalence of child labor among contracted farmers supplying tobacco to PMI, achieving 0.1% in 2022, and resolving 95% of identified cases
- Fostered a living income among contracted farmers supplying tobacco to PMI (achieving 73%) and a minimum wage for tobacco farmworkers (achieving 99.9%)
- Completed seven in-depth human rights impact assessments since 2018, as well as ongoing monitoring and implementation of action plans
- Improved representation of women in management positions to 40.7% (up from 39.7% in 2021) and set a baseline to measure inclusion among PMI employees



### Financial

- Derived 32.1% of our annual net revenues from smoke-free products out of total net revenues of USD 31.8 billion<sup>6</sup>
- Achieved a 15.1% smoke-free product shipment ratio
- Generated USD 0.3 billion in net revenues from products in wellness and healthcare in 2022
- Reported USD 2.2 billion in corporate income taxes
- USD 73 billion in excise tax paid on PMI products
- Increased annualized dividend rate to USD 5.08/per share based on a quarterly dividend of USD 1.27/share, declared September 14, 2022; 15 consecutive years with a dividend increase since becoming a public company in 2008

<sup>1</sup> Incorporating Vectura Fertin Pharma, as well as the 2022 acquisition of Swedish Match, PMI employed approximately 79,800 people worldwide at year-end 2022.  
<sup>2</sup> Including Swedish Match and Vectura Fertin Pharma.  
<sup>3</sup> Figures pertain to total IQOS users. See [Glossary](#).

<sup>1</sup> Investments reflect research, product and commercial development, production capacity, scientific substantiation, and studies on adult smoker understanding.  
<sup>2</sup> Shipment volume includes heated tobacco units, e-vapor cartridges, and e-vapor disposables.  
<sup>3</sup> Including recycling (80%) and incineration with energy recovery (6%). 2022 figure excludes Russia.  
<sup>4</sup> Including Swedish Match and excluding PMI Duty Free. Classification of low- and middle-income countries is based on World Bank report issued in July 2022.  
<sup>5</sup> Figures pertain to total IQOS users. See [Glossary](#).  
<sup>6</sup> For definition of net revenues related to smoke-free products, see [Glossary](#). Including Swedish Match net revenues from November 11, 2022 (acquisition date) to December 31, 2022.

Note: Presentation of information in this visual is informed by the Integrated Reporting Framework of the IFRS Foundation.



# Transforming for good

## Our business transformation

We strive to become a company that has a net positive impact on society.

This ambition starts with researching, developing, and commercializing less harmful alternatives to cigarettes for those adults who otherwise would continue to smoke, ultimately allowing us to phase out cigarettes and become an entirely smoke-free business. As a next step, we are expanding our offerings to include products that fill critical unmet needs within the wellness and healthcare space.

To achieve our purpose, a radical transformation of our business is required. Our strategy is to responsibly transition from a cigarette company into a world-leading smoke-free business while simultaneously exploring adjacent avenues of growth in wellness and healthcare.

Our North Star is to create a net positive impact that benefits our company, shareholders, consumers, and society.

Transforming our company is not simply about substituting one product with another. It requires revamping our entire value chain and the way we engage with society. This necessitates a holistic review and overhaul of our entire business model and value proposition, which brings challenges and opportunities to all aspects of our business.

Sustainability stands at the core of PMI's transformation. It spurs innovation, better positions the company for long-term success, and helps to address certain challenges stemming from our transition.

## Product transformation

Innovating for better products



Our product lines are the most visible aspect of our transformation. Over the past decade and a half, we have harnessed scientific and technological advances to develop alternatives to cigarettes that are scientifically substantiated to be a better choice for adult smokers than continued smoking. We work relentlessly to phase out cigarettes by replacing them with less harmful alternatives as quickly as possible to achieve a smoke-free future.

We are increasing access for adult smokers by improving and expanding our portfolio of smoke-free products to meet their varying needs and preferences. We are progressing toward becoming a majority smoke-free company by 2025 in terms of net revenues and are taking concrete steps to grow our wellness and healthcare business organically and through strategic acquisitions of leading innovative companies.

### Supporting transformation



### Growth priorities



### Emerging opportunities



Simultaneously managing the impacts of two value chains—the one we are moving away from (our cigarette portfolio) and the one we are moving toward (our smoke-free portfolio)—while also managing the impacts of the transition itself makes our strategy even more complex.

In formulating and implementing our sustainability strategy, we must consider a range of trade-offs among different forms of capital. Read more [here](#).

While a transformation of this magnitude and complexity cannot be achieved overnight, we are committed to making it happen as fast as possible.

## Internal transformation

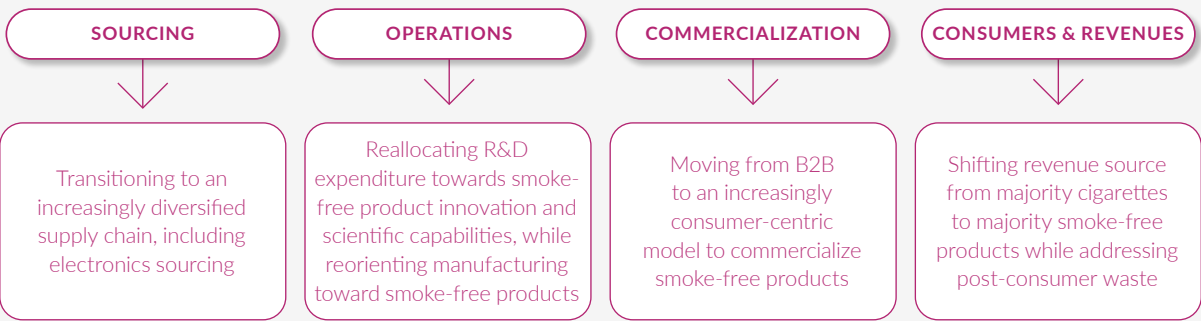
A new organization and value chain



Since announcing our smoke-free vision, we have undergone a meaningful reorganization. We have helped our employees build the skills and capabilities they need to contribute fully to our business transition while also investing in recruiting top talent and acquiring new capabilities. We are also incorporating new ways of working as we become an increasingly digitalized, project-based organization focused on consumer centricity, agility, and data-driven decision-making.

Moreover, we are working to integrate and leverage capabilities from our recent business acquisitions.

Beyond our own operations, we are transforming every step of our value chain to serve our company purpose. We recognize the challenges these changes pose and are actively helping all those impacted (in our direct and indirect operations) to best manage the transition.



[Read more about our value chain transformation](#)

## External transformation

Changing the way we engage with stakeholders



Engaging with external stakeholders is critical to achieving our purpose. Our ability to successfully transform requires that we work together with various segments of society to create a paradigm shift in which cigarettes become obsolete.

Continuous engagement also allows us to build a shared understanding of contingency issues, proactively respond to concerns, identify potential areas of compromise, and find solutions that are good for our stakeholders, as well as for our business and long-term success.



[Read more about our stakeholder engagement](#)





# Business Transformation Metrics

We realize that business transformation is a very company-specific journey, which ESG reporting standards do not adequately capture.

To make our progress both measurable and verifiable, we developed our Business Transformation Metrics, a bespoke set of financial and nonfinancial key performance indicators (KPIs). These metrics showcase how we are allocating resources away from our legacy business as we advance toward a future in which we no longer make or sell cigarettes.

Business Transformation Metrics		2015 baseline	2020	2021	2022	2025 aspirations
Consumers & Revenues	Total number of users of PMI smoke-free products (in millions) <sup>1*</sup>	0.2	18.3	21.7	24.9	
	Estimated number of users who have switched to PMI smoke-free products and stopped smoking (in millions) <sup>1*</sup>	0.1	13.0	15.3	17.8	>40
	Adjusted net revenues ratio (smoke-free/total) <sup>2**†</sup>	0.7%	24.2%	29.5%	32.1%	>50%
	Annual net revenue from wellness and healthcare products (in billion USD) <sup>3*</sup>	n/a	n/a	0.1	0.3	≥ 1
Commercialization	Number of markets where smoke-free products are available for sale <sup>4*</sup>	7	64	71	73	100
	Proportion of markets where smoke-free products are available for sale that are low- and middle-income markets <sup>5*</sup>	17%	39%	42%	42%	>50%
	Commercial (marketing) expenditure ratio (smoke-free/total) <sup>*</sup>	8%	76%	73%	74%	
	Smoke-free product shipment ratio (smoke-free/total) <sup>6**†</sup>	0.6%	10.9%	13.3%	15.1%	>30%
	Smoke-free product shipment volume (billion units) <sup>6**†</sup>	5	80	99	114	>250
	Combustible tobacco product shipment volume (billion units) <sup>6**†</sup>	877	650	645	641	<550
Sourcing & Operations	Change in combustible tobacco product shipment volume (billion units) vs. 2015 baseline <sup>6**†</sup>	n/a	(25.8)%	(26.4)%	(26.8)%	~(40%)
	Adjusted R&D expenditure ratio (smoke-free/total) <sup>7*</sup>	70%	99%	99%	99%	
	Supply chain direct spend expenditure (smoke-free/total) <sup>8</sup>	n/a	33%	35%	43%	
	Number of factories producing smoke-free products out of total number of factories <sup>9**†</sup>	3 out of 48	9 out of 39	9 out of 38	24 out of 53	

\* The 2022 metrics marked with an asterisk (\*) are subject to PwC's Assurance Report

Notes:

In the fourth quarter of 2022, we acquired Swedish Match, a market leader in oral nicotine delivery with a significant presence in the United States market. The Swedish Match acquisition is a key milestone in PMI's transformation to becoming a smoke-free company. PMI consolidated statements of earnings for the year ended December 31, 2022, include the results of operations of Swedish Match from November 11, 2022 (acquisition date) to December 31, 2022, as presented in the Form 10-K for the fourth quarter and year ended December 31, 2022.

Following the Swedish Match acquisition and a review of PMI and Swedish Match's combined product portfolio, PMI reclassified certain of its own products previously reported under its combustible tobacco product category to the newly created smoke-free product category to better reflect the characteristics of these products. Where applicable, prior years' KPIs have been recalculated to reflect the reclassification on a comparative basis. Impacted metrics are marked with (†).

In 2023, we plan to evaluate our published aspirations to ensure they remain ambitious, reasonable, and achievable in the context of a dynamic and evolving smoke-free industry, and impacts of our recent acquisitions.

<sup>1</sup> Figures pertain to total IQOS users, for definition see [Glossary](#).

<sup>2</sup> For definition of net revenues related to smoke-free products, see [Glossary](#). 2022 figure includes Swedish Match net revenues from November 11, 2022 (acquisition date) to December 31, 2022. 2021 figure excludes the impact related to the Saudi Arabia customs assessments.

<sup>3</sup> For definition of net revenues related to wellness and healthcare, see [Glossary](#). 2021 figure includes portion of net revenues reported after acquisition of Fertin Pharma A/S, Vectura Group plc. and OtiTopic, Inc. that took place in the third quarter of 2021.

<sup>4</sup> Including Swedish Match. For definition of available for sale, see [Glossary](#).

<sup>5</sup> Excluding PMI Duty Free. World Bank report issued in July 2022 is used on a comparative basis for income level classification. For definition of low- and middle-income markets, see [Glossary](#).

<sup>6</sup> These indicators are calculated based on millions of units. For definition of smoke-free products and combustible tobacco products, see [Glossary](#). Smoke-free products shipment volume includes volume of smoke-free products that can be converted into cigarette equivalent units, such as heat-not-burn, e-vapor, and oral nicotine. Total shipment volume includes the listed smoke-free products as well as combustible tobacco products: cigarettes and other tobacco products expressed in cigarette equivalent units. Data does not include Swedish Match and wellness and healthcare products.

<sup>7</sup> Adjusted R&D expenditure excludes asset acquisition cost related to OtiTopic, Inc. in 2021. Total reported R&D expenditure in 2021 including these items amounted to USD 617 million.

<sup>8</sup> Direct spend focuses on materials used in the manufacture of our products; it includes tobacco leaf, direct materials, and electronic devices and accessories. Data excludes Swedish Match and Vectura Fertin Pharma.

<sup>9</sup> Data reflects the number of factories operated and owned by PMI at the end of the respective year, including Swedish Match and Vectura Fertin Pharma. 2022 factories include eight facilities producing heated tobacco units, two producing other smoke-free consumables and 14 Swedish Match owned facilities, primarily engaged in the production of smoke-free products.

By reporting periodically on these KPIs, we enable external scrutiny and allow our stakeholders to assess the pace and scale of our transformation. The KPIs also permit tracking of both year-on-year and cumulative progress. Aspirational goals linked to our Business Transformation Metrics give us a clear roadmap and offer our stakeholders visibility into the future toward which we aim to advance.

Over the years, in response to stakeholder feedback and to increase transparency around our business transformation, we have significantly expanded the number of metrics on which we report. In 2022, we reviewed this expansive set of metrics with the objective of streamlining our reporting to focus on those metrics that best measure our progress. The criteria we used in this evaluation mirrored those used to select KPIs for our Sustainability Index; namely, they should be relevant, measurable, comparable, and verifiable.

Through this process, we reduced the number of Business Transformation Metrics from 28 to 14, allowing us to focus on those KPIs that best assess the impact of our transformation on consumers, the availability of our products, how our product portfolio is changing, and how we allocate resources as we progress toward our 2025 aspirations. Several metrics removed from this table will continue to be reported in the [Performance metrics](#) section of this report, with each data point linked to one of our key strategies. The remainder, such as the number of stores or number of retailers selling smoke-free products, are included in the body of this report as complementary data points, where relevant. The efforts undertaken in 2022 to streamline our Business Transformation Metrics were part of a broader ESG data relevancy review (read more [here](#)).

For all our Business Transformation Metrics, we aim to report our historical performance, ensuring a consistent scope and calculation methodology, and strive for external assurance. In 2022, 13 out of 14 Business Transformation Metrics were subject to external assurance by our statutory auditor, PwC, indicating that they are both measurable and verifiable (read PwC's limited assurance report [here](#)). Supply chain direct spend expenditure (smoke-free/total) was not in scope of assurance.

## Looking ahead

During 2023, almost seven years since announcing our transformation, we plan to re-evaluate all our business transformation aspirations to ensure that they remain ambitious, reasonable, and achievable in the context of a dynamic and evolving smoke-free industry and our recent acquisitions. We will do this taking into consideration learnings gathered since we set some of these aspirations in the early stages of our smoke-free journey. In particular, we will consider the impact of our business combination with Swedish Match, finalized in late 2022, and our agreement with Altria granting PMI full rights to commercialize IQOS in the U.S. as of April 2024. We will also assess and reflect changes in our value chain and the impact of recent external factors, including the COVID-19 pandemic and the war in Ukraine, where applicable. We intend to communicate any related changes within 2023.



## Anchoring sustainability at the core of our strategy

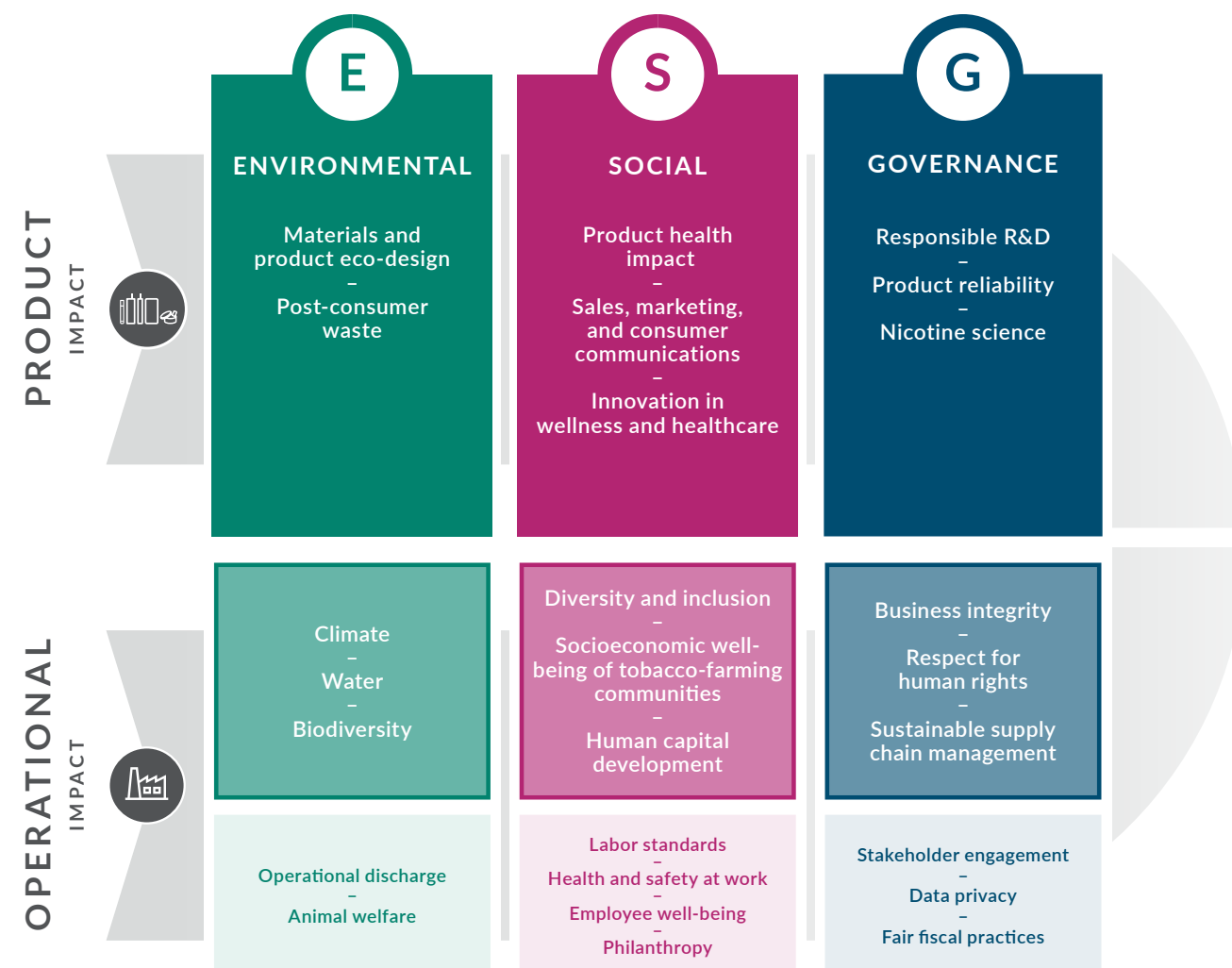
We can only achieve our purpose by embedding sustainability in all we do.

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. Accordingly, we work hard to integrate sustainability into every aspect of our business and activities.

Our approach to sustainability is guided by the outcomes of our most recent sustainability materiality assessment, which considered and prioritized a long list of ESG topics (read more [here](#)).

The result was a structured ESG framework (depicted below) that showcases those ESG topics we focus and prioritize our resources on. This framework recognizes two distinct forms of issues: those that relate to our products (what we produce), which are part of the “Product Impact” pillar, and those related to our business operations (how we produce), which are part of the “Operational Impact” pillar. We classify each issue based on its environmental, social, or governance-related nature.

Building on our ESG framework, we developed eight strategies (discussed on the next page) targeting our most pressing areas of impact. To accompany those strategies, we established 11 goals, which form the basis of our 2025 Roadmap and 19 metrics to measure progress via our Sustainability Index.



## Our sustainability strategy

Consistent with the outcomes of our sustainability materiality assessment, we have placed addressing the social impacts of our products at the core of our sustainability strategy. These are the areas on which we must focus our resources to innovate and develop solutions that can contribute to solving some of society's most pressing challenges. This approach represents an opportunity for growth and our strongest competitive advantage.

The health impact of cigarette smoking is the most significant and pressing negative externality our strategy aims to address. Lessening this impact is the most valuable societal contribution we can make and is the cornerstone of PMI's purpose and business strategy. Addressing this critical issue requires a three-pronged approach:

### 1. Maximize the benefits of smoke-free products:

Research, develop, and commercialize nicotine-containing products that are scientifically substantiated to be less harmful than cigarettes, and then seek to ensure that those adults who would otherwise continue to smoke have broad access to these products to expedite the decline of smoking prevalence.

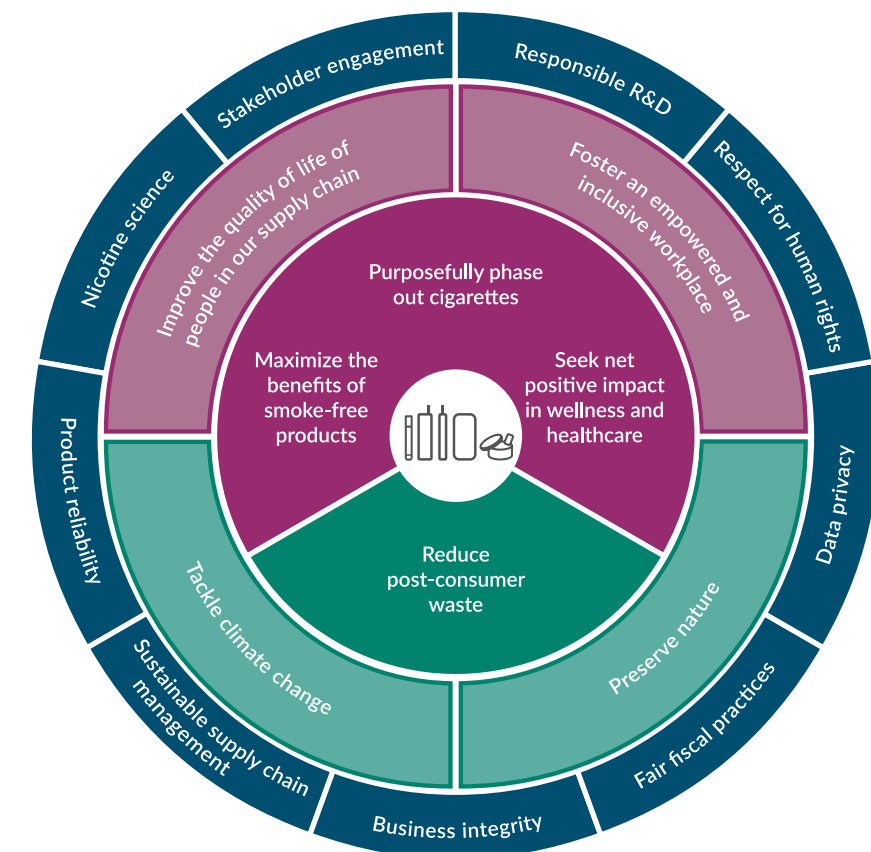
### 2. Purposefully phase out cigarettes:

Work to make cigarettes obsolete, with the aim that smoke-free products ultimately replace cigarettes for those who continue to use nicotine, driving their obsolescence.

### 3. Seek net positive impact in wellness and healthcare:

Despite its critical importance, achieving a smoke-free future is not our final horizon. We are also exploring adjacent opportunities for growth in wellness and healthcare, leveraging the capabilities we have accrued and developed while transforming our business. It is through these emerging opportunities that we will achieve our ultimate goal.

Our approach to sustainability must also address other material ESG topics related to our products and business operations, including the environmental impact of our products, and the environmental and social impacts across our value chain. To address this broad range of considerations, our three-fold approach to addressing the social impact of our products is complemented with five other impact-driven strategies. Altogether, these eight strategies are equally divided between those that focus on the impacts of our products and those that focus on the impacts of our business operations. Last but not least, all-encompassing governance-related topics set the basis of our success.





# Our 2025 Roadmap









PMI's 2025 Roadmap, first introduced in 2019, outlines our key goals and informs the route of our company's long-term plan.

Running to the end of 2025, it comprises 11 headline goals, each connected to our eight strategies, which aim to address our priority ESG topics identified by our sustainability materiality assessment.

You can learn more about this mapping exercise in our 2021 [Sustainability Materiality Report](#).

Our roadmap offers straightforward direction to our stakeholders by clearly outlining the social and environmental impacts we aim to achieve with these strategies, in relation to both our products and our business operations.

We believe business can and must help to achieve the UN Sustainable Development Goals (SDGs) adopted in 2015. Accordingly, we have explicitly linked each of our eight strategies to the SDG(s) to which it aligns and can contribute towards achieving.

		Goals	Priority ESG topics	Primary SDGs
PRODUCT IMPACT	 Purposefully phase out cigarettes	1 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	Product health impact	3 GOOD HEALTH AND WELL-BEING
	 Maximize the benefits of smoke-free products	2 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	Product health impact	3 GOOD HEALTH AND WELL-BEING
	 Seek net positive impact in wellness and healthcare	3 Deploy robust youth access prevention programs in indirect retail channels and ensure that sales of our products abide by our Marketing Codes	Sales, marketing, and consumer communications	3 GOOD HEALTH AND WELL-BEING
	 Reduce post-consumer waste	4 Leverage scientific and development capabilities to generate at least USD 1 billion in annual net revenues from products in wellness and healthcare	Innovation in wellness and healthcare	3 GOOD HEALTH AND WELL-BEING 8 DECENT WORK AND ECONOMIC GROWTH
		5 Reduce post-consumer waste and prevent littering by implementing comprehensive programs covering all our consumables	Materials and product eco-design	8 DECENT WORK AND ECONOMIC GROWTH 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
		6 Follow eco-design and circularity principles for all smoke-free electronic devices	Post-consumer waste	
OPERATIONAL IMPACT	 Foster an empowered and inclusive workplace	7 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	Diversity and inclusion	4 QUALITY EDUCATION 5 GENDER EQUALITY
	 Improve the quality of life of people in our supply chain	8 Eradicate systemic child labor in our tobacco supply chain	Human capital development	8 DECENT WORK AND ECONOMIC GROWTH 10 REDUCED INEQUALITIES
		9 Ensure all contracted tobacco farmers make a living income, and partner with our direct suppliers to promote a living wage for their workers	Socioeconomic well-being of tobacco-farming communities	1 NO POVERTY 8 DECENT WORK AND ECONOMIC GROWTH
	 Tackle climate change	10 Achieve carbon neutrality in our operations and accelerate our decarbonization toward net zero across our value chain	Climate	13 CLIMATE ACTION 15 LIFE ON LAND
	 Preserve nature	11 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	Biodiversity Water	6 CLEAN WATER AND SANITATION 15 LIFE ON LAND

# PMI sustainability index

We measure progress on our roadmap with a set of key performance indicators (KPIs) that collectively form our Sustainability Index.

In 2021, we developed PMI's Sustainability Index to measure and communicate progress rigorously and quantitatively against our aspirations, using a set of clearly defined and verifiable metrics. To better align with shareholder and other stakeholder interests, the Compensation and Leadership Development Committee of PMI's Board of Directors has used the index to enhance the company's practices, explicitly linking compensation to sustainability and strengthening the link between long-term compensation and ESG performance (read more [here](#)).

PMI's Sustainability Index comprises 19 KPIs directly linked to our 11 Roadmap goals. As with our Roadmap, each KPI is aligned with one of two drivers: "Product Sustainability" (11 KPIs) or "Operational Sustainability" (8 KPIs).

Using predefined target ranges, we assess and award a score to each KPI annually. Thereafter, using a weight assigned to each KPI (informed by the results of our sustainability materiality assessment), we calculate the total Sustainability Index score. Performance results from the fiscal year 2022 are summarized on the following page.

Our 2022 performance in the Product Sustainability pillar has left us on track to meet our goals in terms of our youth access prevention program coverage, and post-consumer waste management. That said, our transformation agenda faced stronger-than-expected headwinds due to various external factors—most notably, the world geopolitical situation.

At the end of the year, we were broadly on track across our Operational Sustainability pillar, with two exceptions. Firstly, due to higher-than-anticipated female turnover and lower-than-anticipated internal promotions of women, we have faced challenges when aiming to meet our targeted proportion of women in senior roles. Secondly, uncontrollable and unforeseeable events, like the war in Ukraine and its far-reaching consequences, compelled us to adapt our supply chain and logistics, slowing the pace of our scope 3 greenhouse gas emissions reductions.





Aligned with our sustainability materiality assessment results, the Product Sustainability pillar—and, specifically, those KPIs linked to strategies addressing the social impacts of our products—is the most heavily weighted component of the index. Consequently, despite good progress across the majority of our ESG priority corridors, the total Sustainability Index score fell slightly behind target in 2022.

Moving forward, we will attempt to ascertain the potential impact of these factors on our forward-looking statements and aspirations. Read more about challenges and highlights for each of our eight strategies in designated feature boxes in the [Product Impact](#) and [Operational Impact](#) sections of this report.

PMI ESG KPI Protocol

Our [ESG KPI Protocol 2021](#), published alongside our [Integrated Report 2021](#), provides details about the PMI Sustainability Index. In conjunction with the current integrated report, we are also publishing PMI's [ESG KPI Protocol 2022](#), detailing the definition, scope, and methodology of each KPI included in the index. This updated version accounts for efforts undertaken during the year to make these KPIs even more robust.

Notes:  
The 2022 metrics marked with an asterisk (\*) are subject to PwC's Limited Assurance Report available [here](#).  
Our inventory of GHG emissions (scope 1, 2, and 3) in 2022 is subject to external verification by SGS (see the External Verification Statement for scope 1+2 [here](#), for scope 3 [here](#), and a list of the individual metrics verified [here](#)).  
For further details on the definitions, scope, calculation methodology, and data management for the metrics included in PMI's Sustainability Index, please refer to [PMI's ESG KPI Protocol 2022](#).

1 These indicators are calculated based on millions of units. For definition of smoke-free products and combustible tobacco products, see [Glossary](#). Smoke-free products shipment volume includes volume of smoke-free products that can be converted into cigarette equivalent units, such as heat-not-burn, e-vapor, and oral nicotine. Total shipment volume includes the listed smoke-free products as well as combustible tobacco products: cigarettes and other tobacco products expressed in cigarette equivalent units. Data does not include Swedish Match and wellness and healthcare products.  
2 For definition of net revenues related to smoke-free products, see [Glossary](#). 2022 figure includes Swedish Match net revenues from November 11, 2022 (acquisition date) to December 31, 2022.  
3 Including Swedish Match.  
4 Excluding PMI Duty Free. World Bank report issued in July 2022 is used on a comparative basis for income level classification. For definition of low- and middle-income markets, see [Glossary](#).  
5 Figures pertain to total IQOS users. See [Glossary](#).  
6 Total shipment volume includes cigarettes, OTPs, and smoke-free product consumables.  
7 For definition of net revenues related to wellness and healthcare, see [Glossary](#).  
8 In 2022, we redefined the minimum criteria which must be met by each market to be considered as having a take-back program in place. Shipment volume includes heated tobacco units, e-vapor cartridges, and e-vapor disposables.  
9 To meet our 2025 aspiration, we may consider either a type 1 or type 2 and/or type 3 product environmental statements as defined by ISO 14020:2022, as constituting an "eco-certification".  
10 Our diversity and inclusion data cover around 94% of PMI's total workforce, as they exclude fixed term employees and those on salary continuation.  
11 Our assessments prioritize countries which are assessed as highest risks from a human rights standpoint. They are determined based on key parameters such as PMI's footprint and the country's human rights risk profile, as determined by internationally recognized organizations.  
12 Emissions from PMI-operated IQOS stores are partially excluded from scope 1+2 emissions, as de minimis. In 2022, a portion of PMI's retail stores (representing approx. 10% of total retail surface area) have been included in the scope 1+2 emissions.  
13 For definitions, please see PMI's [Zero Deforestation Manifesto](#).

PRODUCT



Key performance indicators		2022 performance	2022 progress	2025 aspirations	KPI weight	Contribution to total index score
Purposefully phase out cigarettes	1	Smoke-free product shipment ratio (smoke-free/total) <sup>1*</sup>	15.1%	> 30%	85%	
	2	Adjusted net revenues ratio (smoke-free/total) <sup>2*</sup>	32.1%	> 50%		
Maximize the benefits of smoke-free products	3	Number of markets where PMI smoke-free products are available for sale <sup>3*</sup>	73	100		
	4	Proportion of markets where smoke-free products are available for sale that are low- and middle-income markets <sup>4*</sup>	42%	> 50%		
	5	Total number of users of PMI smoke-free products (in millions) <sup>5*</sup>	24.9			
	6	Proportion of shipment volume covered by markets with youth access prevention programs in place in indirect retail channels <sup>6</sup>	91%	> 90%		
Seek net positive impact in wellness and healthcare	7	Annual net revenue from wellness and healthcare products (in billions USD) <sup>7*</sup>	0.3	≥ 1	15%	
Reduce post-consumer waste	8	Proportion of shipment volumes covered by markets with anti-littering programs in place for combustible cigarettes	68%	≥80%		
	9	Proportion of shipment volume covered by markets with end-of-life take-back programs in place for smoke-free consumables <sup>8</sup>	8.5%	≥80%		
	10	Proportion of PMI smoke-free devices with eco-design certification <sup>9</sup>	n/a	1		
	11	Cumulative number of smoke-free electronic devices refreshed or repaired since 2021 (in thousands)	157	1,000		
Product Sustainability performance					100%	67%

Foster an empowered and inclusive workplace	12	Proportion of women in senior roles <sup>10</sup>	30.5%	35%	50%	
	13	Proportion of PMI employees who have access to structured lifelong learning offers	80%	70%		
	14	Cumulative number of human rights impact assessments conducted since 2018, with findings addressed <sup>11</sup>	7	10		
Improve the quality of life of people in our supply chain	15	Prevalence of child labor among contracted farmers supplying tobacco to PMI	0.1%	0%	50%	
	16	Proportion of contracted farmers supplying tobacco to PMI who make a living income	73%	100%		
Tackle climate change	17	Net carbon emissions in scope 1+2 (in thousands of metric tons) <sup>12</sup>	297,236	0		
	18	CO <sub>2</sub> e scope 3 absolute reduction versus 2019 baseline (in-line with science-based target)	7.9%	25%		
Preserve nature	19	Proportion of tobacco purchased at no risk of deforestation of managed natural forest and no conversion of natural ecosystems <sup>13</sup>	55%	100%		
Operational Sustainability performance					100%	33%
PMI Sustainability Index						100%

Key

Target missed

Target met

Target partially met

Target exceeded

PMI acquisition of Swedish Match

Our plans for 2022 included putting in place a methodology and aspiration for the number of users of our smoke-free products. However, following the acquisition of Swedish Match in late 2022 and its material impact on our business, we are now integrating it and assessing how to move forward with a comprehensive methodology that considers a new category.



# Governance and management

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Risk management p46





# Board of Directors and Company Management

PMI’s governance structure underlies our daily activities to ensure that we act with integrity and hold ourselves and our business to the highest ethical standards.

## Our Board of Directors

The primary responsibility of the Board of Directors is to support the long-term success of our company. The Board establishes broad corporate policies, sets strategic direction, and oversees Company Management—the individuals responsible for PMI’s day-to-day operations—as defined to the right.

The Board has established various standing committees to assist with the performance of its responsibilities and has adopted corporate governance guidelines that—together with the company’s charter, bylaws, Board committee charters, code of ethics, code of business conduct and ethics for directors, and related-person transactions policy—serve as the governance framework for the company. Each of these documents is available on [PMI.com](#).

PMI’s [2023 Proxy Statement](#) contains detailed information on our Board and committee structure, the independence and diversity of its members, and the responsibilities and meeting frequency of each committee.

## Our Company Management

PMI’s Company Management primarily consists of our Chief Executive Officer, his direct reports leading our different business functions and regions, and other senior management, such as the Vice President of Treasury and Corporate Finance, the Vice President and Controller, and the Deputy Chief Financial Officer & Head of Finance Transformation. Our Company Management, which totals 25 employees as of March 11, 2023, of whom four are women, includes the 11 employees who are executive officers under Section 16 of the Securities Exchange Act 1934. A biography of each member of our Company Management can be found on [PMI.com](#).

## Executive compensation

Our executive compensation and benefits program supports our business, financial, and strategic objectives and is explained in detail in PMI’s 2023 Proxy Statement. The three components of our executive officers’ total direct compensation are base salary, annual performance-based incentive compensation awards, and long-term variable equity awards. Our long-term executive compensation program reflects our commitment to putting sustainability at the core of our corporate strategy.

In 2022, annual incentive awards were assessed on six growth measures, including a 20 percent weight for our heat-not-burn shipment volume and a 15 percent weight on strategic initiatives. Those measures are heavily focused on our transformation to smoke-free products and include the drive for material and measurable progress in priority sustainability areas, alongside transparent and clear sustainability reporting and disclosure.

For 2023, we continued the practice of incorporating measures focused on our smoke-free product transformation and sustainability priorities into our annual incentive and long-term equity performance goals for executives.

For more information, please refer to PMI’s [2023 Proxy Statement](#).

## Linking ESG performance to executive compensation

In February 2022, PMI’s Board of Directors decided to better reflect PMI’s commitment to sustainability, which is the core of its corporate strategy, by including the Sustainability Index as one of our performance metrics under equity awards. Following the index’s structure, its KPIs are aggregated into two main drivers: Product Sustainability and Operational Sustainability.







## Message from our Chief Sustainability Officer



**“Our business transformation connects sustainability and corporate strategy, recognizing that ESG issues are business issues. As a consequence, sustainability, in all its dimensions, is at the absolute core of our business strategy.”**

What is sustainability, what does ESG mean, and how are these two concepts connected? This is something that many have been grappling with and attempting to define.

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, as well as a way to respond to the concerns of shareholders and other stakeholders.

In order to achieve this, it is paramount that our company understands ESG issues that are relevant to our business success. **Managing well our company's ESG performance can create competitive advantages**, such as ensuring compliance with current and anticipated regulations, establishing a solid shareholder base, increasing stakeholder trust, improving corporate reputation and brand equity, mitigating the effects of supply chain disruptions, preserving business continuity, enhancing organizational resilience, and boosting employee morale, workforce productivity, talent attraction, and retention. To yield these potential benefits and mitigate legal, financial, and reputational risks, **ESG considerations are regularly assessed, addressed, and embedded in an integral way throughout our business.** As a result, at PMI, ESG is considered an input of our corporate strategy, with sustainability being the desired outcome.

Our business transformation connects sustainability and corporate strategy, recognizing that ESG issues are business issues. As a consequence, sustainability, in all its dimensions, is at the absolute core of our business strategy. Accordingly, PMI has chosen to practice integrated reporting because this is the best way to communicate about a business transformation that has sustainability at its core. Our reporting addresses both the material ESG risks related to our operations, as well as those connected to our product. Since 2016, our company has worked to professionalize its approach to ESG reporting by seeking alignment with the expectations of voluntary standards and frameworks. In addition, **we have introduced bespoke reporting of key performance indicators (KPIs) linked to our company's sustainability materiality results, such as PMI's Business Transformation Metrics and Sustainability Index.**

**Historically, ESG disclosures have been mostly voluntary. However, that is changing rapidly.**

Regulators and standards setters in various geographies are working to create comparable and more reliable standards for mandatory disclosures. We see this in the U.S., for instance, through the Securities and Exchange Commission (SEC), in the EU via the Corporate Sustainability Reporting Directive (CSRD), and globally through efforts led by the International Financial Reporting Standards (IFRS) Foundation's International Sustainability Standards Board (ISSB). We have actively engaged in the consultation processes led by the EU and the U.S. SEC, as well as with the ISSB, and will continue to support efforts to set a baseline for sustainability-related disclosures.

Moreover, building on that preparedness, we have completed a new in-depth climate-related risk and opportunity assessment aligned with the framework of the Task Force on Climate-related Financial Disclosures (TCFD). Alongside this year's integrated report, we are publishing PMI's first TCFD report detailing activities and targets related to its recommendations, anticipating regulatory requirements that may result from the U.S. SEC's current climate-related disclosure proposal. **We welcome more rigorous and regulated sustainability reporting requirements**, as we believe this will further strengthen our ability to produce sustainability-related disclosures that are consistent, comparable, and reliable.

In turn, our shareholders and stakeholders will be better able to assess how we are managing and improving on material ESG-related risk factors and how this is contributing to long-term value creation.

Capturing high-quality data is essential to accurate reporting. **Accordingly, we are building systems and processes that can host a sound data governance model** to ensure that nonfinancial data reported are meaningful, well-defined, and verifiable, and that processes are appropriately documented. Further, we continue to build synergies with our Legal and Finance teams to increase rigor and improve the robustness of our ESG disclosures.

To enhance our reporting and prepare for upcoming regulatory changes, we are also partnering with PMI's risk functions to build a roadmap to gradually expand the scope of external assurance of our ESG data, seeking further alignment with voluntary standards.

We intend to continue evolving our processes to produce a leaner and more technical integrated report, primarily aimed at serving the needs of the financial community. To achieve this, we began a reporting relevance review in 2022 whereby we assessed the maturity, significance, and robustness of all KPIs disclosed in our integrated reports. As our organization becomes more sophisticated and our approach to ESG reporting further professionalizes, we aim to reduce the number of KPIs by prioritizing quality over quantity. To give our stakeholders visibility into this process, this Integrated Report 2022 describes the rationale and logic behind this exercise. Ultimately, **our intent is not only to be transparent on what we report, but also to be clear and precise in the way we communicate** why, what, and how we measure our ESG performance.

We recognize the essential need to continue building legitimacy and trust among our stakeholders, who are fundamental to our company's purpose and can accelerate the pace at which we achieve it. Our Integrated Report 2022 aims to address their demands for more transparent, comparable, and reliable information on our ESG-related risks and performance. As we continue to learn, transform, and discover better ways to develop solutions that have a meaningful impact, **we hope our transparency and willingness to engage will spark dialogue with those who can help accelerate our 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 focused on making our company better, dedicated to sustainability, and committed to transform, for good.

**Jennifer Motles**  
Chief Sustainability Officer

**“We welcome more rigorous and regulated sustainability reporting requirements, as we believe this will further strengthen our ability to produce sustainability-related disclosures that are consistent, comparable, and reliable.”**



# Sustainability governance and management

Integrating sustainability into our company relies on a formal structure with clear accountabilities at different levels of the organization.

## Board of Directors

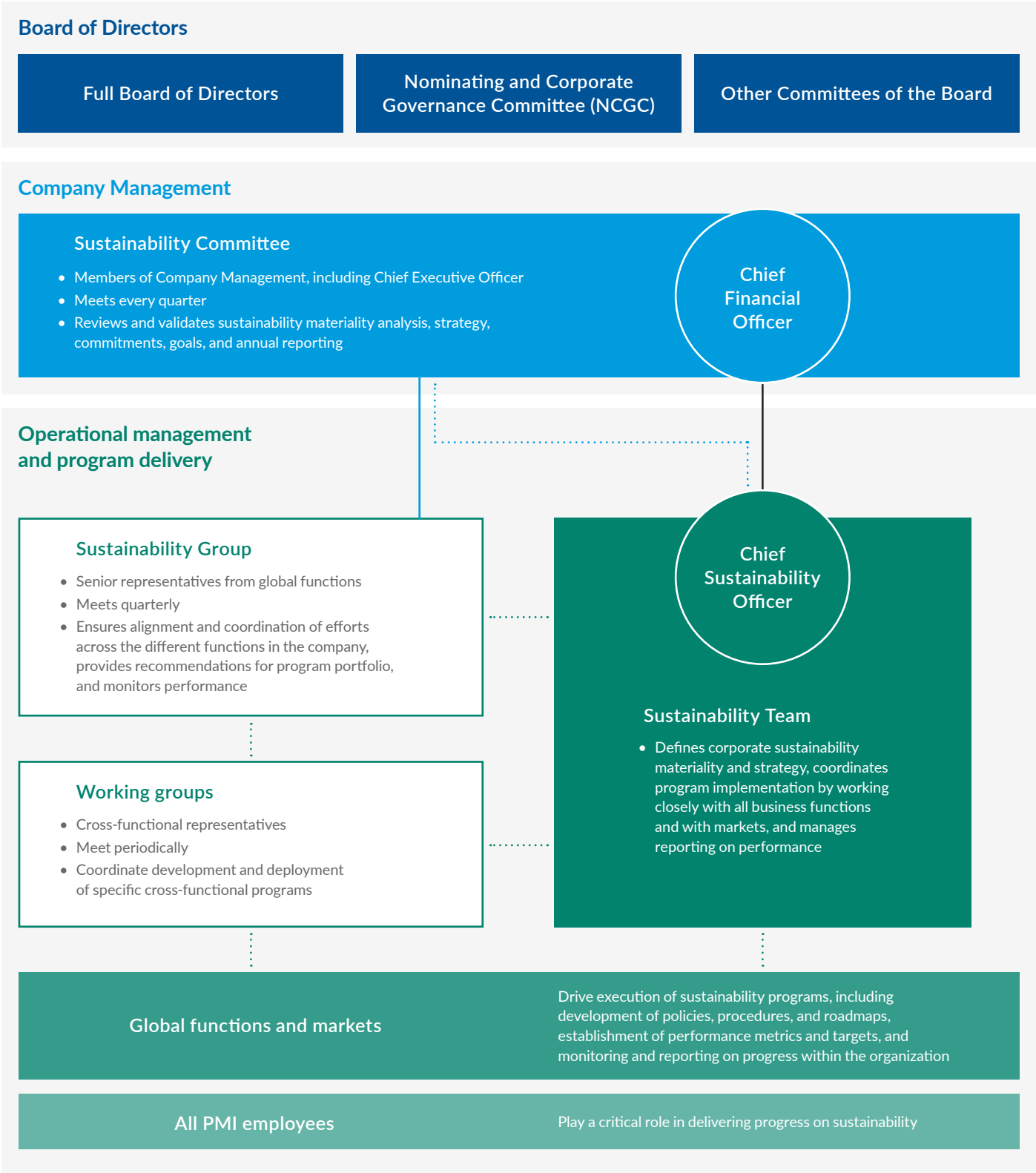
While the Nominating and Corporate Governance Committee (NCGC) oversees the company’s ESG and sustainability strategies and performance, and advises the Board on sustainability matters, several other committees are tasked with oversight responsibility for specific sustainability topics. For instance, the Audit Committee reviews with management, the internal and independent auditors, any sustainability information to be included in the Company’s financial reporting framework and the internal controls and procedures related to sustainability disclosures, while the Compensation and Leadership Development Committee (CLDC) is responsible for executive compensation matters which consists of, among others, evaluating the Company’s performance in relation to the PMI Sustainability Index. The Product Innovation and Regulatory Affairs Committee and Consumer Relationships and Regulation Committee have oversight over product development and commercial practices, including from an ESG perspective. PMI’s Chief Sustainability Officer (CSO), a member of PMI’s management, updates the CLDC, the NCGC and the full Board of Directors at least once per year on sustainability-related matters, including progress in priority areas and an overview of key initiatives.

## Company Management

Anchoring our sustainability priorities with executive responsibilities and accountabilities helps embed our strategy into our daily operations. Members of Company Management are responsible for driving progress and delivering on our sustainability targets within their respective functions. We have included feature boxes for each of our eight strategies in dedicated chapters of this report to highlight reporting lines for specific topics.

As described above, the Compensation and Leadership Development Committee has tied a significant portion of our Company Management’s compensation to the Sustainability Index.

Composed of members of Company Management, including our Chief Executive Officer, PMI’s Sustainability Committee meets at least four times per year. In 2022, quarterly Sustainability Committee meetings focused on assessing PMI’s performance on the Sustainability Index, receiving updates on various sustainability initiatives as well as external developments, reviewing the company’s disclosures, and discussing efforts to further embed sustainability within PMI, effectively manage ESG risks, and enhance ESG data reliability.



## Operational management and program delivery

Integrating ESG drivers into business strategy can significantly enhance both sustainability agendas and financial performance. Accordingly, our CSO reports to PMI’s Chief Financial Officer (CFO), a member of Company Management who heads the Sustainability, Finance, and Strategy functions—three essential components that work hand in hand to drive strong and coherent value creation and deliver long-term success. Our CSO leads the integration of sustainability across our business. She updates the Sustainability Committee on a quarterly basis and hosts the Sustainability Group—composed of functional leaders—quarterly.

The CSO heads PMI’s Sustainability Team, which leads PMI’s sustainability materiality analysis, defines strategy, manages reporting on performance, and coordinates strategy implementation across the different business functions and markets.

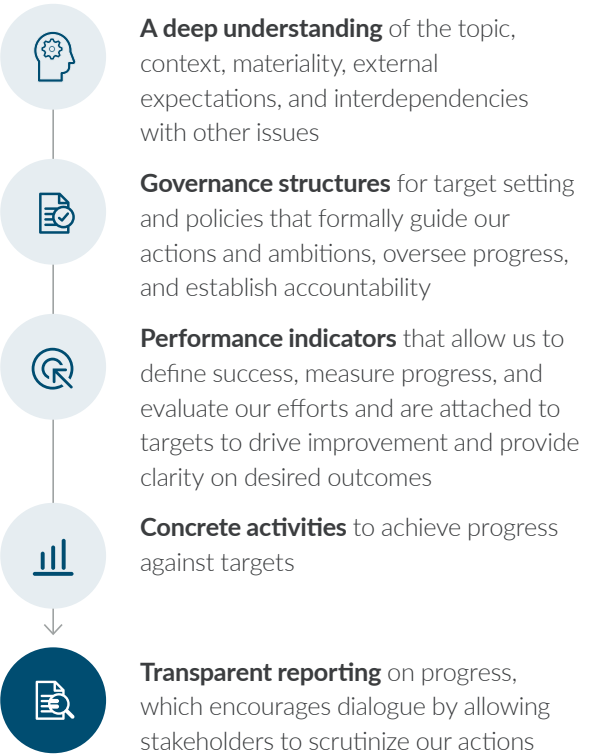
Program-specific working groups meet periodically to cross-functionally coordinate the strategy, targets, and performance of specific sustainability programs.

At the market level, dedicated sustainability coordinators help ensure that sustainability priorities are cascaded and programs are localized. Under central guidance, market coordinators meet monthly to ensure concerted effort and that progress is achieved and tracked in a consistent manner, including via KPIs derived from the PMI Sustainability Index.



Approach to sustainability programs

Our harmonized approach to designing and managing material sustainability topics is built on the following foundational elements:



The sustainability landscape is dynamic. We continuously update and strengthen our programs as knowledge improves, progress is made, or the relative importance of topics fluctuates.

Connectivity and trade-offs

Sustainability challenges do not exist in a vacuum. They are often linked, and we must consider their interdependencies—including the direction of causality and magnitude—as we craft appropriate strategies and develop programs to address our company’s impacts.

Where possible, we seek solutions that are mutually reinforcing. Addressing one topic may, however, limit how we tackle another. Necessary trade-offs often occur in the course of our business transformation.

Given the multifaceted and complex nature of sustainable development, trade-offs are inherent to decision-making. In some circumstances, we are compelled to make sacrifices in one sustainability area to obtain benefits in another, at least for a period.



Understanding our impacts and prioritizing ESG topics

A robust sustainability materiality analysis allows us to identify, assess, and prioritize ESG topics. By feeding findings from these regular assessments into our strategy, targets, KPIs, and reporting, we are able to keep pace with external and internal developments and ensure that our strategy addresses those areas in which we can have the most significant impact. Our [2021 sustainability materiality assessment](#) helped identify the ESG topics on which we should focus. In line with the principle of double materiality, the assessment consisted of a five-pronged approach that evaluated both outward and inward impacts and considered stakeholder expectations.

In addition to our formal sustainability materiality assessments, we keep abreast of trends by engaging continuously with stakeholders and external organizations (read more [here](#)). Further, our enterprise risk assessment considers ESG-related risks and opportunities and leverages the company’s sustainability materiality assessment process (read more [here](#)).

Additional targeted, topic-specific assessments—including, among others, climate risk and opportunities assessments, human rights impact assessments and saliency mapping, and product life-cycle assessments—complement our more holistic efforts.



Governance structures and policies

Integrating sustainability into our company relies on a formal governance and management structure with clear accountabilities at every level of the organization. Read more on the previous pages and in the reporting lines feature boxes in each of our eight impact sections.

Our business is governed by a set of policies and principles. Our [Code of Conduct](#) sets clear standards and expectations addressing key risk areas. It is complemented by a set of internal policies (called Principles and Practices), which provide more specific guidance on the various topics covered by the code (read more in the [Business integrity](#) chapter of this report).

Within the sustainability area, a set of thematic public commitments is available for download on [PMI.com](#). These commitments guide our work and express our view on specific issues considered critical from an environmental or social perspective. Read more in the policies and standards feature boxes in each of our eight impact sections.



Performance indicators and targets

Clearly articulating success via aspirations and targets and explaining how we measure progress is imperative. For internal and external stakeholders, this provides clarity on what we aim to achieve, visibility on the way forward, and ensures that we hold ourselves accountable.

Our complete set of sustainability-related performance indicators—alongside our respective goals, where applicable—can be found in the [Reporting and performance](#) section of this report and are available for download on [PMI.com](#).

In 2022, to enhance the robustness of our ESG data management and reporting, we undertook an extensive relevance review of all our reported ESG metrics. As part of this exercise, we evaluated the strength, validity, and maturity of the data reported.

We also assessed relevant developments, such as changes in business priorities, revised methods of measuring or capturing data, internal and external stakeholder feedback, and developments related to mandatory and voluntary reporting frameworks and standards.

We first categorized the full universe of our existing ESG indicators by type and use. This categorization allowed us to begin prioritizing our actions as we seek to increase the reliability of our ESG data, and lay the groundwork for future efforts.

Certain indicators align with the requirements of ESG reporting standards and frameworks or respond to the expectations of external ESG ratings and rankings. Others are bespoke KPIs that we developed to measure and report progress against our priority ESG topics where no external standard is available. Moreover, some indicators help us provide meaningful and consistent measurements of progress, while others complement our narrative reporting on a more ad hoc basis. Reviewing and categorizing our ESG metrics allowed us also to prioritize them, avoiding redundancies and focusing on our most relevant and reliable data points. The visual depicted on the next page showcases the criteria utilized to determine relevance and prioritize ESG data, and will act as a compass as we continue to fine-tune our internal processes and expand internal and external assurance.



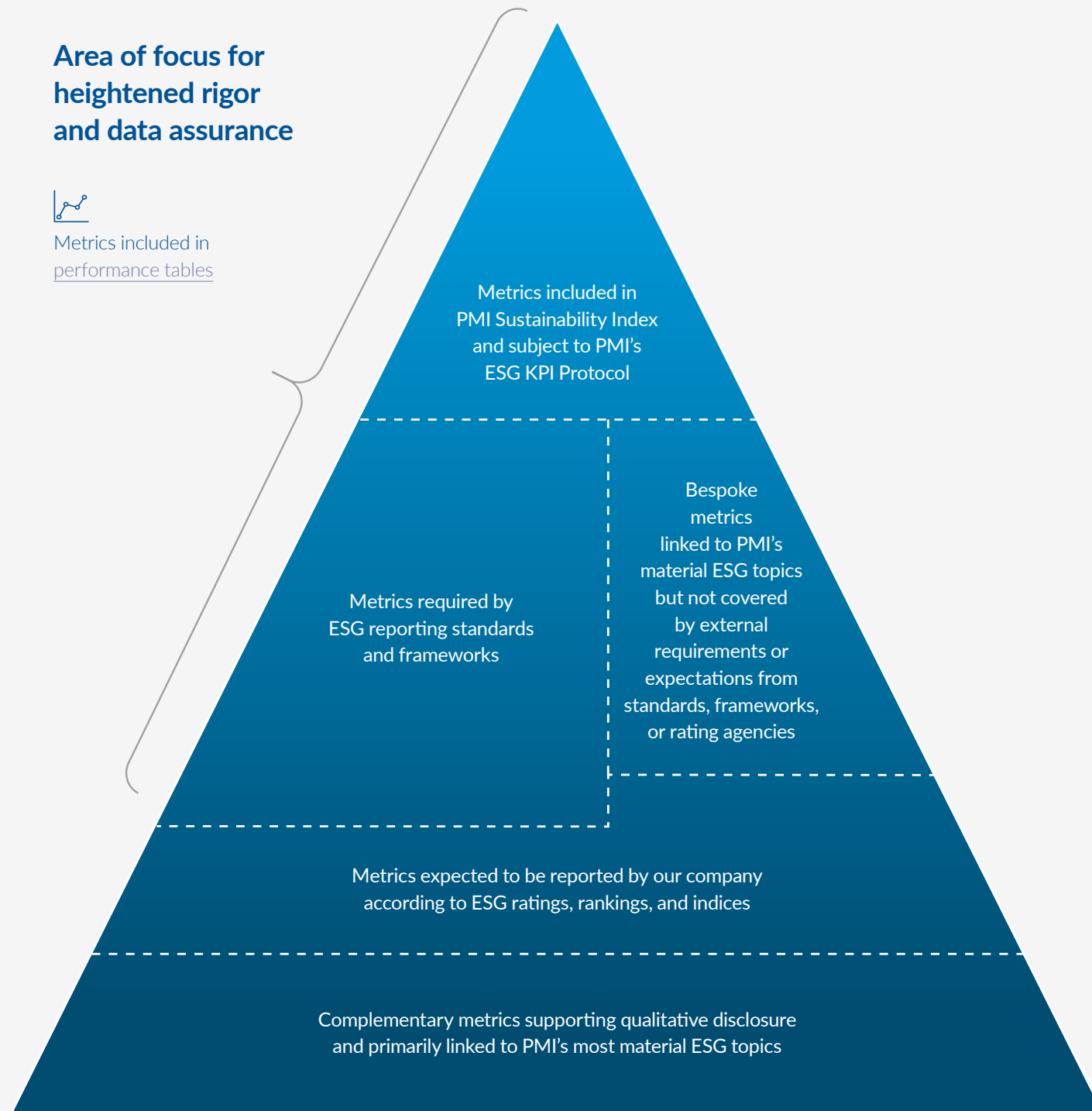


## ESG data relevance review

### Area of focus for heightened rigor and data assurance



Metrics included in performance tables



The ESG data relevance review, which started in 2022, has led, and will continue to lead, to a reduction in the number of KPIs included in this Integrated Report—and is expected to result in further reductions in subsequent reporting cycles. A tangible illustration of this can be seen in this year's Business Transformation Metrics, which we have streamlined to ensure that we focus on the most meaningful KPIs measuring transformation (read more [here](#)).

In 2022, we also strengthened our reporting on the 19 KPIs that constitute the PMI Sustainability Index. Notably, we worked with our Risk & Controls function to lay the groundwork for expanding the scope of external assurance to cover all KPIs included in the index. Together, we reviewed our internal standards and processes and sought opportunities to reinforce them where relevant. The result can be seen in our [ESG KPI Protocol 2022](#), which reflects updates to definitions and methodologies.



### Activities to deliver on our ambitions

We discuss activities in place to deliver on our ambitions throughout the eight impact sections of this report. These activities are carried out by a range of internal functions. For each topic disclosure, we clearly highlight reporting lines that demonstrate who has responsibility and accountability for each strategy.

One important commonality shaping the way we design and implement programs is our understanding that many of the challenges we face are systemic and cannot be addressed in isolation. Accordingly, we support and engage with a range of organizations and initiatives that seek to drive change. Learn more [here](#).

### Engaging our employees

Our employees are drivers of change and the ambassadors of our purpose. We seek to actively engage a broad range of employees through a variety of channels, including our internal sustainability hub, interactive social channels, training sessions and capability building, and global internal webcasts and events.

In 2022, we launched a series of employee challenges to impart knowledge, build awareness, and increase engagement with our sustainability strategy. We did this by incorporating learning, action, and sharing elements to drive active involvement. More than 2,000 employees across 42 markets participated in PMI's first Sustainability Challenge, which focused on how their individual actions can impact society and the environment. In September, a second sustainability challenge focused on post-consumer waste management, connecting externally with the International World Cleanup Day (read more in our Post-consumer waste section [here](#)).



### Reporting

Transparently reporting on governance, strategy, targets, programs, and metrics, for our ESG priorities helps us communicate progress in a structured way. We complement our annual integrated report with additional materials online, including reporting indices, case studies, and downloadable data, as well as dedicated disclosures that dive deeper into specific ESG topics. You can learn more about our approach [here](#) and visit our sustainability resources page [here](#) to learn more.



# Risk management

We designed our risk management and internal control practices to address significant or emerging strategic, external, inherent process, and project deployment risks that could undermine our ability to achieve our strategic business objectives and create value over time. Within this context, ESG-related risks and opportunities are considered as part of our risk management practices.

## Risk governance

PMI assigns ownership of each prioritized key risk area to a member of our Company Management. Furthermore, risk oversight is conducted by the full Board of Directors, as well as by Board committees in their respective areas of responsibility. Throughout the year, Company Management regularly updates the Board and its committees on the evolution of key risk areas. Our Enterprise Risk Management practices are designed to support Company Management and the Board in their respective roles and ultimately to ensure the adequacy of PMI's responses against each prioritized key risk area.

Additionally, as part of our risk management practices, PMI has established the Corporate Risk Governance Committee (CRGC), consisting of a subset of Company Management and other key leaders from the organization. The purpose of the CRGC is to identify and monitor developments in key risk areas and oversee the company's Governance, Risk Management, and Compliance (GRC) environment and strategy, including the establishment, maintenance, and enhancement of effective risk management and assurance capabilities within PMI.

The CRGC consists of senior executive officers, including the Chief Financial Officer, Senior Vice President and General Counsel, Chief Digital & Information Officer, Vice President & PMI Controller, Vice President Risk & Assurance, Chief Information Security Officer, and Vice President and Chief Compliance Officer, among others. In addition, the Chief Executive Officer and Vice President & Corporate Secretary are informed of any risk management observations or insights shared with the CRGC and participate in these meetings. The CRGC receives updates related to the Company's risk management and internal controls practices at least once per quarter.

## Risk management

Risk management is facilitated through periodic alignment of "first line" business, "second line" risk management and assurance, and "third line" Corporate Audit functions.

"First line" business functions are responsible for and own PMI's response to risk. They are business stakeholders who actively define and monitor their programs in response to strategic risks and leverage PMI's Risk Control Self-Assessment (RCSA) capability to identify, self-assess, and evaluate operational end-to-end process risks and the effectiveness of internal controls at an early stage.

Beyond the "first line" business functions, our risk management framework involves Risk & Controls, Ethics & Compliance, Information Security, and Data Privacy as "second line" risk and assurance functions. Additional contributors are risk specialist functions, such as Quality Compliance and Security & Market Safety. PMI's "second line" functions provide a combination of risk management, advisory, and assurance activities to assist management with having an effective and efficient response to risk in place. This includes our internal control environment.

As the overarching risk management function, Risk & Controls defines, develops, maintains, and executes against the established GRC environment, including the underlying Enterprise Risk Management (ERM) and Operational Risk Management (ORM) methodologies and practices.

Our "third line" comprises of Corporate Audit as an internal, independent audit function. Corporate Audit provides Company Management and the Audit Committee with objective assurance and advisory services designed to assess the adequacy and effectiveness of PMI's internal control systems and use of resources.

Taking a holistic approach, these functions collaborate to continuously identify, assess, and respond to evolving or emerging strategic, external, inherent process, and project deployment risks.

## Our risk management framework



## Risk assessment

The Risk & Controls function defines PMI's approach to risk management and coordinates a continuous enterprise-wide risk assessment, which brings together the business, risk management and assurance, and internal audit functions. We identify and prioritize key risk areas based on four dimensions: the impact of a risk on PMI were it to occur, its likelihood, its velocity, and its interconnectivity with other risks.

ESG-related risks and opportunities are considered within our enterprise-wide risk assessment, which also leverages the company's sustainability materiality assessment process. More specifically, the priority ESG topics identified by the latest sustainability materiality assessment determine which ESG risks and opportunities are considered in the enterprise-wide risk assessment. Moreover, we also progressively consider, among others, risks and opportunities that could have an impact on PMI's sustainability strategy and the achievement of performance targets linked to KPIs defined as part of the Sustainability Index.

**“By fully integrating ESG into our Enterprise Risk Management (ERM) and assurance programs, we are ensuring that our ESG efforts benefit from our strategic objective-centric risk management practices, including its structure, methodologies, technology, and processes. We are also deploying continuous efforts to elevate the rigor and robustness of our nonfinancial sustainability-related disclosures. Our seamless collaboration proves that together as a whole we are greater than the sum of each individual discipline on its own.”**

**Marie-Pauline Lauret**  
Vice President Risk & Assurance



## Specialized ESG-related risk assessments

To complement our continuous enterprise-wide risk assessment efforts and regular sustainability materiality analyses, we have various risk evaluation mechanisms in place to support the development of tailored strategies and responses for our priority ESG issues along our value chain. Focused on environmental and social issues, some of these assessments include human rights risks saliency mapping, product life-cycle assessments, and deforestation and water risk assessments. You can learn more about PMI's most recent climate risk and opportunities assessment and how we manage and govern significant climate-related risks and opportunities in our [2022 TCFD Report](#).

## Risk monitoring and compliance

Among other risk-monitoring activities (e.g., reviews, advisories, assessments), our technical procedures and internal controls over financial reporting comply with the Sarbanes-Oxley (SOX) Act 2002. Risk & Controls and our external auditors provide assurance on the design and operating effectiveness of these internal controls.

Our business, risk management, and assurance functions execute assurance-gathering activities beyond the scope of SOX, leveraging the defined library of global standard processes, risks, and internal controls to address inherent process risks.





In early 2023, we started repositioning and strengthening our Enterprise Risk Management (ERM) proposition, and combining all audit and assurance practices under one umbrella referred to as "Risk & Assurance".

Finally, we disclose PMI's material risk factors in our 10-K and 10-Q submissions to the U.S. Securities and Exchange Commission. Our latest submissions are available on [PMI.com](#).





# Product impact

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	Seek net positive impact in wellness and healthcare	p74
	Reduce post-consumer waste	p78



# Our aspirations

SI Sustainability Index

Maximize the benefits of smoke-free products

Maintain

>90%

Of shipment volume covered by markets with youth access prevention programs in indirect retail channels ⑤

2025

100

Number of markets where PMI smoke-free products are available for sale ⑤

>50%

Of markets globally where PMI smoke-free products are available for sale that are low- and middle-income markets ⑤

>40 m

Adult smokers globally who switched to PMI smoke-free products and stopped smoking

Purposefully phase out cigarettes

2025

>30%

Smoke-free product shipment ratio (smoke-free/total) ⑤

<550 bn

Combustible product shipment volume

>250 bn

Smoke-free product shipment volume

~40%

Reduction in our combustible product shipment volume versus 2015 baseline

>50%

Net revenue ratio (smoke-free/total) ⑤

Seek net positive impact in wellness and healthcare

2025

≥ USD 1 bn

Net revenues generated from wellness and healthcare products ⑤

Reduce post-consumer waste

Maintain

2023

70%

Effective recycling rate of our smoke-free electronic devices¹

2025

≥1 million

Smoke-free electronic devices refreshed or repaired (cumulative since 2021) ⑤

100%

Of smoke-free electronic devices introduced on the market as of the end of 2025 that have eco-design certification ⑤

100%

Of PMI smoke-free electronic device sales volume covered by the CIRCLE program²

80%

Effective recycling rate of our smoke-free electronic devices¹

CONSUMABLES

≥80%

Of shipment volumes covered by markets with anti-littering programs in place for combustible cigarettes ⑤

≥80%

Of shipment volumes covered by markets with end-of-life take-back programs in place for smoke-free consumables ⑤

PACKAGING

100%

Recyclable inner liners by year-end³

100%

Of packaging materials made with recyclable materials

95%

Of packaging materials coming from renewable sources

15%

Reduction of packaging materials weight versus 2018 baseline

Notes:  
Aspirations referring to smoke-free electronic devices exclude disposable products and non-PMI-designed devices.  
We plan to recalibrate our 2025 packaging aspirations as we plan for 2030, taking a fresh look at being impactful in an ever-changing environment.

- 1 The effective recycling rate is calculated based on the proportion of device sales volume covered by the CIRCLE program multiplied by the actual recycling rate of devices at the active CIRCLE hubs (weighted average), which includes actual recycling and energy recovery. Russia CIRCLE hub was discontinued in 2022 and is therefore excluded from the reported recycling numbers of 2022.
- 2 We plan to recalibrate this aspiration in 2023 to account for regulatory and market developments. In particular, as of 2023, depending on market circumstances (e.g., available waste treatment infrastructure and regulatory frameworks), collected devices may be considered covered by the CIRCLE program if they are either processed at our centralized CIRCLE hubs, through local e-waste streams, or by local recycling partners (under the governance of PMI central CIRCLE team to fulfill our standardized processing requirements and recycling rates performance).
- 3 For all markets where possible in compliance with local regulatory requirements.

Note: In 2023, we plan to evaluate our published aspirations to ensure they remain ambitious, reasonable, and achievable in the context of a dynamic and evolving smoke-free industry, and impacts of our recent acquisitions.





PRODUCT IMPACT

# Maximize the benefits of smoke-free products



At PMI, we are accelerating the end of smoking by making cigarettes obsolete. To that end, we are transforming our operations and value chain to develop, assess, and commercialize smoke-free alternatives that are scientifically substantiated to represent better alternatives than continued smoking.

INWARD IMPACT: The business case

Through our early and sustained investment in R&D and consequent leadership in technology and innovation, we have built a powerful position and competitive advantage in scientifically substantiated smoke-free products, which can help accelerate the decline in cigarette smoking.

By allocating the majority of our resources to the development and commercialization of smoke-free products we are accelerating our progress toward becoming a smoke-free company, and in doing so are building legitimacy and stakeholder trust. Moreover, it allows us to expand our market share in the nicotine space, increasing our current and future revenue base as we seek to encourage all adults who would otherwise continue to smoke to switch to smoke-free products—this includes the estimated 130 million adult smokers of our cigarette brands, as well as the hundreds of millions of adult smokers who buy competitor brands. Further, our smoke-free product consumables drive higher net revenues per unit than cigarettes, with accretive product contribution per unit already helping to generate attractive returns on our significant upfront and ongoing investments in developing the smoke-free category.

It is critical to us to avoid that the marketing and sales of our products could discourage complete nicotine use and smoking cessation, encourage the initiation of nicotine use, or be of particular appeal to unintended audiences (including youth). Disregarding this would undermine our credibility, harm our reputation, and potentially trigger adverse regulation, hampering our ability to achieve a smoke-free future as fast as possible.

OUTWARD IMPACT: The right thing to do

The best thing is to never start smoking. For those who do smoke, their best course of action is to quit tobacco and nicotine use altogether. However, many do not. Those adult smokers who would otherwise continue to smoke should have access to nicotine-containing alternatives that are scientifically substantiated to be less harmful than continuing to smoke. Scientific and technological innovation have made such solutions available today. The vast majority of harmful compounds found in cigarette smoke and associated with smoking-related diseases are generated by combustion. Nicotine-containing products that do not involve combustion (smoke-free products), such as e-vapor, oral nicotine, and heated tobacco products, while not risk-free, could present a much better alternative than continued smoking.

For adults who would otherwise continue to smoke, scientifically substantiated smoke-free products indeed represent a significant opportunity, as switching to these products has the potential to reduce the risk of developing smoking-related diseases versus continued cigarette smoking. Seizing this opportunity to achieve a public health benefit depends not only on the scientifically substantiated risk-reduction profile of these products, but also on adult smokers successfully switching to smoke-free products and stopping smoking cigarettes. It is therefore critical that smoke-free products are made available to all adult smokers, that adult smokers be informed of their existence and understand their benefits, that they find them acceptable, and that they can afford to buy them.

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## Management approach

In order to maximize the benefits of our smoke-free products to individual smokers and the population as a whole, we deploy a three-fold approach.

Firstly, we focus on researching and developing less harmful alternatives to continued cigarette smoking for the benefit of adult smokers who would otherwise continue to smoke. It is vital that the health risk profile of these smoke-free products be thoroughly assessed and scientifically substantiated. Our research program is inspired by long-held practices of the pharmaceutical industry and is in line with the draft guidance from the U.S. Food and Drug Administration (FDA 2012) for Modified Risk Tobacco Product (MRTP) applications. We follow scientific standards, including the Good Laboratory Practices (GLP) and Good Clinical Practices (GCP). Our assessment program covers a wide range of areas, pre- and post-market. It focuses on product development, laboratory clinical research, perception and behavior, and monitoring the in-market use of the smoke-free products we commercialize.

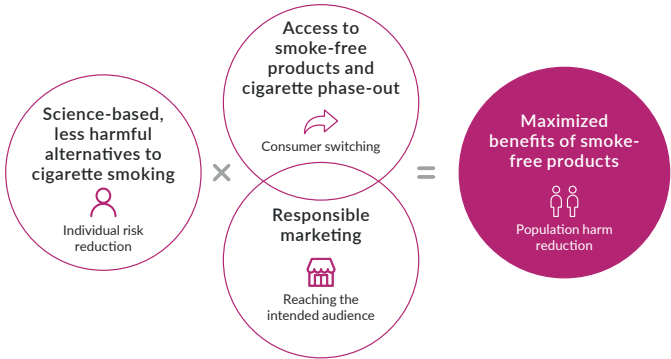
Secondly, we work to ensure that adult smokers have access to and successfully switch to smoke-free products, which can help accelerate the decline in smoking prevalence. By “access”, we mean:

- **Awareness:** Adult smokers are conscious that smoke-free products exist and understand the benefits of switching to them (relative to continued cigarette smoking)
- **Acceptability:** Smokers who would otherwise continue to smoke consider smoke-free products an adequate and viable alternative to cigarettes
- **Availability:** Smoke-free products are conveniently attainable and for sale to adult smokers
- **Affordability:** The cost of smoke-free products is reasonable, to enable smokers to acquire them, facilitating switching

In this context, an essential element to maximize availability, awareness, acceptability and affordability is a regulatory framework that allows smoke-free products to be sold in a particular market, permits engagement with adults who smoke to heighten their understanding, and facilitates smoke-free portfolio expansion in order to improve both acceptability and affordability.

Thirdly, we deploy responsible marketing and sales practices to propel our smoke-free vision while minimizing the risk of unintended consequences, such as youth access, to our products.

Our commercialization activities across the world are guided by applicable laws and by a set of core principles (read more [here](#)).



Management

Developing, improving, and assessing smoke-free products is a cross-functional responsibility jointly headed by our Chief Life Sciences Officer, Chief Product Officer, President of Smoke-Free Inhaled Products and Chief Consumer Officer, and President Oral Smokeless, who are members of PMI's Company Management.

Our President of Smoke-Free Inhaled Products and Chief Consumer Officer and President of Smoke-Free Oral Products & CEO Swedish Match oversee PMI's smoke-free products growth trajectory, fostering consumer centricity and leveraging the strengths of our markets and regions. Their teams work hand-in-hand with many other business functions within PMI to support the responsible expansion of smoke-free products worldwide and ensure the deployment of all smoke-free product marketing and sales activities occur in accordance with PMI's Marketing Codes.

PMI's policies and standards

- [PMI Science: Our Standards](#)
- [Marketing Code for Non-Combusted Alternatives](#)
- [Marketing Code for Combusted Tobacco Products](#)

Maximize the benefits of smoke-free products

Purposefully phase out cigarettes

Seek net positive impact in wellness and healthcare

Reduce post-consumer waste





# Progress in 2022

## Highlights

We initiated the largest and most comprehensive clinical study program investigating whether switching to our leading heated tobacco product, IQOS, reduces the harm and risk in adult smokers who have already developed a specific smoking-related disease.

We improved access, by expanding our smoke-free portfolio increasing acceptability, affordability, and availability, thanks to the geographic expansion of our flagship heat-not-burn product IQOS ILUMA, as well as by offering broader choice for devices and taste options for consumables. We kept improving user experience via personalized engagement, and removing potential price barriers by offering various lower-priced options, with lil introduced by IQOS, the launch of BONDS by IQOS, our latest heat-not-burn tobacco heating system, and VEEBA, a disposable e-vapor product.

In November 2022, we acquired Swedish Match, a market leader in oral nicotine products; by joining forces, we expect to accelerate the achievement of our joint smoke-free ambitions, enabling more adults who would otherwise continue to smoke to switch to better alternatives faster than either company could achieve separately.

## Developing science-based alternatives to cigarettes

Since 2008, PMI has invested USD 10.7 billion in research, product development, production capacity, scientific substantiation, and perception and behavior studies, with the aim of maximizing the benefits of smoke-free products and advancing tobacco harm reduction.

### PMI's scientific assessment of smoke-free products

We continued to dedicate almost all of our R&D expenditure (99 percent in 2022) to noncombustible products, which include smoke-free and wellness and healthcare products.

## Challenges

The geographic expansion to make our smoke-free products available in more markets was slower than previous years, mainly as a consequence of supply chain disruptions linked to the war in Ukraine, continued work on obtaining appropriate regulatory and fiscal frameworks in markets to be able to launch successfully, and a focus on rolling out our flagship heat-not-burn product IQOS ILUMA.

We incurred certain inefficiencies and limits on the availability of IQOS ILUMA consumables, due to the cancellation of production in Russia, as we converted and transitioned capacity from blade to induction technology, in response to IQOS ILUMA success.

We entered new product spaces and responsibly launched nicotine pouches and e-vapor disposables, two product lines that are important additions to our smoke-free portfolio and help adult smokers, who would otherwise continue to smoke, make the switch. These products, however, have historically raised various concerns related to environmental and social impacts, including responsible marketing practices, which are critical but not always adequately regulated or enforced. We are committed to address these concerns by setting the market standard with our responsible marketing practices, working with other market players to encourage them to follow the same approach, as well as proactively engaging with regulators to adequately regulate and enforce regulations, with particular focus on youth access prevention.

As of year-end 2022, our R&D work and its associated innovations have resulted in around 2,500 patents granted for smoke-free technologies by the five largest intellectual property offices in the world (IP5).

PMI's smoke-free product portfolio currently includes heat-not-burn products, nicotine-containing e-vapor products, and oral nicotine products. As these products do not involve combustion, they generate significantly lower levels of toxicants compared with cigarettes and are better alternatives for those adults who would otherwise continue to smoke.

We conduct rigorous scientific studies to substantiate the harm reduction potential of our smoke-free products compared with continued cigarette smoking, including systems toxicology, preclinical, clinical, and perception and behavior assessments. Our most thoroughly assessed smoke-free product is the IQOS tobacco heating system, and other smoke-free products are at various stages of development and scientific assessment.

### Our scientific research

Our scientific assessment is built on a collaborative approach and expertise in multiple fields such as chemistry, biology, informatics, and medicine. Since 2015, we have completed a total of 251 toxicological assessment studies, 26 clinical assessment studies, and 58 perception and behavior premarket and post-market (surveillance) studies on smoke-free products. Our scientific results are available on [PMLscience.com](https://pmlscience.com). Further, our scientific booklet, which is periodically updated and available [here](#), provides the most up-to-date findings on our assessment program.



The results of our studies are publicly available on our dedicated scientific website [PMLscience.com](https://pmlscience.com), published in peer-reviewed scientific publications, and have been submitted to numerous regulatory authorities, including the U.S. Food and Drug Administration (FDA).

Post-market studies are necessary to continue building our confidence in the harm reduction potential of switching to smoke-free products compared with continued smoking and, over time, to quantify the reduction in morbidity and mortality through epidemiology. In 2022, we initiated new clinical studies involving our leading heated tobacco product IQOS. These studies are part of a program that will examine clinically relevant health changes in adult smokers who have already developed a specific smoking-related disease to determine whether switching from cigarettes to heated tobacco products can slow the progression and improve symptoms thanks to the significant reduction in exposure to harmful toxicants versus cigarette smoke.

In addition to scientific assessments in controlled environments, such as clinical studies, evidence collected from the real world helps researchers understand the uptake, use, and health effects of a product in real-life settings. We found that the launch of heated tobacco products in Japan (the country with the highest use prevalence of these products to date) was temporally associated not only with a reduction in cigarette sales but also a decrease in hospitalization rates due to chronic obstructive pulmonary disease (COPD) exacerbation and ischemic heart disease.<sup>1</sup> Further analysis using real-world data from South Korea has confirmed the results in regards to a temporal association between the introduction of heated tobacco products and COPD exacerbation reduction.

Analyses from Czech Republic, Italy, and Lithuania are being performed to confirm the Japanese and South Korean results and will be available in 2023. Read more about our research in Japan in our [16th Scientific Update](#), issued in September 2022.

Independent researchers have also reported positive findings associated with the use of heated tobacco products. A study by Choi et al.<sup>2</sup> for instance showed that compared with those continuing smoking, men using non-combustible nicotine products had a reduced risk of developing cardiovascular disease. Additionally, a study by Fagerstrom<sup>3</sup>, indicated that countries with high adoption of alternative nicotine products (such as heated tobacco products and e-cigarettes) have been able to achieve lower smoking rates. These findings suggest that adoption of alternative nicotine products may help to reduce smoking prevalence faster than traditional tobacco control measures solely focused on prevention and cessation.

As next steps, we are evaluating the impact of switching to heated tobacco products on developing incident disease in a long-term prospective epidemiological study as well as assessing frequency of product use and possibly the influence of switching to heated tobacco products on disease progression using a real-world database. We will continue to gather and evaluate real-world data, in particular, epidemiological data from long-term follow-up studies, that include information on other variables that might impact the risk of developing smoking-related diseases, such as as lifestyle or other environmental factors.

The totality of the evidence available to date on our smoke-free products, including both experimental data and emerging real-world evidence, points firmly in the direction of harm reduction.

### Growing external scientific consensus

We welcome and encourage independent research on our products, methods, and results. Over the past several years, a growing number of organizations and institutions have initiated or completed studies on our smoke-free products, or on the methods and results surrounding them. These include public health institutions informing policy and regulation in several countries, as shown [here](#). The independent studies we are aware of that are published around PMI's smoke-free products or our methods and results are discussed on [PMLscience.com](https://pmlscience.com). In general, these studies confirm important elements of PMI's results. However, some research has approached the data differently, has methodological differences, or overstates conclusions.

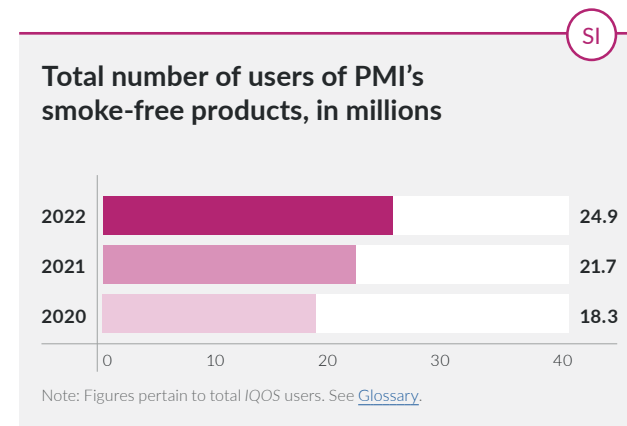
1 Observational time-trend analysis looking at temporal associations and not designed to assess cause and effect. Specific factors associated with changing hospitalization rates over time have not been fully analyzed. Subject to inherent limitations of ecological analysis.  
2 Reference: Combined Associations of Changes in Noncombustible Nicotine or Tobacco Product and Combustible Cigarette Use Habits With Subsequent Short-Term Cardiovascular Disease Risk Among South Korean Men: A Nationwide Cohort Study – [PubMed \(nih.gov\)](#)  
3 Reference: Can alternative nicotine products put the final nail in the smoking coffin? – [PubMed \(nih.gov\)](#)



## Broadening access to smoke-free products

The public health benefit resulting from the introduction of smoke-free products in the marketplace depends not only on their potential to reduce the individual risk of smoking-related disease versus continued smoking but also on their actual use by adult smokers who would not quit smoking. To the extent possible, we deploy relentless efforts to improve and increase consumer awareness, as well as the acceptability, availability, and affordability of our smoke-free products.

As of the end of 2022, 24.9 million adults were using our smoke-free products worldwide, of whom we estimate 17.8 million had switched to these products and stopped smoking.



### INCREASING AWARENESS

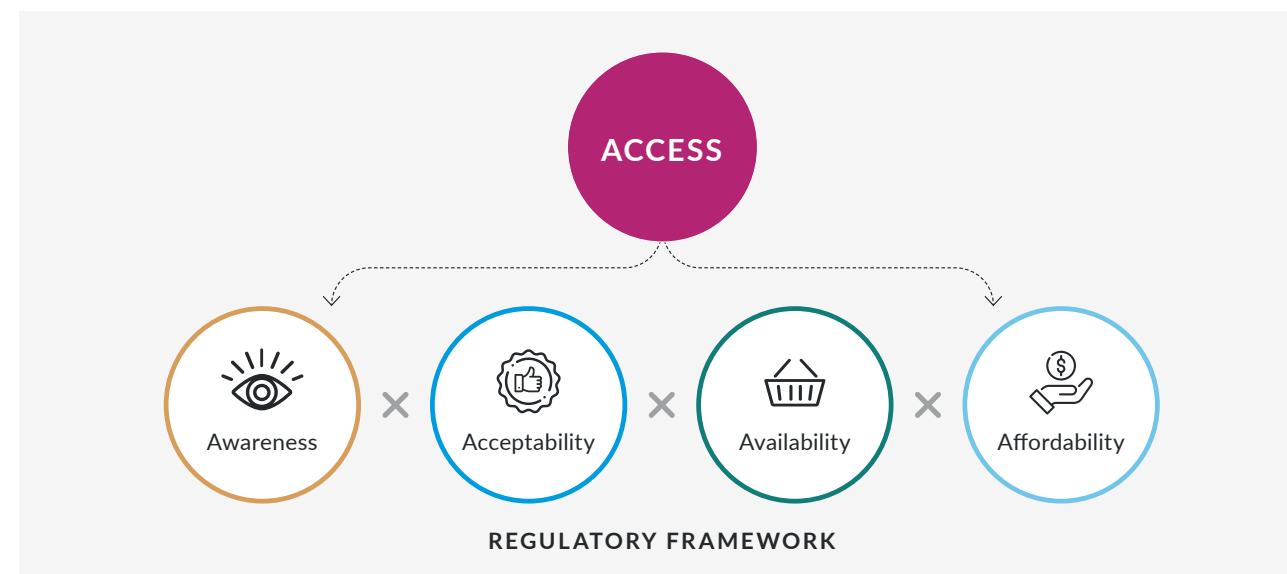
Adults who would otherwise continue to smoke should understand the risks and benefits of switching to our smoke-free products compared with continued cigarette use. They also need to understand that quitting tobacco and nicotine altogether is the best option and that smoke-free products are not risk-free and contain nicotine, which is addictive.

As of the end of 2022, we estimate that around 29 percent of the adult smokers in the markets in which PMI commercializes IQOS were aware of the product's features and benefits compared with cigarette smoking. While this represents an increase on the previous year (2021: 25 percent), it is clear that the lack of information about—and awareness of—smoke-free products still presents a big hurdle to achieving tobacco harm reduction.

#### Informing the general public about the smoke-free category

Confusion about basic concepts underpinning the category of smoke-free products leads to misunderstandings about the harm reduction potential of scientifically substantiated smoke-free alternatives for adults who would otherwise continue to smoke, and slows down progress in the decline in cigarette smoking prevalence.

We seek to improve awareness of the smoke-free product category among the general public, enhance understanding of key concepts underpinning it—such as the role of combustion, nicotine, tar, and harm reduction—and address widespread misconceptions about smoke-free products.



To this end, we deploy “[Unsmoke](#),” a global corporate communications campaign, across various online and offline channels. The campaign's core message is simple: Those who don't smoke or use nicotine products should not start; the best option for adult smokers and users of smoke-free products is to quit tobacco and nicotine products altogether; but for those adults who don't quit, smoke-free alternatives are a much better choice than continuing to smoke.

#### Communicating and engaging with adult consumers

We engage with adult smokers with the aim to improve their understanding of the smoke-free product category. We also seek to enhance their knowledge of the existence of smoke-free products, the associated benefits and relative risks compared with continued smoking, and proper product use. We do so in several ways.

For instance, we deploy consumer-centric branded campaigns aimed at motivating adult smokers to consider switching while making it clear that quitting tobacco and nicotine use altogether is the best choice. These campaigns also aim to explain the smoke-free category and the harm reduction potential that switching represents.

Another way we engage with adult smokers is via our cigarette packaging, where permitted. JustScan is a mobile digital platform that allows adult smokers to access online content by scanning a QR code or using a weblink typically featured on the cigarette pack itself or on an insert. In markets where smoke-free products are available, we leverage JustScan to drive awareness and support conversion to these products by providing adult smokers with access to tailored content. In 2022, we expanded our JustScan touchpoints from cigarette packs only to communication materials placed in indirect retail points of sale and other locations, such as hotels, restaurants, and cafes. This allowed us to reach approximately 1.3 million adult consumers across 36 markets globally, increasing awareness of the existence of our smoke-free products and explaining their potential benefits compared with continued smoking. Engagement via JustScan proved successful, with over 40 percent of adult smokers who accessed it (subject to age-gate process) demonstrating interest in receiving more information or trying the smoke-free products.

We plan to continue expanding efforts on such digital communication channels and, where legally permitted, to leverage on-pack communications, in order to double the number of adult smokers reached in the years to come.

Our shift to a more consumer-centric and increasingly B2C commercialization model with direct routes to adult smokers (including our own stores and e-commerce channels) allows us to explain our products, their features, and their risks and benefits compared with continued smoking. It also enables us to feed adult smokers' perspectives back into our processes and product development.



### STRIVING FOR HIGH PRODUCT ACCEPTABILITY

Consumer acceptance of better alternatives to continued cigarette smoking is a critical component in our effort to move away from cigarettes entirely. Even the product with the lowest level of risk would not bring any benefit to adult smokers and public health if adult smokers did not switch to it.

We conduct post-market studies to understand how our smoke-free products are used, helping us evaluate their acceptance among adult users. In particular, by conducting repeated studies in 55 countries among adult users of our heated tobacco products, involving in total about 67,000 participants per month, we have been able to measure their use patterns over time.

We consider conversion a critical indicator of whether our smoke-free products meet consumer expectations. The conversion rate is the percentage of adults who switch to our heated tobacco products and stop smoking cigarettes versus total adult users.<sup>1</sup> In 2022, the global average full conversion rate for our main smoke-free product, IQOS, was approximately 70 percent.<sup>2</sup>

<sup>1</sup> Considering that individual consumption of PMI heated tobacco units represents the totality of their daily tobacco consumption in the past seven days or, for markets where there are also competitors' heated tobacco products, at least 70% of their daily individual consumption is with PMI heated tobacco products. See [Glossary](#).  
<sup>2</sup> The 2022 global average conversion rate excludes Russia and Ukraine.





### Expanding our smoke-free portfolio

Our product development is driven by consumer needs and expectations, as well as by a reduced-risk profile based on the absence of combustion. These are two key components of consumer acceptance.

No single product will address the individual preferences of all adult smokers. We are therefore delivering a multi-category portfolio of better, science-based alternatives to cigarettes offering a wide variety of user experiences, technologies, tastes, and price options for adult smokers who would otherwise continue to smoke cigarettes.

In 2022, we continued expanding our smoke-free product portfolio, with the scale-up of *IQOS ILUMA*, a revamp of *IQOS* (*IQOS Originals ONE* and *Originals DUO*) and the launch of two new products: *BONDS* by *IQOS* and *VEEBA*. These products complement our existing offering of heated tobacco, e-vapor, and oral nicotine products.

*BONDS* by *IQOS* is PMI's latest heated tobacco smoke-free device that heats tobacco via resistive external heating, with no blade. It is compact, easy-to-use, and affordable (read more [here](#)).

*VEEBA* is an all-in-one pocket-sized disposable vaping device, which requires no charging, no cleaning, and no refilling. We believe that the convenience of *VEEBA* can play a significant role in encouraging adult smokers to try an alternative to smoking and engage in a conversion journey to smoke-free products. Read [here](#) how we seek to minimize the environmental impact of *VEEBA* end-of-life disposal.

Finally, at the end of 2022, PMI acquired Swedish Match, a global leader in oral nicotine products. This will further increase the acceptability of our smoke-free value proposition, as we expand our presence into the oral smokeless category in harmony with changing consumer trends and in line with a strategy that contributes to a world without cigarettes.

### A look inside our smoke-free products

In December 2022, we published our [17th Scientific Update](#), which provides an overview of PMI's range of smoke-free products, discusses the introduction of oral nicotine products to our offering and the available science on this category of products, and shows how heated tobacco units are made to heat rather than burn tobacco.

### The role of flavors and nicotine in smoke-free product acceptability

For a smoke-free product to be successful in reducing the risk of harm compared with continued smoking, the product must present less risk compared with the risk profile of a cigarette (or other combustible tobacco product), and it must be an acceptable alternative for current adult smokers (so that full switching occurs). The responsible use of flavors as well as nicotine are important factors in helping adult smokers make the switch.

The difference in taste between smoke-free products and adult smokers' preferred cigarette brand can often be an obstacle to fully converting those adult smokers to smoke-free alternatives. Flavors play an important role in helping adults who do not quit tobacco and nicotine use altogether to move away from cigarettes and prevent relapse to smoking. Our smoke-free portfolio encompasses various flavored options to cater to the preferences of adult users and increase their acceptability as an alternative to continued smoking.

In order to increase acceptability with flavor offerings, while also minimizing appeal to unintended audiences, including youth, PMI is committed to use—and communicate about—flavors and product features responsibly, and we have a central governance process in place under which all new flavored product variants are evaluated prior to commercialization (read more about youth access prevention [here](#)).

Our smoke-free product portfolio is composed of products that provide nicotine in a significantly less harmful way than via smoking. They are not risk-free and contain nicotine, which is addictive but not the primary cause of smoking-related diseases. Read more about nicotine [here](#).

### Supporting adult smokers to switch to smoke-free products—leveraging consumer programs through a strong B2C partner ecosystem

In addition to product characteristics, it is essential that we have the right infrastructure in place to support adult smokers along every step of their journey toward smoke-free products and away from cigarettes.

We seek to continuously strengthen the ecosystem through which we engage with our consumers, following rigorous age verification. We have a set of programs accompanying consumers along their journey. Some programs provide support in the initial discovery phase of our portfolio (for example, offering the opportunity for adult smokers to book an appointment at an *IQOS* store or with a remote *IQOS* coach to learn more about our products); our guided trials and lending offering provide the possibility to try our products; loyalty schemes allow consumers to bond with our brands and facilitate their commitment to our smoke-free alternatives; and our recently launched trade-in program allows consumers to give back their old device in exchange for purchase of a newer version with a discount, so that they can benefit from our latest technologies.

Consumer programs are deployed in a holistic retail channel ecosystem, allowing our consumers to conveniently find and purchase their product. This ecosystem encompasses our exclusive brand direct retail touchpoints (including permanent PMI-owned *IQOS* boutiques, stores, and islands worldwide, as well as temporary touchpoints), our *IQOS.com* website and third-party e-commerce such as marketplaces (where allowed by regulations), 48 consumer call centers where adult users can contact us if they have questions about using our products, as well as thousands of indirect retail touchpoints worldwide, and *IQOS* partners (indirect retail stores and shop-in-shop formats with extended experiences and PMI brand presence).

Digital capabilities also help us serve adult consumers more efficiently and engage with them in a more personalized fashion, via a specific electronic customer relationship management (eCRM) conversion journey based on adult consumer needs and interests.

**Technology**  
Tobacco-free, smoke-free nicotine pouches

**Nicotine source**  
Nicotine containing pouch designed for oral use

**Technology**  
Heats tobacco without burning it

**Nicotine source**  
Uses real tobacco, nicotine naturally present in tobacco

**Technology**  
*IQOS VEEV* / *VEEV* uses *MESH™* heating technology  
*VEEBA* uses wick and coil technology

**Nicotine source**  
No tobacco, nicotine added in e-liquid



*III HYBRID* combines heated tobacco and liquid technologies



EXPANDING PRODUCT AVAILABILITY

Our ability to make our smoke-free products available for sale to adult smokers depends on several factors—including some beyond our control—that dictate our capacity to scale and legally commercialize our products in certain markets.

Advocating for contemporary tobacco control policies and risk-proportionate regulation

Tobacco and nicotine product marketing and advertising are subject to extensive restrictions worldwide, including outright bans in some countries. This regulatory environment limits our ability to increase access, as it makes it difficult or sometimes impossible to enter a market (by banning the sale of smoke-free products) or, even if present in a market, restricting our chances to raise awareness among adult smokers that better alternatives to cigarettes exist and are available so that they could decide to switch if they do not quit tobacco and nicotine altogether.

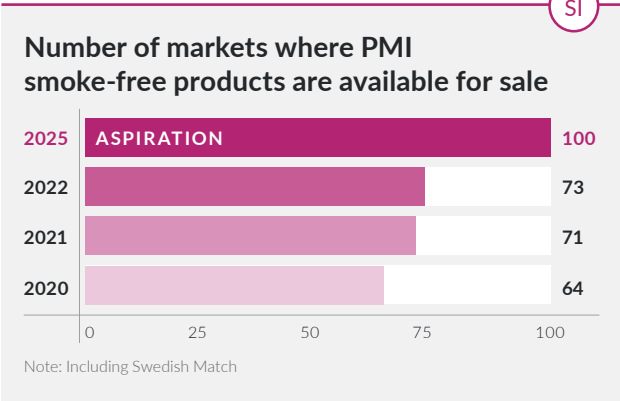
Encouragingly, we have witnessed growing scientific and regulatory consensus supporting science-backed smoke-free products. An increasing number of governments now complement traditional tobacco control measures (i.e., those intended to discourage smoking initiation and encourage cessation) with a harm reduction approach (i.e., providing adults who would otherwise continue to smoke with access to scientifically substantiated smoke-free alternatives). Visit [PMI.com](https://www.pmi.com) for an overview of significant regulatory developments in recent years.

We engage with governments, regulators, and legislators to support the development of differentiated legislation and regulations that will enable adult smokers to be aware of different nicotine-containing products and their corresponding risk profiles compared with continued smoking. In addition, we support regulation that helps accelerate switching to maximize the benefits of smoke-free products while minimizing the risk of unintended consequences, like access and use by unintended users, including minors and nonsmokers.

We believe regulation should continue to dissuade smoking initiation and encourage cessation. However, we are also convinced that sensible, risk-based regulation of smoke-free products, combined with further restrictions on cigarettes (and other combustible tobacco products), can encourage behavioral change, prompting adult smokers who would otherwise continue to smoke to switch to less harmful alternatives and therefore helping to minimize the harm caused by smoking more effectively than only the traditional regulatory measures.

Making our smoke-free products available in an increasing number of markets

As of year-end 2022, our smoke-free products were available for sale in 73 markets<sup>1</sup> either in key cities or nationwide (2021: 71). We aspire to expand our footprint to make them available in at least 100 markets by 2025.



Our geographic expansion to make our smoke-free products available in more markets was slower than previous years, mainly as a consequence of supply chain disruptions linked to the war in Ukraine and continued work on obtaining appropriate regulatory and fiscal frameworks in markets to be able to launch successfully.

We instead focused on expanding the availability of our different smoke-free products in 2022—and notably our flagship heat-not-burn product *IQOS ILUMA*. While we incurred certain inefficiencies and limits on the availability of *IQOS ILUMA* consumables as we converted and transitioned capacity from blade to induction heated tobacco products in response to the success of *IQOS ILUMA* and the cancellation of *IQOS ILUMA* consumables production in Russia, we made the product available across an increasing number of markets. By year-end, *IQOS ILUMA* was available in 16 markets (2021: 3), while our e-vapor products, including *IQOS VEEV* and *VEEBA*, were commercialized in 12 markets (2021: 7).

1 Including Swedish Match.

Unlocking the opportunity for IQOS in the U.S.

In October 2022, we announced an agreement with Altria Group, Inc. to end the companies' commercial relationship covering *IQOS* in the U.S. as of April 2024. Thereafter, PMI will have full rights to commercialize *IQOS* and other smoke-free products in the U.S., providing a clear pathway to reach the estimated more than 30 million Americans who currently smoke cigarettes.<sup>1</sup> We view *IQOS* as a very substantial growth opportunity in the U.S. smoke-free market. The opportunity for *IQOS* in the U.S. is particularly significant given the clear demand from American adult smokers for credible smoke-free alternatives to cigarettes, and the limited success to date of current offerings to enable adult smokers to fully switch away from cigarettes. Furthermore, in the U.S., there are ample opportunities to build adult smoker awareness and understanding of smoke-free products, something that is particularly true for *IQOS* given its Modified Risk Tobacco Product (MRTP) authorizations, allowing the product to be marketed in the U.S. with reduced exposure claims.

1 Source: Centers for Disease Control and Prevention.

Beyond external factors, such as the regulatory landscape, the rate at which we can roll out smoke-free products globally depends on certain internal constraints. Notably, we must evaluate the commercial viability of launching smoke-free products based on the size and capacity of our local organizations across the 175 markets in which our products are present, and prioritize internal resources adequately.

Further, our ability to manufacture smoke-free products at scale requires significant investment in our production capacity to build new factories or convert existing cigarette factories, and modernize our production lines as we launch new products. By the end of 2022, including Swedish Match and Vectura Fertin Pharma, 24 of our 53 factories were either partially or fully dedicated to the manufacture of our smoke-free products. Among them, eight factories produced heated tobacco units and two factories produced other smoke-free consumables. The Swedish Match acquisition expanded our manufacturing footprint with the addition of 14 owned manufacturing facilities, which are primarily engaged in the production of smoke-free products.

Increasing availability within each market

In addition to international expansion, it is essential that we ensure that our smoke-free products are conveniently available to adult consumers within the markets in which we have launched. We seek to do this by leveraging a variety of retail channels, including:

- Direct retail channels, such as brand retail locations (e.g., *IQOS* stores) and e-commerce websites (where permitted). As of the end of 2022, there were over 1,800 direct retail touchpoints (including 285 permanent PMI-owned *IQOS* boutiques and 140 temporary touchpoints) worldwide, and we have e-commerce sites for our smoke-free products in 60 markets (2021: >1,700; 274; 55).
- Indirect retail channels, such as tobacconists, convenience stores, gas stations, consumer electronic stores or vape stores, and online channels. Some of these only sell smoke-free consumables, others allow consumers to purchase smoke-free devices, and others—called “*IQOS* partners”—offer consumers a wide range of services and experiences, including product trials. As of the end of 2022, there were 3,300 *IQOS* partners worldwide and approximately 848,000 points of sale at which our smoke-free product consumables were sold (2021: 3,610; 812,000).





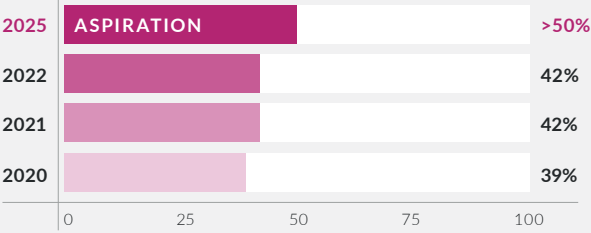
## ADDRESSING PRODUCT AFFORDABILITY

In addition to increasing the availability of smoke-free products across markets, we must also ensure that our portfolio includes products that are affordable to all adult smokers, including those with lower purchasing power, in each market so that price is not a barrier to switching from cigarette smoking. Our vision of a smoke-free future can only materialize if all adult smokers can afford to switch to better alternatives and actually do if they don't quit.

This means deploying inclusive solutions to meet the needs of different segments of the population, accounting for the economics of smoke-free products—which are significantly different from those of cigarettes.

We have set a 2025 ambition for at least 50 percent of the markets where we commercialize our smoke-free products to be low- and middle-income markets. As of the end of 2022, our smoke-free products were available in 30 low- and middle-income markets, or 42 percent of the markets where we commercialize them globally (2021: 29; 42 percent).

**Proportion of markets where PMI smoke-free products are available for sale that are low- and middle-income markets**



Note: Excluding PMI Duty Free. World Bank report issued in July 2022 is used on a comparative basis for income level classification. For definition of low- and middle-income markets, see [Glossary](#).

### Devices

Some of our smoke-free products—such as our heated tobacco products—require the use of electronic devices together with consumables. These high-quality devices rely on innovative technologies and involve significant development and production costs to ensure that they meet our science-based harm reduction objectives.

To alleviate the cost barrier that some adult smokers who would like to switch may experience, we deploy various solutions, such as:

- Lending or refund: Initial provision of the device so that consumers can try the product for a defined period before paying the full upfront price, and refunding when consumers return the purchased device depending on conditions
- Payment in installments: We are piloting “buy now pay later” solutions in certain markets where purchase barriers can hinder the access to our smoke-free products
- Second-life: Remarketing of used products collected and refreshed or repaired following stringent standards (read more [here](#))
- Extended life: Enhanced longevity of devices, which lowers the average annual cost for the user while also improving the ecological footprint of our devices (read more [here](#)). Further, an extended set of free support services is available in boutiques, flagship stores and authorized partners, such as professional cleaning of devices, airflow checks, and firmware upgrades. Our contact centers assist consumers with their devices and ensure that their purchase is complemented by a best-in-class after-sale support.

In addition, our diversified portfolio of products offers different price points to facilitate access to scientifically substantiated heated tobacco products for consumers in the low- and middle-income segments irrespective of their income.

A milestone in that regard was the launch at the end of 2022 of *BONDS* by *IQOS* in the Philippines and Colombia. This device offers an opportunity to address consumer acquisition barriers for these segments, including affordability and taste satisfaction, in addition to also serving existing *IQOS* users.

In parallel, we expanded the commercialization of *lil SOLID 2.0* introduced by *IQOS* in five new European markets in 2022, a sign that our efforts to decrease the purchase barriers for our devices are not only limited to low- and middle-income markets, but can also cater to price-sensitive consumers in developed geographies.

### Smoke-free consumables

Our smoke-free consumables are of three types: those that can be used without a device (e.g., nicotine pouches), those that require a device (e.g., heated tobacco units or e-liquid cartridges), and those that are all-in-one (e.g., our disposable e-vapor product). Their price plays an important role in determining consumer affordability.

The recommended price of our consumables depends on R&D, production, compliance, and commercialization costs, as well as the excise taxation regime in the countries where they are sold.

Looking at our most broadly available product, *IQOS*, product costs of the heated tobacco units are, on average, somewhat higher than those of cigarettes, due to additional R&D, manufacturing, and commercialization costs. However, another factor driving tobacco and nicotine product retail price is the excise tax. Taxing products according to risk is a strong demand measure that can contribute to behavioral change, and smokers switching to less harmful alternatives. Accordingly, excise taxes on cigarettes generally tend to be higher than on smoke-free products.

The combined effect of manufacturer costs and tax differences is such that the price at which the consumer buys heated tobacco units is typically below that of premium cigarettes—or can even be at the low end of cigarette pricing. As of the end of 2022, we estimate that our heated tobacco units are, on average, priced the same as, or lower than, an adult smoker's current cigarette brand for 65 percent of smokers in the geographies where we commercialize *IQOS* (2021: 58 percent).

## Marketing and selling our products responsibly

Our marketing and sales policies and practices crystallize our commitments to market all our products responsibly to increase adult consumers' awareness and understanding of our smoke-free product portfolio, thus improving access, while minimizing the risk of unintended consequences.

### Marketing Codes

Our Marketing Codes embody PMI's commitment and lay the groundwork for responsible product development, design, marketing, consumer engagement, and sales practices.

In May 2022, we published on our website two Marketing Codes: one [Code for Non-Combusted Alternatives](#) and one [Code for Combusted Tobacco Products](#). The Codes are accompanied by internal implementation guidelines.

These Codes guide our marketing and sales practices and are based on core principles:

- We do not encourage people to start smoking, nor do we discourage cessation of nicotine products
- We do not want minors to use PMI products and we do not market them to minors
- We remind adult smokers of the health effects of smoking and encourage those who would otherwise continue to smoke to consider switching to smoke-free products
- We also transparently inform consumers of the benefits of switching to our smoke-free products and are clear about the fact that, while switching to smoke-free products is a better choice than continued smoking, these products are not risk-free, contain nicotine, and are addictive
- All advertising and consumable packaging for both combustible and smoke-free products must have health warnings, even if the law does not require them



Employee and third-party training

Our responsible commercialization efforts rely on the adherence and dedication to responsible marketing of our employees and the third parties with whom we work. All PMI employees involved in our company's commercialization activities must follow the Codes and be trained on them at least every two years. Third parties involved in commercialization activities (including agencies, promotional staff, call center agents, and shop assistants, among others) must also be trained at least every two years on the relevant parts of the Codes and follow the portions of the Codes that relate to the role they perform.

Our Marketing Codes-related training includes a global compliance e-learning, instructor-led classroom, and online training sessions for our employees as well as for third parties.

Around 76,000 people participated in at least one Marketing Codes-related training session in the past two years. Of this total, around 24,000 were PMI employees and around 52,000 were third-party workers. Training sessions in 2022 were focused on delivering Marketing Code refreshers, including specific training on youth access prevention to PMI salespersons engaged in brand retail or in our contact centers as well as Marketing Code training to new hires.

Monitoring and remediation

We have a robust infrastructure in place for monitoring compliance with our Marketing Codes, and provide clarifications to functions or markets having questions or queries regarding their implementation.

Self-assessments

Our Codes impose the implementation of a self-assessment program to evaluate the level of compliance with the Codes at market level. In 2022, we designed the first wave of such a program, piloted it in the second quarter of the year and rolled it out in all our markets in the fourth quarter. The scope of this first wave focused on the level of compliance with the Codes' requirements with regard to the implementation of a marketing governance forum at market level as well as the requirements applicable to our consumer databases, the systematic presence of PMI's good conversion

practices where needed, and the conduct of age-verification in relation to the sale of PMI's products.

Results showed a high level of adherence and timely implementation of the Codes' requirements. Markets observing deviations reported them together with remediation plan and timelines. For example, certain markets had not fully completed the training program imposed by the Codes or were behind schedule with regard to the implementation of the Codes' minimum contractual requirements. In accordance with our policies, these results, action plan, and timelines were escalated to senior management.

Internal monitoring

Our Ethics & Compliance function investigates potential incidents of noncompliance with applicable laws, regulations, and PMI Policies, including PMI's Marketing Codes. In 2022, there were 14 violations of our Marketing Codes by PMI employees (2021: 13). As a consequence of these violations, PMI took disciplinary actions against these individuals, including employment termination, suspension, written warning, and verbal warning or counselling, as appropriate.

Reviews by our Corporate Audit department in 2022 found that only a few affiliates experienced compliance issues related to marketing, and these issues were mainly procedural. During the year, Corporate Audit conducted 16 audits covering 21 markets. Processes and controls were reviewed in each of these markets, and members of the Corporate Audit team visited a limited number of points of sale to assess the steps taken to implement our Marketing Codes. No significant issues related to youth access were identified in the locations visited based on the checks performed by the Corporate Audit team.

We have minimum contractual requirements relating to the obligations of our trade partners or service providers not to sell tobacco and other nicotine products to consumers below legal age and conduct age verification imposed by our Codes. Those were generally implemented in accordance with the Codes' requirements and we are not aware of any breach that would have required the termination of an existing contractual relationship.

Ensuring that our commercial activities reach the intended audience

Our commercial activities must strike the right balance between encouraging adult smokers who would otherwise continue to smoke to completely switch to smoke-free products and at the same time minimizing the risk of unintended consequences, such as youth access, initiation, and relapse back to tobacco or nicotine products.

As part of our premarket assessment governance process for flavored products (described above), we conducted 13 studies on our heat-not-burn and e-vapor products in seven markets in 2022, including interviews with more than 22,000 adults who were not consumers of tobacco or nicotine products. The results of those studies show very low intention to use our smoke-free products among adult former users of tobacco or nicotine products (between 0 percent and 5.6 percent across the 13 studies) and adults who had never used tobacco or nicotine products (between 0 percent and 3.3 percent across the same 13 studies).

We do not conduct studies involving individuals under the legal age to purchase tobacco products. However, results of our studies among the youngest legal age adults who were not consumers of tobacco or nicotine products—those aged 18 (or higher, depending on the legal age in the country) to 24—show a very low intention to use our smoke-free products (between 0 percent and 3.3 percent across the 13 studies).

1 AlMoosawi S, Bajec M, Mainy N, Kallischnigg G, Zwisele B, Fischer K, Magnani P, Roulet S, Risk perception of IQOS™ and cigarettes: Temporal and cross-country comparisons. *SSM Popul Health*. 2022 May 17;18:101123. doi: 10.1016/j.ssmph.2022.101123. PMID: 35669892; PMCID: PMC9162949

We also conduct post-market studies to understand how our smoke-free products are used and by whom, once made available for purchase in the market. These studies are necessary to confirm the results of our premarket perception and behavior assessment studies, measure the extent to which adult smokers switch to our smoke-free products, and monitor whether never and former smokers use our smoke-free products. The data from recent post-market studies conducted in Asia and Europe involving over 5,000 legal-age adults from the general population as well as about 1,000 legal-age adults from IQOS user samples confirm that IQOS is reaching the intended audience (adult smokers) and that IQOS use by adults who had never smoked or had already quit using tobacco and nicotine products is very limited. Specifically, the results in these markets show that less than 1 percent of smokers initiated tobacco product use with IQOS, and about 3 percent of smokers relapsed to or re-initiated tobacco product use with IQOS. Moreover, more than 98 percent of IQOS users in these markets were already using tobacco products when they switched to IQOS.

Finally, the results from our premarket perception and behavior assessment studies conducted as part of the scientific assessment of IQOS which show that adult consumer groups surveyed understand that IQOS presents less risk than cigarettes but is not risk-free, are confirmed by our post-market studies (AlMoosawi et al., 2022).<sup>1</sup>

Preventing youth access and use of our products

We have developed a holistic and comprehensive approach to guard against youth access to our products through a suite of measures.

These measures are deployed to ensure consumers are age-verified across all access channels when attempting to purchase our products, including PMI-managed boutiques, PMI e-commerce platforms, and third-party retailers and online marketplaces. While the level of control we have over these channels varies, it is critically important that we make every effort to guard against youth access to our products regardless of the point of sale.

Specific requirements set in our Marketing Codes to guard against youth access to our products

The global youth access prevention requirements included in our Marketing Codes apply to all our commercial activities, even when not required by local laws. These stringent standards, combined with our responsible approach to marketing (in terms of channels and content) reduce the likelihood that our products and related consumer communications reach or are particularly appealing to youth.

A fundamental requirement is that a consumer's age must be verified before they can purchase our products—ensuring they are of legal age to purchase or at least 18 years old (in markets without a minimum legal age).





The methods used to age verify adult consumers vary channel by channel and market by market. For instance, for online sales of our products through a branded website, which is operated by PMI, individuals may be asked to upload a copy of their ID which we then check, or to provide certain personal data about them which we then use to verify that they are adult in a reliable third-party database (such as one which may be operated by a financial institution or government agency). Alternatively, when purchasing in brand retail, an individual will be age-verified visually by a trained salesperson, and asked for a copy of their ID in case of doubt.

Requirements in our Marketing Codes also shape the content of our creative materials, ensuring, for instance, that they do not contain images of models who are, or appear to be, under age 25 or images of youth-oriented celebrities. They also guard against product placement in places or channels frequented primarily by minors; this means that our advertising, marketing, and sales materials are placed, for example, where the audience is reasonably estimated to be at least 75 percent above legal age.

**Assessment of new flavored product propositions**

By design, smoke-free products do not burn tobacco and therefore provide a different sensory experience. They also often require a change in ritual. These factors may deter adult smokers from considering them as acceptable alternatives to continued smoking or prevent them from completely switching and abandoning cigarette smoking altogether. Flavors can help adult smokers overcome these barriers.

Also, as we lead an industry-wide transformation, there is increasing competition in the marketplace with regard to flavors, and their use plays an important role in PMI's ability to remain competitive.

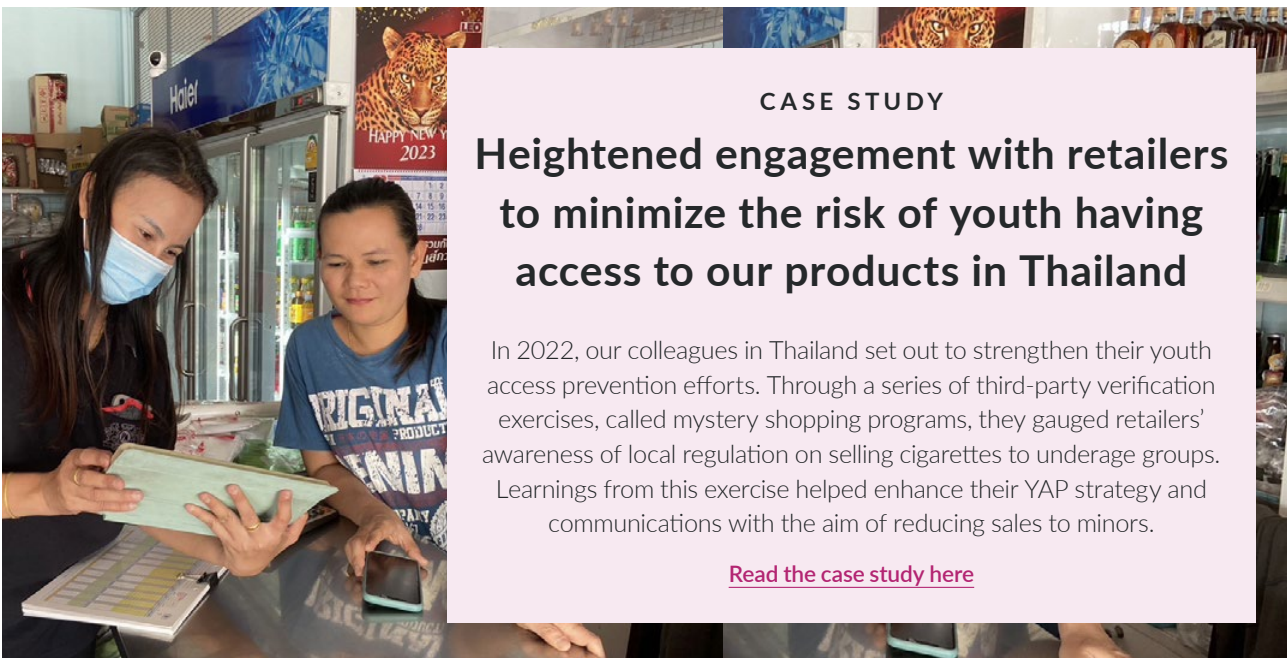
Our product portfolio is composed of a wide range of taste variants so that it can adequately cater to individual adult consumers' taste preferences.

PMI is committed to using flavors in a responsible way and, as mentioned above, has implemented a central governance process under which all new flavored product variants are evaluated (i.e., heated tobacco products, and since 2022 e-vapor and combustible tobacco products). Under this framework, flavored product propositions are assessed premarket to minimize the risk that their introduction in the marketplace generates unintended consequences, including appealing to youth and other unintended audiences.

The assessment framework takes into account, among other things, the flavor dimension of the product, how the product will be labeled and marketed, and the regulatory and commercial environment. Moreover, our flavored product variants are named in a way that gives either no specific indication to consumers about the flavor direction (beyond tobacco, menthol or kretek) for combustible and heated tobacco products, or is entirely factual (e-vapor and oral nicotine product), avoiding names that could particularly appeal to unintended audiences.

**Social media influencers**

Since 2019, we do not use product-related digital influencers and do not engage with or pay any individual in exchange for publishing product-related endorsements on their social media channels. In 2022, we piloted a digital content creators' program in a limited number of markets, relying on the youth access protection measures that digital platforms have instituted over the past few years to help prevent unintended audiences accessing content aimed at adults. On the understanding that adult consumers rely heavily on digital content platforms to research, learn about, and discuss a variety of products prior to making purchasing decisions, the content of the pilot is primarily intended for educating adult smokers on our scientifically-substantiated smoke-free alternatives and their switching journey. It is subject to strict controls intended to prevent access by unintended audiences. These controls include ensuring that any content posted is only visible to those social media users who have confirmed they are of legal age (minimum 18 years) to purchase. We also only select content creators who are at least 35 years old, and we pre-screen the demographic audience of their followers to ensure they are at least 75 percent adult. The pilot is intended to assess the viability of using carefully selected, industry-relevant content creators (i.e., an individual who has a specific story to tell about IQOS, based on their own individual experience such as their conversion journey from cigarettes to smoke-free products) to further accelerate the achievement of a smoke-free future, and we will evaluate the results when they become available.



**CASE STUDY**

**Heightened engagement with retailers to minimize the risk of youth having access to our products in Thailand**

In 2022, our colleagues in Thailand set out to strengthen their youth access prevention efforts. Through a series of third-party verification exercises, called mystery shopping programs, they gauged retailers' awareness of local regulation on selling cigarettes to underage groups. Learnings from this exercise helped enhance their YAP strategy and communications with the aim of reducing sales to minors.

[Read the case study here](#)

**B2B Youth access prevention—engaging with our trade partners**

We do not own or control the vast majority of retail outlets that sell our products: Around 99 percent of our sales occur outside our managed channels. We set robust requirements and work with retailers to ensure they understand why they should not sell nicotine-containing products to youth. These measures complement the local regulations for youth access prevention which we comply with and that retailers must enforce.

Our youth access prevention (YAP) programs in indirect retail channels combine guidelines and tools to help our affiliates work more effectively with their trade partners to guard against sales of our combustible tobacco and smoke-free products to minors. They are based on three pillars: (i) communication by our affiliates' heads to the trade partners reinforcing the YAP requirements set out in our Marketing Codes, (ii) online or in-person training sessions with retailers' staff, and (iii) materials such as stickers, banners, or leaflets placed at the point of sale.

We are committed to maintaining high coverage of our shipment volume (minimum 90 percent) with YAP programs in indirect retail channels. By the end of 2022, markets representing 91 percent of our total shipment volume were implementing such programs.

**B2C Youth access prevention—efforts in our owned channels**

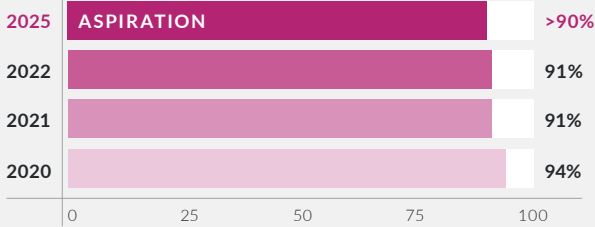
At our brick and mortar brand retail outlets, any adult consumer who wishes to purchase our products must be age-verified by a trained salesperson. In 2022, when selling our products online, we implemented online age verification methods integrating latest technologies in 23 markets. When performing age verification online, this requires that we leverage databases from reliable and credible sources (e.g., government organizations, telephone network operators, or banks) or scan an uploaded copy of a person's identity document ensuring frictionless consumer experience. Where the necessary technology is not available, or where a person cannot be age-verified using either of these methods, alternative age-verification processes are applied, which include face-to-face age verification on delivery by couriers or at collection pick-up points.

Mystery shopper programs remain an effective way to monitor compliance with our responsible marketing and commercialization requirements. In 2022, we moved to a decentralized approach to allow markets to decide on the most appropriate way to achieve this important compliance objective in the local context.





Proportion of shipment volume covered by markets with youth access prevention programs in indirect retail channels



Note: Total shipment volume includes cigarettes, heated tobacco units, other tobacco products, e-cigarettes, and oral nicotine products.

Enhanced electronic age-verification technology

Beyond our existing responsible marketing programs, we continue to look for, test, learn, and develop technology to guard against unintended use, unintended access to product information and purchase and prevent youth from initiating nicotine use or using our smoke-free devices. An example of this is our parental lock feature embedded in our closed-tank e-vapor device, *IQOS VEEV*, where the adult user can choose to lock and unlock their device at any time, via connected capabilities, to prevent unintended use. Additionally, we continue to test proprietary device activation technology embedded into our smoke-free products, where technical capabilities at the device level allow. Efficacy tests conducted during pilots in 2020 through 2022 confirmed that, fundamental to our ability to scale the deployment of these novel technologies, is the underlying local technical infrastructure (e.g., wide availability of Wi-Fi networks, mobile data, reliable and credible third-party databases) which are notably relevant for low- and middle-income markets.

This specific form of device activation technology required the consumer to be age-verified using a reliable online database, in order to be able to unlock, and thereby activate the device prior to first use. If the device was not linked to an age-verified consumer profile, the device would then remain blocked and unusable. Continuous learnings from our ongoing pilot in Corsica highlighted that it is critical to ensure a simple and easy to use mechanism for adult consumers to be age verified, as well as to activate their devices. Moreover, we learned that on the consumer conversion journey, an overly complex age-verification process would represent a barrier in their decision to abandon cigarette smoking and switch to a smoke-free alternative.

During 2022, we launched additional pilots which included testing of different user experiences, a suite of online age-verification mechanisms, and various methods to perform device activation. Secure and user-friendly age-verification technology is a novel advance in the smoke-free product category and requires strong partnerships with information technology service providers, as well as with the owners of various software applications. Our teams continue to engage with the leading hardware and software players in these industries, to ensure that the most robust and best-in-class technology is available for PM's smoke-free products.

Additionally, we are continuously scouting emerging innovation and credible age verification technologies to ensure robust age control, while aiming to simplify the adult consumer experience and reduce the time of such efforts required by them. For example, in 2022 we began testing the use of facial age verification software. This is a solution certified by Age Check Certification Services Ltd. In the U.K. that is already being applied by a wide range of international companies across different categories including banking and medical services. Complementary to our existing third-party age verification methods, this new method is aimed to accelerate and simplify the user experience with a high level of robustness. This technology is currently being tested in two markets to obtain additional evidence of the solution efficacy in preparation for an anticipated scaled deployment in the future.

Since our ambition set in 2019 to equip 100% of our electronic smoke-free devices with enhanced age-verification technology—which was viable at that time—our smoke-free portfolio has significantly evolved and expanded; and today, PMI offers a broad range of better alternatives to continued smoking in terms of technology, usage, taste, and price options across multiple categories (electronic and analog). Due to these factors, our initial ambition has not been achieved. However, we remain steadfast in our efforts towards our aspiration to equip our electronic smoke-free portfolio offerings—when and where commercially feasible and viable—with enhanced age verification technologies.

During 2023, we will continue to develop and test a range of enhanced age-verification technologies. We will utilize these current and future learnings to guide our ambitions and assess our targets, remaining steadfast in our commitment to prevent access to these products by unintended audiences.

Looking ahead



**Badrul Chowdhury**  
Chief Life Sciences Officer,  
Smoke-Free Products



We are preparing for important regulatory submissions in the U.S.—including Premarket Tobacco Applications (PMTAs) for *IQOS ILUMA* in 2023.

We will continue to gather and evaluate real-world data on *IQOS*, and execute comprehensive clinical studies investigating whether switching to a smoke-free product reduces the harm and risk of smoking-related diseases upon switching to *IQOS*.



**Stefano Volpetti**  
President, Smoke-Free  
Inhaled Products and  
Chief Consumer Officer



We have ambitious plans leveraging the progress made to date, including continuing to broaden access and improve our product portfolio.

In particular, we reached an agreement with Altria in October 2022 to take full control of *IQOS* in the U.S. as of April 30, 2024. During this transition period, we plan to invest in *IQOS* to bring it to market at scale across the U.S., leveraging the proven capabilities of our commercial engine. We are preparing for domestic manufacturing and developing U.S. sales, distribution, retail, consumer engagement, and support capabilities.

We will continue to broaden access to our heat-not-burn products through a multi-tier portfolio approach for both devices and consumables that covers a range of price points. This can already be seen in Japan, where our two-tier heated tobacco unit portfolio for *ILUMA* is driving overall share growth, with premium-priced *TEREA* and mainstream-priced *SENTIA* each gaining share in 2022.

While pursuing our efforts to act on all drivers of access, we will continue to design and deploy a suite of effective tools to ensure that our smoke-free products reach the intended audience: current adult smokers or users of other nicotine products who otherwise would not quit.

We will continue to monitor through premarket and post-market studies that our smoke-free products encourage adult smokers to switch away from cigarettes, while minimizing the risk of unintended consequences, such as youth uptake, initiation, or relapse back to tobacco or nicotine products. In particular, we will evolve our study approach to better account for our expanded portfolio of smoke-free products, including our e-vapor products.



**Lars Dahlgren**  
President, Smoke-Free Products  
(SFP) Oral Products and  
CEO Swedish Match



Swedish Match joining PMI in late 2022 means significantly enhanced prospects to progress toward accelerating our common goal to make cigarettes obsolete. Following PMI's acquisition of Swedish Match, we will contribute towards the expansion of, and increase in access to, smoke-free products as together we are now present in the large, attractive, and growing U.S. smoke-free market. We will also drive accelerated global expansion opportunities for Swedish Match's oral nicotine products through PMI's international commercial infrastructure.







## PRODUCT IMPACT



# Purposefully phase out cigarettes

Our intention is not only to develop, scientifically substantiate, and responsibly commercialize smoke-free products to offer a better alternative to adult smokers, but to make sure these products ultimately, and as soon as possible, replace cigarettes completely.

## INWARD IMPACT: The business case

Despite being well on our way to delivering a smoke-free future, we still have some distance to travel, as our combustible tobacco product business still represents the majority of our revenues. The operating cash flows generated by cigarettes serve an essential role, supporting ongoing investments in the growth of smoke-free products and in building new capabilities in wellness and healthcare.

Staying competitive in the cigarette category during this interim period provides the infrastructure needed to support our smoke-free growth, allowing us to create a future where cigarettes no longer exist. Notably, where permitted, it remains the primary way we can engage and connect with adult smokers and trade partners to raise awareness of smoke-free products and explain why they are a better option than continued smoking. Handing market share to competitors and others is unlikely to provide them with strong motivation to follow our smoke-free lead.

Our legitimate ambition to maintain market share in the declining combustible tobacco product category does not mean that we aim to continue selling cigarettes in the long term. Our purpose is clear: our smoke-free business is our focus area of growth, as these are the products needed to enable our transformation and, most importantly, to help make cigarettes obsolete.

Importantly, smoke-free products offer the prospect of higher and more sustainable returns than cigarettes over the long term, as also recognized by the stock market in our valuation premium to cigarette-focused peers. The business case is thus crystal clear, with compelling financial incentives for us to transform as fast as possible.

## OUTWARD IMPACT: The right thing to do

Even though selling off our cigarette business would make our company achieve its smoke-free ambition faster, it would not resolve the cigarette problem—and indeed would risk exacerbating the issue as a new owner would more likely be focused on maximizing cigarette consumption.

Our aim is not only to make our company smoke-free, but to make cigarettes obsolete. To achieve this, we will continue to responsibly and coherently sell cigarettes, taking a consistent, disciplined, and steadfast approach to one day completely leaving them behind.

While contradictory on the surface, this is a necessary trade-off that is vital to driving a successful industry transition for the benefit of public health.

We are convinced that impactful and systemic change can best be achieved by transforming from the inside out, engaging constructively with different parts of society, and ultimately influencing our entire industry to follow our lead and adopt business models that also seek to completely replace cigarettes with smoke-free products for those who continue to use nicotine.

## Approach and progress

Our priority is to address the health impacts associated with smoking by offering smoke-free, science-based alternatives that have been proven to be a better choice than cigarettes for those adults who would otherwise continue to smoke.

However, we do not believe it is enough to simply offer more choice to consumers. Rather, we are seeking to persuade adult smokers to switch to the better alternatives now available and put cigarettes behind them.

To achieve this objective, we are dedicating the vast majority of our resources to commercializing our smoke-free products (see our [Business Transformation Metrics](#)).

We also recognize that PMI alone cannot achieve a smoke-free future. Such systemic change requires a collaborative, multistakeholder approach. In particular, we are seeking to work with policymakers to ensure that scientifically substantiated smoke-free products replace cigarettes as quickly as possible for those who continue to use nicotine. We are also actively advocating for others in the industry to follow our lead by transforming their businesses, phasing out cigarettes, and reporting transparently on progress by adopting our [Business Transformation Metrics](#).

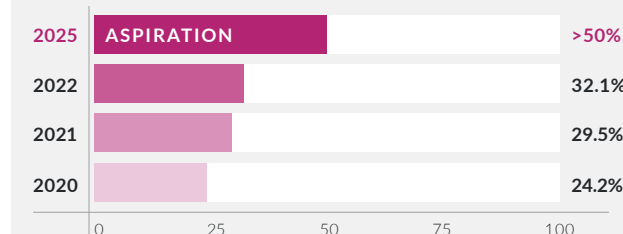
In pursuing our vision of a smoke-free future, we are eager to see measures introduced that drive large-scale consumer switching as quickly as possible. We are confident that the right mix of government leadership and commercial initiative would dramatically accelerate efforts to reduce the health burden of smoking. We believe that, with the right regulatory encouragement and support from civil society, cigarette sales can end within 10 to 15 years in many countries (see our [Statement of Purpose](#)).

## Allocating our resources to smoke-free products

Our efforts center on the development of scientifically substantiated, better alternatives to smoking and broadening access to smoke-free products for adult smokers who wouldn't otherwise quit smoking. The [Maximizing the benefits of smoke-free products](#) chapter of this report details our approach and the progress achieved to date on that front.

Our efforts have led to a continued rapid increase in the proportion of our total net revenues represented by smoke-free products, reaching 32.1 percent in 2022.

### Adjusted net revenue ratio (smoke-free/total)

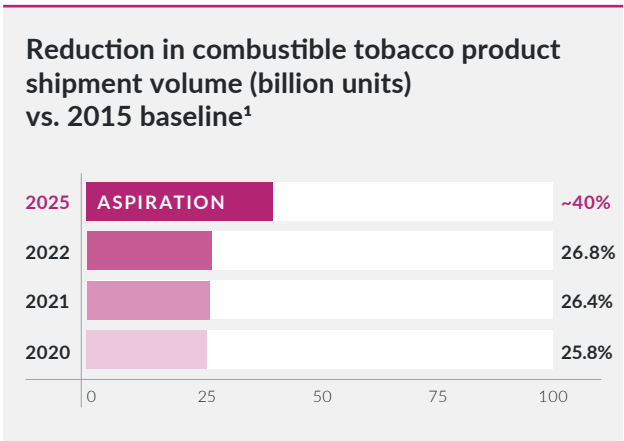
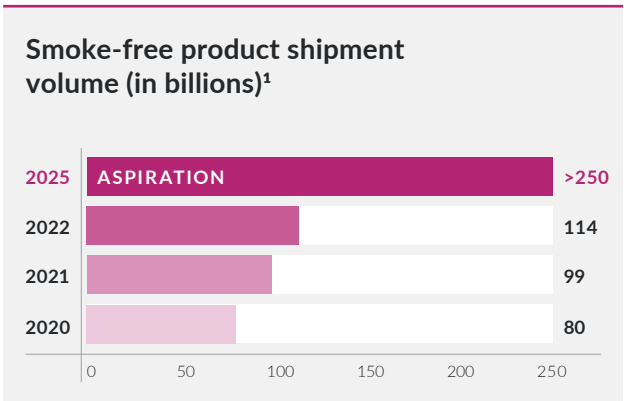
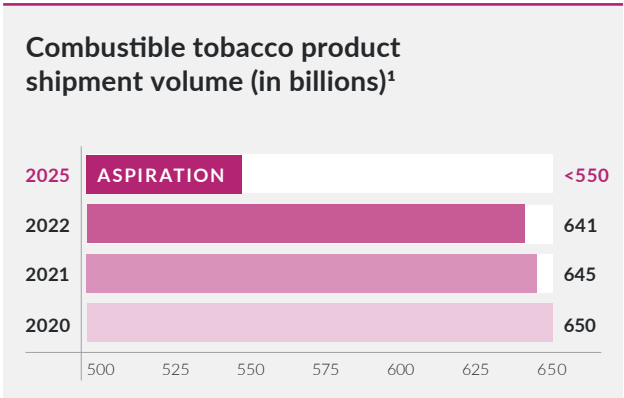
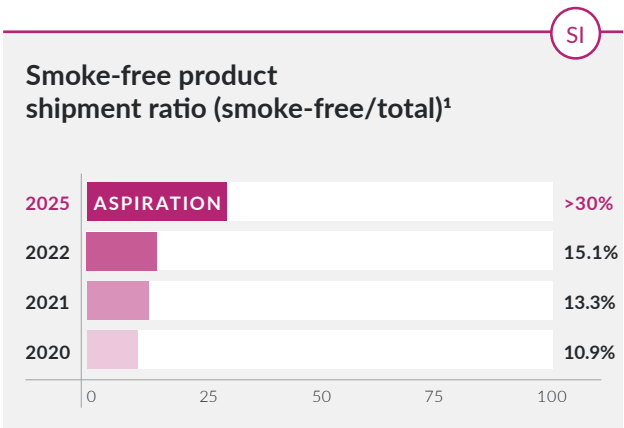


Note: For definition of net revenues related to smoke-free products, see [Glossary](#). 2022 figure includes Swedish Match net revenues from November 11, 2022 (acquisition date) to December 31, 2022. 2021 adjusted net revenues exclude the impact related to the Saudi Arabia customs assessments.

Moreover, as of the end of 2022, smoke-free products represented over 50 percent of net revenues in 17 of the 73 markets where we commercialized them (2021: 10), and over 10 percent of the adjusted net revenues in 52 of these markets (2021: 49).

Our transformation also translates to a shift in the composition of our total shipment volumes. In 2022, we shipped a total of 114 billion units of smoke-free products (2021: 99) and a total of 641 billion units of combustible tobacco products (2021: 645). The proportion of smoke-free product out of our total shipment volume grew to 15.1 percent in 2022, versus 13.3 in 2021. Meanwhile, our combustible tobacco product shipment volume decreased by 26.8 percent versus a 2015 baseline, with an aspiration to reach an approximately 40 percent reduction by the end of 2025.

While the global cigarette category is in structural decline our intention is to accelerate that decline by maximizing access to better alternatives.



**Advocating for appropriate regulation and taxation to drive cigarette obsolescence**

Regulation of all nicotine-containing products (including both combustible tobacco products and smoke-free products) is essential. We advocate for a comprehensive and risk-proportionate regulatory framework that acknowledges that not all tobacco and nicotine products are the same. Regulation and taxation should subject the most harmful products—those that combust tobacco—to the most restrictive measures and should encourage those adults who would otherwise continue to smoke to switch to less harmful alternatives.

Government action heavily influences how quickly we can see an end to cigarettes. To expedite the process, regulators and public health authorities can ensure that adult smokers have access to accurate information about smoke-free products. They can introduce product standards to ensure that only scientifically substantiated smoke-free products are commercialized. And, through risk-proportionate regulation and taxation, they can provide the right incentives to encourage adults who smoke and would continue smoking to switch from cigarettes to alternatives that are scientifically substantiated to be better, thereby encouraging manufacturers to direct their investments and R&D toward these better products.

We are encouraged by 2022 regulatory and fiscal developments, where an increasing number of governments have complemented, or committed to complement, traditional tobacco control measures (i.e., those intended to discourage smoking initiation and encourage cessation) with a harm reduction approach (i.e., providing adults who would otherwise continue to smoke with access to scientifically substantiated smoke-free alternatives).

We continue to engage with governments, regulators, and legislators to support the development of differentiated legislation and regulations that will enable adult smokers to know about different nicotine-containing products and their corresponding risk profiles compared with continued smoking. In addition, we strongly support regulation that helps accelerate switching to maximize the benefits of smoke-free products while minimizing unintended consequences, like access and use by unintended users, including minors and nonsmokers.

<sup>1</sup> These indicators are calculated based on millions of units. For definition of smoke-free products and combustible tobacco products, see Glossary. Smoke-free products shipment volume includes volume of smoke-free products that can be converted into cigarette equivalent units, such as heat-not-burn, e-vapor, and oral nicotine. Total shipment volume includes the listed smoke-free products as well as combustible tobacco products: cigarettes and other tobacco products expressed in cigarette equivalent units. Data do not include Swedish Match and wellness and healthcare products.

**Staying competitive in the cigarette market while hastening its end**

Despite being well on our way to delivering a smoke-free future, we still have some distance to travel. Maintaining our competitive position in the cigarette market during the transition period is essential.

It allows us to focus our commercial efforts on raising awareness of—and informing adult smokers about—smoke-free products and the benefits of switching versus continued smoking. As an example, it allows us to deploy JustScan, a mobile digital platform allowing adult smokers to access online content about smoke-free products by scanning a QR code or using a weblink typically featured on the cigarette pack itself or an insert (read more in the chapter on [Maximize the benefits of smoke-free products](#)). It also generates the financial resources needed to continue investing in scientific research, product development, and the manufacture and commercialization of smoke-free products.

**Supply and demand measures that can accelerate change**

We believe that a clear roadmap agreed by political, regulatory, and public health stakeholders, supported by both civil society and businesses, offers the best prospect for further accelerating the end of smoking. Such a roadmap may consist of elements addressing:

- Increased investment in prevention, quitting campaigns, and cessation services, with a particular focus on vulnerable populations
- Measures to address adult smokers' confusion about the role of combustion and nicotine in the development of smoking-related disease
- Regulatory and fiscal differentiation between combustible tobacco products and noncombustible forms of tobacco and nicotine, coupled with robust safeguards against unintended use
- Post-market monitoring and surveillance to assess public health outcomes and the impact of policy interventions
- Phase-out measures that help to achieve countries' set smoke-free targets
- Post-phase-out support for adult smokers who still continue smoking
- Robust anti-illicit trade policies

**Looking ahead**



While cigarette sales today remain the largest part of PMI's business in most countries, this is changing rapidly. PMI is actively accelerating the decline in cigarette smoking beyond what traditional tobacco control measures can achieve alone. Our stakeholders, who are fundamental both to achieving our purpose and to determining the pace of our progress, will be affected in different ways by our company's transformation. We will seek to engage and collaborate with all of them in an inclusive manner to speed our transformation while mitigating negative consequences.

**Jacek Olczak**  
Chief Executive Officer



Industry disruption only looks easy in hindsight. At present, we are in mid-stride: with one foot in our past, operating in a fiercely competitive legacy cigarette business, and one foot in our bold future, building an entirely novel and improved category of products. We recognize the magnitude of the challenge and remain committed to continuing to lead, tracking progress, and reporting on it transparently to ensure that cigarettes become obsolete as soon as possible.

**Emmanuel Babeau**  
Chief Financial Officer



Cigarettes continue to represent a sizeable portion of our volumes and an opportunity to engage with adult smokers around better alternatives than smoking. We are committed to selling them responsibly while transitioning to smoke-free products. We will continue implementing our youth access prevention efforts globally and investigate ways of strengthening their enforcement.

**Werner Barth**  
President, Combustibles Category and Global Combustibles Marketing







## PRODUCT IMPACT



# Seek net positive impact in wellness and healthcare

Striving to become a company that has a net positive impact on society, we are expanding our offerings to include products that will address critical unmet consumer and patient needs within the wellness and healthcare space.

## INWARD IMPACT: The business case

As described in our [Statement of Purpose](#), the critical next step in PMI's transformation is leveraging our expertise and capabilities to expand into products beyond tobacco and nicotine as part of a natural evolution into a broader wellness and healthcare business.

Leveraging our company's expertise in aerosol chemistry and physics, best-in-class preclinical safety and toxicology and clinical research, and continued investments in capabilities and R&D programs, we are developing innovative and differentiated products for unmet patient and consumer needs.

Although we are at the beginning of this journey, our intention is set: we are working towards furthering the transformation of our company and our deep belief in the opportunity these adjacent avenues of growth can bring in the long term, leveraging our ability to monetize the skills and assets we have accrued and developed during the process of our transformation.

## OUTWARD IMPACT: The right thing to do

Researching and developing smoke-free alternatives that are scientifically substantiated to be less harmful than cigarettes was the first step in our journey to address our biggest negative externality: the impact of cigarette smoking on health.

In the process, we have expanded our social, human, intellectual, and manufactured capital in ways that allow us to move from a value proposition centered on doing less harm toward one where we can seek to have a net positive impact on society. The aim now is to use this capital to develop adjacent avenues of growth in wellness and healthcare.

PMI's investment and innovation approach in the wellness and healthcare space is part of a larger transformation that puts science, technology, and sustainability at the heart of our company's future, delivering products and solutions that aim to improve people's lives and deliver a net positive impact on society.

To achieve this objective, we will rely on and expand upon our existing core capabilities, and seek partnerships with entrepreneurs and companies that have the proper experience and credibility in relevant fields.

## Management approach

PMI has developed a strong foundation and significant expertise in life sciences—particularly with product formulation, aerosol chemistry and physics, device technology, clinical research, and best-in-class preclinical safety and inhalation models—gained during our transformation journey.

To complement our in-house science and innovation capabilities, we acquired three innovative and forward-looking companies in 2021 (read more in our [Integrated Report 2021](#)). In March 2022, we launched a new wellness and healthcare business consolidating these three entities into Vectura Fertin Pharma. Vectura Fertin Pharma brings together Vectura's expertise in inhalation delivery systems used for prescription drugs, Fertin Pharma's leadership in oral and intra-oral delivery systems, and OtiTopic's inhaled aspirin asset.

Vectura Fertin Pharma is centered on health, science, and technology to deliver innovative, best-in-class or first-in-class products and solutions that are safe to use and can improve people's lives.

### Management

In early 2022, we defined Vectura Fertin Pharma's operating model. We established the leadership team for this new business, the organizational buildup, decision-making, and scientific governance, as well as key processes. Vectura Fertin Pharma is operationally separate from other businesses owned by PMI. This means that the business has its own executive leadership team overseeing day-to-day operations and a dedicated governance for projects. The business is headed by the President of Vectura Fertin Pharma, although it is collectively delivered with the Vectura Fertin Pharma leadership team, the Vectura Fertin Pharma employees, and a strong investment by PMI to enable the buildout of this business. Its operational model is based on product categories, led by its category leads. The governance of Vectura Fertin Pharma is designed to enable efficient delivery of the product pipeline and comprises stage gate review committees, scientific advisory boards, and functional review boards. Furthermore, revenues generated by Vectura Fertin Pharma are reinvested into its wellness and healthcare business.

We are aiming to deliver new innovations in fields where a clear unmet medical or consumer need exists. We are focusing on specific opportunities in selected business areas, which comprise two growth categories—inhaled therapeutics and consumer health, as well as two additional business areas—nicotine replacement therapies and our Contract Development and Manufacturing Organization (CDMO).



1. **Inhaled therapeutics:** Developing these products uses our expertise and experience in device technology for medical applications and delivery and scientific assessment of aerosols, including preclinical safety and toxicology, clinical, medical, regulatory, and quality capabilities.



2. **Consumer health:** Moving into consumer health products will enable us to address benefit areas such as "energy with purpose". In addition to therapeutical applications, we are also evaluating cannabinoids for consumer health starting with CBD offerings, applying our expertise in assessing efficacy and safety of novel oral delivery formats, inhalation science and technologies, and plant substrates.



3. **Nicotine replacement therapies:** There is an unmet need in the nicotine replacement therapy market, which, combined with our existing expertise and ability to innovate, positions us well to play in this market.



4. **CDMO:** Based on our unique technologies, delivery platforms, and capabilities, we are striving to grow our CDMO business in both oral and inhalable solutions, and to expand it geographically.

Our business model for wellness and healthcare is not necessarily to pursue or internalize the entire value chain, from drug identification and upstream development to downstream commercialization. Instead, our aim is to use our technology platforms to rethink and reposition existing medication and consumer health products to address some of today's unmet needs. Our skills in device and formulation development, and our delivery capabilities will be at the center, together with our experience in product assessment. For skills we do not have, we will partner, outsource, and orchestrate an ecosystem to bring products to market.

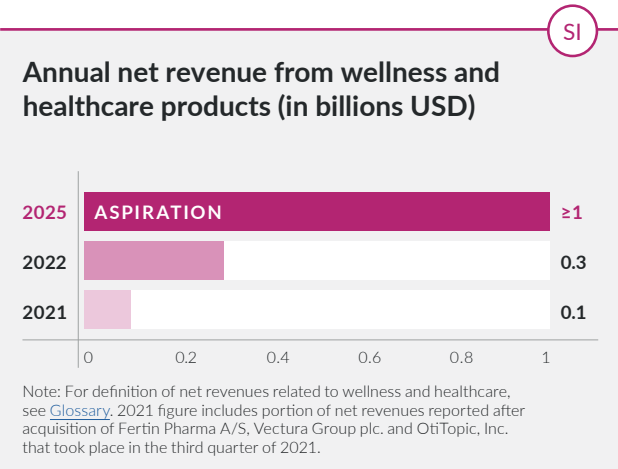


# Progress in 2022

Vectura Fertin Pharma is currently developing a pipeline of products so that at least USD 1 billion in net revenues is generated by PMI’s wellness and healthcare business by 2025.

Since the inauguration of Vectura Fertin Pharma in 2022, it has consistently refined its business and portfolio strategy, based on lessons learned, advice from its scientific advisory board, and the current macroeconomic challenges and business headwinds it is facing.

Despite these headwinds, net revenues related to wellness and healthcare products amounted to USD 0.3 billion in 2022. They primarily consisted of operating revenues generated from the sale of inhaled therapeutics and oral and intra-oral delivery systems through the CDMO or co-development business. In parallel, Vectura Fertin Pharma has re-evaluated the development of its proprietary pipeline assets to ensure that it is focusing its resources on projects with a high probability of success.



## Developing products aimed at improving people’s lives

Vectura Fertin Pharma continued the organization buildup across its business categories alongside ongoing product development activities.

In inhaled therapeutics, the newly created team executed the planned development of the inhaled aspirin product. The achieved milestones include the start of pivotal clinical trials (Phase III) and launch of activities to prepare the commercialization engine.

In the neuropathic pain indication, Vectura Fertin Pharma is working with a third party on an inhaled drug-device combination, progressing work on the early development pathway towards clinical proof of concept.

Vectura Fertin Pharma’s Consumer Health category is developing “energy with purpose” dietary supplements, as well as oral and inhalable CBD solutions, with the aim to commercialize them using a partnership approach.

To make full use of PMI’s scientific expertise, we decided to integrate the Singapore-located PMI research laboratory, with its inhalation toxicology and safety capabilities, within Vectura Fertin Pharma’s inhaled therapeutic’s CDMO business, to form a global one-stop-shop inhalation service provider. This strategy will enable us to drive revenue growth and pursue co-development and business opportunities that were not previously available to us.

Another area of interest is smoking cessation products, known as nicotine replacement therapies (NRT). As the NRT market holds significant potential for growth through innovation, we see an opportunity to provide more effective solutions via consumer, over-the-counter (OTC), and prescription pathways over time. With over 200 patents and a dedicated science center, Vectura Fertin Pharma’s ability to innovate a superior product line means that it has the potential to radically change and disrupt the market as it stands today.

### Venture funding

PM Equity Partner Sarl (PMEP), the corporate venture capital arm of PMI, was launched in 2016 and, to date, has committed USD 350 million to build and develop a portfolio of minority strategic investments, from early to growth stage companies aimed at supporting and delivering our smoke-free vision and beyond nicotine objectives. PMEP invests across four main corridors, including:

- Wellness and healthcare
- Inhalable therapeutics
- Reduced-risk products
- Impact investing

Read more about PMEP [here](#).

# Looking ahead



Jorge Insuasty  
President, Vectura  
Fertin Pharma



Vectura Fertin Pharma’s aim is to be a leader in the health and wellness space by developing a pipeline of proprietary products that we can commercialize. This is an unprecedented endeavor for our company. It requires once more a shift in mindset, business model, and ways of working. It also means accepting a very different risk profile from an investment perspective, as well as probability of success, and requires us to directly compete with incumbent players that have significant experience and resources.

In 2023, we will continue to drive our technology platforms and DMO business, so that we can invest in our proprietary pipeline. We will also work with partners to develop new products.

In health, we are focused on products targeting areas of high unmet medical need in two disease areas: cardiovascular and neurology. In the future, we will consider expanding into other areas where we see strategic opportunities.

In wellness, a high growth sector, we are looking to develop high-quality, consumer-appealing products directed at “energy with purpose,” helping consumers enhance daily activities such as sleep and work. In 2023, we are focusing our efforts in the U.S. market, where we believe the biggest opportunities lie. We are also developing best-in-class oral formulations of nicotine delivery as nicotine replacement therapy in certain markets, and exploring the opportunity to enter the cannabinoid space for consumer health, an area we believe holds significant potential.

Our ambitions for Vectura Fertin Pharma will evolve as we develop our product portfolio and pipeline. In the immediate term, we must demonstrate our ability to deliver and to bring the first product to market. Ultimately, our goal is to create a sustainable, long-term business, develop products that improve people’s lives, and be a strong and successful part of the PMI transformation story.







PRODUCT IMPACT



# Reduce post-consumer waste

We understand the need to address the environmental impact of our products in addition to their health impacts. We do this by embedding principles of circularity and eco-design, implementing effective post-consumer waste management solutions, addressing litter, and promoting responsible disposal of products at their end-of-life.

## INWARD IMPACT: The business case

Many consumers consider the environmental impact of products and services in their purchase decisions. Regulators are also increasingly focusing on corporate responsibility for use of materials such as plastics, as well as for product repairability and end-of-life management. Appropriately addressing post-consumer waste helps us enhance our brand equity and company reputation and meet consumer expectations. It also allows us to mitigate implications for our bottom line, as producers increasingly are asked to participate in cleanup costs, for instance.

Consumer expectations and regulatory trends also provide us opportunities: motivating us to innovate in a way that can drive competitive advantage by devising more circular value chains. These value chains are linked not only to less waste and less litter but also to better use of materials and higher operational efficiency—all of which are good for our bottom line.

## OUTWARD IMPACT: The right thing to do

Reducing and appropriately managing post-consumer waste means that we can extract, convert, and use fewer raw materials from a planet with limited natural resources. This includes materials used in packaging, combustible products, smoke-free consumables, and electronic devices. This can reduce our plastic and carbon footprints and decrease our impact on the planet and society.

Moreover, committing to the safe and responsible disposal of this waste addresses society's concerns regarding the impacts of litter. Among others, there are concerns over the pollution resulting from plastic, tobacco, and other materials such as metals, potentially resulting in harm to wildlife and humans alike. We recognize our role in designing better products and working to protect nature and preserve the environment.

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## Management approach

Our intention is to preserve resources, reduce waste, and prevent inappropriate disposal, including littering.

To reduce post-consumer waste across our portfolio, we seek to design and implement impactful strategies tailored to our various products and packaging and tied to specific targets:

- **Cigarettes:** We aim to reduce cigarette butt littering by encouraging behavior change through impactful awareness-raising campaigns and by empowering consumers to dispose of cigarette butts appropriately. We also intend to tackle the issue at the source, continuously working to replace the plastic in filters with more sustainable alternatives.
- **Smoke-free consumables:** As we grow our smoke-free business, we seek to ensure that the consumables used with our electronic devices, as well as our disposable vaping devices, are disposed of responsibly at their end-of-life and that users have access to end-of-life take-back programs for smoke-free consumables. Further, we strive to design new generations of consumables that address plastic reduction and recyclability.
- **Smoke-free electronic devices:** To reduce the depletion of finite resources, we are integrating sustainability into the early stages of product design to improve recyclability, resource efficiency, and repairability. These measures will help increase opportunities to refresh and repair used devices. By extension, we will continue to look for opportunities to use recycled materials in our products.
- **Packaging:** We strive to minimize packaging materials and improve their circularity by designing for recyclability and promoting the use of materials made from renewable resources.

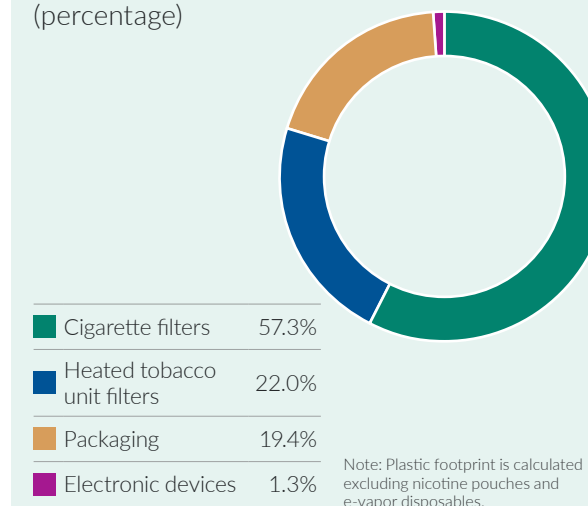
### PMI's policies and standards

- [Environmental Commitment](#)
- [Anti-Littering Policy](#)
- [Sustainable Design Framework](#)

### Striving to reduce plastic

As a global manufacturer, we source plastic materials and plastic-containing items for products such as the filters in our heated tobacco units and cigarettes, devices, and packaging. Approaches to reducing plastic cut across our product categories. Globally in 2022, we purchased approximately 140,000 tons of plastic. The largest share was bioplastics used in the filters of cigarettes and heated tobacco units. Learn more about our plastic reduction activities on the following pages.

### PMI's 2022 plastic footprint (percentage)



### Management

Our President of Smoke-Free Inhaled Products & Chief Consumer Officer and our President of Combustibles Category & Global Combustibles Marketing are responsible for driving our agenda on post-consumer waste management for their respective categories. Additional efforts on product design and increased circularity are steered cross-functionally, involving teams headed by our Chief Product Officer and Senior Vice President Operations. With regard to our smoke-free products, we have a dedicated cross-functional governance board, which oversees strategies and progress related to our device life extension and consumables end-of-life programs.





# Progress in 2022

## Highlights

Understanding that meaningful progress can only be achieved on the ground, we reinforced our guidance to markets to help them develop and implement impactful end-of-life take-back programs for smoke-free consumables and to deploy cigarette butt anti-littering programs.

We set a mandatory requirement for markets to establish end-of-life take-back programs for smoke-free consumables when launching consumables for VEEV and IQOS ILUMA products and VEEBA e-vapor disposables in order to minimize their environmental impact.

The expansion of IQOS ILUMA in 2022 translates into continuously improving device longevity and lower return rates. In parallel, we continued building our capabilities and accelerated our efforts to refresh and repair used smoke-free devices, and we re-marketed them in nine markets.

Our combined efforts in material optimization in 2022 led to significant reductions in the volumes of cardboard and plastics used across our packaging for consumables, devices, and accessories.

## Challenges

We are yet to find a suitable material meeting necessary criteria to replace cellulose acetate (CA) in our cigarette and heated tobacco unit filters in order to reduce our plastic and carbon footprint.

Since they are a new product category, smoke-free electronic devices are not covered by existing eco-design certification standards, which can delay progress toward the certification of our products.

We need to intensify efforts to increase refresh, repair, and recycling of smoke-free electronic devices within existing complex regulation norming the transport and management of electronic waste and considering challenges to identify local recycling partners.

We continued to convert our nonrecyclable inner liner systems, such as laminated aluminum paper, to recyclable alternatives where local regulation allows. The remaining portion for full conversion initially planned in 2022 was delayed due to supply chain and local market challenges; we anticipate to complete it in the coming years.

# Addressing cigarette butt littering

Although most cigarette butts are disposed of properly, too many are casually littered into the environment.

To tackle cigarette butt littering, we center our work along two pillars:

- 1. **Sustainable design:** Invest in R&D toward filters made of plastic-free alternatives.
- 2. **Encourage behavior change:** Inspire change in consumer habits through impactful anti-littering awareness programs and initiatives to empower consumers to dispose of cigarette butts properly, regardless of filter materials. These initiatives include communications campaigns and cleanup activities to raise awareness, partnerships, portable disposal solutions, and improvement of public equipment solutions.

## Sustainable design

From an environmental perspective, the ideal and most sustainable scenario would be for our products to generate zero litter post-consumption. We continue to work toward this aspirational goal, seeking design options that avoid, or at least significantly reduce, the polluting impact of litter. Our intention is to develop filters with a significantly lower environmental footprint. We are aware that materials changes alone will not solve the littering problem, but they may help mitigate the environmental impacts of residual littering by those consumers who do not engage in behavioral change driven by anti-littering programs.

We evaluate alternative filter materials via extensive analytical testing, machinability trials, and prototype testing among consumers to understand their acceptability.

Any new nonplastic filter material or design must satisfy the following criteria:

- Comparable filtration efficiency and performance consistent with cellulose acetate (CA) filters
- Acceptable taste characteristics and experience for consumers
- Similar or reduced material carbon footprint compared with CA filters
- Favorable to industrialization at scale

## Focus on filter materials

Tobacco product filters are traditionally made from cellulose acetate (CA), a bio-based material considered to be one of the world's first plastic materials made using wood-based cellulose. The material is also used in many other applications in different forms, such as in eyeglass frames, textiles, and medical consumables, among others.

There are different scientific views about the environmental impact of CA, including the sustainability of feedstock, footprint, and end-of-life. In response to consumer demands for alternatives to single-use plastic across many markets and industries, and policy shifts supporting such changes, PMI continues to research the development of more sustainable, nonplastic alternatives for our filters.

Biodegradation is often discussed as a solution to address the problem of the accumulation of litter in the environment. We acknowledge that current standards for measuring biodegradability do not necessarily reflect real-world conditions, and therefore the ability to demonstrate the overall value of biodegradation to address the problem of littering. As science-based policies evolve, we will seek to align our R&D activities that explore the viability of alternative tobacco product filter materials with them.

Beyond these R&D activities, we will remain focused on driving consumer behavior change to prevent cigarette butt littering and implementing end-of-life take-back programs for our smoke-free consumables.

In the past, some tested materials have met one or more of these criteria, but we are yet to find an alternative to CA that satisfies all of them. We will continue to explore and test options as new materials and processes become available, and science and innovation evolves. In 2022, we accelerated our efforts to develop different plastic-free filter prototypes composed of materials and technologies which are classified as nonplastic according to EU guidelines (associated with the Single-Use Plastic Directive), and we have tested some of them with consumers in multiple markets. The results have encouraged us to further invest in this endeavor and key learnings from these efforts are helping us focus our efforts moving forward.

## Encourage behavior change

While many consumers dispose of their cigarette butts properly, too many of them end up in the environment. We believe that to change this reality consumers need to be more aware about the environmental impacts of littering and, specifically, about the nature of the cigarette filter. Consumer insights data from 10 markets<sup>1</sup> show us that only about one-quarter of adult smokers are aware that CA is one of the main constituents of cigarette filters and only about half of them mention either the cigarette filter or the plastic wrap outside the pack as main pollutants.

To drive behavior change we therefore need to continue focusing on raising awareness and ensuring that littering is considered unacceptable. This requires us to develop and implement actions that respond to local realities and the socioeconomic and cultural specificities of the various places where we operate.

In 2022, we analyzed a range of solutions and created an anti-littering toolkit for markets focused on two aspects:

- 1. **Reach activities** focus on passing along the message directly to consumers, mainly using our own channels. Examples include on-pack and point-of-sale messaging.
- 2. **Impact activities** involve initiatives to raise awareness of the issue beyond the consumers of our brands and develop solutions in partnership with civil society organizations, local governments, and other stakeholders. Examples include corporate communication campaigns, initiatives to identify litter hotspots and improve public infrastructure, making portable ashtrays available, etc.

In order to meet their objective, our markets will deploy at least one reach and one impact activity each year.

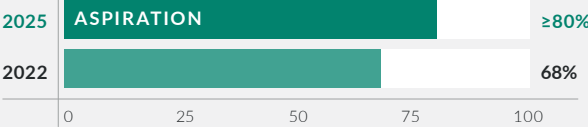
We are making strong progress toward our 2025 aspiration of 80 percent weighted coverage, within regulatory restrictions.

<sup>1</sup> Based on claimed response as part of PMI cigarette butt littering impact knowledge check in France, Indonesia, Japan, Kuwait, Netherlands, the Philippines, Poland, Saudi Arabia, Spain, and Switzerland.





Proportion of shipment volumes covered by markets with anti-littering programs in place for combustible cigarettes



SI

Raising awareness globally

It is important for us to tackle anti-littering with global campaigns and activities to address the issue on a larger scale and have a greater impact. We seek to educate and engage employees, relevant external stakeholders, and local communities in efforts to reduce littering, to ensure consistency and coordination in our efforts, leading to more effective and efficient use of resources.

Cleanup campaigns are predominantly designed to raise public awareness of the littering problem in the communities in which they occur rather than resolving the problem of littering or replacing more cost-efficient public cleaning services. In 2022, as part of our annual mobilization around World Cleanup Day—the world’s largest litter cleanup event—we expanded our employee engagement by adding a digital learning component, in addition to physical cleanups planned across many of our affiliates. Employees were invited to join a multi-week challenge designed to raise awareness on our holistic approach to reducing post-consumer waste across all our product and packaging streams. Our affiliates’ participation in this global action is part of our public sensitization efforts and demonstrates our broader aspiration to tackle the issue of cigarette butt littering.

Over 2,000 employees in over 60 countries participated in the challenge as part of PMI-driven activities. We once again partnered with Litterati, an app which uses data collection to develop patterns and find long-term solutions to littering; participants used the app consistently over the challenge to raise their own awareness around littering in their local communities. We estimate that we reached over 10,000 people globally, including our employees, their relatives, and partner organizations.

We also continued to host “[Our World Is Not an Ashtray](#),” an online corporate platform to educate, inspire, and engage the public on the issue of littering. Through this campaign, we share facts and figures, testimonials, and calls to action. A few of our affiliates also use this platform as a basis for local awareness-raising initiatives.

Tackling the issues of cigarette butt littering locally

Global campaigns and activities to raise awareness and reduce littering are driven by individual markets, which may have unique challenges and opportunities related to the issue. For example, smoking habits, environmental awareness, and disposal practices vary by country. By allowing markets to drive their own activities, we can ensure that the efforts are tailored to the specific needs and circumstances of each market and are more likely to be successful. Our affiliates therefore follow a global methodology, while also focusing on impactful, context-based strategies appropriate for their respective markets. These local anti-littering campaigns are run by our affiliates, with central support and guidance.

In this section, we have highlighted a handful of examples from markets that have introduced reach and impact activities. They serve as examples of what local initiatives can look like and collectively address all levels, from on-the-ground activations, local partnerships, experts, and trade partners to local authorities and online campaigns. We believe that markets that activate this multilevel campaign approach have an increased chance of reaching the desired outcome to change the socially acceptable habit of littering.

We understand that scalable solutions require the right kind of partnership, collaborating with industry peers, working with anti-littering organizations, and engaging with public authorities. With the learnings from these best practices, we aim to expand the activities beyond the local level to global campaign and initiatives.

Single-Use Plastics Directive

In the EU, cigarette manufacturers will be required to contribute to the costs of collecting and cleaning up cigarette butt litter. The Single-Use Plastics (SUP) Directive requires that producers participate in industry-wide Extended Producer Responsibility (EPR) schemes. EPR is an established governance scheme for circular waste management; it is now being used for the first time in the EU to address the problem of littering. We support the concept of an industry-wide EPR, provided such schemes are managed in a cost-efficient, proportionate, and transparent way that addresses the objectives of reducing litter and changing consumer behavior.

Bulgaria

PM Bulgaria launched an ongoing national campaign in 2021, which includes a range of awareness-raising activities such as public information boards in collaboration with nongovernmental organizations (NGOs) and art festivals, out-of-home visuals at 50 Black Sea beaches, and engagement with traditional national and regional media channels and online media outlets.

In 2022, the campaign once again generated media coverage in national and regional media, helping us pass along the anti-littering messages to more adult smokers and raise interest from NGOs for potential collaboration with our affiliate in the future.

Italy

An awareness campaign on environmental protection with particular focus on cigarette butt littering was launched in 2019 on the coast of Sicily and expanded to over 35 cities in 18 of the 20 regions in Italy. Over the years, the campaign has evolved and expanded the scope of its environmental mission, and it gained recognition from important Italian institutions. The goal is to encourage the adoption of appropriate behavior for smokers, creating awareness of cigarette butt pollution, and making thousands of portable ashtrays available to smokers.

From June to November 2022, more than 300,000 portable ashtrays were distributed across approximately 400 points of sale. Cleanup education activities across six cities and communication campaigns on social media channels raised awareness on the proper way to dispose of cigarette butts. This work was done in partnership with two major environmental organizations. Read more [in this market story](#).

Mexico

Since 2019, Philip Morris Mexico (PMM) has moved beyond awareness-raising in anti-littering campaigns by piloting an option to recycle cigarette butts with a local start-up called Ecofilter (read more in last year’s case study [here](#)).

In 2022, PMM and Ecofilter jointly deployed a comprehensive strategy by enabling infrastructure and equipment in highly populated public spaces nationwide, bringing people together to collect cigarette butts with nationwide activation work, resulting in more than 160 collection events in 2022. They used a countrywide awareness campaign intended to drive behavioral change that can lead to the appropriate disposal of cigarette butts, their collection, and where and how to contact Ecofilter’s ambassadors nationwide to trigger a recycling process. PMM also began assessing the feasibility of the technology for deployment beyond Mexico.

Nordics

Our efforts to raise awareness focus both on specific littering hot spots—such as high-traffic urban areas, squares, and parks identified as priorities by local authorities—and on reaching significant numbers of consumers to drive societal change. Insights gathered from our litter prevalence assessment in 2021 helped further guide our work, allowing us to strategically focus on those areas with the highest incidence of littering.

For example, PMI developed portable ashtrays which were branded, marketed, and sold by partner NGOs and directly to retailers in 2019 in our Nordic markets. The portable ashtray is a cheap, simple, and reusable solution that stubs out cigarette butts, prevents odor from leaking, and can contain up to 15–20 butts. In 2022, more than 160,000 portable ashtrays were sold at indirect retailers across four markets (Denmark, Finland, Norway, and Sweden). In addition, we built on this project to see how it could be more widely utilized across other markets.



## Managing waste from our smoke-free consumables

We seek to minimize the environmental impact of the main consumables used in our smoke-free category.

These include the heated tobacco units (HTUs) used with our heat-not-burn products (including the *HEETS* used with *IQOS ORIGINALS DUO* and previous generations, *TEREA* used with *IQOS ILUMA*, *Fiit* used with *lil SOLID*, and *BLENDS* used with *BONDS* by *IQOS*), the *VEEV* pods used with our e-vapor device, and our new *VEEBA* disposable e-vapor product.

Since our smoke-free portfolio is diverse in terms of product offering, so is the impact each of these products can have on the environment based on their different design, composition, and consumption. As our portfolio evolves, we seek to design and deploy tailored programs based on the specificities of each product category. In 2022, we required that our affiliates launching *VEEV* pods, *VEEBA* disposable e-vapor products, and *TEREA* HTUs put in place end-of-life take-back programs (with an intent to recycle collected products), as a prerequisite for product launches. We deem end-of-life take-back programs for all of our smoke-free consumables to be business critical based on their environmental impact, consumer needs, and market feasibility (read more about the composition of certain smoke-free consumables [here](#)). We will therefore continue rolling out these programs to other product categories moving forward.

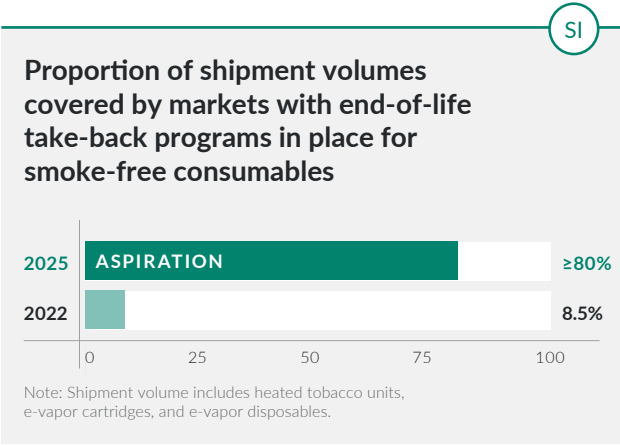
Over the long term, we aim to reduce our post-consumer waste by design, and explore lower-carbon, recyclable, and biodegradable alternatives to the materials currently used in our smoke-free consumables. In the interim, we are focused on scaling our end-of-life take-back programs.

The consumption and post-consumption behaviors related to our smoke-free products differ drastically from cigarette consumption. Unlike cigarettes, HTUs, pods, and disposable products do not require combustion to be consumed; in turn, they do not need to be stubbed out after use, and they do not contain smelly smoke residues. Because of this, consumers are more likely to hold on to it post-consumption and keep it until they can dispose of it properly. As a result, the likelihood of littering is less compared to cigarettes. We have run surveys over the past several years in key markets to measure the proportion of HTUs versus cigarette butts found on the ground. In partnership with third-party experts at Cortexia, we then compared that figure with the market share of HTUs versus all tobacco products.

Our findings suggest that a heated tobacco unit is on average three times less likely to be littered than a cigarette butt.

### Deploying end-of-life take-back programs

To mitigate the risk of littering, we set a goal as part of our revamped [2025 Roadmap](#) to reduce post-consumer waste and prevent littering by implementing comprehensive programs covering our smoke-free consumables. To serve this goal, we set an aspiration to implement context-based, impactful end-of-life take-back programs to collect and manage post-consumer waste from our smoke-free consumables in markets representing at least 80 percent of our smoke-free shipment volume as part of our [Sustainability Index](#). The programs align with global requirements to ensure consistency and comparability over time but are adapted to deployment realities in each market.



In 2021, we developed and piloted a global internal toolbox defining global standards for the preparation and execution of PMI end-of-life take-back programs. In 2022, we developed further guidance for markets following challenges some of them faced in finding adequate collection and recycling infrastructures in a complex and highly regulated environment. This guidance includes scouting of global recycling partners and recommends waste treatment in line with regulatory requirements applicable to waste management.

During the year, we worked closely with markets to guide and support them during the deployment process. We covered 8.5 percent of shipment volumes with end-of-life take-back programs by the end of 2022 despite these identified challenges. We also gained valuable insights on next steps as we seek to scale up these programs via enhanced materials to further support our markets.


### Addressing the impacts of our disposable VEEBA products

Whereas e-vapor disposables, similar to refillable or other reusable e-vapor products, offer adult smokers who would otherwise continue to smoke another smoke-free alternative to cigarettes, their single-use nature should lead producers to offer programs allowing for waste circularity and correct disposal.

Specifically, noting the role of lithium in fueling the green economy, there are concerns about the wasteful potential for lithium batteries in disposable devices to be lost and end up in landfill. Like for our heat-not-burn electronic devices and consumables, we are deploying voluntary end-of-life take-back programs to ensure valuable materials from our *VEEBA* e-vapor disposables are collected.

That said, even after collection, lithium recycling is difficult and many recyclers do not recycle the lithium component when recycling lithium batteries due to cost and technical difficulty. We have therefore amended our recycling guidelines to make it a formal requirement for our chosen recycling partner to be able to recycle the lithium alongside other salvageable materials from *VEEBA* products.

We also communicate to our adult users, where allowed, on proper disposal to prevent these products from being disposed of in general waste streams or littered in the environment. As increased regulations for such e-vapor disposables are expected to be adopted in the coming years, we actively support regulatory frameworks seeking to set better eco-design principles for reusability, repairability, and circularity for all smoke-free electronic products.



CASE STUDY

## Embedding convenience into our smoke-free consumables take-back program in Switzerland

Switzerland launched the first consumables take-back program in December 2021, with the goal of reducing waste from our products and improving circularity in our value chain. In partnership with external stakeholders, the program enables consumers to conveniently collect and return heated tobacco units after consumption and we are now exploring how they can be repurposed and given a new life.

[Read the case study here](#)





## Improving sustainability of our smoke-free devices

By integrating sustainability considerations into our product design—from choice of materials, development, to end-of-use and end-of-life—we can reduce environmental impacts as well as associated costs. We are committed to understanding and managing environmental impacts across our entire value chain, including assessing the life cycle of our products.

Improving the sustainability profile of our smoke-free products is particularly important as we continue to deliver technologically advanced products for adults who would otherwise continue to smoke or use other nicotine products. These products are at the heart of our transition to a smoke-free future.

### Utilizing life-cycle analysis

We use life-cycle analysis (LCA) to assess the carbon footprint of our products, from tobacco sourcing to device end-of-use and end-of-life. This analysis applies to devices, consumables, and packaging. In 2022, we deployed a standard baseline for devices and consumables to be used by different LCA suppliers and requested reports conforming with ISO standards. In line with current market practice, we also sought review of reported data by an independent entity. This will enhance our confidence in LCA data moving forward.

In general, our smoke-free products have a higher carbon footprint than combustible cigarettes. This is primarily due to the inclusion of an electronic device, which involves new components and requires electricity to charge.

On average<sup>1</sup>:

- Our heat-not-burn product category (including both consumables and devices) has an average carbon footprint of approximately 26.3 kg CO<sub>2</sub>e/year, of which consumables contribute 83 percent and devices 17 percent.
- Our e-vapor product category (including both consumables and devices) has an average carbon footprint of approximately 18.7 kg CO<sub>2</sub>e/year, of which consumables contribute 95 percent and devices 5 percent.
- Our cigarettes have an average carbon footprint of approximately 24 kg CO<sub>2</sub>e/year.

<sup>1</sup> Figures are based on data compiled from different LCAs. Scope includes materials, manufacturing, and end-of-life, but excludes logistics.

To mitigate these additional product impacts, we aim to decrease the total carbon footprint through smart materials selection, sustainable design practices, the collection and triage of devices, expanding our refresh and repair capabilities, and remarketing refurbished products.

In addition to the impact of electronic devices, the process used to manufacture consumables such as HTUs is also more resource intensive than for cigarettes due to the production of cast leaf tobacco which requires more water and energy. Learn more about our efforts to conserve water [here](#) and decarbonize our operations [here](#).

### Eco-design certification

We aim to drive continuous improvement in future product generations. To this end, we have explored eco-design standards and identified the criteria applicable to smoke-free products to further embed sustainability in the early stages of the product design process and across the product cycle.

These eco-design criteria address an end-to-end approach to minimizing impacts related to materials selection and sourcing, components production, design for repairability, and product manufacturing, distribution, use, and product end-of-life stages.

Product eco-design certification can drive product performance by raising the environmental and social standards to pursue and provide comprehensive information to consumers, enabling them to make more informed product choices.

Smoke-free products—and heated tobacco products, in particular—are a relatively new product category. As such, they are not covered by existing product category rules, making it challenging to find recognized eco-labels for these products. We are exploring several avenues to reach our 2025 goal, as well as continuing to implement eco-design criteria in PMI's product pipeline.

Aspiration   
**100%**

Of smoke-free electronic devices introduced on the market as of the end of 2025 that have eco-design certification

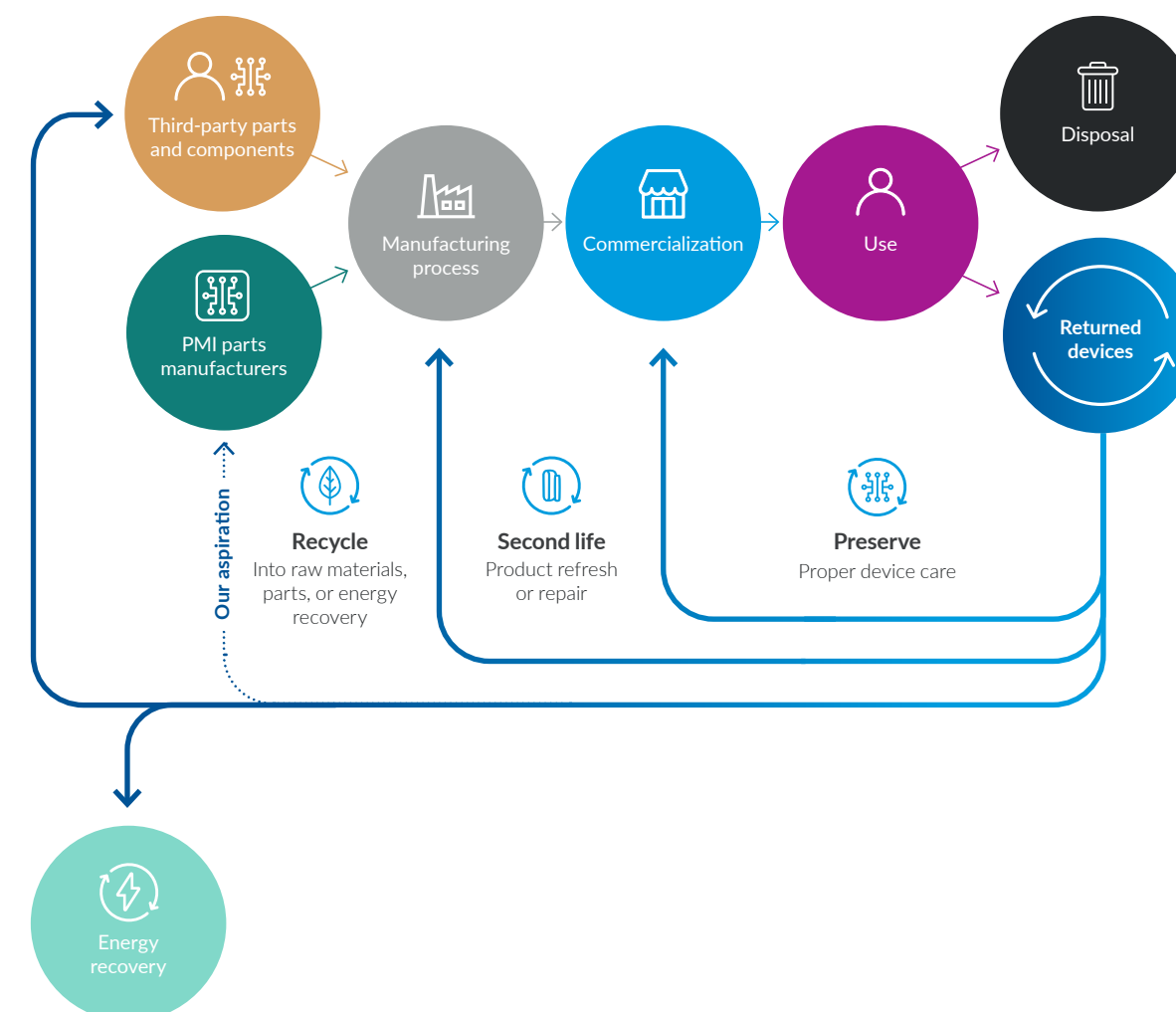
2025

## Extending smoke-free product life cycle

We strive to extend our product life cycles. Achieving this starts with imposing high standards of quality and reliability (read more [here](#)) and extends to preserving devices through proper device care, taking necessary steps to enable the refresh, repair, and refurbishment of devices, as well as take-back programs. In other words, we are evolving from a collection-for-recycling-only model to a collection-for-reuse-and-recycling model.

In the context of our CIRCLE program, in addition to establishing best-in-class recycling standards, we are expanding our capabilities to: (1) collect and triage devices, perform diagnostics that allow us to establish the state of the device and accordingly send it to be recycled, refreshed, or repaired; (2) refresh and repair devices in a manner that meets quality and hygiene requirements; and (3) remarket refurbished products, giving them a second life.

Capabilities (1) and (2) are highly interdependent, as the criteria and procedures for device triage are linked to the extent of our refresh and repair capabilities. As these capabilities will strengthen over time, the triage model will also evolve, allowing a greater proportion of devices to be refreshed or repaired.



Source: Adapted from the Ellen MacArthur Foundation Butterfly [diagram](#)

Maximize the benefits of smoke-free products

Purposefully phase out cigarettes

Seek net positive impact in wellness and healthcare

Reduce post-consumer waste



Preserve through proper device care

We strive to help users of smoke-free electronic products extend their device life cycles through better care. We seek to minimize consumer pain points with simple tips pertaining to regular device cleaning at home or professional cleaning in our boutiques, firmware updates, and proper charging. These simple actions help reduce the number of devices ending up as waste.

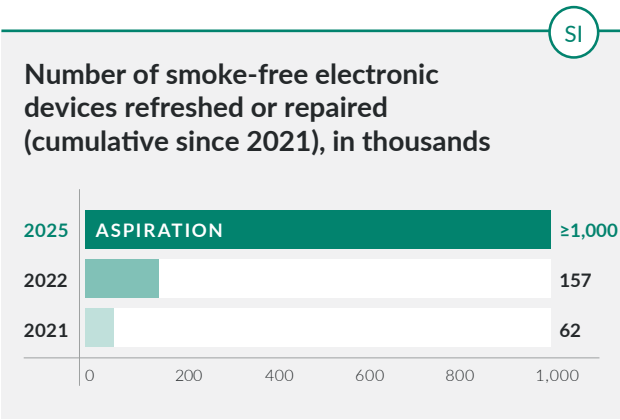
Building on this work, we are leveraging our B2C commercialization model and related processes and tools in our sales channels (e.g., our stores, e-commerce websites, and IQOS coaches) to prolong the life of our devices and avoid e-waste through appropriate device care. These efforts include engaging directly with the consumer, explaining device functionality, and avoiding unnecessary product replacements through proper device diagnosis and streamlined procedures for returns, warranties, and loyalty programs.

Overall, the combination of device quality improvements and consumer-facing efforts have contributed to reducing our device return rate by more than two-thirds in the past two years.

Promote device second life: refresh and repair

We strive to establish commercially viable programs for devices that, once returned, can find a second life back into the economy.

We are in the early stages of moving from a collection-for-recycling-only model to a collection-for-reuse-and-recycle model. We took steps in the past two years to prepare and scale capabilities in our CIRCLE hubs to enable the processing of devices for a second life. To guide us in this journey, we have set an ambitious target to refresh or repair at least one million smoke-free electronic devices by 2025 (cumulative since 2021), which we are on track to achieving. Key prerequisites of a successful second-life strategy include the ability to collect and sort devices, distinguishing between those to be recycled and those to be recovered, and to repair or refresh devices according to quality and safety standards.



In 2022, we successfully established our first repair process for IQOS ORIGINALS DUO. Overall, close to 157,000 devices were repaired and refreshed, and received by markets for remarketing in 2022.

During the year, we continued to develop and enhance our refresh and repair capabilities at our CIRCLE hubs. In 2022, we initiated a retention program in Germany that allowed IQOS users to return their damaged electronic devices that were no longer under warranty and in exchange purchase remarketed, refreshed devices with the same warranty terms as a new device.

We are also looking at ways to integrate device refresh and repair activities into commercial opportunities. We commercialized refreshed devices in nine markets: Austria, Germany, Malaysia, New Zealand, the Philippines, Portugal, Romania, Switzerland, and the U.K.

An important purchase driver for many adult smokers considering converting to smoke-free alternatives is the upfront price of the device. Typically, the refreshed devices are priced 20 to 30 percent lower than new devices, playing an important role in our portfolio by diversifying price point offering. Read more about affordability [here](#). Overall increases in net promoter scores in our e-commerce channels demonstrate that these offerings have had a positive impact on consumer satisfaction.

Moving forward, we plan to expand the collection of used devices via other consumer programs and increase their processing for a second life. We plan to further expand the program's geographic coverage and will continue to increase our refresh and repair capabilities.

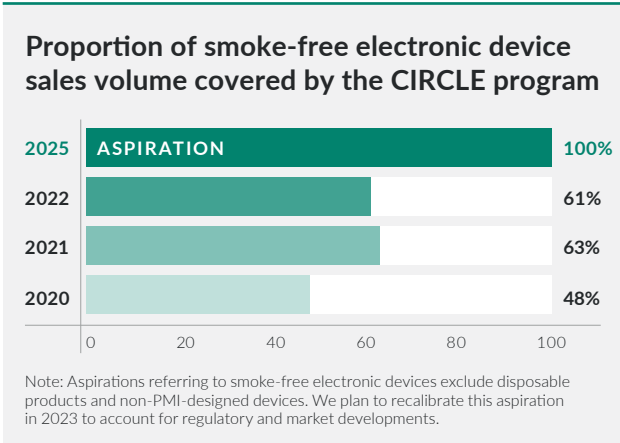
Enhance circularity: device recycling

For those products that are broken or have reached end-of-service and cannot be given a second life, our centralized CIRCLE hubs inspect, process, and separate materials for recycling. We continue to grow the capacity of these hubs and to expand their coverage by onboarding new markets. Nevertheless, in some geographies we face logistic and regulatory challenges to onboard markets into the centralized CIRCLE program, which also limit our pace of deployment.

We are exploring how to expand device recycling capabilities at a local level in markets such as Italy and Korea. This could be through adapting our centralized CIRCLE hub approach to distinct markets, or looking at business models that would incorporate agreements with third-party repair and recycle partners that meet or exceed our minimum requirements, complementing our CIRCLE hub approach.

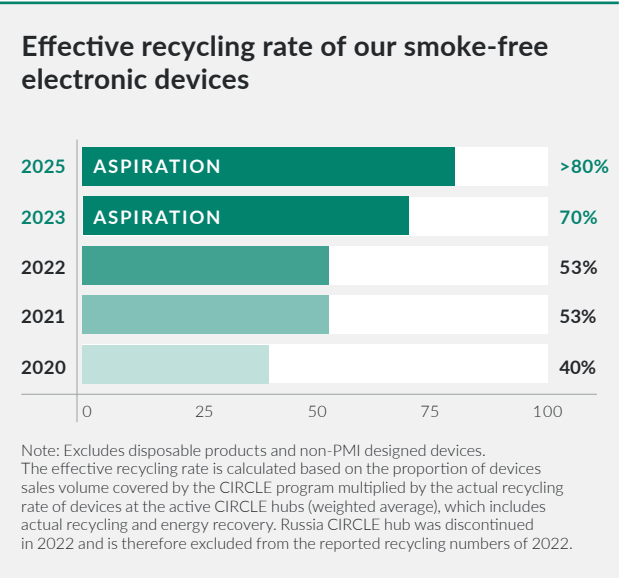
We expect to leverage the learnings from our centralized CIRCLE hubs to guide and centrally govern such local solutions, ensuring that they are aligned with our standards and support progress toward our global recycling targets.

We achieved a CIRCLE hub coverage of 61 percent market volume globally in 2022 (2021: 63 percent).



During 2023, we plan to re-calibrate our initial aspiration to expand the CIRCLE hub coverage to 100 percent to account for regulatory and market developments in particular considering market circumstances (e.g., available waste treatment infrastructure and regulatory frameworks). While leveraging central CIRCLE hubs, we will also use solutions to expedite and accelerate our market coverage. These local solutions will operate under CIRCLE, meaning, they will be required to fulfill equivalent recycling rate performance to follow the CIRCLE reporting standard.

Our CIRCLE hubs in Hungary and Japan continued to drive excellence in e-waste management in 2022. The recycling rate of our products in these two hubs combined stood at 86 percent for the year (80 percent recycling and 6 percent incineration with energy recovery).



Accessories

As we progress with device recycling, we are exploring possibilities to close the loop by reusing materials to produce new accessories for our products.

In 2022, we launched a collection of recycled IQOS ORIGINALS DUO pocket charger door covers made from pre-owned IQOS 2.4 pocket chargers recycled at our CIRCLE hubs. The collection has been launched in eight pilot markets. The door covers are the first piece of the device accessory made of recycled plastic obtained from our old products and that will be launched in the IQOS ecosystem, demonstrating our intention to further encourage consumers to play an active role in reducing post-consumer waste.

In addition, we are investigating materials with lower negative impact on the environment and have an ambition to make these an integral part of our new product launch ecosystems to gradually replace the existing accessories.





## Reducing and improving packaging

As our product portfolio changes, so does our packaging range, which continues to evolve in line with our expansion into new product categories, adaptations to better meet consumer needs, and shifts in regulatory expectations.

Our packaging sustainability strategy seeks to keep pace with these changes, reflecting best-in-class leadership on packaging recyclability and the role of plastics.

We aim to develop sustainable packaging solutions that enhance the consumer experience, protect our products, and comply with regulation. To deliver on our ambition, we employ a twofold strategy:

- 1. **Reduce packaging:** We aim to design our packaging systems in a way that eliminates unnecessary packaging waste, using only the materials needed to deliver an optimal experience.
- 2. **Improve circularity:** We seek to ensure the recyclability of our packaging, increase the use of recycled content, and continue to increase the use of materials from renewable sources.

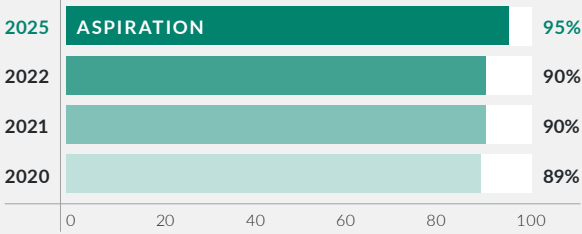
Multistakeholder engagement and active participation in external coalitions and working groups remain a key part of our strategy, which allows us to contribute to the global sustainable packaging agenda, anticipate regulation, and learn about recycling requirements, recycled material availability, and testing and data analytics associated with packaging.

We continue to maintain and track progress on our 2025 targets for packaging material reduction, recyclability, and renewable content. Reflecting recent changes in our business and product categories, we expect to re-baseline our packaging portfolio for new and existing product and packaging systems and we anticipate integration of these considerations into future reporting cycles.

We continue to work towards integrating materials coming from renewable sources, by removing unnecessary plastic and replacing aluminum inner liners with paper versions where possible, while maintaining a high share of our packaging being made of paper and board.

We also continue to invest in proprietary research and to test alternative materials and formats for potential displacement of hard-to-recycle packaging across our consumable portfolio.

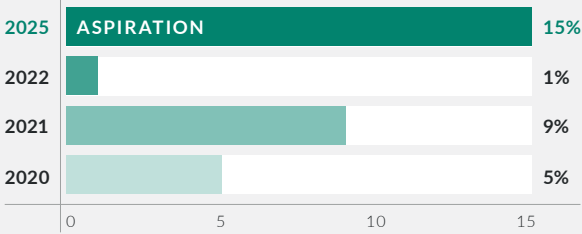
Proportion of packaging materials coming from renewable sources



### Reduce packaging

Between 2018 and 2022, we reduced our total packaging materials weight by 1 percent, versus our current ambition to reduce our total packaging materials by 15 percent by 2025. This is a smaller overall reduction of packaging material weight in 2022 than in previous years compared with our 2018 baseline, as these efforts were largely offset by significant volume growth, changes in our product portfolio, and both inventory recovery and forward planning to build resilience.

Reduction of packaging materials weight versus 2018 baseline



In 2022, paper and board remained the primary material used in our packaging, representing around 92 percent of our total packaging portfolio. Of this, 85 percent was sourced from suppliers with Chain of Custody (CoC) certified according to the Forest Stewardship Council (FSC), Programme for the Endorsement of Forest Certification (PEFC), or Sustainable Forest Initiative (SFI) standards. We continue to work in close partnership with our major suppliers to drive towards full CoC for our board supply chain. In collaboration with industrial material and machine suppliers, we continue to focus on reducing material consumption. By the end of 2022, we activated an estimated annual reduction of 3,200 tons of board across our portfolio. Between 2018 and 2022, this work led to a reduction of more than 11,700 tons of board across the majority of our packaging portfolio.

This is equivalent to a material weight reduction for our cartons and consumer facing packaging of over 11 percent for our combustible and 7 percent for our smoke-free categories without compromising pack quality.

Currently, the plastic wrap around our packs of consumables and secondary cardboard packaging is recyclable but is not made from renewable sources. In 2022, as part of our plastic reduction program, we reduced and optimized our current film solutions on our heated tobacco packaging portfolio, removing 385 tons of plastic film. We have similarly continued removing unnecessary packaging and improving recyclability for our electronics device and accessories packaging.

On a like-for-like basis versus a year ago, through a series of improvement initiatives across our IQOS ORIGINALS heated tobacco portfolio, we have reduced material consumption by over a third and increased packaging efficiency by around 25 percent. Together, these represent a reduction of 136 tons of fiber-based material and over 5 tons of plastic content. We have also fully removed plastic wrap around our packs for all our device and accessories packaging across our IQOS portfolio and completed the removal of any packaging components that compromise recyclability, such as magnets which are commonly used for closure systems.

Within our e-vapor category, including our recently launched VEEBA product, we have redesigned the packaging to both reduce the amount of materials required and remove all unnecessary plastic. For VEEBA packaging, this has resulted in a 75 percent material reduction and 94 percent decrease in plastic per pack.

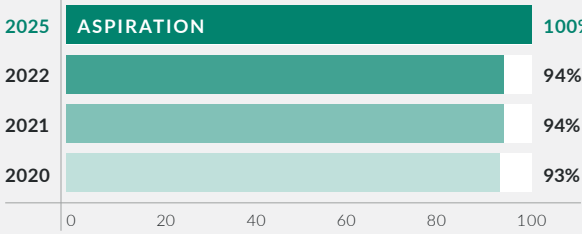
### Use of materials in our packaging in 2022

Material	Description	Weight (tons)	Proportion
Paper and board	Packs and bundles, inner liners, and shipping cases	415,014	92%
Plastic	Overwrap of packs and bundles, pouches, seal inner liners, and labels	27,322	6%
Aluminum	Inner liners (including seal) and other tobacco packaging	2,495	1%
Other	Inks and composite materials used in other tobacco product packaging	7,379	2%

### Improve circularity

To drive improvements in our packaging footprint, we focus on using recyclable materials, including recyclable inner liners.

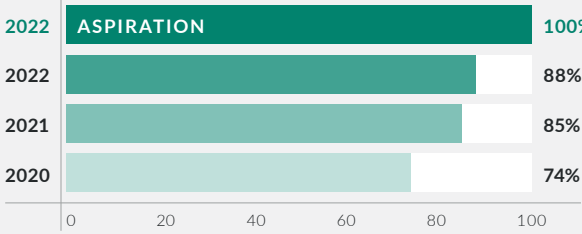
Proportion of packaging made with recyclable materials



Note: Prior years' data has been restated to take into account more accurate computation of packaging material usage.

We continue to transition from nonrecyclable inner liner systems, such as laminated aluminum paper, to recyclable alternatives in markets where regulatory requirements allow. As of the end of 2022, we had transitioned more than 88 percent of the total portfolio (2021: 85 percent).

Proportion of recyclable inner liners by year-end



Note: For all markets where possible in compliance with local regulatory requirements.

For reporting clarity, we consider a target of 95 percent to be the full potential for conversion based on current estimates. Due to supply chain and local market challenges, the remaining portion for full conversion is anticipated in the coming years.

In 2022, 94 percent of the aluminum used in our packaging was Aluminum Stewardship Initiative (ASI) certified, either under the Performance Standard or the CoC.

In 2022, we launched a commercial initiative whereby 100 percent of our limited edition *Marlboro* packs in Mexico were made with recycled content board from the industrial waste generated within our own packaging value chain. This is an important step in keeping renewable materials within the circular economy.



# Looking ahead



**Werner Barth**  
President, Combustibles  
Category and Global  
Combustibles Marketing



In addition to R&D investments, we will leverage our new, market-focused anti-littering toolkit to assist in the development and deployment of local reach and impact activities to prevent cigarette butt littering. For example, we plan to pilot emergency ashtrays developed in our Nordic markets to additional markets around the world.

Currently, multiple alternative filtration materials are evaluated through consumer research studies. Based on these results, consumer feedback will be critical in shifting the developments toward the direction pointed out. This approach, though time consuming, will ensure that developments resonate with consumer needs leading to a viable and sustainable product.



**Scott Coutts**  
Senior Vice President,  
Operations



To reduce the overall carbon and plastic footprints of our cigarettes and smoke-free consumables, we will continue to research and test alternative materials to cellulose acetate-based filters that meet our criteria for scale and focus on developing alternatives to the materials currently used in our smoke-free consumables. To be an industry leader, we must focus on a growth mindset in the way we approach innovation activities, working internally and externally, learning from fundamental science and our consumers, improving and adjusting accordingly, and not giving up until we solve this important global challenge.

In 2022, with the expansion of our product category and broadening of product portfolio, we continued to deliver a significant reduction in our packaging. In 2023, we will continue our focus, looking at our footprint, regulation and making the right moves for the long term.



**Bin Li**  
Chief Product Officer



With initial eco-design criteria in place, we will be able to continue on our eco-certification journey. We are ensuring that we have a set of options that will allow our electronic devices to be eco-designed following electronic industry sustainability best practices to ensure reliability, accuracy, and transparency.

We will also continue to expand the CIRCLE hub capabilities to perform repair and refresh activities and recycle products that cannot be recirculated, while also helping our markets find alternatives where our centralized CIRCLE hubs are not a viable option.



**Stefano Volpetti**  
President, Smoke-Free  
Inhaled Products and  
Chief Consumer Officer



In 2023, we will continue our efforts to reduce the post-consumer waste generated by our products by supporting our markets in the deployment of end-of-life take-back programs for VEEV, VEEBA and IQOS ILUMA consumables and encourage them to also set similar initiatives for other smoke-free consumable product launches, where feasible, using our internal toolbox for guidance.

Beyond consumables, we will also continue to leverage our sales channels to promote device durability and longevity, as well as device take-back, and look to commercialize business models with partner organizations to perform repair and refresh services that meet our global standards and help reduce e-waste.







# Operational impact

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# Our aspirations

### Foster an empowered and inclusive workplace

Maintain	<b>100%</b> of employees earning at least a living wage <b>≥30</b> employee Net Promoter Score	<b>&lt;0.65</b> collision rate in our fleet <b>Global EQUAL-SALARY</b> certification <b>40%</b> of management positions held by women	<b>&lt;0.3</b> Total Recordable Incident Rate (TRIR) for PMI employees, contracted employees, and contractors (per 200,000 hours worked)
2022	<b>100%</b> of PMI employees covered by parental leave principles		
2023	<b>32%</b> of senior roles held by women		
2025	<b>70%</b> of PMI employees with access to structured lifelong learning offers ⑤ <b>35%</b> of senior roles held by women ⑤	<b>≥60%</b> representation of local talent in the executive management teams of at least 80% of our markets or clusters <b>&gt;70%</b> perception of psychological well-being among our employees	<b>≤60%</b> representation of any gender in managerial roles in most of our functions and regions <b>≥20%</b> representation of Asian talent in senior roles globally

### Improve the quality of life of people in our supply chain

Maintain	<b>&gt;90%</b> of PMI purchased tobacco volume for which labor practices and adherence to our Agricultural Labor Practices Code are systematically monitored	<b>100%</b> of contracted tobacco farmers and farmworkers supplying tobacco to PMI have access to personal protective equipment for the application of crop protection agents and prevention of green tobacco sickness	<b>100%</b> of tobacco farmworkers are provided with safe and adequate accommodation <sup>1</sup>
2022	<b>100%</b> of contracted farmers supplying tobacco to PMI paying their workers at least the minimum legal wage or agricultural benchmark		
2025	<b>100%</b> of contracted farmers supplying tobacco to PMI make a living income ⑤ <b>10</b> highest-risk countries covered by external human rights impact assessments, with findings addressed ⑤	<b>0%</b> prevalence of child labor among contracted farmers supplying tobacco to PMI ⑤	<b>100%</b> of critical suppliers from whom PMI sources sustainably  <b>100%</b> of contracted farmers supplying tobacco to PMI have basic water access
2030	<b>100%</b> contracted farmers supplying tobacco to PMI have access to basic sanitation and hygiene		

Note: In 2022, we strengthened our approach to monitoring the quality of life of people in our tobacco supply chain by introducing the Sustainable Tobacco Supply Chain (STSC) framework (read more in this section). Although it is still a requirement to monitor performance against our Agricultural Labor Practices (ALP) Code for all contracted farms, we decided to shift from reporting sustainability progress on all farmers contracted by PMI's suppliers or PMI leaf operations to farmers whose tobacco volumes are purchased and used in PMI products.

1 Scope is limited to farmers that provide accommodation to workers.

## ⑤ Sustainability Index

### Tackle climate change

2023	<b>Zero</b> coal used as curing fuel for the tobacco we source		
2025	<b>Carbon neutrality</b> in our direct operations (scope 1+2) ⑤  <b>35% reduction</b> in absolute greenhouse gas (GHG) emissions in our tobacco supply chain versus 2019 baseline	<b>100%</b> of our manufacturing facilities certified carbon neutral  <b>100%</b> of electricity used and purchased in our factories derived from renewable sources	<b>25%</b> reduction in absolute scope 3 GHG emissions versus 2019 baseline ⑤  <b>15%</b> of suppliers by spend (covering purchased goods and services) will have science-based targets (SBT)
2030	<b>50%</b> reduction in absolute scope 1+2 GHG emissions versus 2019 baseline (SBT)	<b>50%</b> reduction in absolute scope 3 GHG emissions versus 2019 baseline (SBT)	<b>50%</b> reduction in absolute GHG emissions in our tobacco supply chain versus 2019 baseline
2040	<b>Net zero</b> GHG emissions in our value chain (scope 1+2+3) (SBT)		

### Preserve nature

Maintain	<b>Zero gross deforestation</b> of primary and protected forests associated with our tobacco supply chain	<b>&gt;70%</b> of flue-cured tobacco purchased cured with renewable fuel sources (self-sufficient firewood or biomass)	<b>100% of tobacco purchased</b> without detection of residues attributable to the use of highly hazardous pesticides	<b>≤3.1 Water ratio</b> in our manufacturing facilities (water withdrawn in cubic meters per million cigarettes equivalent)	<b>Virtually zero</b> waste to landfill in manufacturing sites
2025	<b>Zero net deforestation</b> of managed natural forest and no conversion of natural ecosystems in our tobacco supply chain ⑤  <b>100%</b> of our tobacco-growing areas covered by local water risk assessments (cumulative since 2018)	<b>Net positive impact</b> on forests associated with our tobacco supply chain  <b>100%</b> of our manufacturing facilities certified to the Alliance for Water Stewardship (AWS) standard <sup>1</sup>	<b>Zero gross deforestation</b> of primary and protected forest associated with our supply of paper and pulp-based materials		
2030	<b>≥10 million cubic meters</b> of water optimized in our tobacco-growing areas (cumulative since 2019)		<b>Net zero deforestation</b> of managed natural forest and no conversion of natural ecosystems in the paper and pulp-based products supply chain		
2033	<b>No net loss</b> on ecosystems connected to PMI's value chain		Scale solutions <b>toward a positive impact</b> on water resources, measured as volume of water optimized and restored		
2050	Contribute toward a net <b>positive impact</b> on nature		Contribute toward a <b>positive impact</b> on water resources		

1 Aspiration pertains to priority manufacturing facilities identified based on-site overall risk in relation to the watershed, water withdrawal, water consumption, product portfolio, and other strategic considerations.



OPERATIONAL IMPACT

# Foster an empowered and inclusive workplace



Our employees are drivers of innovation and the ambassadors of our purpose. We aspire to provide meaningful and fair employment, opportunities to grow, and a workplace that champions well-being and inclusion.

## INWARD IMPACT: The business case

Our long-term business success relies on our people: human capital in the form of our employees' dedication, talent, and passion. It is essential for us to provide a fair and inclusive workplace that upholds good working conditions and labor rights, protects the health and safety of employees, promotes their well-being, and offers opportunities to grow, increase their skills and capabilities, and improve their employability.

Investing in our people and providing them with meaningful opportunities helps us to recruit and retain talented individuals who can contribute to our company's purpose and achieve high productivity and efficient operations in a context of rapid change. Furthermore, we strongly believe that an inclusive culture embracing diversity better attracts talent and improves decision-making, innovation, customer orientation, and employee satisfaction.

## OUTWARD IMPACT: The right thing to do

Equitable and fair employment conditions are crucial for societal harmony and well-being and are central to a sustainable and prosperous future for all. Effective professional development opportunities ensure that employees can pursue professional opportunities and contribute meaningfully to society.

By ensuring that all people who work with us enjoy a safe and healthy work environment, and by attending to their physical and mental well-being, we can positively impact their lives beyond their time spent at work.

Moreover, by protecting and promoting diversity, equality, equity, inclusion, and fair treatment—essential to unlocking social and economic development—we seek to instill in our people a sense of belonging and maintain an inclusive workplace culture. This can have positive spillover effects outside of our organization, and sets an example for corporate best practice.

### In this section

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## Our management approach

Our ambition is to be an employer of choice, fostering an inclusive culture wherever we operate in the world.

This means ensuring that our employees experience fair working conditions, opportunities to develop skills and boost their employability, and a workplace that protects and promotes their psychological and physical health, safety, and well-being.

We develop and deploy specific programs accompanied by tailored commitments and targets that allow us to track progress and adjust our actions as needed.

Training and communications help employees understand the standards and processes relevant to their roles and how to apply them in their daily work. We use multiple formats and languages to optimize our reach across the organization.

We ensure our employees are informed of their rights by their local People & Culture (P&C) teams, our [Code of Conduct](#), and related principles and practices—including our Workplace Integrity policy—and collective labor agreements.

Employees can speak up about employment-related concerns, ask questions, and recommend improvements to their supervisors, P&C teams, our Ethics & Compliance function, or through our helpline (read more [here](#)).

As a global company, we consider it our duty to ensure that our entire workforce (regardless of local or national regulation) is treated fairly, respectfully, and in line with our principles. We operate in multiple countries with widely varying legal employment frameworks. For example, in some countries the right to freedom of association is restricted; in such cases, we strive to work with employees' consultative committees and other suitable mechanisms of representation.

We value dialogue with employee representatives (e.g., trade unions and works councils) and regularly engage with them and learn from best practices. This dialogue occurs at local, regional (e.g., European Works Council), and global (e.g., the IUF – International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations) levels.

### Workplace integrity principles at PMI

We strive to maintain an environment that is inclusive, safe, and professional. We promote diversity, equality, and equity in our organization, ensuring that all employment-related decisions are merit-based. We do not tolerate harassment, discrimination, abuse or misuse of company assets or resources, violence, or the misuse of alcohol or drugs. We do not engage in or condone child labor, forced labor, or other labor abuses. We encourage effective engagement and dialogue with employees and their representatives.

### Management

Employee-related matters are the responsibility of all members of Company Management and functional heads. Beyond reporting lines, dedicated teams within our People & Culture function—headed by our Senior Vice President, People & Culture, a member of our Company Management—lead efforts on labor relations, talent attraction and retention, learning and development, performance management, and compensation.

Our Chief Diversity Officer oversees the development and deployment of strategies to foster diversity, improve inclusion, and promote well-being in the workplace. Our Senior Vice President, Operations oversees the company's strategy and performance on health and safety across our manufacturing sites, fleet, and offices.

Our team, headed by our Senior Vice President Global Communications, plays a key role in facilitating greater employee engagement and nurturing a positive workplace culture via internal communications.

### PMI's policies and standards

[Code of Conduct](#)

[Human Rights Commitment](#)

[Environmental, Health, and Safety \(EHS\)](#)

[Manufacturing Commitment](#)

[Fleet Safety policy](#)





# Progress in 2022

## Highlights

- We achieved our 2022 target of 40 percent women in management positions and successfully renewed our global EQUAL-SALARY certification, which will be valid until 2025.
- We continued to improve our employee Net Promoter Score, exceeding industry benchmarks and demonstrating strong employee engagement despite a difficult external context in many countries this year.
- We took meaningful steps, laying the groundwork for providing our employees with structured lifelong learning offers, leveraging on digital and inclusive solutions.
- We continued to promote our employee resource groups (ERGs) and prepared to launch a new ERG focusing on parents at PMI.
- We were included in the 2023 Bloomberg Gender-Equality Index for the third consecutive year (read more [here](#)).

## Challenges

- Higher-than-expected turnover of women coupled with lower internal promotion rates of women in management and senior roles (compared to men's) were the main factors limiting progress toward our aspiration to increase representation of women in senior roles.
- The majority of accidents in our manufacturing facilities occurred in non-production areas, limiting our oversight and ability to intervene.
- As our company continues to transform, we must continue to find ways to upskill, re-skill, and create new experiences for current employees to fill skill gaps and boost their employability.

## Calculating the footprint of recent acquisitions

We have begun collating workplace-related figures pertaining to the wellness and healthcare acquisitions made in 2021, which we have since consolidated into PMI's Vectura Fertin Pharma subsidiary. Vectura Fertin Pharma employed around 1,100 people in 2022. Due to the immaterial impact on our global workforce-related data and overall operational independence of this subsidiary, data presented in this section of the report do not represent consolidated figures.

## Providing fair employment

All employees, irrespective of role, location, type of employment, or length of service, have the right to work under fair and just conditions. Treating people with respect and dignity is central to the fundamental principles that guide our business conduct and unite us as a company.

## Maintaining sound labor relations

We are committed to respecting the rights of our employees to form or join trade unions and other employee representative organizations of their choice. In 2022, we had 79 collective labor agreements in 35 countries, covering 61 percent of our employees (2021: 77, 34, 61 percent).

During the year, we worked with markets to further develop their own labor relations strategies. Strong local labor relations strategies help us avoid disruption with employees and social partners in light of changes to our business needs, and other external trends such as inflation, through consistent, open dialogue.

## Labor relations in Turkey

In August 2022, a dispute arose between a third-party company that provides services in our Torbalı-İzmir factory (PMTM) and the third-party's employees following the transfer of four individuals to other facilities. PMTM does not employ these individuals; their contractual employment relationship is with the provider of outsourced services and the facility transfer is explicitly provided for in their employment contracts. These transfers were wrongfully interpreted as terminations and resulted in non-peaceful protests in the factory, and damage to PMTM property.

Suggestions that have been made in the media and elsewhere that PMTM and Philip Morris International are “union busting” or have engaged in actions that are inconsistent with PMI's [Human Rights Commitment](#) and the International Labour Organization (ILO) standards on effective labor relations are erroneous.

PMTM worked with law enforcement and the third-party company to de-escalate the situation. We continue to be in close contact with the third-party company to ensure that the situation is managed in a lawful and appropriate manner. First steps have been taken to address the third-party company's employees' concerns, including those regarding their economic conditions.

## Promoting employee volunteering

PMI has a long-standing commitment to support the communities where our employees live and work, and from where we source tobacco, in the form of monetary contributions and in-kind donations (see the list of our 2022 social contributions [here](#)), as well as volunteer work by our employees.

After deploying our global employee volunteering guidelines in 2021, all PMI employees are eligible to take two days per year of paid leave for volunteering activities. Also, the company commits to match—with up to five additional paid leave days—any additional volunteer work employees choose to do in their own time.

In 2022, we analyzed how these guidelines were being used and gathered feedback from our employees with a view to broadening their adoption. Also, we looked into the potential to further leverage these guidelines to support Projects with a Heart, a global grassroots, employee-driven philanthropic movement established and run by employees and endorsed by PMI. Projects with a Heart connects internal employee donors and would-be volunteers with people in need. Read more about their work [here](#).

## Providing fair compensation

We are committed to upholding and promoting a fair and just workplace, rewarding employees based on their performance.

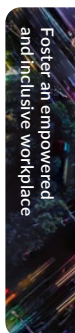
Our suite of compensation, recognition, and benefits programs, platforms, and policies differs by location, taking into account local regulations, agreements, needs, and preferences. However, there are some global elements, such as our Employee Assistance Program, and most programs incorporate bonus plans, life insurance, long-term sickness plans, retirement-related arrangements, and paid leave programs.

We regularly review our offerings to ensure that they continue to meet the evolving needs of our workforce.

## Upholding a living wage for our employees

We are committed to ensuring that all our employees globally earn at least a living wage. Paying at or above the living wage benefits employees, families, communities, and our business. It fosters talent attraction, retention, and productivity, while securing our social license to operate. A living wage, distinct from a minimum wage, provides an employee with the means to enjoy a decent standard of living, including the ability to buy goods and services, and accumulate savings. A living wage takes local living standards into account.

We have worked with leading sustainability consultancy, BSR, since 2018 to assess living wages for our employees globally. We plan to keep conducting a living wage assessment at least every two years and initiate actions as necessary to ensure that we continue to meet our global living wage commitment to our employees.



Improve the quality of life of people in our supply chain

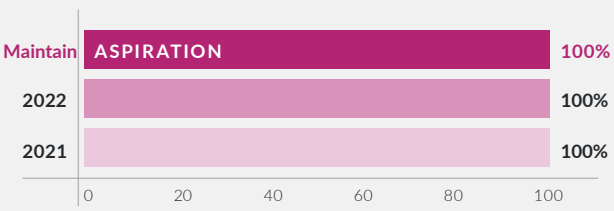
Tackle climate change

Preserve nature





Proportion of employees earning at least a living wage



In 2022, we continued to analyze the data, which confirmed that we continue to pay at or above the living wage for all our employees worldwide.

We are also committed to improving the quality of life of the people in our supply chain. Read more about our work to promote a living income in our tobacco supply chain [here](#).

Equal pay for equal work

In April 2022, we achieved re-certification of our initial global EQUAL-SALARY certification from 2019. This global certification verifies that PMI continues to pay female and male employees equally for equal work in over 90 markets where we operate. This is an important building block on the road to creating a more inclusive gender-balanced workplace and maintaining our status as a top employer.

Aspiration



Global EQUAL-SALARY certification

Maintain

Equal pay for equal work is a first step in ensuring that women's work is not undervalued because of their gender. With this foundation in place, we are now working to close our gender pay gap (the average pay for women versus the average pay for men), including by achieving a better gender balance at senior levels of the company (read more [here](#)).

Protecting the health, safety, and security of our employees

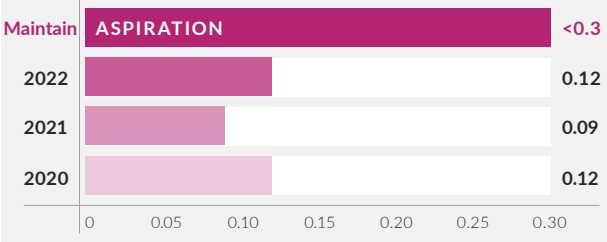
We have embedded clear methodologies, procedures, and robust controls in our factories, offices, and fleet aimed at ensuring that our employees and others on-site stay safe.

The health and safety of employees and contractors in manufacturing facilities, offices, and our fleet is covered by our management systems, which are based on recognized guidelines and standards, including ISO 45001:2018 (Occupational Health and Safety Management Systems), and assessed and audited internally and externally.

These systems enable us to analyze safety losses and to prioritize, plan, and monitor health and safety performance. We routinely update our standards and train our staff to ensure teams understand and align with the requirements.

Our health and safety performance monitoring covers PMI employees, contracted workers who are under the direct supervision of PMI but employed by a temporary employment agency (we had around 6,990 contracted employees on average per month in 2022, compared with 7,300 in 2021), and contractors when on PMI premises (see [Glossary](#) for definitions).

Total Recordable Incident Rate for PMI employees, contracted employees, and contractors



In 2022, our Total Recordable Incident Rate (TRIR) for employees, contracted employees, and contractors was 0.12 (2021: 0.09). We are proud of the progress made to date and remain committed to maintaining a TRIR below 0.30 in a sustainable manner.

Our Lost Time Incident Rate (LTIR) for employees, contracted employees, and contractors was 0.07 in 2022 (2021: 0.05). We do not set targets on lost time incidents as we wish to handle every incident with the same level of importance, quality of analysis, mitigating action, and worldwide reapplication of learnings regardless of whether the incidents result in lost time. The top three direct causes of injury in 2022 included "cutting by sharp object" (20 percent), "contact with moving machinery" (15 percent), and "slip, trip or fall on the same level" (12 percent).

Embedding a safety culture across PMI

Our ambition is to create an interdependent sustainability culture in which responsibility for health and safety and the workplace environment is owned by highly skilled individuals and autonomous teams.

In our markets, we use various communication platforms to increase the level of engagement on market and fleet safety, and sustainability topics. Through our recognition programs in 2022, we identified over 600 improvement initiatives embedded across seven main categories slated for 2023, and over 40 employees were awarded for their contribution to fleet safety and environmental sustainability.

In our factories, we conduct annual sustainability culture assessments with representatives from all levels of their local organizations, combined with anonymous employee surveys, to evaluate our sites' safety culture levels, identify opportunities for improvement, and check the effectiveness of our actions. In 2022, our employee survey drew close to 15,000 participants with a result of 4.17/5 (2021: 4.02/5). Site leadership teams take ownership to continuously close any gaps identified.

Safety in manufacturing

Health and safety in our factories is coordinated centrally by our Global Manufacturing Sustainability team. At site level, each facility has a dedicated team that ensures standards are met on the ground.

As part of ISO 45001:2018 requirements, each site performs an annual management review, which highlights the main risks and opportunities for each site, and actions moving forward aligned with the whole management team of the site.

External certification helps us continuously improve and drive efficiency. In 2022, 98 percent of our factories producing the equivalent of over three billion cigarettes annually achieved certification to ISO 45001:2018 with zero major or minor nonconformities. The global multi-site certification process included third-party audits of a sample of our sites, which determined that best practices are embedded across all our factories.

This result highlights the excellence in some crucial parts of an effective occupational health and safety (OHS) management system, including but not limited to:

- Prioritization and integration of action plans with quantified targets to address OHS risks
- Integration of actions to prepare for and respond to emergency situations
- Evaluation of progress in reducing/preventing health issues/risks against targets
- Internal inspections
- Procedures to investigate work-related injuries, ill health, diseases, and incidents

All manufacturing sites perform full-scope risk assessments to identify hazards and implement necessary controls. Our corporate targets on incidents help us evaluate the effectiveness of our safety policies and programs.

We regret to report that there were three contractor fatalities in 2022 on PMI premises in Indonesia. All incidents in our manufacturing operations are subject to in-depth root cause analysis, and we apply the same thorough approach to all incidents involving contractors. Although our safety standards and procedures complied with local regulations where these incidents occurred, we introduced new standards to track contractor activities that go beyond local regulation and build on industry best practices.



We use behavioral observation systems (BOS) in our factories to instill a culture in which everyone involves themselves in openness, care, observation, and safe behavior reinforcement. We advance this culture through two-way communication with employees, addressing the top-three unsafe behaviors through systematic actions and safety alerts or notice boards. Every person's contribution counts—a fact we recognize through awards and other means of acknowledgment. Through BOS, we are further embedding safety into the organization's DNA in a planned, structured, and standardized way.

An Environmental, Health, and Safety (EHS) pillar is established in all manufacturing sites, which focuses on building capabilities across the organization to autonomously identify, classify, and mitigate risks, through daily management systems applied at all levels of the organization. All incidents' root causes are analyzed, and communicated for learning and reapplication. These capabilities are an integral part of skill development plans for our teams, enabling our manufacturing sites to develop an interdependent sustainability culture.

One of the key challenges we encountered in 2022 was the proportion of incidents occurring in non-production areas within our manufacturing sites, because historically there has been a greater focus on safety on the production floor. We responded to this challenge by reinforcing the frequency and breadth of safety inspections by site leadership teams outside of production areas to ensure that unsafe conditions are identified and eliminated.

A second challenge in 2022 has been the resumption of full activity after the COVID-19 pandemic, as we work now to increase the cadence of site visits and simultaneously ensure that remotely hired or working employees are properly onboarded into PMI's safety culture.

In 2022, we also recalibrated our approach to safety training and developed a global manufacturing comprehensive year-long program covering leadership and culture, technical safety, governance, environment, and the OHS agenda.

Safety and security in our markets

A dedicated team—led by our Vice President, Global Security & Market Safety—manages safety in our commercial and sales environments, as well as physical security across PMI. This team works closely with stakeholders throughout our business, developing and deploying risk-based procedures, programs, and training courses; fostering engagement at the country level; and using technology, monitoring systems, and performance indicators to evaluate progress. This helps ensure the safety of company personnel in the office, in the field, on the road, and while traveling.

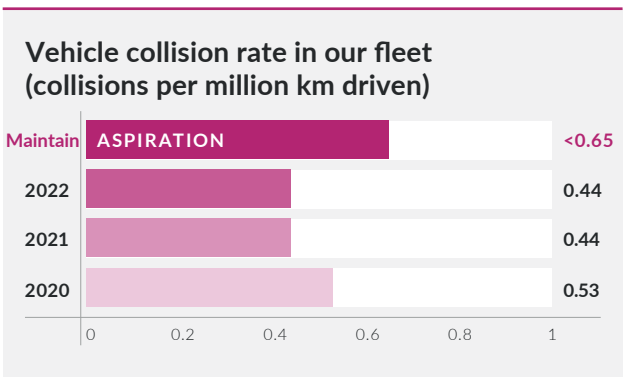
Through our fleet safety management program, based on recognized standards including ISO 14001 and ISO 39001, we equip PMI with standards, tools, training, and capabilities to protect the safety of all personnel driving company vehicles.

We seek to protect our employees and other road users by providing safe vehicles and driver safety awareness programs to achieve zero preventable fleet safety accidents. Our target is to reduce high-severity collisions, with an ongoing goal of eliminating fatal accidents completely.

To improve driving behaviors, we leverage awareness campaigns, training, and connected fleet technologies. By the end of 2022, 65 percent of our working-tool cars were equipped with vehicle telematics systems, providing drivers and the company with accurate data on driving behaviors. Telematics and subsequent analytics allow us to proactively improve driving behaviors, reduce fatalities and injuries, and decrease carbon emissions (read more [here](#)). We aim to have all our over 17,400 working-tool vehicles equipped with tools and new ways of working by 2024.

Our immersive, global fleet safety e-learning program launched in 2021 is tailored to each driver's core competency score, driving style, and local traffic conditions. In 2022, we connected this program to onboard vehicle telematics systems where legally permitted, extending the program to help us assess driver competencies and real-world driving behaviors. By year-end 2022, 66 percent of company drivers had commenced the program, which includes eco-driving modules. We expect all drivers at PMI to undergo the training within a three-year cycle.

Together, our standards, programs, and technology are leading to significant improvements in road safety.



Although we continue to reduce collisions, it is to our deep regret that the actions of our employees resulted in road traffic fatalities in 2022 involving nine members of the public. The accidents occurred in one country in Asia and one in Latin America and involved challenging circumstances related to the public use of motorbikes on the road. Lessons learned from the investigations highlighted the necessity for motorbike-specific defensive-driving training, along with the continued deployment of our robust fleet safety management program.

Our Security & Market Safety department also maintains a comprehensive security management program to assess and mitigate physical security risks for all company personnel and assets. While physical security incident data are collected and maintained separately from PMI's health and safety performance metrics, three security-related contractor fatalities occurred in 2022 in high-risk operating environments—two in Mexico and one in an Eastern European country. All incidents involved external circumstances of threat to life, emanating from outside of PMI's facilities.

As with our systemic approach to manufacturing safety, all fleet and security incidents are subject to thorough investigation and in-depth root cause analysis, including cooperation with law enforcement authorities where applicable, and robust corrective actions have been implemented to prevent the risk of reoccurrence in these markets and in similar operating environments.

Developing our human capital

We provide all our employees with opportunities to continue to learn, develop, and contribute toward our ambitious company purpose. Learning new skills enables employees to adapt to our evolving needs and expectations. It also improves their sense of belonging at PMI and increases the impact they have in their role. Development of our people also positively impacts on the communities in which they live and work.

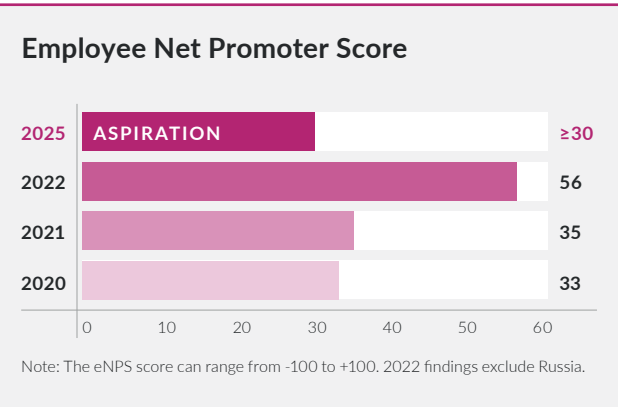
We are proud to have been certified by the Top Employers Institute as a global Top Employer for the seventh year in a row. PMI is one of only 15 organizations awarded this recognition. Our affiliates were also recognized as leading employers in 34 countries.

Listening to our employees

We conduct an annual company-wide employee survey to better understand employee engagement and satisfaction. The annual survey is supported with a regular cadence of shorter surveys throughout the year.

Ongoing listening to our employees helps us to understand what matters most to them and better respond to their needs. The results inform data-driven analysis for different functions and regions to deliver concrete action plans for improvements and ensure that we have a robust and sustainable approach to develop and engage our human capital.

Employee Net Promoter Score (eNPS) is a universal benchmark across industry of employee engagement calculated by disregarding neutral responses and then calculating the difference between positive and negative responses. Evaluating eNPS at PMI means we can track employee sentiment year on year and externally benchmark ourselves.







In 2022, we collected 46,306 responses and achieved an eNPS of 56 (2021: 44,089, 35). This is 42 points above the global benchmark provided by our external partner Karian and Box, 26 points above our aspiration to maintain an eNPS of 30, and our highest number to date.

The drivers of eNPS are consistent with past results, with the increase being driven by improvements in key areas such as our employees' emotional well-being, and confidence that our smoke-free journey will be successful.

While on a positive trend, we need to continue to focus on employee reward and recognition and career opportunities. Ensuring reasonable workloads and finding effective ways to work between markets, regions, and global functions are additional focus areas for 2023.

Managing the employee journey

PMI's vision of a smoke-free future helps to attract and retain talent by providing an opportunity to make a positive societal impact. We seek to equip line managers with the tools and knowledge essential to retain talent and to support the personal growth of employees through regular performance and career development conversations.

Recruiting and retaining talent

Our overall employee turnover rate has decreased from 12 percent in 2021 to 9.3 percent in 2022. This includes 4.6 percent voluntary turnover (2021: 4.7 percent).

To better understand the impact of employee turnover, voluntary turnover was analyzed in 2022 to determine the areas requiring focus in PMI. We developed a definition for the most business-critical employees and a retention framework will be embedded into performance management discussions.

While we recognize that with continuous transformation comes the need to recruit external talent, we focus on promoting internal mobility before hiring externally when possible. Our internal careers market provides transparency and easy access to opportunities for current employees. Supporting our employees to grow and move to new opportunities internally helps to mobilize our diverse talent across the organization and supports the career development and satisfaction of our employees. In 2022, around 4,500 employees were promoted to more senior positions, with an additional 9,200 employees moving positions. During the year, we hired 12,457 people worldwide.

Beyond our company-wide employee surveys, we also leverage a holistic approach to employee listening during different moments in an employee's career at PMI, such as onboarding, a change of position, or a promotion.

This ongoing listening approach, supported by real-time dashboards, helps us to understand the evolving trends in employee expectations and requirements and to take action as needed. For example, achieving a high retention rate starts with effective onboarding processes for new employees. In 2022, data highlighted the importance of the line manager and their inclusion in the onboarding processes. Key focus areas for improvement included breaking down barriers between new hires and longer tenured employees, better integrating underrepresented groups, and considering how differences between introverted and extroverted personality profiles impact new hires.

We continued to provide support for line managers through a playbook, structured around the life cycle of a line manager. This was further enhanced in 2022 through the inclusion of additional modules relating to onboarding, retention, coaching, mentoring, managing hybrid teams and supporting well-being.

Performance and career development

Performance and career development reviews support the personal growth of employees and contribute to skills management and the development of human capital within PMI.

In 2022, 90 percent of our employees were covered by formal performance reviews against their individual objectives (2021: 92 percent) overall.<sup>1</sup>

Our updated performance management approach was tested in 2021 and continued in 2022 with over 14,000 employees participating. The approach provides a holistic picture of the value and impact each employee brings and is aligned with our expanding focus on project-based, multidisciplinary, and virtual teams. It is built on three fundamental elements: clear objectives derived from the company strategy; continuous feedback from multiple sources; and how people behave aligned to our PMI's leadership model.

<sup>1</sup> The calculation is based on the 58,190 employees maintained in PMI's central human resources (HR) system as of November 1st, 2022.

The remainder of our employees continued with the existing approach, which is also aligned to our behavioral leadership model. In 2023, all employees will move to the same process to support their performance reviews.

Our approach to talent review helps us to assess the sustained performance of employees and their potential to take up more complex roles. The two main objectives of the process are: ensure that PMI has the right capabilities in critical roles to enable business success; and agree upon individual development actions based on employees career aspirations to support their development.

Continuous employee learning and development

We know that external acquisitions of talent and businesses will not provide all the capabilities we require in PMI. Creating opportunities for current employees to upskill, re-skill and have new experiences is also critical. Much of this employee development comes from being supported to learn "on the job" and having access to opportunities to contribute to projects alongside their day job.

We seek to empower our employees to take ownership of their development and career, encouraging them to complete an individual development plan and identify their key areas for development, supported by 360-degree feedback reports.

Our global approach to employee development focuses on equity, granting access to digital learning offers, democratizing training by offering a range of voluntary learning opportunities, and deploying targeted programs that support strategic needs.

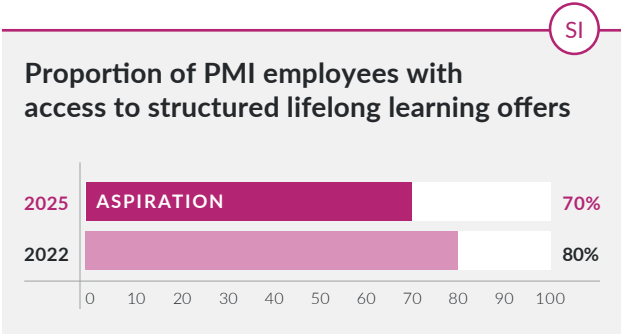
For over three years, all employees have access to a cross-company mentoring program, iGrow. The initiative is employee-owned and driven and, in 2022, over 800 employees developed their leadership behaviors such as active listening and communication skills. They also significantly improved their ability to set up trusted relationships across different cultures.

Digital learning

In 2022, we continued to focus on strengthening our digital learning offerings, expanding access for all digitally enabled employees to different learning content platforms:

- Our FUSE digital learning platform has a wide range of learning content to support employee development. This ranges from developing foundational knowledge of our products and science, to effective leadership, well-being management, sustainable transformation, and IT and digital capability development
- Our digital language learning program, through our partnership with Rosetta Stone, continues to be available to all employees worldwide. At the end of 2022, nearly 5,300 employees were actively learning or perfecting a new language
- During 2022, we deployed a third open content learning platform, Udemy. Our partnership with Udemy, an external content library for digital learning, provides a broader range of offerings supporting the development of workplace skills to employees in multiple languages.

During the year, we established mechanisms whereby any employee who can access FUSE can request and be given access to both Rosetta Stone and Udemy, thus allowing us to significantly exceed our initial aspiration. In 2022, 80 percent of our employees worldwide could access structured lifelong learning offers.



Providing access to these platforms is the first step. Moving forward, we are curating learning journeys that support the employee experience and engagement around participating in learning. Our portfolio of learning products is also continuing to evolve, incorporating online self-paced resources, virtual classrooms, and in-person sessions to provide flexibility and respond to the different needs of our employees.



Targeted programs

In 2022, we continued to refine our workforce capability model to identify the professional skills and critical capabilities required for PMI as we progress over the next few years. Three cross-functional capabilities were identified as critical for PMI: data and digital literacy; critical thinking; and sustainability. We continue to develop and deploy targeted programs to support our employees to acquire and develop these critical skills and capabilities. Some of our programs include:

- The “Next Generation Leadership Pathway” is a two-year program designed to support the development of an internal talent pipeline of future commercial leaders. Female representation in this program increased from 15 percent in 2021 to 50 percent in 2022. The program includes a nine-month educational curriculum featuring core elements, including a module focused on sustainability and offered by our external partners at INSEAD and Duke Corporate Education. To date, eight participants have been promoted to commercial leader roles, and 20 others have taken on new or expanded roles.
- Our high-potential development pathway “Accelerate” identified 70 participants in 2022 for accelerated development to more complex or critical roles. It focuses on supporting them to become future leaders at PMI, and will expand in 2023.
- We designed our “License to lead” program for first-time line managers and line managers who recently joined PMI. It involved around 260 participants in 2022 and focused on developing the critical capabilities new managers require in the first days in their role.

- Our “Women in Leadership” program focuses on personal growth, development, and senior leader sponsorship. It is designed to provide participants with strategies and tactics to navigate common barriers, build confidence, and create a sense of community and belonging. It helps identify what is truly important to them in their lives and careers. Over 70 female leaders participated in the six-month program in 2022, which incorporated virtual classrooms, one-to-one sessions with an external coach, group activities, and impactful interactions with senior leaders.

Attracting and developing young talent

We seek to support early talent around the world to be equipped for the modern workplace through targeted programs and initiatives. This helps ensure that PMI has a next generation of leaders with the right skills.

For example, in our U.K. market, we have deployed programs focused on early talent, targeting recent graduates and apprenticeships. EVOLV, an 18-month fast-track program for U.K.-based graduates, offers individuals multiple placements within our company to experience new functions and develop based on their aspirations and the business need. In 2022, the program welcomed four new graduates to the program, with a total of 60 graduates participating over the five years of intakes. In parallel, we introduced Embark in 2022, a new 18-month apprenticeship program, targeted at school leavers and welcoming five apprentices. This field-based and sales-focused program gives apprentices the opportunity to achieve a professional qualification while experiencing a range of functions across the business.



CASE STUDY

## The future of work—lifelong learning program in PMI

In 2022, our Operations function continued to expand its voluntary lifelong learning program, granting all employees within the function access to two digital learning platforms to encourage them to develop skills to shape their career in the way they desire, and enable their long-term employability.

[Read the case study here](#)

Fostering diversity, equity, equality, and inclusion

We regard our employees’ diversity as one of our greatest assets. We therefore seek to cultivate an inclusive environment where diversity can thrive and all employees feel respected, supported, and engaged.

Bloomberg has acknowledged our efforts for transparency in gender reporting and advancing women’s equity by including us in the Bloomberg Gender-Equality Index (GEI) in 2023 for the third consecutive year.

Enhancing diversity

At PMI, we aim to celebrate all types of diversity, both demographic (e.g., race, ethnicity, sexual orientation, gender identity or expression, age group, creed, national identity, marital or family status, and visible or invisible disability) and experiential (how people think, work, communicate, and live). Our global forward-looking aspirations, however, specifically center on gender equality and nationality.

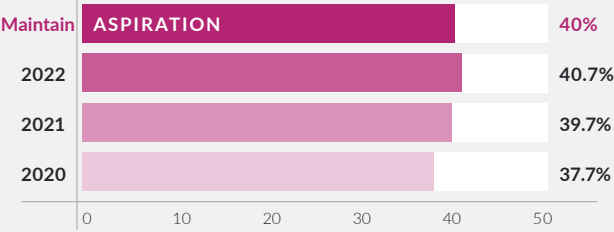
Advancing gender equality and empowering women

A gender gap is a talent gap. Building a gender-balanced organization and improving inclusion at PMI are therefore two of our top priorities.

Increasing representation of women

Globally, 42.1 percent of our employees were women in 2022, and 40.7 percent of our management positions were held by women (2021: 42.2 percent, 39.7 percent). We are proud to confirm that we achieved our target of 40 percent of management positions held by women by the end of 2022. Our managerial new hires’ gender ratio for the year was 42.7 percent for women (2021: 44.7 percent), and the proportion of promotions to management positions that went to women was 47.5 percent (2021: 47.6 percent).

Proportion of management positions held by women

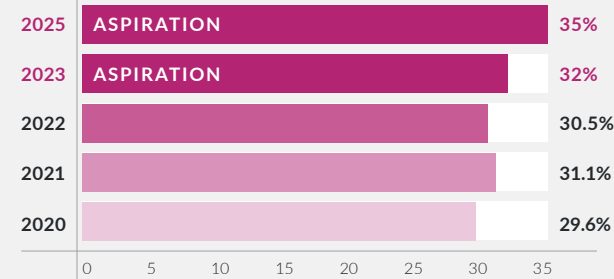


Our ambition is to maintain a gender balanced representation in management positions. To do so, we aim to (i) maintain a minimum of 40 percent women in managerial roles globally, and (ii) have a maximum of 60 percent of any gender in managerial roles in most of our functions and regions by 2025. We will report on this key performance indicator (KPI) moving forward.

In line with this aspiration, we are focusing our efforts on specific business functions and regions. In 2022, approximately half our regions and business functions were already aligned with our gender representation aspiration.

To optimize our business, we believe it is critical that we improve the gender balance in senior roles. We are committed to having at least 32 percent of senior roles held by women by 2023 and 35 percent by 2025. In 2022, women represented 30.5 percent of senior positions (2021: 31.1 percent).

Proportion of senior roles held by women







Our current figures mainly result from higher turnover of women in senior roles and lower internal promotion to managerial roles of women compared with men in 2022. We plan to continue our centrally sponsored “Women in Leadership” program for women in senior roles (read more [here](#)) to support retention efforts. We also plan to launch a new program called “Elevate” for women in managerial roles to support their development and career progression. This program was piloted in 2022 with women from our Market Safety & Security team and we received very positive feedback.

These global programs are complemented by local or regional efforts. For instance, our Middle East & Africa and Duty Free and Eastern Europe regions deployed a “Female Leadership Practices” program involving 52 participants in 2022, which focused on creating a sense of community and belonging and on supporting women in navigating common workplace challenges while improving their engagement.

Meanwhile in the U.S., we started a partnership with NextUp in 2021, an organization with the mission to advance women in corporate America and transform workplaces. In 2022, 33 PMI employees participated in their leadership programs, summits, and workshops to help amplify women’s voices in the workplace and overcome gender-based challenges. In addition, PMI U.S. partnered, in 2022, with a global organization comprised of current and former Black CEOs and senior executives at Fortune 1000 and Global 500 companies whose mission is to increase the number of successful Black executives. PMI U.S. selected nine employees, of which six were women, to participate in these development programs. These programs were deployed through our local employee resource groups (WIN and MOSAIC) with sponsorship from management.

Closing the gender pay gap

PMI’s global EQUAL-SALARY certification gives us confidence that we provide equal pay for equal work.

Alongside equal pay, we are committed to fostering fairness in the workplace and we seek to close our gender pay gap. The gender pay gap refers to the percentage difference between the average pay for men and women.

As a result of our certification, we are confident that unequal pay for equal work does not contribute to the gender pay gap at PMI. Rather, the gap stems from the fact that women are underrepresented in senior leadership roles.

The imbalance also needs to be viewed in the context of our overall workforce demographics. In particular, of the 71,070 people we employed by the end of 2022, over a third are employees, mainly women, who hand-roll cigarettes at our manufacturing facilities in Indonesia. Those employees are subject to a different salary structure and are paid based on the number of pieces they hand-roll. This employment opportunity, which empowers thousands of women in the country, impacts our global gender pay gap. When we look at our company globally as a whole, the average male pay was 30 percent higher than female pay in 2022 (2021: 34 percent). When we exclude our Indonesian piece-rate employees, our average 2022 female pay was 0.6% higher than male pay. This is largely driven by the fact that, when excluding the Indonesian hand-rollers, the majority of our lower paying blue-collar roles are held by male employees.

Proportion of women in PMI

	2022	2021	2020
Top pay quartile globally	37%	35%	34%
Upper-middle pay quartile globally	34%	36%	34%
Lower-middle pay quartile globally	25%	22%	21%
Lowest pay quartile globally	73%	76%	77%
PMI's global mean (average) raw gender pay gap <sup>1</sup>	30%	34%	33%

<sup>1</sup> The mean gender pay gap is calculated as the percentage difference between the sum of annual base salary, bonus, and stock options.

Focusing on national representation

We seek to strengthen the diversity of nationalities within our global workforce and, in particular, to grow local talent within executive management teams.

Our employees represented 133 nationalities at year-end 2022, contributing to an international culture that many employees value. Despite this international composition, employees in all management positions need to better reflect PMI’s geographic footprint and the diversity of its overall workforce.

Top five nationalities in PMI's workforce and their respective representation in management positions and senior roles

	Overall workforce	Management positions	Senior roles
Indonesian	31.0%	7.5%	3.5%
Polish	6.2%	7.9%	3.5%
Filipino	6.1%	3.5%	2.3%
Russian	4.5%	6.0%	4.9%
Italian	4.2%	4.6%	5.6%
Other nationalities	48%	71%	80%

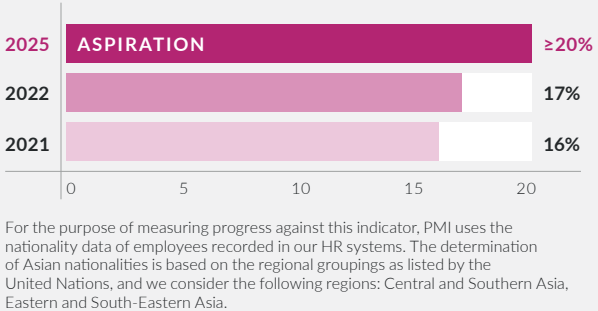
We set an ambition to develop local talent for leadership positions, and we aim to achieve a minimum local representation of 60 percent in at least 80 percent of our markets and clusters. In 2022, we established our baseline, finding we are at a good starting point to meet this goal. Rather than launching dedicated programs, we focused on discussions with market management teams to remind them of the goals and opportunities to bring more local talent on board.

Proportion of markets with at least 60% representation of local talent in the executive management teams



More specifically, Asian nationals held 17 percent of PMI’s senior roles in 2022. In contrast, the South and Southeast Asia (S&SA) and East Asia and Australia (EA&A) regions together represented 39 percent of our total workforce in 2022. We aspire to have at least 20 percent Asian representation in senior roles by 2025 to help bridge this representation gap.

Representation of Asian talent in senior roles globally



To support these efforts, in 2022 our S&SA and EA&A regions continued the deployment of their regional acceleration and development of the Asian talent program originally launched in 2021. The program aims to build high-potential Asian talent and accelerate their preparedness to assume future leadership roles. A total of 36 high-potential management-level participants took part in 2022, with an equal representation from both regions. The program follows a blended learning approach from the Duke Corporate Education faculty, external experts, and PMI leaders to sharpen the agility and management capabilities of the participants. It offers course learnings and real business challenges that will equip them with strategic and organizational skills. Approximately a third of the participants moved into more senior roles following their participation in this program.



Building a culture that promotes and protects inclusion

Only a truly inclusive culture can ensure we benefit fully from the value diversity can bring to our organization.

Measuring inclusion

In 2022, we continued to capture employee sentiment on inclusion as part of our global employee listening survey (read more about the survey [here](#)). We analyzed responses to six questions first introduced in 2021 that cover key components of inclusion to understand past and present behavior and to influence future behavior. At 82 percent, the index showed an overall high perception of inclusion within PMI (2021: 76 percent).

While there is no official standard established for measuring inclusion, we enhanced our internal surveys as a consequence of the Inclusive Future research we conducted in partnership with IMD (see the feature box on the right). Consequently, we introduced a new metric called the “inclusion Net Promoter Score” (or iNPS) to complement the Inclusion Index.

For the first time, we asked our employees to voluntarily self-identify as part of an underrepresented group based on gender, nationality, sexual orientation, ethnicity, disability, creed, or other dimension. We also asked how likely they would be to recommend PMI to their friend or colleague from an underrepresented group as an inclusive place to work. The majority (77 percent) of respondents voluntarily self-identified, of which 16 percent self-identified as part of an underrepresented group. The total PMI iNPS amounted to 56 (50 for women and 59 for men) while the iNPS for underrepresented groups stood at 35. The iNPS was lower for employees who identified as part of an underrepresented group based on gender or ethnicity. To raise awareness about the need to improve inclusion in the organization, we organized a workshop for members of our Company Management with an external expert consultant. The consultant conducted qualitative research across the organization to assess the level of inclusion perceived by different demographics and levels of seniority. This work will help us to develop plans to increase inclusion across all central functions and regions.

Inclusive Future

In 2021, we sponsored the Inclusive Future research with the International Institute for Management Development (IMD) in Switzerland. This is a year-long research and convening project to advance the discourse and practices surrounding inclusivity.

IMD’s extensive three-part analysis examines a broad range of qualitative and quantitative approaches and practices that organizations can implement to cultivate a more inclusive workplace. The report highlights the need for a comprehensive exploration of the six key dimensions of inclusion: (1) psychological safety, (2) uniqueness, (3) fairness, (4) participation, (5) belonging, and (6) authenticity. The research was published in March 2022 (read more [here](#)).

At PMI, we used the findings to help us further establish inclusion at the core of our business—which is key to unlocking the innovation, creativity, and solutions required to deliver a smoke-free future.

Encouraging employees to take an active role

Our employee resource groups (ERGs) focus on particular dimensions of diversity and provide a platform for building a sense of belonging, visibility, and greater understanding of different experiences and dimensions of diversity in our company. They organize events, provide mentoring opportunities, and host conversations to enable employees to better understand and support one another.

All our ERGs are led by a committee of volunteer employees, sponsored by a member of Company Management, and supported by an external subject matter expert partner. They are open to all PMI employees.

In 2022, we continued to focus on the growth of our global ERGs and on expanding them locally, to be able to meet the specific needs of different geographies. By the end of the year, we had over 40 local ERG chapters established, and participation in our global ERG events reached up to 8,000 attendees. We also developed a new global ERG focused on parents at PMI, which we will launch in 2023.

Our global ERGs include:

- **STRIPES** convenes employees around gender identity and provides a formalized structure and global strategy for the local LGBTQ+ networks
- **EMBRACE** aims to champion racial, ethnic, and cultural equality by raising awareness and understanding of the challenges faced by underrepresented groups
- **WIN** (Women’s Inspiration Network) aims to provide a supportive place to inspire and empower women to advance their skills, expand their network, and unlock their full potential
- **ABLE** aims to foster a more inclusive and diverse organization by attracting candidates and supporting employees with different abilities

We also launched a platform open to all employees, which brings together representatives of each ERG to discuss an intersectional topic on a monthly basis. It introduces the concept of ERGs and drives an inclusive culture through open discussions among employees.

Raising awareness and knowledge

In 2021, we successfully broadcast our first global Inclusion & Diversity (I&D) conference. To find additional ways to engage with employees on I&D topics in 2022, we conducted a range of activities throughout the year. For example, we launched an inaugural campaign during Well-being Awareness Month, organized several ERG events, and our Chief Diversity Officer launched a series of topic-specific “Let’s talk about it” podcasts spread out over the course of the year and made available on our intranet to all employees.

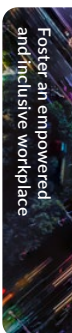
We also continued our monthly I&D office hours, which offer a casual and safe setting in which employees worldwide can openly raise questions or topics with our Chief Diversity Officer and the global I&D team and share their thoughts with participants from different teams and business areas.

As part of our ongoing effort to gather diverse input for our I&D strategy and programs, we also continued an internal employee group (I&D Soundboard), which meets regularly to give input and feedback to the I&D team. The global I&D team also publishes *I&D News*—a quarterly newsletter to encourage our continued unity and inclusion.

We introduced monthly calls with our I&D representatives in the markets to communicate and cascade the global I&D strategy. During these sessions, we also take the opportunity to celebrate local I&D achievements:

- PT SRC Indonesia Sembilan (SRCIS) was chosen by UN Women as an SME Champion for the Gender-Inclusive Workplace Category at the 2022 Women Empowerment Principles (WEPs) Awards at the Indonesia and Asia Pacific level (read more [here](#))
- Philip Morris Japan was awarded second place in the Forbes Japan Women Award in the category of companies over the size of 1,001 employees in recognition of the significant progress being made to advance gender equality in the affiliate
- We also celebrated the second year of Philip Morris Pakistan’s “MakeYourComeback” program, a platform for women who have taken a break from paid work and wish to relaunch their careers (read more [here](#))

We continued to offer our employees access to our global unconscious bias and culture diversity training as well as newly introduced psychological safety resources. These e-learning raise self-awareness of implicit bias with an aim to understand the various ways it shows up in organizations and how to minimize our biases when we take decisions. Through these e-learning, participants receive practical tools and techniques to combat prejudice and preconceived notions that constitute barriers to inclusion.



Improve the quality of life of people in our supply chain

Tackle climate change

Preserve nature





# Promoting mental health and well-being

We seek to promote an environment that supports employee well-being as an enabler of professional and personal fulfillment, sustainable high performance, and business results.

## Building a holistic approach to well-being

One of the pillars of our I&D strategy is creating an environment for sustainable high performance. To do that, our vision is to create an environment which nourishes people's energy.

We use a global framework and an integrated and data-driven roadmap of priority actions supported by insights gathered through our employee listening surveys, benchmarks of best-in-class practices, and the help of external experts to drive this vision.

Under our holistic framework, well-being incorporates physical needs, psychological needs, and self-fulfillment.

## Measuring well-being to drive action

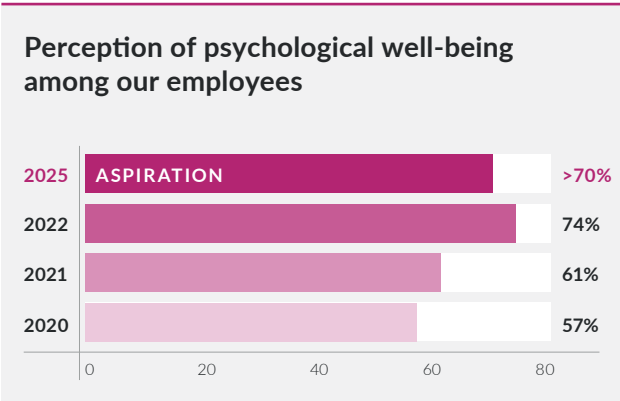
Data and insights are key to introducing relevant interventions in support of employee well-being.

As part of our regular employee listening (read more [here](#)), we ask employees three times a year to answer questions related to perceptions of psychological well-being. This is measured on a five-point scale from very bad to very good.

In October 2022, 74 percent of employees responded “good” or “very good” (2021: 61 percent). This is a positive trend, which exceeded our annual target and external benchmarks. Many drivers contributed to this result, including external factors such as the easing of COVID-19 restrictions in many countries, for instance. Despite the overall positive trend, there is still a 7 percent gap between how men and women rate their psychological well-being, which will be a focus area moving forward (2021: 5 percent).

In March 2022, we piloted the inclusion of questions in our employee listening surveys exploring psychological safety for the first time. Psychological safety underpins both inclusion and how comfortable employees feel to have conversations related to personal challenges and well-being needs.

We introduced additional questions in our fall 2022 survey relating to well-being control, demands, and support, informed by an in-depth study we conducted in 2021. Survey results gave us additional insights into priority areas, such as managing workload and reasonable deadlines, which can be addressed through organizational support, as well as empowering colleagues to prioritize self-care. We will continue to track progress on this indicator, and aim to continue achieving at least a 70 percent score.



## A global focus on mental health

Mental health is critical to employee well-being.

Our research indicated that removing the stigma around conversations on mental health should remain a top priority. In order to equip employees to support themselves and others, in 2022 we developed self-paced, online training on our internal e-learning platform, FUSE, called “Mental Health for All.” This training offers insight into the science of mental health, teaches how to spot the signs of common problems, and introduces proven and easy self-care practices and basic skills to offer help to others. It is translated in 10 languages, and we will be rolling it out further in 2023, as well as incorporating it into our leadership and management development programs.

Our employee-led Well-being Advisory Group is a diverse body convened in 2021 that includes senior leaders and well-being advocates from various functions and regions. In 2022, it helped us shape our plans for the year and launch new initiatives. One such initiative was a pilot training program of well-being champions. This first global cohort received training on how to listen, have supportive conversations, and act as a catalyst for positive well-being initiatives in their locations.

We also trained over 50 employees to become trainers themselves of well-being champions, our P&C and Security & Market Safety colleagues, who will adjust the training to local language and cultural nuances, and deliver it locally to champions in 14 markets. Moving forward, we will continue to grow this program through the “train the trainer” approach, to ensure that we expand the reach of our network of well-being champions across the globe (read more about this program [here](#)).

## Strengthening resilience

Against the backdrop of rapid changes in the world, and following recent global events, including the health pandemic, we want to help our employees feel safe within the ever-changing external environment, and give them tools to strengthen their resilience to maintain well-being over the long term.

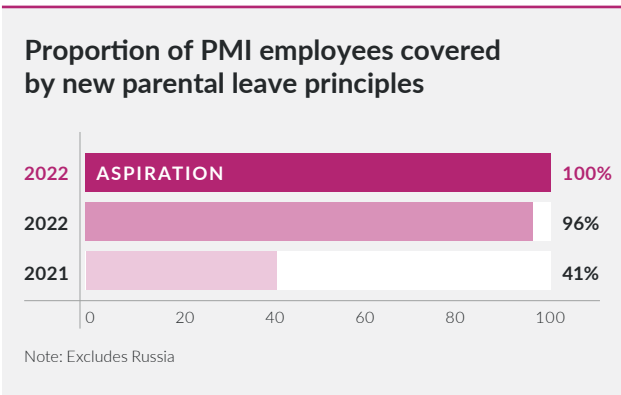
After analyzing results of resilience deep-dive workshops piloted in South Africa in 2021, we have decided to build resilience training into broader initiatives and resources, including our approach to lifelong learning, as well as training programs for leaders and new managers (read more [here](#)).

## Supporting our employees

We aim to provide well-being offerings that fit employee needs and expectations and that are anchored in the local context of where our people live and work.

**Family and caregiver support**

We seek to promote an inclusive and equitable vision of care through our global parental leave principles, which provide primary caregivers a minimum of 18 weeks of fully paid parental leave and a secondary caregiver a minimum of eight weeks fully paid parental leave (read more [on PMI.com](#)). We are proud to announce we have met our target of having all PMI employees covered by these parental leave principles by the end of 2022.



In parallel, we continued to provide access to an external online platform called Circle-In, first launched in 2021, that offers resources to support employees with the professional and personal challenges they may experience as a caregiver, and we developed a new employee resource group for parents (read more about ERGs [here](#)).

Back-up childcare services or childcare subsidies through company or government support are available in 33 of our markets. Further, private space to be used as lactation rooms or breastfeeding, or lactation benefits, are provided by 83 markets.

Paid family or care leave beyond parental leave is offered in 42 of our markets. Examples may include care for a child, spouse, partner, dependent, parent, sibling, or other designated relation with a physical or mental health condition.



Supporting our employees and their families

Our global Employee Assistance Program offers first-line support to our employees and their close relatives in the areas of psychological, financial, and legal counseling. Support is provided in local languages across all 92 countries under high standards of confidentiality. By the end of 2022, the program covered 100 percent of our total workforce maintained in PMI's central HR system.<sup>1</sup> The majority of countries are served by a global provider, with the remainder being covered by local schemes.

Flexible working arrangements

Even prior to COVID-19 and the shift to remote work, PMI was promoting more balanced ways of working.

Drawing on the experiences and changed expectations of employees during COVID-19, we developed a global hybrid work plan in 2020 called "Smart Work." Its philosophy and principles are global, with the general rule being that employees are permitted to work remotely up to 60 percent of their time in each month, with the remainder spent on-site. The program is deployed and adjusted locally to account for cultural, operational, tax, and legal implications, which vary at the national level.

In 2022, we continued to deploy Smart Work in markets where COVID-19 was receding and where local circumstances allowed it. By year-end, 87 percent of markets had implemented it, and 12 percent were in the process of preparing for the launch; one market had to pause it due to COVID-19 restrictions. We will use our learnings to adjust our guidelines and provide resources to support employees and managers to help use time most productively in the hybrid world, as well as to support an individual's well-being.

Looking ahead, we plan to develop tailored arrangements for non-office-based employees, such as our factory and sales workforce, based on findings from the initial launch to office-based employees.

Anchoring well-being initiatives in local realities

As we expand our well-being champions network globally (read more [here](#)), we will continue to draw on support from market-level health and well-being committees or dedicated market-level contacts for well-being, depending on the local context. We continue to offer well-being-related interventions and benefits, ranging from gym membership offerings to sports competitions, mental health-related webinars, cooking classes, and other activities that are rooted in local realities. We are, however, seeking to use our well-being champions network as the golden thread to foster discussion and activity in a more harmonized way across markets and to complement well-being benefits with more direct employee engagement around the topic.

<sup>1</sup> The calculation is based on the 58,240 employees maintained in PMI's central HR system.

Looking ahead



**Charles Bendotti**  
Senior Vice President,  
People & Culture



In 2023, we will utilize insights from our employee listening surveys to drive the formation of our strategy to address key pain points such as workload, reward and recognition, career opportunities, and inter-office projects and work patterns to continue improving our employee experience. We will move beyond providing access to lifelong learning opportunities by structuring these opportunities for employees to help meet strategic organizational objectives and boost employability. Human capital development remains core to PMI values and to our long-term success, and as such we will continue evolving our success measures to be more impact-driven. In 2023, we will also initiate actions as necessary to ensure we continue to meet our global living wage commitment to our employees, focusing on at-risk markets.



**Silke Muenster**  
Chief Diversity Officer



In the coming year, our focus will continue to be growing the feeling of belonging for our employees. We will carry on measuring our progress in this area through our inclusion Net Promoter Score (iNPS). Throughout the year, we will leverage insights from this score and launch our new, parent-focused employee representation group to improve a sense of belonging among employees. Because we know that fostering an inclusive culture is the only way to really reap the benefits of diversity.

Another focus for us has been improving our employees' well-being, taking into account how living in different areas can impact everyone differently. To address this, we are expanding our well-being champions network globally and will use them to foster discussion and activity across markets and find solutions.

While we have made huge progress in the last few years, especially with female representation, we know that more work must be done. So, in 2022 we also started designing a supplier diversity framework that aims to make sure we use inclusive sourcing practices at PMI by 2025. And we are working hard toward achieving our target of 35 percent of senior positions held by women by the end of 2025, through targeted programs and initiatives across both markets and business functions.



**Scott Coutts**  
Senior Vice President, Operations



We will maintain our focus on occupational health and safety, seeking to continue our trend of low Total Recordable Incident Rate. This will include ramping up training on health and safety for our employees, contracted employees and contractors working at our premises. Within our fleet, our focus will be on equipping all working-tool vehicles with telematics, and extending training on defensive driving techniques to minimize incident rates.







OPERATIONAL IMPACT

# Improve the quality of life of people in our supply chain



Our supply chain connects us with millions of people, from the farmers cultivating tobacco and other agricultural products to workers at the supplier companies that provide the products and services used in our products or necessary to run our business.

**INWARD IMPACT: Risks and opportunities**

As our business transforms, our supply chain evolves as well. Caring for the quality of life of the people in our supply chain is a major contributor to building preparedness, resilience, and overall long-term success. Prioritizing our agricultural supply chain allows us to focus on a critical component of our business that is vulnerable to poverty and human rights abuses. This includes working with farmers who make a decent living from growing tobacco, other crops, or other income-generating activity, which improves their livelihood and limits our potential exposure to child labor, forced labor and other labor-related violations, import bans, and reputational damage. We anticipate that the time, energy, and resources we have invested in developing, implementing, and monitoring the implementation of our Agricultural Labor Practices program will provide the insights needed to ensure similar standards are met throughout the rest of our supply chain as we continue on our transformation journey.

**OUTWARD IMPACT: External impact**

Promoting and adhering to sustainable business practices helps safeguard human rights, improve labor conditions, protect workers' health and safety, tackle social inequalities, and contribute toward alleviating poverty.

Agricultural supply chains face specific sustainability and human rights challenges. The tobacco we source is cultivated in many regions of the world, including low- and middle-income countries, where it is typically grown on smallholder farms. The socioeconomic well-being of farmers and their families depends on many factors, including the nation's health and educational services, political stability, resilience to extreme weather events and conditions, access to markets, and public infrastructure. Our supply chain activities and investments extend beyond our direct effect on farmers, impacting people's assets, capabilities, opportunities, and standards of living.

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## Management approach

Sound standards and practices to manage our supply chain responsibly (read more [here](#)) and safeguard human rights (read more [here](#)) are vital prerequisites to harnessing the connections in our supply chain to improve the quality of life of those involved.

A principal aim of PMI is to provide a decent livelihood to all contracted farmers in our tobacco supply chain. This has been a focus since we introduced our [Agricultural Labor Practices \(ALP\)](#) program in 2011, supplemented by the [ALP Step Change](#) in 2018. The mid- and long-term targets that we have committed to cover fundamental labor standards such as child labor, income, work hours, health and safety, accommodation, and access to water, sanitation, and hygiene. Our Leaf teams, tobacco suppliers, contracted farmers, and workers are regularly trained on the ALP Code. Our integrated production system enables traceability at the farm level (read more [here](#)). And we have a robust due diligence framework in place to evaluate the implementation of our ALP Code.

### Monitoring the implementation of our ALP program

Our due diligence framework to evaluate the implementation of our ALP Code comprises internal farm-by-farm monitoring by field technicians, external comprehensive and focused assessments by Control Union, and external verification by specialized third parties. Learn more on [PMI.com](#).

We use a risk-based approach to identify, prevent, and mitigate incidents related to human rights and labor rights in our tobacco supply chain. For this undertaking, we collaborate with key stakeholders—such as suppliers, farmers and farmer associations, civil society organizations, academics, governments, and the private sector—to more effectively tackle persistent and systemic issues in the agricultural sector.

### PMI's policies and standards

[Human Rights Commitment](#)

[Agricultural Labor Practices \(ALP\) Code](#)

[Good Agricultural Practices \(GAP\)](#)

[Responsible Sourcing Principles \(RSP\)](#)

Since 2018, we have deployed a Step Change approach to our ALP program focused on four priority areas: eliminating child labor; ensuring payment of at least a minimum legal wage or agricultural benchmark; ensuring the availability and appropriate use of personal protective equipment (PPE); and ensuring adequate accommodation for workers where farmers choose to provide housing. Step Change aims to resolve the root causes of these persistent issues in priority countries—which we assess periodically—and is run in collaboration with our long-term strategic partner on the ALP program, Verité.

Beyond tobacco, we are taking steps to leverage the extensive learnings from the ALP program and our human rights impact assessments to proactively address challenges in our electronics supply chain. We will also explore pathways to promote a living wage across our supply chain. We are at the early stage of this journey and are focused on building our understanding and identifying meaningful strategies to deploy in the years to come, grounded in our [Human Rights Commitment](#) and [Responsible Sourcing Principles](#). We understand that promoting fair working conditions and a living wage across a global and complex supply chain must rely on data that are often not available or fragmented. In that context, we actively participate in the Business Commission to Tackle Inequality (BCTI) efforts led by the World Business Council for Sustainable Development (WBCSD), a cross-sectoral and multistakeholder coalition of organizations that seek to share challenges, learn best practices, and explore ways to make progress.

We are committed to sourcing sustainably from all our critical suppliers (read more [here](#)) and conducting human rights impact assessments in our 10 highest-risk markets by 2025 (read more [here](#)).

### Management

PMI's Senior Vice President of Operations, a member of our Company Management, is accountable for our strategy related to supply chain management and relevant programs. Regarding the agricultural supply chain work, the operational responsibility lies with our Vice President of Global Technical Operations department, and in each sourcing region, a management team oversees its implementation. When it comes to PMI's work in the broader supply chain, including electronics, the operational responsibility lies with PMI's Chief Procurement Officer. Meanwhile, our Operations Sustainability department is responsible for strategy development and stakeholder engagement, and acts as the center of expertise related to potential social issues.





# Progress in 2022

## Highlights

We introduced the Sustainable Tobacco Supply Chain (STSC) framework to strengthen our approach to monitoring and reporting on the quality of life of people in our supply chain.

We continued activities to support farmer income through enhanced productivity and alternative income schemes.

We continued initiatives to keep children away from farms through various interventions, including targeted training, after-school and school improvement programs.

Around 125 leaf suppliers' ALP coordinators were trained using our new ALP program training materials in a "train the trainer" initiative in partnership with Verité.

We launched targeted monitoring guidelines to support field technicians to better identify and address potential issues on the ground.

## Challenges

Methodology improvements on how we measure and analyze a wide range of social concerns—though useful moving forward—make it difficult to track and discuss year-on-year trends and progress.

Sustainability of water access, sanitation, and hygiene (WASH) infrastructure is one of the greatest challenges, which we mitigate by working closely with local communities and by developing water committees to keep infrastructure in good condition.

A gradual decrease in our overall demand for tobacco leaf resulting from the increased share of smoke-free consumables in our overall product mix has impacts on farmers that we continue to monitor and attempt to mitigate.

Despite our best efforts, isolated cases of child labor—even when systemic occurrences are addressed—might persist, leading us to tackle them promptly when identified.

Multistakeholder engagement is required to advance global efforts toward increased visibility into supply chain working conditions and promotion of living wages.

# Promoting fair working and living conditions in our tobacco supply chain

Since the implementation of the ALP program over a decade ago (read our 10-year ALP anniversary report [here](#)), we have put in place several initiatives and strengthened our processes and our methodologies.

We aim to continuously improve our approach and challenge our work.

Accordingly, during 2022 we reviewed our methodology in order to become more stringent in our purchasing practices and hoping to further accelerate efforts to address labor issues in the industry. We have therefore set a new baseline by implementing our Sustainable Tobacco Supply Chain (STSC) framework, excluding prior year data, throughout this report. This new approach focuses on the full life cycle of tobacco production and targets actions toward the tobacco we purchase and use in our products.

Accordingly, we shifted from reporting sustainability progress on the PMI's supplier farm base to farmers whose tobacco volumes are directly included in PMI's purchased tobacco (i.e., those eligible contracted farmers supplying tobacco to PMI) to ensure better data quality and granularity. See the visual on the right for further details.

Because of this, it is important to note that, while the data reported confirm that indeed the tobacco we purchased is almost completely free from key labor issues, this does not mean that labor issues, including child labor, do not continue to exist in the tobacco growing areas from which we source.

The STSC framework breaks down our tobacco supply base into three categories:

- 1. PMI's supplier farm base**  
All tobacco farmers from whom our third-party leaf suppliers purchase tobacco in PMI's tobacco growing areas.
- 2. Eligible farmers contracted by suppliers and applying PMI's GAP and ALP**  
The eligible farm base is composed of that subset of tobacco farmers who have been contracted by suppliers based on a set of sustainability requirements established by our suppliers, which include PMI's GAP and ALP Code. This preselection takes into consideration farmers' past year performance related to addressing child labor or forced labor issues, minimum wage payment, decent accommodation for workers, and access to personal protective equipment (except for newly contracted farmers for which such information is not available). Only a subset of these eligible farmers end up supplying tobacco used in PMI's packed products.
- 3. Eligible contracted farmers supplying tobacco to PMI**  
This corresponds to the portion of the eligible farm base whose tobacco is, ultimately, included in PMI's products. This segment represented 223,299 farmers in 2022. We refer to this group as "contracted farmers supplying tobacco to PMI" throughout this report. This excludes spot purchases that could represent up to 10 percent of our total purchased volume (i.e., unplanned purchases for which we do not have access to sustainability data).



Our intention with the introduction of this new approach is to influence the rest of the industry, as well as our partners who operate in tobacco-growing countries, to accelerate actions to address sustainability challenges. We have updated a series of internal guidelines related to farm-level monitoring and external verification, as well as training materials in line with the STSC updates.

We will, however, continue to implement targeted initiatives to address labor issues identified on the ground within our broader total farm base of contracted farmers.

## Contributing toward alleviating poverty

We aim to improve the livelihoods of the farmers supplying tobacco to PMI, thereby advancing the socioeconomic development of the communities in which they live. We see this as fundamental to addressing social inequality and other human rights issues in our tobacco supply chain.

## Assessing income levels in our tobacco sourcing markets

Robust analyses and studies to define living income values and assess current farmer incomes (and the potential gap between the two) across our sourcing markets are the backbone of our approach.

The living income value determines the net annual income required for a household to afford a decent standard of living for all its members. We calculate it based on a variety of mechanisms, depending on the economic characteristics of individual countries from which we source tobacco.





For identified priority and low- and middle-income countries, we used the following methodologies (see [Glossary](#) for further details):

- **Full benchmark:** Since 2020, we have tasked Social Accountability International to conduct full living income benchmark studies (in line with the Anker methodology) which start from the analysis of secondary data (e.g., government-issued household welfare surveys). The resulting benchmarks are then adjusted through on-the-ground field visits. In 2022, we finalized full benchmarks in Mexico and India, bringing the total number of countries where such benchmark studies have been completed to three, alongside our 2021 study in Pakistan.
- **Reference value:** When determining living income for Argentina, Mozambique, and Turkey, we use reference values from previous years, which represent typical or average living incomes for rural and urban areas within each country. They are not location-specific, and so are not representative of a specific region or city.
- **Regional adjustments:** In 2022, we began using a new approach to establishing income levels developed by the Anker Research Institute. We deployed this methodology in Brazil and Malawi. The approach relies on previous full benchmark assessments conducted in the country and splits the country into regions that share similar characteristics. If needed, they are then complemented with on-the-ground adjustments by researchers from the Anker Research Institute.

For establishing the living income status of farmers in higher-income markets where we source tobacco, we piloted a new strategy leveraging PMI’s global provider of living wage estimates on our own employees, BSR. It provided living wage benchmarks in high-income countries from which we source tobacco (e.g., Canada, Greece, Italy, North Macedonia, Poland, Spain, and the U.S.). We used these estimates, alongside the reference family size to assess whether the farmers in these countries are achieving a living income.

Moving forward, we intend to conduct a full benchmark study in Indonesia and finalize one in the Philippines that we started in 2022. We will also perform BSR studies in South Africa and Switzerland, and update all relevant 2022 benchmarks as needed (e.g., accounting for inflation).

These external approaches bring robustness to the approach and replace the interim solution of internal desktop exercises used in the past.

In parallel to establishing the living income value, we assess the income level of farmers supplying tobacco to PMI in each sourcing market in order to estimate the potential gap between the two. To do so, we include both on-farm and off-farm activities, net of production cost, and including remittances or other subsidies. On-farm activities include income generated from the sale of tobacco and the production of other crops and livestock, while off-farm income comes from revenue-generating activities outside of the farm such as waged employment. These analyses rely on our internal farm-by-farm monitoring and also incorporate third-party studies by local partners. Learn more about our living income methodology in [PMI’s ESG KPI Protocol 2022](#).

Our new STSC framework will also dictate the way in which we report our living income KPI in 2022 (i.e., reporting on contracted farmers supplying tobacco to PMI).

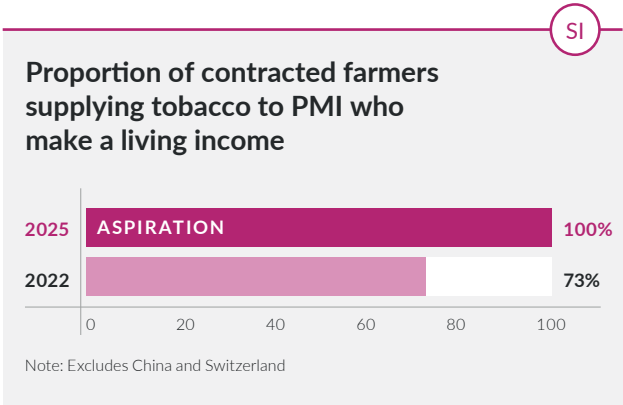
During the year, as our Living Income Program became more sophisticated and mature, we started developing a more granular approach to analyze farmers’ income, based on extensive research on existing methodologies. More specifically, we explored ways to further segment our farmer base in order to account for household size (instead of relying on averaged data). Doing this will enable us to compare—in a more accurate way and with more granularity—the income per hectare with the family size, and assess whether they can achieve the equivalent living income, thereby allowing us to better identify potential income gaps and help focus our efforts on the most vulnerable households.

In 2023, we will roll out this new methodology with our suppliers and internal operations. In our next integrated report, we will report our progress based on this new methodology, and restate prior year data to account for progress, which will then define a baseline moving forward.

**Implementing targeted interventions to close the living income gap**

Driven by the results of our assessments, we implement various initiatives to improve income levels. While we tailor activities to local realities and needs, our strategy is universal: We aim to improve tobacco crop productivity and competitiveness while supporting households in diversifying their sources of income.

When designing comprehensive action plans, our aim is to exceed the living income benchmark targets that are required to achieve a decent standard of living. This affords a buffer to accommodate potential fluctuations in farmer incomes due to climatic shocks or volatility due to market dynamics. We periodically review the living income benchmarks to account for annual inflationary increases, and revise farmer income studies to consider market dynamics that may impact farmers’ overall income.



**Improving productivity**

We support farmers in maximizing efficiencies on their farms—for example, by hiring only the labor required, making careful use of inputs such as fertilizer, finding ways to increase yields per hectare, improving irrigation, and mechanizing certain steps of tobacco cultivation.

For example, in the 2022 crop year, we undertook mechanization projects of Burley tobacco in Vinukonda, India. The distribution of 12 seeder machines, 294 cultivator and fertilizer applicators, 805 sucker applicators, and 511 sewing machines helped improve productivity by reducing labor demands per hectare by 18 hours, 23.8 hours, 13 hours, and 200 hours respectively. Increased productivity and reduced labor requirements translated to cost savings for farmers. Based on the latest study, we are currently able to reduce the labor hours by up to eight percent, which translates into savings of USD 63 per hectare with the combination of seeder machine, cultivator, sucker application, and sewing machine.

We also undertook initiatives to promote sun-cured production for around 353 hectares in India during crop year 2022. By targeting a proper crop window with consideration of weather and field selection and ensuring farmers followed best practices like plant spacing, and proper fertilizer application and top dressing, we were able to increase farm productivity by 18 percent.

Although at a small scale, these projects are indicative of projects we implement on the ground.

**Supporting households in diversifying their income**

We also look at opportunities to implement other income-generating activities. Notably, the cultivation of complementary crops beyond tobacco can improve farmer income while enhancing resilience against climate change and economic uncertainty. In 2022, we estimate that around 70 percent of our contracted farmers grew crops other than tobacco.

For example, in Mozambique, we developed a treadle pump program in 2018 in a bid to tackle child labor issues by providing farmers with an innovative way to irrigate their tobacco nursery crop. We found that the pumps also provide a means to more effectively irrigate winter crops. We therefore incorporated a starter kit of winter crop seeds and fertilizer to be provided to treadle pump beneficiaries in their first year of receiving the pumps. A 2020 internal study found that farmers who grew two to three crop cycles per year generated an additional USD 300 to 400 income (i.e., representing approximately 15 percent of the average annual income). Furthermore, a 2022 farmer income study demonstrated these farmers are able to increase their vegetable garden sizes, thereby increasing the amount of vegetables they can produce per cycle for either sale or consumption. During 2022, we distributed a further 1,320 pumps and distributed winter crop kits to 1,760 treadle-pump beneficiaries from 2021. Since 2018, 6,120 pumps have been distributed.

Beyond Mozambique, we deploy similar targeted initiatives to support households in diversifying their income in various tobacco-growing countries, such as India, Indonesia, and Malawi.



Mitigating the impact of the gradual decrease in our tobacco demand

The growth of our smoke-free business will result in a simultaneous decline of our cigarette business. While this consequence is fully intended, it also necessarily translates into a gradual decrease in demand for tobacco leaf, which will have an undeniable impact on our contracted farmers. Since 2016, our demand for leaf has fallen approximately 25 percent. This has resulted in a reduction in the volume of tobacco we purchase in some markets and the elimination of our sourcing activities in others.

We seek to minimize the negative effects of the gradual decrease in tobacco demand by improving the socioeconomic well-being and resilience of tobacco-farming communities. We do this through a dedicated assessment of the unique realities and contingencies that define each country or region where we source tobacco, building an understanding of the local ecosystem to tailor and implement

sustainable solutions that can help farmers transition to sustainable alternative livelihoods where needed.

In some cases, farmers are not heavily reliant on tobacco production for their livelihoods, have the means to easily switch to other crops, or will continue to grow tobacco for other customers. In other geographies, we provide additional support to help mitigate the negative impact of our reduced purchases.

The initiatives we implement to help contracted farmers earn a living income improve the productivity of their tobacco crop and help them diversify their production to other crops. We expect these efforts to play an important role in minimizing the potential negative economic impacts on contracted farmers of our transformation and consequential reduction in demand for tobacco.

Empowering women involved in tobacco farming

Around the world, women participate in agriculture both as members of family farming households and as hired wage labor on farms owned and operated by other households or companies.

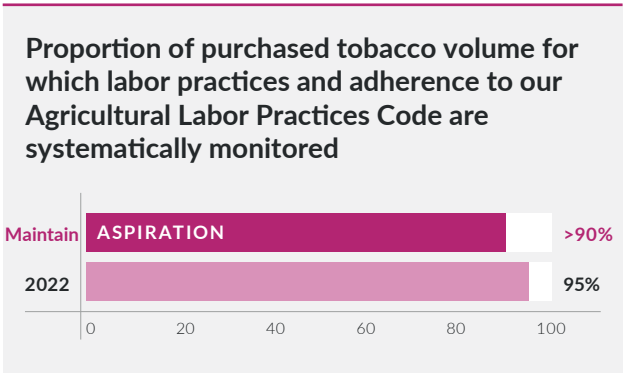
Many of the gender inequalities faced by women in general are exacerbated for women in agriculture. Globally, less than 15 percent of agricultural land is owned by women, and women involved in tobacco farming often face structural and cultural barriers.<sup>1</sup>

Since our ALP Step Change in 2018, our ALP program has deployed several initiatives across our sourcing markets focused on women empowerment. For example, we discussed how we provided “train the trainer” workshops to empower women in India in our [2020 Integrated Report](#). To date, a total of 650 women from 67 Self-Help Groups (SHG) have been trained on SHG governance, leadership, and micro-entrepreneurship development. Since 2020, a total of 498 micro-enterprise businesses have been established, of which 325 were directly funded by PMI and 173 have been funded by SHG members themselves who previously established their own businesses (read more in our dedicated ALP Progress Update [here](#)).

Eliminating labor abuses

Our ALP Code principles include no child labor, fair income and work hours, no forced labor or human trafficking, a safe work environment, fair treatment, freedom of association, and terms of employment.

We have implemented the STSC framework in the way we report our ALP monitoring data and relevant KPIs in 2022, based on contracted farmers supplying tobacco to PMI. This sets a new baseline for data in this section (read more [here](#)).



In 2022, 3,128 field technicians contracted by either PMI or our leaf suppliers systematically monitored the implementation of the principles and measurable standards of ALP on 95 percent of tobacco volume purchased by PMI. The remaining percentage pertains mainly to spot, unplanned purchases for which sustainability data were not available.

Our 2022 ALP monitoring farm-level datasets cover 19 out of the 20 countries from which we sourced in 2022. Switzerland was not included in this dataset, however 100 percent of the Swiss farms from which we source were monitored by an independent company for the past two years.

They were visited once during the season to validate the results obtained from a self-assessment questionnaire completed by the farmers. Read more about the reasons behind this on pages 152-153 of [PMI's Integrated Report 2021](#).

In 2022, field technicians reported a total of 6,101 prompt actions across all sourcing markets, of which 90 percent related to safe working environment issues, 3 percent to child labor incidents, and 7 percent to income and working hours. In total, 84 percent of the prompt actions raised were resolved during the year, with the remaining 16 percent of prompt actions followed up yet not resolved, predominantly due to the timing of the crop stage.

Across the countries from which we source tobacco, the most recurrent and difficult challenges relate to a safe work environment and usage of personal protective equipment (PPE). This is an area where we continue focusing our efforts through regular training and continuous improvements of the PPE in terms of comfort and usability.

To further support compliance with our ALP Code, we fine-tuned and deployed our ALP training materials in 2022. We rolled out the revamped materials through webinars following a “train the trainer” initiative with suppliers. Verité’s professional trainer teams delivered three virtual sessions, reaching 77 PMI employees and supplier staff responsible for ALP implementation in three regions. Over 70 percent of post-training survey respondents mentioned that the training sessions increased their knowledge of the ALP program as well as their facilitator skills and overall confidence. Our ALP program team, comprising regional sustainability managers, delivered the same training session to an additional 48 participants. These 125 participants will extend relevant knowledge and skills to field technicians who are implementing the ALP program across PMI’s sourcing markets.

Supporting monitoring activities at the farm level

In 2022, we issued targeted ALP Farm Monitoring Guidelines to support field technicians to better identify and categorize potential issues to be recorded as prompt actions and nonconformities. This allows us to further standardize the reporting of these issues, strengthen capabilities of field technicians to identify certain types of issues, and enhance data reporting to support ALP country teams toward better decision-making.

The new guidelines include more detailed examples of how to categorize different types of issues and risk factors and escalate them, especially when it comes to forced labor and human trafficking. We expect that the implementation of the new guidelines will lead to a more proactive approach to detect potential issues (nonconformities) before they evolve into prompt actions and thus a more adapted remediation.

1 Source: [Food and Agriculture Organization of the United Nations](#). (FAO)





Strengthening our controls

In addition to internal farm-by-farm monitoring, during 2022 Control Union conducted an external assessment in Indonesia, evaluating the management system in place for ALP implementation, reviewing prompt action protocols and procedures to identify, record, and address issues, and examining the internal capacity to implement the ALP program. We also published findings from the 2021 assessment in China. This brought the total number of Control Union external assessments conducted on our total farm base of contracted farmers to 38 since 2013 (all of them are available on [PMI.com](#)).

In addition, external verification by local third-party organizations was undertaken in Argentina, Mexico, and Turkey, covering our eligible farm base of contracted farmers. The outcomes of all external verifications were positive. In Turkey, especially, there was a clear decline in data discrepancy between suppliers' internal monitoring and external verification results.

We postponed external verifications in Malawi and Mozambique because our STSC framework was still in development stages. We replaced these assessments with interim internal shadow assessments.

Updating our External Verification Guidelines

First introduced in 2018 as a key component of our ALP Step Change approach, our External Verification Guidelines define a consistent, global framework on how to select third-party assessors and the overall methodology, including scope, farmer sample, field activities, and reporting.

In 2022, we revised the guidelines to help clarify the role of external verification under the STSC framework (read more about the framework [here](#)). We also slightly modified the aim of the guidelines to focus on increasing confidence in internal monitoring data, validating this data, and identifying potential data discrepancies with the aim of implementing corrective actions.

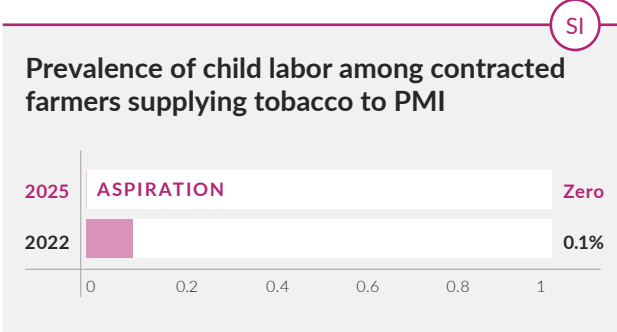
Eliminating child labor

We maintain a relentless focus on preventing incidents of child labor, and we take immediate action when they arise.

Our objective is to eradicate by 2025 child labor cases in our tobacco supply chain that are repetitive and systemic. We acknowledge that isolated cases—even when systemic occurrences are fully addressed—might persist due to farmer turnover or unintentional misbehaviors, and we will remain alert and tackle them promptly when identified.

We updated our methodology for calculating child labor prevalence in 2022 in line with our new STSC framework. Child labor datasets now depict the prevalence of child labor among contracted farmers supplying tobacco to PMI purchased volume. This sets a new baseline moving forward. Learn more in [PMI's ESG KPI Protocol 2022](#).

We use International Labour Organization (ILO) standards to measure our progress toward our target of zero child labor. Our methodology centers on preventing the employment of children under age 18 doing hazardous tasks, under age 15 being hired, and under age 13 doing any tobacco-related tasks. It reinforces our risk-based due diligence processes by improving visibility and granularity on child labor across our sourcing markets.



Child labor prevalence was 0.1 percent in 2022 in our purchased tobacco. While this data point does not reflect child labor prevalence in our total contracted farm base, the continuous reduction in child labor incidences among farmers supplying tobacco to PMI that we have observed gradually, is due to years of implementation of our ALP program, continuous training, and targeted interventions. While isolated cases of child labor do persist, systemic cases have been broadly eradicated in the farms we contract with.

Our field technicians continued to conduct farm-by-farm monitoring and to support farmers in addressing and remedying child labor risks and incidents. During 2022, field technicians monitored 100 percent of contracted farms supplying tobacco to PMI for child labor-related issues and recorded a total of 175 prompt actions. In total, these prompt actions involved 211 children, with 52 percent of them being the farmers' children.

This granular information on child labor, which provides the age breakdown and the type of issues identified, allows us to address them more efficiently with targeted interventions.

Total number of prompt actions recorded in 2022 relating to child labor among contracted farms supplying tobacco to PMI, by type

	2022
Children under 18 performing hazardous tasks	155
Children under 15 hired	14
Children under 13 performing light work	6

Total number of child labor prompt actions recorded in 2022 among contracted farms supplying tobacco to PMI, by country

	2022
Turkey	64
Philippines	51
Mozambique	45
Indonesia	10
Pakistan	5

The decrease in child labor incidences is mainly attributed to Malawi, North Macedonia, and Pakistan where we observed the positive impact after many years of implementation of the ALP program.

Malawi is a good example of where our targeted interventions led to a significant reduction of child labor prevalence. A key initiative was our primary school feeding program, piloted in 2019. In 2022, we increased the number of schools with this setup, leading to a total number of 11 schools with over 9,000 children participating. Realizing that only 41 percent of those who start school complete primary education, in combination with the fact that only 16 percent of the 14- to 17-year-old children enroll in a secondary school, we decided to upscale our current work. In close collaboration with a local nongovernmental organization (NGO), we plan to support a total of 625 participants by 2023 with comprehensive scholarships.

Addressing potential human trafficking concerns in Malawi

On July 5, 2022, the Special Procedures Branch of the UN Office of the High Commissioner for Human Rights (OHCHR) addressed to PMI a communication regarding human trafficking allegations affecting tenant farmers in tobacco farms in Malawi. The same communication was also addressed to three national governments and to six other companies active in the tobacco industry in Malawi.

With this communication, the OHCHR independent human rights experts highlighted a number of concerns in relation to human trafficking affecting tobacco farmers in Malawi (including forced labor, child labor, discrimination against women, and debt bondage) and asked PMI for its observations on the concerns brought forward, as well as the steps that PMI as a company was taking to prevent such abuses and protect farmers' human rights in the country.

While there was no legal obligation to do so, PMI responded in the hope of advocating for, raising public awareness of, and sharing good agricultural practices (see the letter [here](#)). In particular, we reiterated our commitment to respect human rights and the due diligence we carry out, our tobacco purchasing requirements, and the most relevant social and environmental initiatives and remediation programs in place.

Finally, PMI extended to the OHCHR's independent human rights experts a formal invitation to meet with the company in Malawi, in order to facilitate further engagement and drive progress in the country.



Through this initiative, we wish not only to address child labor issues in our supply chain but also to contribute to the development of future leaders in Malawi by providing end-to-end educational support for children in tobacco-farming communities. To ensure successful implementation, the primary school feeding program will continue while focusing on increasing the attendance and completion rate (with a target of 60 percent) supported by after-school activities.

Despite the improvements reflected above, we stay alert and continue focusing on addressing potential child labor issues in all sourcing markets, with particular attention to Mozambique, the Philippines, and Turkey.

Types of prompt actions recorded in 2022 relating to hazardous work performed by children among contracted farms supplying tobacco to PMI

	2022
Handling or applying CPA or fertilizer	32%
Stringing	24%
Harvesting or handling green tobacco	18%
Carrying heavy loads	8%
Working with sharp tools	6%
Driving a tractor or operating machinery	2%
Other	10%

The most common tasks field technicians found the children performing were stringing and handling or applying crop protection agent (CPA) or fertilizer. A significant proportion of the overall reduction in prompt actions comes from Malawi and Pakistan, which was the result of interventions such as the introduction of stringing machines.

Of all child labor-related prompt actions recorded in 2022, 95 percent were resolved, and the remaining 5 percent had monitored action plans put in place.

Field technicians further support our efforts to remediate prompt actions and eradicate child labor by raising awareness and offering training, promoting school access and attendance, conducting vocational training, and supporting initiatives to improve household income levels.

In many geographies, the findings of external assessments related to child labor are aligned with our internal monitoring data, which show continued improvement in our visibility

on the ground and the accuracy of our internal data. We remain focused on further strengthening our controls, for example by increasing the number of unannounced visits and improving the training of field technicians on monitoring techniques.

Promoting a safe working environment

In line with PMI's ALP Code, we require all our contracted farmers to provide a safe workplace to prevent accidents and injury and minimize health risks. In 2022, field technicians recorded a total of 5,490 prompt actions related to unsafe working environments.

The key focus areas remain to address the non-usage of personal protective equipment (PPE) when handling green tobacco, incorrect storage of CPA containers, and working at height without protection.

During the year, we focused on maintaining access to appropriate PPE for all our contracted farmers and farmworkers. Understanding the hazards related to certain tobacco tasks and encouraging behavior change is key to safeguarding the health and safety of those involved.

Types of prompt actions recorded in 2022 relating to safe working environment issues among contracted farms supplying tobacco to PMI

	2022
Exposure to green tobacco sickness (GTS) due to not wearing proper personal protective equipment (PPE)	30%
Crop protection agent (CPA) stored in a way that could cause a health and safety incident	23%
Working at height without protection	21%
Exposure to CPA due to not wearing proper PPE	19%
Unsafe or insufficient work accommodation	2%
Other	5%

These topics are always part of annual training provided to farmers, and a focus of our efforts on the ground.

Aspiration

100% of contracted tobacco farmers and farmworkers supplying tobacco to PMI have access to personal protective equipment for the application of crop protection agents and prevention of green tobacco sickness

Note: We did not collect this data in 2022 due to the shift to our new STSC framework. We will resume collecting this data in 2023.

Maintain

We also monitored the provision of safe and adequate accommodation by farmers to workers, when relevant (in 2022, around 2 percent of farmers provided accommodation to workers). Issues identified during monitoring were all resolved according to our standards. We also plan to update our ALP Global Accommodation Standards, first issued in 2020, in 2023.

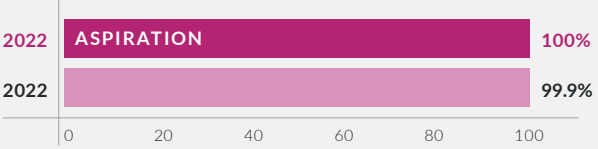
Proportion of tobacco farmworkers provided with safe and adequate accommodation



Advancing minimum wages for farmworkers

In a typical crop season, approximately 32 percent of farmers supplying tobacco to PMI hire workers. Income earned by farmworkers during a pay period or growing season should be enough to meet their basic needs. Our ALP Code requires that the wages of all workers (including temporary, piece-rate, seasonal, and migrant workers) meet—at a minimum—the national legal standard or formalized agricultural benchmark standard.

Proportion of contracted farmers supplying tobacco to PMI paying their workers at least the minimum legal wage or agricultural benchmark



In 2022, we monitored the wages of 100 percent of the contracted tobacco farmers who hire workers and found that 99.9 percent of farmers paid their workers at least the minimum wage. Field technicians recorded a total of 436 prompt actions related to farmers paying less than the minimum wage to their workers.

Despite a set of targeted initiatives such as awareness raising, remediation, and increasing efficiencies in the farms, some isolated issues related to minimum wage payment were still reported in India and Turkey. In both countries, it was mainly attributed to the informal agricultural labor market, often temporary, and to complex and changing wage structures.

Tackling the challenges linked to minimum wage

While encouraged by the progress made so far, we know that wage-related challenges relate not only to substandard payment but also to informal terms of employment, inconsistency between supply and demand of labor, and workers' lack of knowledge about their rights. We will continue monitoring this topic to proactively address potential payment gaps. We are implementing targeted initiatives, which include rolling out mechanization for labor-intensive tasks or piloting payment support to workers, aiming to bridge the gap.

Enhancing access to WASH among tobacco-farming communities

There is a well established link between poverty and inadequate access to water, sanitation, and hygiene (WASH). Enhancing WASH infrastructure can substantially improve the well-being and livelihoods of community members.

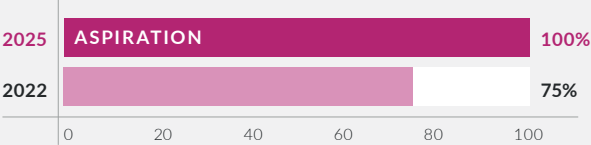
To ensure that all farmers within PMI's footprint have basic drinking water access by 2025 and sanitation and hygiene access by 2030, we developed a framework guided by the Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP), established by the World Health Organization (WHO) and UNICEF.

We performed an internal assessment and found that some PMI tobacco sourcing locations in rural areas do not have basic drinking water access. Argentina, Malawi, and Mozambique were identified as our priority markets for drinking water interventions. We have integrated WASH monitoring into our broader ALP monitoring process and have implemented solutions to bring safe drinking water to these locations, including drilling boreholes, protecting springs, and providing continuous household-level solutions.





Proportion of contracted farmers supplying tobacco to PMI that have basic water access



Note: Estimated based on surveys that indicate whether the farmer has an improved drinking water source within one km or 30-minute round trip. Excludes China.

Since its inception, we estimate that our WASH program in Africa has benefited approximately 250,000 community members. Women and children benefited the most from this initiative, which reduces the amount of time they must spend collecting water supplies. This has had a positive impact on women-led businesses and school attendance. In Argentina, by protecting springs, both farmers and community members have access to water that is less likely to cause runoff contamination. Sustainability of WASH infrastructure is one of the greatest challenges, which we mitigate by working closely with the local community and developing water committees.

Aspiration



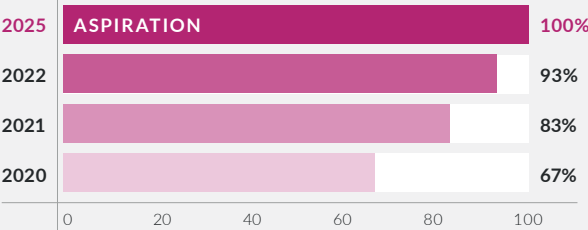
100% of contracted farmers supplying tobacco to PMI have basic sanitation and hygiene

2030

Promoting fair working and living conditions in our broader supply chain

We aim to leverage our experience in our tobacco supply chain to promote high labor standards and advance the socioeconomic well-being of workers across our broader supply chain.

Proportion of spend with critical suppliers from whom PMI sources sustainably



Our Responsible Sourcing Principles (RSP) set out ambitions and expectations for our suppliers, including human and labor rights considerations. In 2022, we began a review and update of our RSP (read more [here](#)).

We monitor adherence to the RSP and the sustainability performance of our critical suppliers through tailored due diligence instruments. For our electronics suppliers (read more [here](#)), we rely on the Validated Assessment Program (VAP) and Customer Managed Audits (CMAs) of the Responsible Business Alliance (RBA). For our direct materials suppliers (read more [here](#)), we rely on the EcoVadis platform.

Our electronics supply chain

We aim to proactively address specific social risks in our growing electronics supply chain.

In 2022, we performed an extensive analysis of PMI's current footprint and due diligence framework in our electronics supply chain, considering evolving regulations and available benchmarks. We also considered Article One's findings and recommendations following the human rights saliency mapping it conducted in 2021 that focused on our electronics supply chain (read more [here](#)).

We continued to leverage resources from the RBA and gathered data through the VAP and CMAs during the year. These highlighted that the most common social issues relate to working time.

In 2022, we also completed a human rights impact assessment in Malaysia, our first end-to-end exercise, looking at upstream as well as downstream. This work covered our main electronics supplier in the country, and we worked with them to develop a robust action plan to tackle findings (read more [here](#)).

Our direct materials supply chain

Our supply chain, beyond tobacco and electronics, is broad and complex (read more [here](#)), facing a large set of social risks. These are mainly related to working conditions, a lack of strong policies in place around social dialogue, career management, and training. Our assessment highlights that our suppliers have room for improvement in reporting on material human rights topics, beyond health and safety issues.

To address these risks, we focus on critical suppliers (read more [here](#)). In 2022, our critical suppliers of direct materials assessed in EcoVadis achieved an average Social score of 58 out of 100. In order to address the issues identified, we engaged with the suppliers showing lower sustainability performance. We organized deep-dive review sessions of their corrective action plans before their reassessment. Consequently, 80 percent of these suppliers improved their sustainability performance. Considering the positive impact of this approach, we will continue engaging closely with our suppliers to continuously improve their policies and practices.

In 2022, we completed two remote corrective action "health check" reviews that focused on determining supplier alignment with PMI's RSPs. Our partner, Verité, focused on the progress and status of PMI's efforts to address its labor and management systems issues. They did this through a series of remote and in-person reviews, which started two years ago in the paper and pulp supply chain in Asia.

In general, suppliers included in the health checks have steadily improved some labor procedures pursuant to corrective action plan recommendations. For example, several training sessions have improved worker awareness on a variety of policies and procedures. However, there are corrective actions that are either not yet in place or were still being implemented at the time of the most recent visits and will require continued efforts and oversight.

Meanwhile, our broad and in-depth human rights impact assessments—which we aim to conduct in our 10 highest-risk countries by 2025—provide us with granular insights into social challenges along our value chain. Read more about how we tackle human rights issues [here](#).





# Looking ahead



**Scott Coutts**  
Senior Vice President,  
Operations



Proud of the progress we have achieved in our tobacco supply chain, we will continue to expand and develop a social sustainability strategy that is able to respond to our transforming supply chain addressing impacts present in the rest of our value chain, increasing transparency, and ensuring robust data reporting. We are aware that this will require strong engagement with our suppliers, with our business partners, with others in the private sector as well as strong collaboration with specialized organizations, academics, and governments.

Noting the change in reporting to increase granularity and accuracy of the data pertaining to the tobacco we purchase, during 2023, we plan to conduct two audits to assess the quality and governance of our suppliers' data and also introduce in the contractual conditions the requirement for them to expand their eligible farm base year-on-year. During 2023, we plan to publish a dedicated disclosure detailing rationale behind the change in reporting. This report will share details related to our desired impact, benefits, challenges, and actions that we will take in order to mitigate potential unintended consequences derived from reporting data which relates only to that tobacco we purchase, instead of the total contracted farm base of our suppliers in the tobacco growing areas where we purchase, which include farmers that are not part of our supply chain.

As our company transforms and welcomes Swedish Match organization, we will work to integrate its supply chain to find synergies that may result in changes to sourcing supply. We will, accordingly, assess social and potential social impacts and adjust our strategy as needed.



**Pedro Braga**  
Vice President Global  
Technical Operations



We remain committed to provide a living income in our tobacco supply chain. To support our ambition, we plan to take a number of steps to make our data more robust, reliable, and meaningful. For example, we expect to undertake living income benchmarks in higher-income countries, including South Africa and Switzerland, and update 2022 benchmarks in other countries, in the coming years. We'll also implement a new methodology to analyze farmers' income at a more granular level with the support of our suppliers. We plan to report progress based on this updated methodology in next year's integrated report. We will also implement our new farm level monitoring guidelines, seeking to take a more proactive approach to detecting potential issues at an early stage.



**Hamed Belhadj**  
Chief Procurement Officer



In 2023, we will further leverage our partnership with the Responsible Business Alliance (RBA) and the tools and resources it provides to foster improvement in social conditions in our electronics supply chain. In particular, we will continue building our internal capability and that of our suppliers to be better equipped to monitor and address identified issues. We will also pilot relevant initiatives, such as the RBA Workers' Voice as well as the Responsible Factory Initiative (RFI), which assists suppliers to gain further insights and improve their sustainability journey. Depending on the outcome and the learnings acquired, we will explore the possibility of expanding such initiatives to our broader supplier base. In parallel, we will enhance our participation in working groups hosted by RBA and the Responsible Minerals Initiative (RMI) to expand our knowledge and gain insights into human rights trends in the electronics supply chain as well as share good practices.



**Mimi Kurniawan**  
Vice President Operations  
Sustainability



Building on a solid foundation established over the past decade, we will continue strengthening our policies, processes, and programs to address social issues and create a positive change across our value chain. We will continue working on respecting human rights within our organization and across our value chain, taking a systematic approach following the United Nations Guiding Principles on Business and Human Rights. Beyond our tobacco supply chain, we will enhance our efforts and expand our strategy and focus into our electronics supply chain, by further leveraging our Responsible Business Alliance membership.







OPERATIONAL IMPACT



# Tackle climate change

Climate change is among the greatest threats to society. There is broad scientific consensus about the urgent need to reduce greenhouse gas (GHG) emissions to limit the rise in the global temperature to 1.5°C above pre-industrial levels, aligned with the Paris Agreement.

INWARD IMPACT: The business case

For a business like ours—with a diversified agricultural supply chain that is sensitive to climate changes—abrupt climate variations can endanger physical infrastructure, supply chains, and undermine progress. It can also become a risk for business growth by exacerbating systems-level disruptions for customers, investors, employees, and communities.

It is therefore imperative for us to develop and implement strong mitigation and adaptation strategies that can prepare and mitigate how climate change may impact our business. We do that by reducing our GHG emissions, which increases efficiency and energy savings, and results in better profitability, as well as fewer inputs used over outputs. We are also planning and investing in innovative low-carbon technologies, which require higher investments upfront but offer meaningful emissions reductions and payback over the medium and long term. These actions position us to better anticipate climate-related regulation, support climate policies, and seize climate-related economic opportunities.

OUTWARD IMPACT: The right thing to do

The climate crisis, as acknowledged by the international community, threatens all livelihoods, but especially those who are most vulnerable, exacerbating inequalities. It impacts human rights, biodiversity, water access, global health, and food security, and exacerbates environmental changes such as ecosystem degradation, drought, flooding, and desertification.

While science tells us that climate change is irrefutable and unavoidable, it also tells us that it is not too late to limit global warming to the 1.5°C threshold that is considered the limit beyond which climate-related impacts will be catastrophic. Achieving this goal will require fundamental transformations of critical aspects of society, including how we grow food crops, use land, transport goods, and power our economies. The great challenge of our times is to find a way to effectively align the public and private sectors to take critical action and put aside existing siloed approaches and objectives.

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## Management approach

Our climate strategy aims to address pertinent climate change risks and build resilience while seizing opportunities presented by a low-carbon future.

To deliver on our climate ambition, we rely on robust carbon footprint accounting, analysis of climate change-related risks and opportunities, ambitious mitigation targets, implementation of adaptation measures, clear management and governance structures, and key enablers such as our internal carbon pricing.

We prioritize reducing absolute carbon emissions by optimizing efficiency and reducing consumption while minimizing the use of fossil fuels and promoting the switch to renewable energy. We compensate for the remaining unavoidable emissions in our direct operations by prioritizing insetting projects in our supply chain when possible and purchasing certified carbon credits when needed. Our Portfolio of Climate Investments (PCI) guides our approach to compensation.

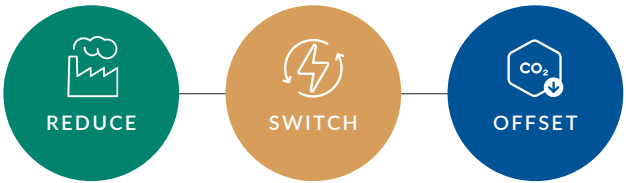
We use internal carbon pricing to incentivize and drive reductions in GHG emissions, including carbon shadow pricing and an internal carbon levy.

We incentivize our employees through monetary rewards or other forms of recognition for the successful implementation of climate-related initiatives, and seek to raise awareness among our entire workforce on climate change impacts through regular internal communications and training.

Our direct materials supplier selection criteria take into consideration their transparency in disclosing emissions factors and demonstrating significant carbon intensity reductions.

Combating climate change can not be done in isolation. PMI engages with sustainability-related initiatives and organizations, including the Business Ambition for 1.5°C, and we have publicly declared our support for the Task Force on Climate-related Financial Disclosures (TCFD) and its recommendations. Our affiliates also belong to national business associations that are engaging with governments to advance progress on climate protection at the local level.

Our three-pronged approach to decarbonization



We support the Paris Agreement and have set a science-driven decarbonization roadmap. Our near-term 2030 absolute carbon emissions reduction targets and long-term 2040 commitment to net zero emissions have been approved by the Science Based Targets initiative (SBTi) and aligned with a scenario of an increase in global temperatures of no more than 1.5°C above pre-industrial levels. In addition, we set a new target validated by the SBTi in 2022 on the percentage of supply chain spend covered by suppliers with their own science-based targets.

Our decarbonization efforts cover our entire value chain. Guided by our GHG footprint model, we have specific mid-term targets and strategies in place that account for our most significant impacts on climate, and we conduct periodic climate change risk and opportunity assessments to inform our efforts.

Management

Our Senior Vice President, Operations, a member of Company Management, is tasked with addressing climate-related risks across all company activities. He reports findings to the Nominating and Corporate Governance Committee and the Audit Committee of PMI's Board of Directors. From an operational standpoint, our Operations, Combustible Category, Smoke-free Category, Product, and Finance functions coordinate the company's climate change-related activities.

PMI's policies and standards

- [Environmental Commitment](#)
- [Responsible Sourcing Principles](#)
- [Good Agricultural Practices](#)
- [Zero Deforestation Manifesto](#)
- [Sustainable Design Framework](#)

Foster an empowered and inclusive workplace

Improve the quality of life of people in our supply chain

Tackle climate change

Preserve nature



# Progress in 2022

## Highlights

We exceeded targeted reductions needed to meet our science-based target for reduction in absolute scope 1+2 GHG emissions and our carbon neutrality ambition in our direct operations, in particular with increased focus on delivering efficiency gains and continued efforts to certify our factories as carbon-neutral.

We completed a new and more extensive climate change risk and opportunity assessment and will publish our inaugural TCFD Report shortly after publication of this integrated report.

During the year, we revised and increased our two internal carbon pricing instruments (shadow price and carbon levy) to boost investment decisions favoring projects accelerating emission reduction and anticipate evolution in the carbon offset market.

We continued to strengthen our carbon accounting, notably increasing the proportion of primary GHG emissions data collected from our suppliers.

We were awarded an A score by CDP for the ninth consecutive year in recognition of our efforts to combat climate change.

## Challenges

The geopolitical situation in Europe, war in Ukraine, and adverse impact of supply chain disruption have impacted our decarbonization plans, especially those focused on scope 3, requiring us at times to assume trade-offs between financial and natural capital to ensure business continuity.

To guard the success of our carbon neutrality target and minimize adverse impacts of the geopolitical situation in Europe, we decided to increase our climate investments in projects generating carbon credits, avoiding or removing carbon from the atmosphere with strong focus on nature-based solutions, though our primary focus remains on reducing our absolute GHG emissions.

Many office spaces and facilities are not owned by PMI, making it difficult at times to undertake emission-reduction activities. To mitigate this, we are focusing on increasing the share of green energy used and accelerating the deployment of energy-saving initiatives in those facilities under our ownership.

## Overview of our carbon footprint

We calculate our GHG footprint annually, following guidance from the Greenhouse Gas Protocol and accounting for all emissions generated across our value chain.

We seek to improve the environmental performance of our direct operations that represent 7.3 percent of our overall carbon footprint and where we have operational control.

Our upstream emissions represented 87.6 percent of our total GHG footprint in 2022. We therefore work across our supply chain to drive impact by working within our tobacco supply chain and with our broader supply chain partners.

Downstream emissions represented 5.1 percent of our total footprint in 2022. We have aspirations to embed eco-design principles in all our smoke-free products by 2025 and to extend our electronic smoke-free device life cycle (read more [here](#)).

Overall, in 2022, our emissions decreased in absolute terms by 11.2 percent across our value chain versus 2019. Although our emissions have dropped from our baseline year, they have not fallen as much as planned. In particular, in 2022, they increased versus 2021 due to the adverse impact of supply chain disruption and geopolitical shifts resulting from the war in Ukraine.

In 2022, we conducted a climate change risks and opportunity assessment across our value chain aligned with international expectations such as those of the Paris Agreement and the recommendations of the TCFD. We are preparing to publish our inaugural TCFD Report 2022 shortly after this integrated report, which we will make available on [PMI.com](#).

## Calculating the footprint of recent acquisitions

Climate-related figures presented in this report do not include GHG emissions from wellness and healthcare acquisitions made in 2021, which we have since consolidated into Vectura Fertin Pharma. These emissions represented 1.6 percent of PMI's scope 1+2 emissions and 2.1 percent of scope 3 emissions in 2022 and were calculated in line with PMI's methodology. They are currently excluded from the inventory as they are below our materiality threshold set at 5 percent for scope 1+2 and 10 percent for scope 3, and are therefore not considered material. GHG emissions from Vectura Fertin Pharma will continue to be calculated on an annual basis, and will be integrated into the inventory if they become material.

The data and information in this report also do not incorporate PMI's acquisition of Swedish Match made at the end of 2022. We plan to fully integrate climate-related data in the near future.

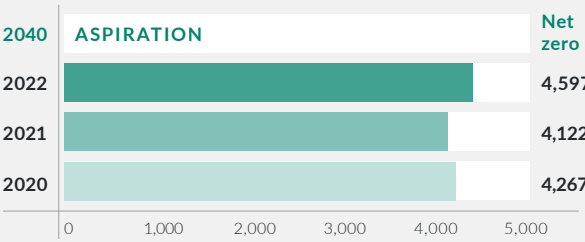
For more information on PMI's approach to GHG calculations and materiality thresholds, please refer to our ESG KPI Protocol 2022 [here](#) and carbon footprint methodology [here](#).

## PMI's Low-Carbon Transition Plan

Our Low-Carbon Transition Plan (LCTP), published in October 2021, provides a transparent and detailed view of how we plan to achieve our climate ambitions. It describes the various tools and enablers—including our approach to carbon pricing, our portfolio of climate investments, and our governance and management arrangements—that will help us deliver on our climate targets. By openly sharing our objectives and methodologies, we seek to accelerate the achievement of our targets and commitments (read more [here](#)).



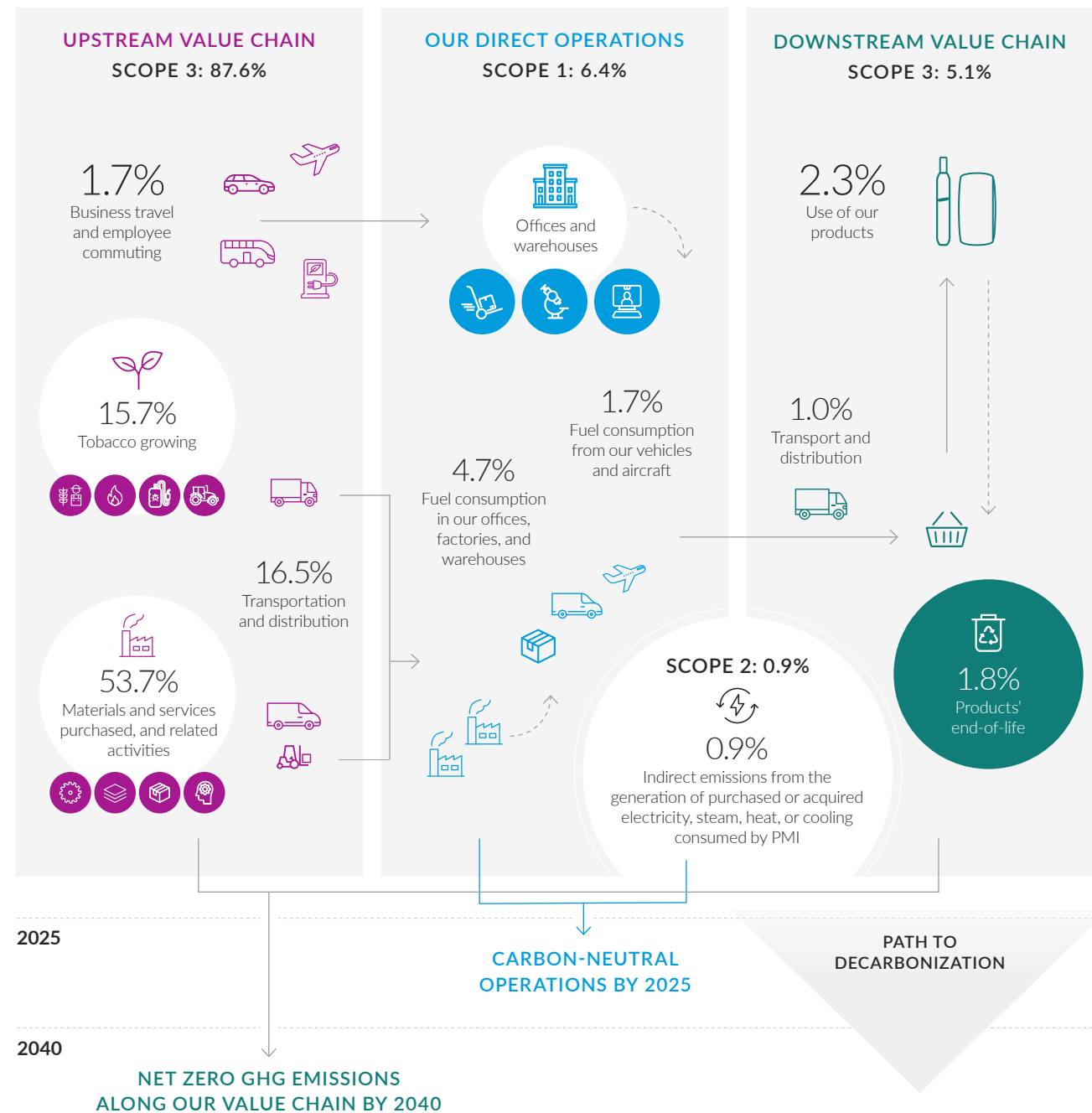
## Absolute GHG emissions in our value chain (scope 1+2+3) (in thousands of metric tons)







## Carbon emissions along our value chain in 2022



Presentation of information aligns with guidance of the Greenhouse Gas Protocol. Figures are rounded.

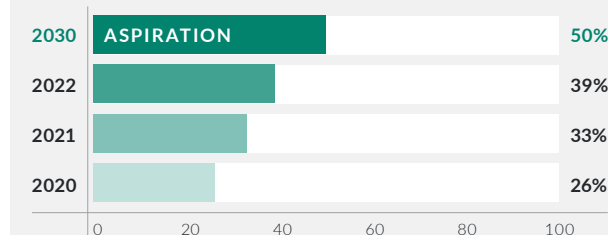
## Carbon neutrality in our direct operations

Our direct operations are the parts of our value chain over which we have the greatest control. Combined, our scope 1+2 emissions represented 7.3 percent of our total carbon footprint in 2022, of which 71.3 percent were generated by our factories.

To achieve our ambition of carbon neutrality in our direct operations (scope 1+2) by 2025, we combine good management practices with strategic energy-related investments. We invest in optimizing energy and process efficiencies and replacing fossil fuel-based energy with renewable sources. We compensate for our unavoidable emissions as a last resort—once we have maximized our emissions reduction.

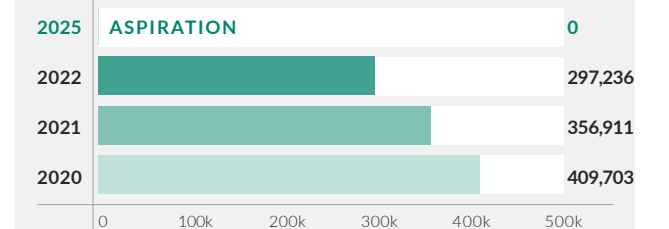
As of year-end 2022, with a 39 percent absolute GHG emission reduction versus 2019, we are well on track to meet our SBTi-validated target for a 50 percent reduction by 2030 versus our baseline.

### Reduction in absolute scope 1+2 GHG emissions versus 2019 baseline



This has also left us on track for our 2025 aspiration to be carbon neutral in our direct operations (scope 1+2) that factors into our [Sustainability Index](#).

### Net CO<sub>2</sub>e scope 1+2 (metric tons)



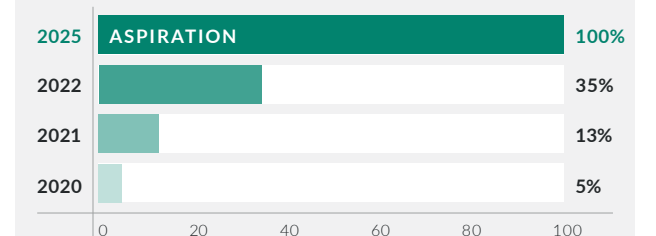
### Decarbonizing our factories

In 2022, our factories accounted for 5.3 percent of our total carbon footprint.

Our strategy to decarbonize our factories focuses on enhancing energy efficiency and switching to renewables, and is underpinned by the development and deployment of low-carbon technologies.

Our efforts in 2022 led to an overall reduction of 39 percent in our absolute GHG emissions in our factories versus the 2019 baseline. During the year, we certified eight additional sites in Argentina, Brazil, Indonesia, Pakistan, and Senegal as carbon neutral, bringing the total to 13 factories certified to date. We remain on track to certify all our manufacturing sites by the end of 2025.<sup>1</sup> We publish certifications for all carbon neutral sites [here](#).

### Proportion of our manufacturing facilities certified carbon neutral



<sup>1</sup> Carbon neutrality certification plans for our factories in Russia and Ukraine were put on hold due to the geopolitical situation.



Promoting energy efficiency

We rely first on promoting efficient energy use across our factories. We achieve this through our global “Drive 4 Zero” program, which establishes a common way of working across our factories, advances a zero-loss mindset, and empowers employees to identify and implement operational efficiencies related to resource optimization. This includes energy savings and environmental benefits such as reduced water consumption and waste generation (read more about maximizing resource efficiency in our operations [here](#)).

In 2022, the program triggered hundreds of creative initiatives worldwide, including the optimization of temperature and pressure process center-lines, heat recovery, condense return, and building automation.

Switching to renewable energy

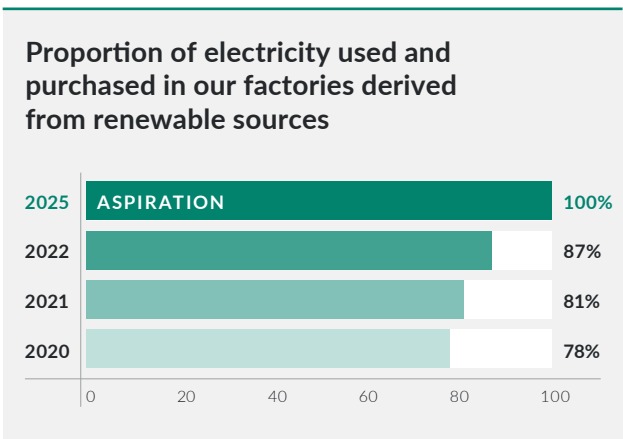
In parallel, we are continuing our gradual switch to renewable energy sources. Many of our zero-carbon technologies aim to generate renewable energy, such as photovoltaic panels, biomass boilers and heat pumps, and tri-generation processes (combining cooling, heating, and power). In total, 5.0 percent of our energy use was self-generated in 2022 (2021: 7.0 percent).

For instance, in 2022, our manufacturing site in Italy continued the expansion of its photovoltaic infrastructure, adding an additional 740 m<sup>2</sup> of solar panels equivalent to 157 kW.

In addition to self-generated renewable electricity production, we continue to consider opportunities to source electricity through power purchase agreements (PPAs) in the future.

In 2022, we purchased additional renewable electricity certificates (RECs) to offset a further 1.378 metric tons compared to 2021.

In 2022, we remained on track to achieve our target of 100 percent of electricity used and purchased in our factories derived from renewable sources by 2025, achieving 87 percent.



Reducing GHG emissions in our offices and other facilities

Our offices and warehouses accounted for 0.4 percent of our total carbon footprint in 2022.

During the year, we continued to refine the level of granularity of our carbon accounting. For example, we included carbon emissions from selected retail stores in our footprint for the first time, and we plan on expanding their integration in the coming years.

A pain point we identified with market-level carbon reduction activities was that many offices are leased and located in multi-tenanted buildings. This severely limits our ability to intervene, and the market affiliates need support as these facilities are locally managed. In response, we are developing a database of potential initiatives to support our market affiliates in reducing emissions. As a last step, we will ensure that markets follow the global plan for compensation for any offsetting needed to reach carbon neutrality.

Moreover, we piloted our PMI market carbon neutrality strategy in Mexico in 2022. This resulted in our first market certified as carbon neutral. The strategy will be rolled out to additional markets in the coming years.

Overall, we were able to decrease carbon emissions from our offices and warehouses by 63.7 percent versus the 2019 baseline, continuing the positive trend from 2021 and mitigating the effects of the gradual return to the office for many employees after the ease of restrictions related to COVID-19.

In 2022, as part of our employee Sustainability Challenge (read more [here](#)), we engaged employees to collect suggestions for market-level carbon reduction initiatives, gathering over 300 ideas.

Fostering carbon neutrality in our fleet

Our fleet of nearly 21,700 vehicles accounted for 1.7 percent of our total carbon footprint in 2022. Most (83 percent) of our fleet vehicles are working-tool vehicles, used primarily to visit point-of-sale locations and distribute our products, with the rest being benefit cars.

To reduce carbon emissions in our fleet, we invest in sustainable powertrains and effective driving to optimize energy consumption and improve operational efficiency.

Our Global Vehicle Fleet policy, instituted in 2021, frames our fleet strategy and moves us to a more centralized operating model to help ensure that every PMI affiliate contributes to our global carbon neutrality goal. In 2022, we continued to select more environmentally friendly powertrains to guide the renewal of our fleet.

By the end of 2022, vehicles with sustainable powertrains (electric or hybrid) represented 19 percent of our fleet globally (2021: 10 percent). We remain focused on retiring our most polluting cars subject to the availability of appropriate infrastructure, legislation, and technological innovation.

We leverage eco-training and telematics where legally permitted to improve driver behavior and further engage employees in our sustainability agenda. By the end of 2022, 66 percent of company drivers were enrolled in the first year of our fleet safety e-learning program, which incorporates eco-driving modules. We expect all drivers to enroll by the end of 2023. Moreover, 65 percent of our working-tool cars are equipped with telematics—a technology that provides the driver and company with data on driving behaviors to improve road safety and decrease carbon emissions (2021: 47 percent).

Deploying zero-carbon technologies

We explore opportunities to leverage technology to achieve significant carbon savings. In 2022, we continued to develop our Zero Carbon Technology (ZCT) program aimed at fostering the transition to renewable energy and driving emission reductions in our manufacturing sites. While every solution is tailored to the specific energy profile of the site, our program is based on a general framework that considers self-generated renewable energy, electrification of heat production systems, and switch to bio-based fuels where possible. Through the ZCT program, we expect to replace 35 percent of our fossil fuel use by green energy and to increase the share of in-house produced renewable electricity by 10 percent by 2025 (versus a 2021 baseline).

We also funded seven projects in seven different manufacturing sites, which will enter the implementation phase in 2023. We plan to install heat pumps and an electric boiler system powered by a new photovoltaic plant at our site in Italy. We will also begin implementing electrification projects in the Philippines, among other affiliates. In Indonesia, we plan to switch from natural gas to biomass by replacing the current gas-fired tri-generation systems with a biomass boiler and photovoltaic plant for the Sukorejo site (read more [here](#)) and a biomass tri-generation unit for the Karawang site. Meanwhile, at our Otopeni site in Romania, we will begin installing an innovative volcanic thermal storage unit combined with three biomass burners.

In addition, we sourced and certified as biogenic the liquid CO<sub>2</sub> supply chain for our Indonesian and Philippines subsidiaries. This resulted in a reduction of around 6 kilotons of CO<sub>2</sub>e in our scope 1 emissions.





Compensating for unavoidable emissions in our direct operations

To achieve our carbon neutrality ambition, we strive to maximize our emissions reductions and we compensate for the remaining unavoidable emissions occurring in our direct operations.

In past years, we continued our efforts to certify our factories as carbon neutral, focusing primarily on efficiency gains and a switch to renewable energy. Accordingly, for the 13 factories and one market which were certified as carbon neutral in 2022, we have reduced our absolute emissions by 57 percent versus our 2019 baseline, with the remaining 43 percent being compensated.

Our long-term goal is to prioritize insetting projects in our supply chain to generate carbon credits and focus our investments on nature-based solutions. As we prepare the organization for the complexity of these projects and considering their lead time to generate credits, PMI's Portfolio of Climate Investments (PCI) purchases carbon credits from the voluntary market to meet the needs of our 2025 carbon neutrality target. Our PCI investments bring both standardization and a robust technical approach to compensation. This results in a pool of purchased high-quality carbon credits available for PMI's compensation activities with attributes on both environmental and social impact fulfilled.

**Pricing carbon**

Assigning a price—and hence a theoretical cost—to carbon emissions makes the intangible tangible and further incentivizes action to reduce the emissions that contribute to global warming. PMI has used two complementary internal carbon pricing instruments since 2020: a shadow price and a carbon levy.

We revise our shadow price and carbon levy annually to reflect changes in our risks and emission profile. In 2022, we also conducted a carbon pricing benchmark assessment, and evaluated external factors, such as inflation rates and developments in emissions trading schemes.

During the year, we integrated our shadow carbon price into the preparation and financial evaluation of business proposals aimed at structurally reducing our carbon emissions, supporting the approval of 121 carbon emission-reduction projects in 2022, including four projects under our Zero Carbon Technology (ZCT) program. The adjustment of our shadow price from USD 65 to USD 105 per ton of CO<sub>2</sub>e in the last quarter of the year supported the approval of two projects under our ZCT program.

We also increased our carbon levy from USD 8 to USD 11 per ton of CO<sub>2</sub>e to help determine investments required to compensate our emissions through offsetting or insetting initiatives. The levy is designed to internalize costs and support behavioral change by setting a virtual internal tax on selected business units for their GHG emissions. This helps us determine a budget for the PCI described below.

**Deploying our Portfolio of Climate Investments (PCI)**

The PCI is a bespoke initiative we introduced in 2021 to standardize and provide transparency to our approach to investments in projects generating carbon credits.

To support decarbonization efforts, PMI believes that limiting the use of market approaches (offsetting) in the short term by prioritizing direct investment in our supply chain in the medium and long term (insetting) will result in a climate investment strategy that is cost-effective, transparent, consistent, and of high quality.

The PCI is supervised by an advisory committee composed of cross-functional PMI senior leaders (including our Chief Sustainability Officer and Senior Vice President Operations). The committee revises and validates the proposals prepared by the project team and approves the allocation of resources to the proposed climate solutions through an investment strategy that leverages the budget generated by PMI's carbon levy scheme.

We anticipate a decrease in the levy budget as our emissions profile shrinks. Where additional funding will be required for specific investments (e.g., unlocking innovative climate solutions and research and development (R&D)), the advisory committee that governs the PCI will decide on approval. In 2022, we completed three rounds of investments following a mandate from the advisory committee, making 2022 the year in which we have invested the most so far in carbon projects. Our increased investment in carbon projects sought to minimize adverse impacts of the geopolitical situation in Europe as we remain committed to achieving our carbon neutrality commitment.

We applied a set of mechanisms and rules—the PCI quality criteria and due diligence protocol—to efficiently evaluate which climate solutions are most appropriate to pursue. We continued investing in nature-based solutions that focus on protecting nature by (1) avoiding deforestation, (2) improving nature through community projects, and (3) fostering natural ecosystems beyond forests.

To assess whether an investment will meet our quality criteria and generate a positive impact, we employ an external due diligence process managed with a proprietary methodology developed with PMI's carbon finance adviser, Clarmondial. This methodology considers GHG mitigation, biodiversity conservation, and community benefits. Clarmondial also supported PMI in establishing relationships that can support the company's long-term climate, community, and nature-related targets in priority countries.

In 2022, we created a Voluntary Emission Reduction Purchase Agreement (VERPA) to standardize conditions that we apply with credit sellers that allows us to be more decisive on our selections as well as more transparent and thorough with our due diligence.

In 2022, PMI's PCI invested around USD 6.6 million in projects in Bangladesh, Brazil, China, Colombia, Indonesia, and Malawi, with a focus on nature-based solutions (2021: USD 4.2 million). Moreover, the PCI focused on securing high-quality offsets to support PMI's decarbonization journey and provided the required carbon offsets for the eight manufacturing sites and one market that achieved carbon neutrality certification during the calendar year.

Insetting in our tobacco supply chain to compensate for our direct emissions

We want to promote insetting by implementing nature-based solutions in our tobacco supply chain. This allows us to compensate for unavoidable emissions generated by our direct operations while also advancing the well-being and socioeconomic development of tobacco-farming communities and creating co-benefits such as more resilient ecosystems and improved safe water access for our farming communities.

In 2021, we identified an insetting project opportunity in our supply chain in Mozambique. In 2022, we kicked off this project with the objective of increasing access to potable water to farmers in PMI's tobacco supply chain by drilling 20 boreholes and distributing 15,000 highly efficient cook stoves. Those interventions will result in a decreased pressure on natural forests that are typically used as a source of biomass for water potabilization and cooking purposes, thus allowing the generation of carbon credits. We expect the project will benefit between 80,000 and 95,000 people and will deliver significant co-benefits for the farming communities where PMI operates. In designing activities, we prioritized co-benefits such as the creation of safe drinking water access points in line with our WASH approach and the contextual protection of natural forests that are providing ecosystem services to the rural communities included in the project feasibility phase.

We assessed a second insetting project in Argentina and received the green light from the PCI advisory committee to progress to implementation phase. The Argentinian project aligns with our "Perfect Forest™" concept, where value is created by implementing sustainable forestry practices. Project outcomes include carbon sequestration through the reforestation of degraded land, ecosystems restoration, and social benefits to the local community such as securing access to sustainable wood to tobacco farmers who depend on it. In 2022, we completed the project feasibility study and a comprehensive risk assessment and started preparations for project implementation. As part of this preparation process, we conducted a comprehensive impact valuation analysis that considered the natural, human, and social capital impacted by the project. We also validated stand growth models that employ forestry-specific expertise.

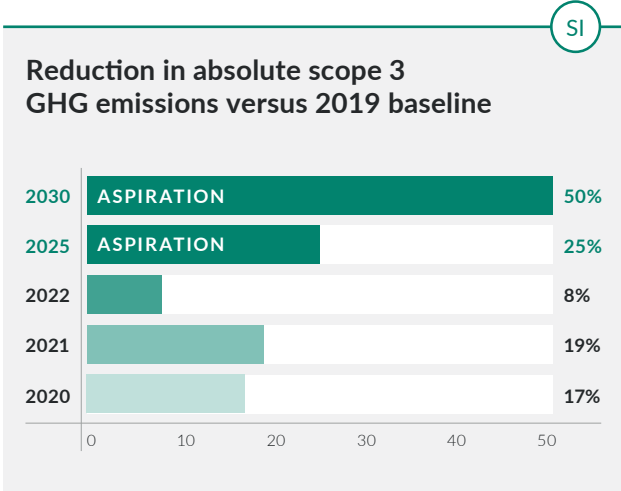


# Carbon reduction in our value chain

The vast majority (87.6 percent) of our carbon footprint lies in our upstream value chain. Main sources of carbon emissions include purchased goods and services and related activities, transportation and distribution, tobacco growing, and business travel and employee commuting.

A smaller percentage (5.1 percent) of our carbon footprint comes from our downstream value chain, including the use and end-of-life phases of our products (read more [here](#)), and the transportation and distribution of finished goods.

In line with PMI's 2040 net zero ambition, we aspire to reduce absolute scope 3 GHG emissions by 25 percent versus our 2019 baseline by 2025 and 50 percent by 2030. Our 2025 aspiration forms part of our [Sustainability Index](#) and impacts executive compensation (read more [here](#)).



Our upstream and downstream value chain combines to form our scope 3 GHG emissions. Our 2022 data reflect an 8 percent decrease in our overall scope 3 GHG emissions versus our 2019 baseline. While our emissions have dropped from our baseline year, they did not fall as much as planned in 2022.

Our planned programs delivered reductions to expectation and are highlighted throughout this section. We did, however, face unforeseen challenges in 2022 due to unfavorable business conditions and the execution of business continuity plans. For example, we had to put plans in place to mitigate the adverse impact of supply chain disruption and geopolitical shifts resulting from the war in Ukraine. Some of these decisions demanded changes that resulted in unavoidable trade-offs which, while ensuring security of supply and business continuity, compromised natural capital. These included:

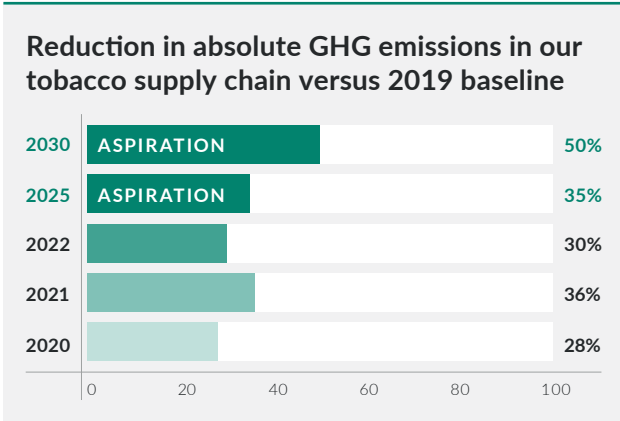
- Change in sourcing: Purchasing more tobacco from geographies with higher carbon footprints
- Change in transport: Shifting to air freight to counter supply chain disruption effects in certain factories and markets
- Change in stock: Purchasing additional materials as part of business continuity plans to build up our stock of raw materials and semifinished products to ensure finished products were available in specific markets

Progress in the coming years will not be easy, nor free from challenges, but we remain committed to reaching net zero by 2040. We seek to proactively build on the learnings of 2022 to navigate complexity and better prepare for uncontrollable events, such as health pandemics or geopolitical turmoil. Mindful that these systemic issues are not only a challenge for the implementation of our own decarbonization strategy, we will increase our engagement with supply chain partners, who remain key in helping us achieve our scope 3 ambitions.

The more we know about the drivers of our emissions, as well as the emissions and profiles of our suppliers, the more targeted our activities and projects can be to reach our targeted reductions. In 2022, we expanded our primary data collection from suppliers in multiple categories, including tobacco and direct materials, making our data more robust. Our new target on the percentage of supply spend covered by suppliers with their own science-based targets was validated by the SBTi in 2022.

## Our tobacco supply chain

Our tobacco supply chain represented around 15.7 percent of our total carbon footprint in 2022. Main sources of emissions are described below and include the use of fertilizers, the process of curing tobacco, and increasingly mechanized activities.



We are relentlessly working toward achieving an absolute reduction in carbon emissions in our tobacco supply chain of 35 percent by 2025 and 50 percent by 2030 versus our 2019 baseline. To deliver on these targets, we seek to decarbonize the tobacco curing process while implementing additional reduction initiatives focused on the use of fertilizer and mechanization.

### Decarbonizing tobacco curing

We mainly source three types of tobacco: Virginia, Burley, and Oriental. While Burley and Oriental tobaccos, once harvested, are air- and sun-cured to dry out the leaves, Virginia tobacco (which represents approximately half (51 percent) of our purchased volume) is generally cured using an external heat source—a process called “flue-curing.” Curing barns can be heated with coal, diesel, natural gas, firewood, or biofuels containing agricultural or wood-sawing by-products.

The GHG emissions of flue-cured tobacco represented 4.3 percent of our total carbon footprint in 2022.

Having achieved a 77 percent reduction in GHG emissions per kilogram of flue-cured tobacco between 2010 and 2020, we established a more ambitious target to reach 75 percent reduction in carbon emissions generated by curing one kilogram of flue-cured tobacco by 2025 (versus our 2019 baseline). To deliver on this ambitious target, we focus on improving curing-barn efficiency and increasing the use of renewable fuels.

In 2022, we made good progress in most markets, achieving a 56.9 percent reduction in emissions per kilogram of tobacco from flue-curing versus 2019. We continued the audit process of our suppliers run by an external partner based on our Monitoring, Verification, and Reporting (MVR) Framework for Sustainable Curing Fuels. These audits covered all flue-cured origins to verify carbon reduction activities and data on fuel use per kilogram of tobacco cured.

### Improving curing barn efficiency

As most farmers own their curing barns, we collaborate with them and our suppliers to provide guidance and support to make the barns more thermal-efficient. We support improvement projects, which typically aim to enhance combustion efficiency, ventilation, heating control, and insulation.

In 2022, the improvement projects we carried out increased the efficiency of 9,106 barns—adding to a cumulative total of around 102,806 barns upgraded since 2014—with a focus on Brazil, China, Pakistan, and the U.S. For example, a pilot study was conducted in our Brazil flue-cured market to use photovoltaic energy systems in curing barns while reducing overall fuel consumption.

In parallel, through our suppliers we continued to deliver training to farmers on fuel consumption efficiency, barn maintenance, and fuel sustainability attributes.



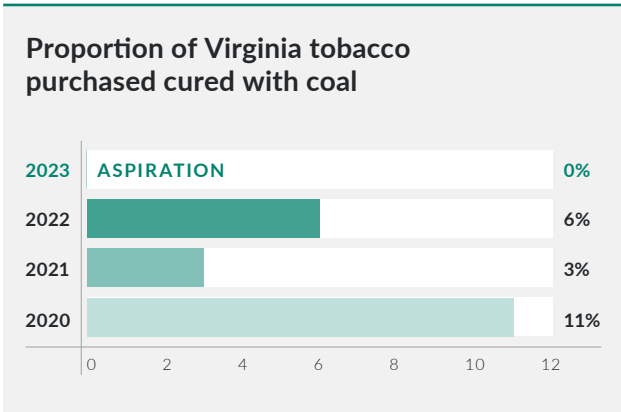


Increasing the use of renewable fuels

To reduce GHG emissions, we are gradually phasing out fossil fuels such as coal and diesel in favor of renewable fuels, including sustainable firewood and biomass. Our MVR allows us to systematically monitor the sustainability of all fuel types used in our tobacco supply chain.

In 2022, 74 percent of our purchased flue-cured tobacco was cured with renewables (2021: 75 percent). We will maintain a focus on driving the reduction of the use of fossil fuels and ensuring that the firewood and other wood-based materials used to cure the tobacco we purchase do not contribute to the deforestation of primary forests. Our MVR enables us to monitor this. In 2022, 100 percent of the tobacco we purchased was cured with no risk of gross deforestation of primary or protected forests for the third consecutive year. Read more about our forestry management ambitions and progress [here](#).

Another driver of progress is our continued focus on the phase-out of coal via the conversion of curing infrastructures to enable the switch to renewable fuels.



In 2022, 6 percent of the flue-cured tobacco we purchased was cured with coal, up from 3 percent in 2021. All of this tobacco originated from three provinces in China, where we continued to support a multistakeholder initiative, led by the China National Tobacco Corporation, to convert curing barns from coal to biomass and create a fuel pellets supply chain produced from agricultural waste. In turn, a certain percentage of our tobacco consumption from China is tied to biomass curing. However, in 2022, to ensure security of supply in response to market dynamics and sourcing disruptions due to geopolitical circumstances, we purchased additional tobacco from China beyond the initial planned volume allocation. These purchases exceeded our cap on biomass-cured tobacco, leading us to purchase more coal-cured tobacco than planned for the year. As a result, 80 percent of the tobacco we purchased from China was cured with biomass, down from 85 percent in 2021. Nonetheless, our ambition to eliminate coal from our curing fuel portfolio by the end of 2023 remains.

Reducing GHG emissions from fertilizers

In 2022, emissions related to the use of fertilizers in tobacco production contributed to 9.0 percent of our total carbon footprint.

Nitrogen-based fertilizers are essential in commercial agriculture to assist farmers in achieving appropriate yields. Continuous decrease of fertilizer application is challenging, so we are addressing fertilizer emissions from different angles, including the preference in volume allocation to markets using fertilizers more efficiently, the increase in input-output efficiency, and the gradual decrease in our overall tobacco demand.

Accordingly, we are working on providing guidance for selecting fertilizer suppliers, taking into consideration their manufacturing emissions. We are also exploring innovative technologies that could curb field emissions from nitrogen-based fertilizers. In particular, we will test the impact of improved irrigation techniques on nitrogen volatilization and evaluate the difference in emissions that small changes in timing of application of the fertilizer can trigger. Additionally, we seek to optimize the use of fertilizer. This requires us to better manage the portion of applied fertilizers that is not taken up by the crop and therefore causes nitrogen volatilization.

For example, in Argentina we are conducting an ongoing pilot testing the optimization of water and fertilizer inputs by converting to drip irrigation. Although this trial is still in progress, it has shown a reduction in overall fertilizer and water use to date, which reduces GHG emissions associated with fertilizers and prevents excess nutrient loss and agricultural runoff.

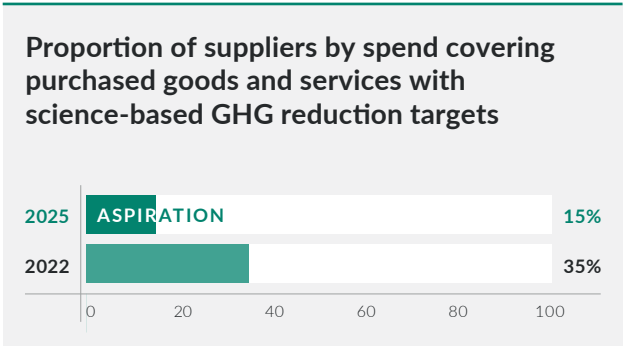
Our broader supply chain

A significant portion of our emissions arise from our upstream non-tobacco supply chain: this segment accounted for 71.9 percent of our total value chain emissions in 2022. Engaging with our broader supply chain to contribute to suppliers' transition toward a net zero economy is therefore at the heart of our approach.

Beyond tobacco, our most carbon-intensive supplies (representing 34 percent of our total carbon footprint in 2022) are the direct materials used in the manufacturing of our products, such as pulp and paper, cellulose acetate tow, and our smoke-free electronic devices.

Another way the direct materials used in our products can negatively impact our carbon footprint is through association with commodity-driven deforestation (read more [here](#)).

As part of our science-based approach to climate action, we engage with our critical suppliers to adopt science-based targets. Specifically, PMI's target is for 15 percent of suppliers by spend (covering purchased goods and services) to have science-based targets by 2025.



During the year, we further increased our visibility on supply chain spend covered by suppliers that are either committed to science-based targets or have targets validated by the Science-Based Target initiative in place. In 2022, this represented 35 percent of our total supply chain spend. In the years to come, we will continue engaging with suppliers and monitoring this figure, taking into consideration a fast evolving external environment and expected changes in supplier mix in line with our expanding portfolio of products.

In 2022, an internal multistakeholder team continued the work of developing the strategy for our non-tobacco supply chain carbon footprint reduction, including an additional focus on transportation and warehousing categories. We expanded our engagement with suppliers to collect primary data and developed a data baseline, identified opportunities for reduction, and explored environmental initiatives for partnerships.

The aim is to increase primary data to improve our carbon accounting accuracy, visibility around opportunities, and traceability of sustainability initiatives. We also anticipate this strategy will help drive more targeted engagement with suppliers in support of our supplier science-based target ambition.

For example, global procurement logistics mapped out the percentage of emissions from transportation categories that are currently spend-based, and developed a supplier engagement pathway to replace 80 percent of this data with primary data from suppliers by 2025. Similar efforts were undertaken in other segments of our procurement functions.

We worked with suppliers to develop a template to collect their data and perform quality checks to make sure it can be used in our carbon footprint model. This work will extend into 2023 as we continue to progress in our supplier carbon reduction strategy.

In recognition of our actions and strategies to reduce emissions and climate-related risks in our supply chain, CDP placed PMI on its Supplier Engagement Leaderboard in 2022 for the sixth consecutive year.



# Looking ahead



**Scott Coutts**  
Senior Vice President, Operations



We are acutely aware that climate change presents an increasing range of risks to all of PMI's operations, and so we remain committed as ever to decarbonizing our direct and indirect operations—in line with the path set by the Paris Agreement. We understand that it is essential, for the planet and for our business, that we manage, mitigate, and adapt to climate change.

We anticipate that uncontrollable disruptions that impacted our decarbonization journey during 2022 will continue to impact our performance in the short term. That said, as our company transforms and welcomes the Swedish Match organization, we will also work to integrate their carbon footprint and, as applicable, adjust our low-carbon transition plan to account for these changes.

We will continue to research and develop innovative solutions, explore new technologies, invest with impact to foster more and better innovation, and inspire all our people and our business partners to join us in this journey. Our learnings will be theirs to build upon, to drive a successful low-carbon transition, together.



**Mimi Kurniawan**  
Vice President, Operations Sustainability



In 2023, we plan to begin deploying zero-carbon technologies in our factories and consider analyzing additional potential solutions in facilities across the world. We anticipate these technologies will help drive progress toward our aspiration of having 100 percent of renewable electricity sourced in our factories globally and increasing self-generation of our electricity needs. In addition, we will continue to invest in sustainable powertrains and deploy eco-driving training to our drivers to further decrease emissions in our fleet. These initiatives will enable us to build on the success of our internal carbon neutrality certification pilot in Mexico by rolling out the process to a broader range of markets. We look forward to utilizing our Voluntary Emission Reduction Purchase Agreement (VERPA) to guide future investments in projects from our Portfolio of Climate Investments. As in the past, we will seek to limit the use of market-based approaches to emissions compensation activities (offsetting) in the short term and prioritize direct investment in our supply chain in the medium and long term (insetting).



**Hafed Belhadj**  
Chief Procurement Officer



Noting the importance of our suppliers in helping us achieve our scope 3 targets, we will continue to engage with our suppliers and partners, share learnings and best practices, and encourage them to set their own science-based targets in line with our SBTi-validated target. To achieve this, we aim to significantly increase the coverage of primary data collection from our suppliers to bring further transparency and robustness to our carbon accounting and set a base for monitoring reduction progress and effectiveness of projects with suppliers. Within our tobacco supply chain, we will continue our efforts to further improve curing efficiency and drive other agricultural practices to reduce carbon emissions of the flue-cured tobacco we source, in line with our 2025 aspiration. We also plan to begin the implementation of our insetting project in Argentina and look for further insetting project opportunities elsewhere that can generate co-benefits between climate, nature, and society.



**Luca Nanni**  
Vice President, Global Supply Chain



In 2023, we will work to mitigate any potential spillover effects on scope 3 emissions from business continuity efforts introduced in 2022. This will require low-carbon strategies for freight transportation, materials purchasing, strengthened emission data collection from our primary distribution partners, and an efficient management of stock at all nodes of the supply chain. Moving forward, we will seek to optimize our emissions in the secondary distribution network, optimize energy and water consumption across our warehousing footprint, and keep looking for alternative transportation modes, route-to-market and reverse logistics flow. Furthermore, in collaboration with our carriers and logistic service providers, we will explore green fuels and electric fleets. We aim to continue furthering the integration of sustainability considerations in our work while appropriately managing supply, financial, and quality considerations.







OPERATIONAL IMPACT



# Preserve nature

Natural capital is a wealth we all share and depend on. It is essential that we protect, sustainably manage, and nurture it.

INWARD IMPACT: 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. As a business with an agricultural supply chain, it is paramount that we take needed steps to protect and preserve the ecosystems where we operate. Even small changes to the balance of the natural environment can damage 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 planetary boundaries, ecosystem degradation, and biodiversity loss. Further, we understand that we all have a responsibility to halt the destruction of natural habitats, including avoiding and compensating for losses, and failure to play our part in helping address this global issue could lead to reputational damage for our company.

OUTWARD IMPACT: The right thing to do

We collectively depend on soil, land, forests, and water, which provide ecosystem 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 species richness and natural resources are being lost at an alarming rate. Global scientific studies indicate that biodiversity is deteriorating worldwide at rates unprecedented in human history, with one million plant and animal species facing extinction, thousands of species already extinct, and several million hectares of natural forest lost each year despite international efforts to counter the trend. The unsustainable use of natural resources can lead to the loss of fundamental ecosystem services we depend on, including soil fertility, clean air and water, protection from natural disasters, and recreational and cultural inspiration, 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 functions.

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## Management approach

We are committed to the responsible and sustainable management of natural resources. We understand that biodiversity protection, forestry management, water stewardship, and waste reduction are deeply intertwined. Moreover, healthy ecosystems play an important role in combating climate change by capturing and storing carbon from the atmosphere, and can act as a buffer against climate change.

Our long-term ambition is to contribute toward a positive impact on nature by 2050. To deliver on this ambition, we seek to tackle pressures on nature in a holistic manner, building on interlinks between programs and activities.

We deploy initiatives tied to various aspects of natural capital, with a particular focus on the highest-risk segments of our value chain. We have targets and measurements in place to help us evaluate the effectiveness of our actions.

More specifically, we aim to achieve no net loss on ecosystems connected to PMI's value chain by 2033. In conjunction, we have ambitions in place to halt deforestation focused on achieving zero net deforestation of managed natural forests and no conversion of natural ecosystems in both our tobacco supply chain (by 2025) and our paper and pulp-based products supply chain (by 2030). Furthermore, we have set a new ambition in 2022 to guide our work to steward water: by 2050, we aim to contribute toward a positive impact on water resources. This long-term ambition is accompanied by intermediary targets centered on our manufacturing facilities (where we aim to certify all our priority factories to the Alliance for Water Stewardship (AWS) standard) and our tobacco supply chain (where we aim to optimize irrigation and restore water volumes, thereby helping address shared water challenges). Finally, our efforts also focus on operational waste reduction and adequate management to create efficiencies and allow for better use of resources.

We routinely conduct global and local risk assessments to evaluate our impacts on biodiversity, forests, and water, and we prioritize and adjust our actions accordingly.

Protecting nature is a collective responsibility requiring both global ambitions and local interventions tailored to diverse contexts. We collaborate with and participate in several platforms and organizations, such as the World Business Council for Sustainable Development (WBCSD), the Taskforce on Nature-related Financial Disclosures (TNFD), CSR Europe, Swiss Business for Nature (SB4N), and AWS.

Management

Our efforts to protect natural capital are overseen by our Senior Vice President, Operations, a member of our Company Management. Under his leadership, our Operations team is responsible for developing and implementing strategies to achieve our ambitions related to biodiversity, forests, water, and waste.

PMI's policies and standards

- [Environmental Commitment](#)
- [Responsible Sourcing Principles](#)
- [Good Agricultural Practices](#)
- [Zero Deforestation Manifesto](#)
- [Water Stewardship Policy](#)



# Progress in 2022

## Highlights

During the year, we developed a comprehensive approach toward contributing to a net positive impact on nature and established long-term ambitions on biodiversity and water (read more in our dedicated publication [here](#)).

CDP has acknowledged this year again our efforts to preserve nature, awarding us an A rating for our work advancing water security and forest protection.

We are well on track to achieve a deforestation-free supply chain. During the year, an external partner audited our primary paper and pulp-based suppliers, confirming that all of those in low-risk countries were fully compliant with our [Zero Deforestation Manifesto](#) (ZDM).

## Challenges

Nature-based strategies leverage on interlinks between intervention areas (e.g., water, forest, soil, biodiversity, and communities) but rarely investigate trade-offs. We need to strengthen awareness and analysis capabilities to better understand and consider the potential negative externalities related to our interventions (e.g., an afforestation project on water-stressed areas or large-scale projects impacting indigenous communities).

The growing representation of smoke-free products in our production mix comes with impacts on natural capital, notably due to a more energy- and water-intensive manufacturing process, which we continuously seek to mitigate.

Unlike climate action, biodiversity activities need to generate positive outcomes at the local level, which requires traceability of all relevant materials we source. Traceability for some materials will be a challenge due to low maturity of some sectors and the relatively small influence PMI might have in certain supply chains.

## 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 understand the role companies can play in tackling biodiversity loss, and seek to align our efforts with global initiatives. 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). We also participate in the member forum of the TNFD.

We welcome the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) to halt biodiversity loss convened at the 15th Conference of the Parties (COP15) to the Convention of Biological Diversity (CBD). We are working toward aligning with its four goals and support related international efforts and measurements deployed to achieve them.

### Designing a holistic biodiversity strategy

We understand that building a meaningful and global approach to biodiversity requires the conscious cross-pollination of various strategies and interventions. To respond appropriately to the biodiversity crisis we face, 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.

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 and leveraged available data and expert guidance to develop an initial assessment of our impacts.

### Understanding our footprint and main pressures on biodiversity

We dedicated most of 2022 to continuing to gain visibility into—and understanding of—our impacts on biodiversity. We started to account for biodiversity impacts related to our business in 2019 by testing the Mean Species Abundance (MSA) metric on selected business areas and we participated in 2020 in CSR Europe’s evaluation of the maturity of biodiversity practices. In 2022, we conducted an in-depth assessment of our biodiversity footprint, completing two analyses covering the most relevant segments of our value chain, which include our tobacco supply chain, our paper and pulp-based materials supply chain, and our direct operations:

- A land-based assessment of the biodiversity extent, condition, and significance (BECS), resulting in PMI’s total land occupancy footprint of close to 3,500 MSA.km<sup>2</sup>.<sup>1</sup> The exercise identified ecosystem use and use change in the supply chain as the greatest driver of potential biodiversity loss
- A resource use-based assessment based on the [Global Biodiversity Score \(GBS\)](#), resulting in a determination of PMI’s total footprint of 405 MSA.km<sup>2</sup>. This assessment identified pollution and water use as the main pressures on natural resources

Those assessments highlighted that the very large majority (over 99 percent) of our impacts on biodiversity arise from our supply chain (with our tobacco supply chain accounting for approximately 60 percent, and our paper and pulp-based supply chain accounting for almost 40 percent). Our direct operations, including our manufacturing sites, accounted for less than 1 percent.

### Setting our ambition on nature

We published a dedicated report at the end of 2022 describing our ambition to contribute toward a net positive impact on nature, and announcing related new aspirations that will guide our work to protect biodiversity and steward water in the decades to come.

Read the brochure [here](#).



### Prioritizing areas of action on biodiversity

This work allowed us to identify the following priority areas of action 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, when wood-based fuels are used. Risks are related to degradation of the natural environment linked to loss of ecosystem areas, 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 on the implementation of good environmental practices at our manufacturing sites.
- Downstream in our value chain, we should concentrate on preventing the littering of our product consumables.

### Setting our ambition on biodiversity

The work carried out in 2022 allowed us to develop intermediate and long-term aspirations that will guide our efforts to protect biodiversity in the years to come.

We aim to protect ecosystems across our value chain and achieve no net biodiversity loss by 2033. Further, we will continue the implementation of initiatives and deploy new actions addressing the relevant pressures on nature we identified, in order to contribute toward a positive impact on nature by 2050.

To achieve these ambitions, we are—and will continue working on—avoiding and reducing impacts to biodiversity in the following areas:

- Sustainable management of working lands with a focus on regenerative practices
- Restoration of affected biodiversity in ecosystems connected to our value chain
- Transformative actions beyond our industry through the application of landscape approaches

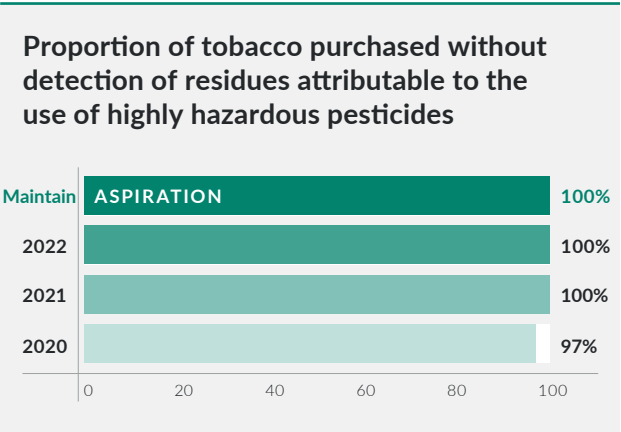
<sup>1</sup> The Mean Species Abundance (MSA) metric uses coefficients of biodiversity loss to account for impacts and dependencies with intensity of associated pressures. For example, one MSA.km<sup>2</sup> represents an area of complete biodiversity loss. This metric is used to prioritize areas of action.





Integrated pest management program in our tobacco supply chain

Our Good Agricultural Practices (GAP) and integrated pest management (IPM) program aim to protect both the environment and farmers' health and safety. In 2022, we confirmed that residues attributable to the use of highly hazardous pesticide were not detected in any of the tobacco we purchased.



With our programs, we seek to achieve crop productivity, which can in turn free up land for other purposes (such as food crops, other income-generating activities and, potentially, biodiversity conservation habitats) through cultivation practices promoting healthy crops and safeguarding biodiversity on farms and in surrounding areas.

Genetically modified tobacco

In line with our GAP principles, genetically modified (GM) tobacco is not acceptable to PMI, and we have solid programs in place to avoid its inadvertent introduction into the products we commercialize.

We require that each lot of tobacco seeds used to produce crops destined for PMI be systematically sampled and tested to ensure that no GM tobacco is grown for our company. Specialized laboratories analyze the seeds sent by all our tobacco suppliers and provide the results directly to both PMI and the suppliers. Additionally, once the tobacco is grown and prior to purchase, we have each lot of tobacco tested—by the same specialized labs—to ensure it has not been genetically modified. If any GM tobacco is detected, the lot is rejected and does not enter PMI's supply chain.

Halting deforestation

We are committed to achieving a deforestation-free supply chain for our tobacco and paper and pulp-based materials.

These supply chains represent the vast majority of PMI's total land use and provide the materials most often linked to the risk of deforestation and the conversion of natural ecosystems, as highlighted in our annual global forest risk assessments.

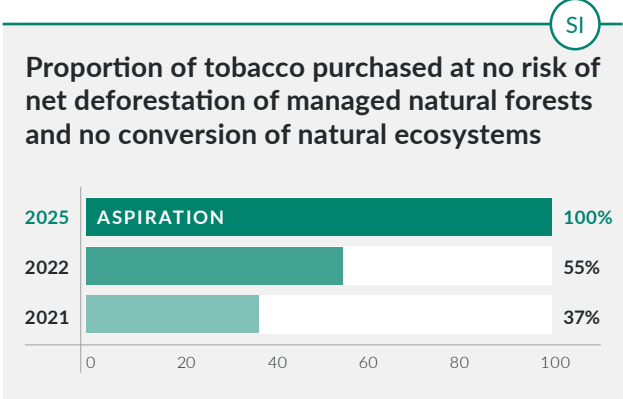
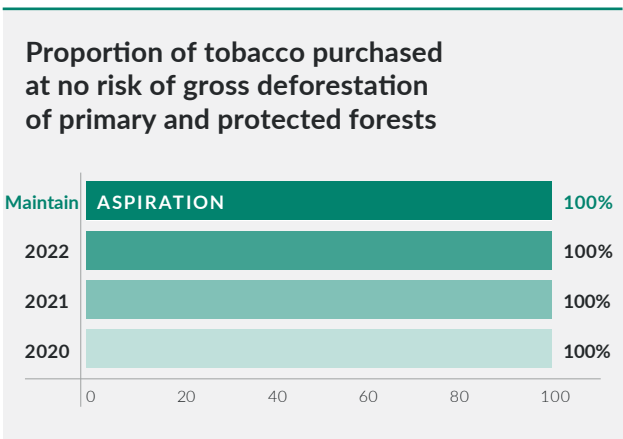
Our forestry management efforts are governed by our [Zero Deforestation Manifesto](#) (ZDM), designed to move us toward becoming forest positive. We monitor compliance with the ZDM by considering not only farm boundaries but looking at natural forest cover changes in areas of interest we call tobacco-growing areas (TGAs). These areas include a surface buffer to consider potential indirect impacts on natural ecosystems beyond farm-level activities. We monitor TGAs by integrating geospatial analysis with wood-based material traceability data collected on the ground. As needed, we develop forest risk mitigation plans to ensure that our tobacco sourcing is not the cause of deforestation.

In 2022, CDP acknowledged our efforts in this area, awarding us an A rating in Forests for the third consecutive year for our work advancing forest protection.

Protecting forests in our tobacco supply chain

We are working with our tobacco suppliers and farmers to foster and implement our net zero deforestation requirements, including by establishing traceability to the point of harvest and documenting our sustainable forestry practices.

In 2022, with the annual external audit carried out in our tobacco supply chain, we confirmed that, for the third consecutive year, 100 percent of our flue-cured tobacco was purchased at zero risk of gross deforestation. Further, the audit confirmed that 55 percent of our purchased tobacco was not posing a risk of deforestation of managed natural forest nor conversion of natural ecosystems (2021: 37 percent).



This progress was mainly driven by enhanced traceability and visibility into potential risks supported by our geospatial analysis, continued efforts to promote the switch to sustainable fuels to cure the flue-cured tobacco we source, and continued support for the expansion of live barns for tobacco curing in Malawi and Mozambique. Additionally, contributing to our net zero and forest positive aspirations, we continued our reforestation and afforestation efforts.

Assessing deforestation risks in our tobacco supply chain

We are using geospatial analysis covering all tobacco types and all suppliers from which we source across over 40 TGAs in 20 countries. Beyond the monitoring of actual tobacco cultivation areas, our spatial assessments allow us to account for the potential impact of indirect land use change by applying a buffer around each farming area.

Globally, we monitor deforestation risks on around 57 million hectares of land (a surface roughly equivalent to the size of France), which allows us to focus our on-site activities and audits on those areas where potential risks of deforestation are detected.

Our 2022 annual risk assessment showed a continued need to prioritize the use of sustainable firewood to cure Virginia tobacco and switch to sustainable sources of timber to build barns for the air-curing of Burley tobacco in Malawi and Mozambique. In particular, we focused on completing the geospatial mapping and characterization of forest districts from where the firewood used for curing originates in Pakistan and on increasing the number of biomass barns in China.

Land use change

We estimate that approximately 233,000 hectares of land are used to grow the tobacco we source. Land use increased by 5 percent versus the previous year (2021: 221,000 hectares). The 2022 surface forest areas producing wood fuel for tobacco curing represent, by our best estimate, around 39,000 hectares. This is a decrease of 5 percent compared with the previous year (2021: 41,167 hectares) driven by a different curing fuel mix in certain markets compared with the previous period and increased efficiency of the curing process, thereby reducing fuel consumption.

Risks associated with land use change resulting from tobacco farming are not considered significant because tobacco is a relatively stable crop in terms of expansion with a low turnover of farmers that grow it. To assess risks related to the management of the TGAs we source from, we carry out an ecosystem conversion assessment annually to look at land use developments in a global dataset of 38 land use classes. This allows us to have a more detailed and effective interpretation of vegetation cover types to act on nature resource management accordingly.

The use of more productive tobacco seed varieties and the implementation of practices in line with PMI's GAP principles and standards help maximize yield per hectare, improve farmer income, and thus reduce pressure to expand crops into surrounding natural ecosystems. In light of these trends and the expected medium-term global contraction of the amount of land needed to fulfill our tobacco crop requirements, our analysis shows no direct deforestation risk associated with our tobacco sourcing.



Promoting the switch to sustainable fuels to cure Virginia tobacco

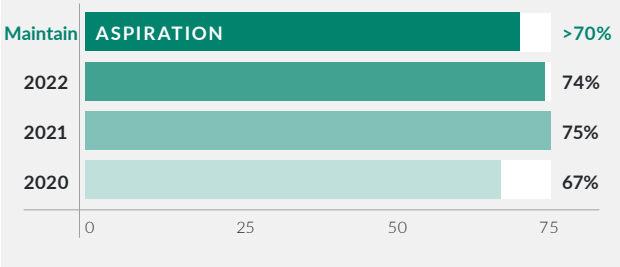
The curing process for Virginia tobacco takes place in barns heated by a variety of fuel sources, including firewood and woody biomass (such as pellets or wood chips). To mitigate the risk of firewood collection contributing to deforestation, we focus on increasing the efficiency of curing barns (thereby minimizing the use of fuel) and on deploying our Monitoring, Verification, and Reporting (MVR) Framework for Sustainable Curing Fuels requiring the traceability of firewood to ensure that it originates from sustainable sources. Moreover, we encourage the use of agriculture-derived fuels where they do not compete with food production or negatively affect food security.

Data gathered through our MVR are verified by a third party. In 2022, all our suppliers of flue-cured tobacco were audited, either via desktop or on-site audits.

During the year, in addition to the regular audit process, a pilot was initiated with the aim of making our MVR Framework available to a larger farmer base in a landscape approach. This pilot was carried out in collaboration with the World Sustainability Organization (WSO) with the objective of developing a Friend of the Earth Standard for Sustainable Curing Fuel for tobacco. Based on the results, feedback from stakeholders using the standard, and strategic considerations, we will evaluate full deployment in the coming years. This will enable us to further spread sustainable management practices for the fuel used in tobacco curing beyond our growers in a holistic approach within tobacco sourcing areas.

In 2022, 74 percent of the flue-cured tobacco we purchased was cured using renewable and traceable fuels (2021: 75 percent). Of this, 31 percent was from adoption of biomass and 43 percent was due to use of self-sufficient sustainably sourced firewood (i.e., the amount of wood harvested per year ensures the resource will be available in future years in a sustainable manner). Further, between 2019 and 2022, globally, the average amount of wood used for curing tobacco decreased from 3.99 kilograms to 3.83 kilograms per kilogram of flue-cured tobacco (a reduction of 4.0 percent) due to changes in sourced volumes (more volumes from lower emissions origins) and improvements in the efficiency of the curing barns used by the farmers that we source from.

Proportion of flue-cured tobacco purchased that is cured with renewable fuel sources (self-sufficient firewood or biomass)



Enhancing natural capital through reforestation and afforestation

As part of our efforts to halt deforestation and enhance natural habitats, we require that our suppliers and farmers be self-sufficient in sustainably supplying wood for curing and barn construction, and, by 2025, we aim for them to grow more trees than they cut. Tree growing requires careful management and is limited to marginal lands where the carbon stock and existing biodiversity assets, including soil, can be enhanced.

Since 2019, we have restored 199 hectares of forest to compensate for the detected risk of potential unsustainable sourcing of firewood used for curing tobacco leaf (2021: 165 hectares), thereby contributing to our net zero deforestation aspiration. We are on track to bring to zero net deforestation all the markets where risk was detected in the past years through our external assurance process.

Additionally, aligned with the criteria of our forest positive program, we are currently developing interventions to increase the hectares of forest restoration and improvements that go beyond zero net commitments to be reported against our 2025 forest positive target. Since 2019, in line with our forest positive ambition, we have supported the establishment of 190 additional hectares of forest within our tobacco supply chain.

Protecting forests in our paper and pulp-based supply chain

In our paper and pulp-based materials supply chain, we continued to strengthen our visibility of potential deforestation risks, leveraging the experience and tools, and replicating the assurance systems applied, in our tobacco supply chain.

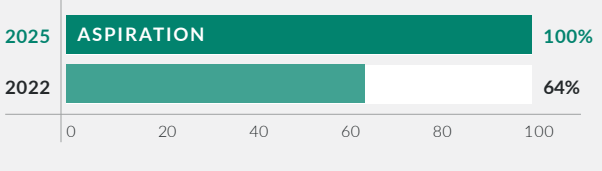
During 2022, we continued to gather feedstock origin locations from the suppliers of direct materials used in our products and packaging. Combining this information with satellite monitoring and applying relevant criteria of the National Risk Assessment of the Forest Stewardship Council (FSC) allowed us to better understand the level of risk our suppliers are facing. More specifically, it enabled us to categorize them between low, medium, and high risk.

For 2022, we focused on those suppliers that source feedstock material for PMI from low-risk origin countries. We applied a thorough process that includes collection of relevant documentation through a dedicated web platform and reviewed publicly available data such as FSC chain of custody certificates. All of our low-risk suppliers achieved full compliance against the verification framework of our ZDM. We also began including selected high-risk feedstock origin suppliers to improve our understanding of current conditions and lead time to address corrective action plans. In 2022, all of our primary paper and pulp-based suppliers sourcing from Indonesia and Brazil underwent an on-site external audit.

We intend to replicate these efforts with our suppliers of secondary paper and pulp-based products. In 2022, we organized webinars with these suppliers to raise awareness, secure their commitment toward our net zero deforestation ambitions, and gather their agreement to undergo a compliance assessment in 2023.

As a result of our increased visibility and the strong collaboration with our suppliers, we can start reporting on two new indicators as of this year, helping us set the baseline and allowing us to track progress moving forward toward our 2025 and 2030 aspirations.

Proportion of paper and pulp-based materials purchased at no risk of gross deforestation of primary and protected forests



Aspiration

100%

Proportion of paper and pulp-based materials purchased at no risk of net deforestation of managed natural forest and no conversion of natural ecosystems

2025

Foster an empowered and inclusive workplace

Improve the quality of life of people in our supply chain

Tackle climate change

Preserve nature





## Managing water responsibly

Water is a renewable yet finite resource shared by all. 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 relevant stakeholders.

Our approach to water stewardship aims to build resilience in watersheds, covering our tobacco and other raw materials supply chain as well as our own operations. We understand that meaningful impact can only be achieved through a deep understanding of water-related risks and informed actions to address them, engaging with stakeholders for scaling solutions, and leveraging a science-based approach supported by robust methodologies and implementation tools.

In 2022, CDP acknowledged our efforts in this area, awarding us an A rating for the fourth consecutive year for our work in water stewardship.

Working with the technical experts at Bluerisk and Valuing Impact, as well as internal subject matter experts across our business functions, we developed during 2022 a new long-term aspiration to contribute to a positive impact on water resources by 2050. We also established new interim targets for our water stewardship strategy, centered on our tobacco supply chain and direct operations which we expect to expand to our non-tobacco supply chain in the years to come. Read more about the setup of our long-term ambition on water in the dedicated brochure available on [PMI.com](#).

### Understanding our water footprint and related risks

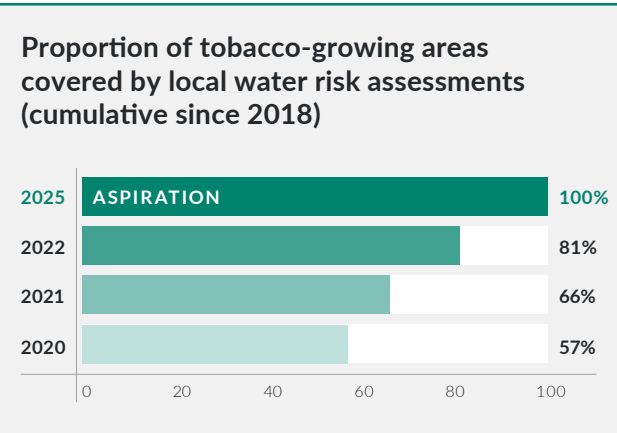
According to internal studies, our agricultural supply chain, our other direct materials supply chain, and our manufacturing represent 53 percent, 41 percent, and 6 percent of our blue water footprint, respectively. As a result, we focus on collecting primary data on water withdrawals related to irrigated tobacco farms in our TGAs. In 2022, they accounted for a withdrawal of approximately 108 million cubic meters. While we are working on consolidating a data collection process to estimate withdrawals for other direct materials, the figure for manufacturing (3.1 million cubic meters in 2022) confirms the relatively small influence on our overall water use.

We routinely assess water-related risks to prioritize our activities.

In our tobacco supply chain, we conduct an annual global water risk assessment using tools such as the World Resources Institute’s Aqueduct Water Risk mapping. Our 2022 global assessment continued to reveal that most (77 percent) of our TGAs show a “medium to high,” “high,” or “extremely high” level of exposure to physical risk, representing approximately 79 percent of our 2022 purchased tobacco volumes.

To better understand the water-related risks in our TGAs, we also conduct periodic local water risk assessments (LWRAs), leveraging primary data sources and interviews with stakeholders to gauge both external and internal water risks on the ground. In 2022, we completed LWRAs in Brazil, Poland, South Africa, Turkey, and the U.S. These assessments highlighted that competing demand for limited water supplies remains a frequently recorded water challenge, together with scarcity of water resources. Other challenges identified include lack of water legislation implementation in South Africa and increased drought risk in Turkey’s Gediz Basin.

We have conducted a total of 39 LWRAs since 2018, covering 81 percent of our TGAs, including multiple watersheds within some of these areas.



In our direct operations, 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. This allows us to identify and prioritize actions where we can make a difference and create shared value. Our 2022 assessment showed that approximately 64 percent of water withdrawal in our factories originated from water-stressed areas. We used this and further information to expand the action plan for our water stewardship strategy, which includes tailored actions at our manufacturing plants and looks at managing risk while generating contribution at watershed level beyond the boundaries of our factories.

We also aim to extend the application of risk assessment tools to the sourcing of non-tobacco materials with an intent of expanding our risk map over additional watersheds.

### Water stewardship in our tobacco supply chain

The quantity, quality, and timing of water availability all impact the growth of tobacco plants.

#### Water use

For about 64 percent of the farmland in our tobacco supply chain, the growing season is synced to the rain season, enabling crops to be rain-fed during the open field stage. Where we use irrigation, we are mindful of the risk of baseline water stress when conducting local water risk assessments. In addition, every year we collect data on irrigation water used to grow tobacco, and in 2022 we used approximately 263 cubic meters per ton of tobacco produced—about 22 percent less than in 2021 (2021: 339 cubic meters per ton of tobacco produced). Volume changes in the sourcing strategy and climatic trends play a role in our improved performance. The application of better water management practices, including the distribution of specific technical guidance on how to monitor and report water volumes in irrigation among all our suppliers, also played a role.

Since we started measuring (collecting primary data from our suppliers and farmers through yearly surveys), the total water requirement related to our purchased tobacco volume has gradually decreased in absolute terms.

Climate change is expected to affect rainfall patterns and has already had a visible impact at the regional and local levels. This could be one of the main causes for the year-on-year fluctuation on water use we record among our farmers. We continue to closely monitor water withdrawal figures in our TGAs and we compare them with water risk figures from our analysis to better inform our tobacco sourcing strategy in an effort to mitigate risk and optimize resource use.

#### Water optimization

We have a target in place to optimize at least 10 million cubic meters of water (cumulative since 2019) in our TGAs by 2030 through dedicated projects that address shared water challenges in the watersheds where we operate.

In pursuing this aspiration, we aim to mitigate water-related risks and help address shared water challenges. We follow the World Resources Institute’s volumetric benefit accounting methodology to measure the progress we are making.

We implement various projects addressing shared water challenges, with a strong emphasis on community-based projects. This includes initiatives in Brazil where, since 2018, we have supported farmer communities to fence and protect areas around streams against biological contamination from cattle and agro-chemical runoff to address water quality issues.

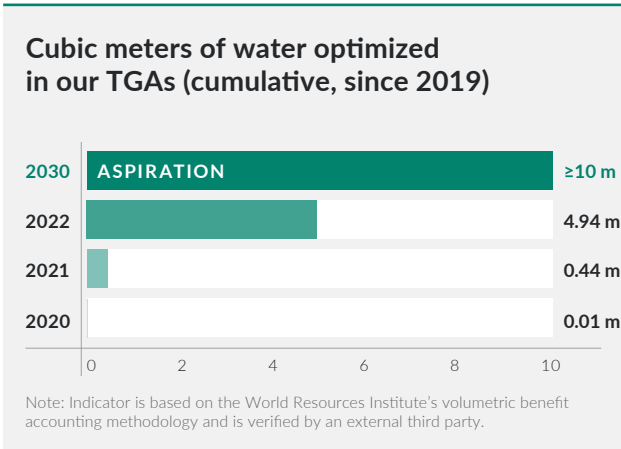
We also expanded this program by issuing the first Brazilian Green Rural Product Note (known locally as “Green CPR”) in the tobacco sector. Our local affiliate, PM Brazil, provides payment to our contracted tobacco farmers when they are able to demonstrate adoption of sustainable practices to preserve forests or strengthen ecosystem resilience against water cycle fluctuations.

We also expanded our irrigation pond project in India to include check dams, a percolation tank, and desiltation tanks, used to increase water supplies for both farms and community members as well as recharge the groundwater table in the project areas. In Pakistan, we trialed laser leveler technology when farmers prepare the land for transplanting the crop, to reduce runoff and ultimately reduce the water withdrawals required for tobacco irrigation. Each of our projects addresses shared water challenges but also has additional benefits ranging from farmer livelihoods and crop quality, to biodiversity protection and enhancements.



To date, we have implemented water stewardship initiatives in Argentina, Brazil, India, Italy, Mozambique, Pakistan, and Turkey.

Combined, these efforts contributed to optimizing a total of 4.9 million cubic meters of water in our TGAs since 2019, bringing us well on track to achieve our aspiration to optimize 10 million cubic meters of water by 2030. This is a significant increase compared with 2021, driven mostly by the widespread implementation of volumetric water benefit generation guidelines and the progressive capabilities built in cooperation with our suppliers, increasing the number of farmers involved in such activities. Volumes are calculated and reported through a bespoke tool, and their impact on shared water challenges in the watershed is validated externally.



In 2022, we set a new 2033 ambition on water, whereby we aim to continue optimizing irrigation and restore volumes to address water risks at the watershed level by scaling solutions contributing to a positive impact on water resources. In alignment with our holistic environmental sustainability approach, we aim for all of our water stewardship projects to have multiple benefits (i.e., biodiversity, carbon sequestration, waste management, or improved community well-being).

Water quality

When misused, crop protection agents (CPAs) and fertilizers can pollute the local environment. While CPAs protect crops and fertilizers improve crop yield, these chemicals can infiltrate groundwater or run off into surface watercourses, impacting aquifers and aquatic ecosystems.

We maintain a global integrated pest management program to reduce the unnecessary use of pesticides, promote less hazardous alternatives, and manage both appropriately (read more [here](#)).

Further, to minimize their negative impact, we promote more efficient ways to apply fertilizers, such as through drip irrigation systems that distribute them in smaller quantities and directly to the plants' root systems.

Water stewardship in our operations

We have a long-standing approach to driving water stewardship in our direct operations, especially in our manufacturing sites.

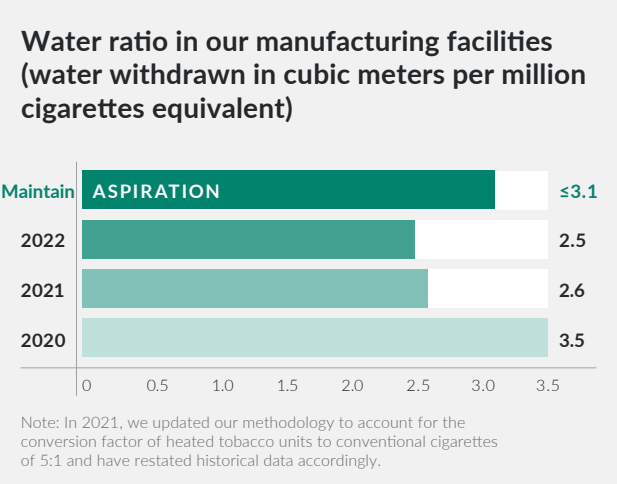
We seek to promote water circularity in our factories, increasing water use efficiency and maximizing the beneficial use of water discharged.

Accelerating water efficiency efforts

The manufacturing of our products resulted in a withdrawal of around 3.09 million cubic meters of water in 2022 (2021: 3.12 million cubic meters). Between 2018 and 2022, we reduced water consumption at our manufacturing sites by 21 percent in absolute terms, mainly through water efficiency initiatives that offset the unfavorable impact of the significant increase in the production volumes of heated tobacco units.

The production of smoke-free consumables is five times 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, we are accelerating efforts to mitigate the increased water demand through enhanced efficiency. In 2022, we continued to reduce water intensity, achieving a reduction of 47 percent versus 2018 and a ratio of 2.5 cubic meters per million cigarettes equivalent (down from 4.7 in 2018).

We continuously work to improve our processes, focusing on applying a zero loss mindset and investing in a variety of projects that aim to optimize our consumption and raise awareness among our employees.



Water and wastewater quality

At our factories, high-quality fresh water is used in manufacturing processes (including the preparation of flavors and liquid products, and the production of smoke-free consumables) and for sanitation and hygiene.

To reduce water dependency in the long term, we are implementing technologies and efficiency initiatives to recycle and reuse water at our manufacturing facilities. These technologies include, for instance, reverse osmosis and electrolytic scale removal systems.

For example, today at our Italian manufacturing site, process wastewater is treated in a local wastewater treatment plant and reused for utilities (e.g., for boilers and cooling towers) through a reverse osmosis system. The current overall recycling efficiency ranges from 65 to 70 percent. In 2022, we finished the implementation of electrodialysis reversal equipment that aims at recycling the treated wastewater for process cleaning at an overall efficiency of 90 percent. We expect this new equipment will increase water savings by 10,000 cubic meters/year, while reducing energy and chemicals requirements.

Monitoring wastewater quality is standard procedure at our manufacturing site, where our certified environmental management systems help us remain in compliance with current and future statutory and regulatory requirements associated with water discharge.

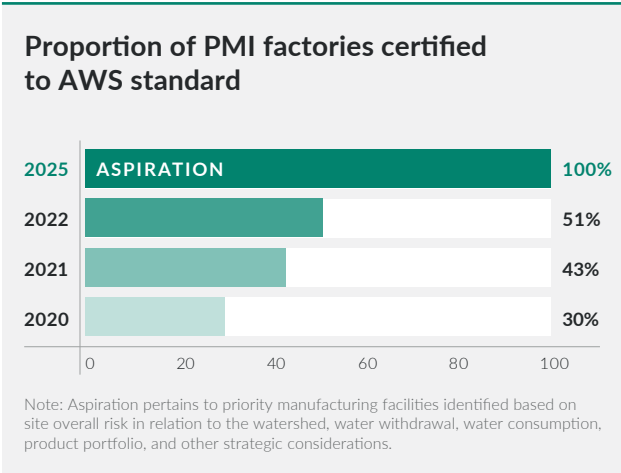


EXTEND IMAGE

Fostering best practices in water management

Certifying our manufacturing sites to the Alliance for Water Stewardship (AWS) standard is a critical component of our approach to water management. The AWS standard is a globally applicable framework that enables organizations to understand their water use and impacts and work collaboratively and transparently with external stakeholders in the same catchment area to achieve sustainable management within the wider water context.

Our goal is to certify all our priority factories to the AWS standard by 2025, and we are making good progress. Since 2018, we have certified a total of 18 of our factories.



CASE STUDY

A holistic approach to water stewardship at our Sukorejo plant in Indonesia

Our Sukorejo plant set out to become the first factory certified by the AWS in Indonesia. Thanks to thoughtful collaboration with local stakeholders, our team successfully implemented initiatives to reduce our environmental impact and protect biodiversity while also addressing local water-related risks and challenges in the nearby communities.

[Read the case study here](#)





Reducing waste

We follow the waste hierarchy, whereby we aim first to reduce the waste we generate, promote its reuse and recycling whenever possible, incinerate it when it is the best option available, and, to the extent possible, avoid any disposal to landfill.

Managing the waste generated in our operations

We manage all waste from our production sites with an objective of reducing it and identifying and applying the most sustainable waste treatment options available. We pay special attention to our most valuable waste streams, such as tobacco, paper, card, and cellulose acetate tow, and to hazardous waste.

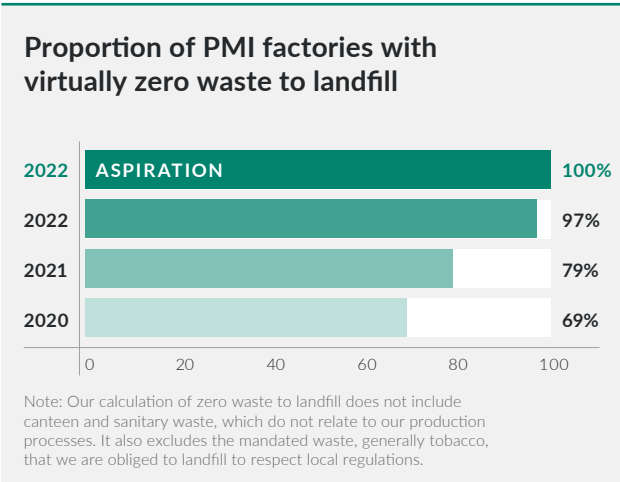
**Avoid and reduce:** We aim to reduce the amount of waste generated by converting raw materials into products as efficiently as possible. In 2022, we generated a total of 119,192 tons of waste, of which 1 percent was hazardous (2021: 114,043, 1 percent).

**Reuse and recycle:** Beyond optimizing our processes to cut waste, we strive to responsibly manage the waste we generate. We first seek to reuse materials ourselves or make them available to others. For instance, we have programs in place to enhance the reuse of cardboard boxes to handle tobacco in our factories. As another example, compost produced in Argentina and Italy, deriving from canteen organic waste, is used to fertilize the factory gardens. Another path is recycling, which currently represents most (87 percent) of our waste disposal. However, the growing proportion of smoke-free consumables in our production mix and the expansion of our portfolio to new products are lowering our recycling rate. We seek to mitigate this trend by implementing appropriate technology to help us better recover waste from these products.

**Recover:** When recycling is not possible, we seek to recover waste materials and use them to generate energy. In 2022, 12 percent of the waste generated was incinerated with energy recovery, and 0.3 percent was incinerated without energy recovery or disposed of in a landfill (2021: 11 percent, <1 percent).

Aiming for virtually zero waste to landfill in our factories

We apply a “zero waste” philosophy, but we acknowledge that even the most efficient systems inevitably involve a small amount of landfill; for instance, waste-to-energy ash residue, waste legally mandated for landfill, and greywater sludge. Therefore, we had set an ambition for all our manufacturing sites to achieve a landfill diversion rate of 99 percent or greater. We are proud that, globally in 2022, only 0.07 percent of our operational waste went to landfill (equivalent to a total of 85 tons of waste). We achieved our target of virtually zero waste to landfill across all our operational manufacturing sites, except in our site in Ukraine, while complying with all relevant waste regulations and standards. We intend to maintain these results moving forward.



Fostering responsible waste practices in our supply chain

We seek to foster a positive impact on waste practices in our tobacco supply chain where our Good Agricultural Practices (GAP) require that suppliers have appropriate waste management plans in place. We also expect our tobacco suppliers to dispose of empty agrochemical containers safely and appropriately. In some countries, we provide additional support to ensure the collection and proper disposal of containers that held pesticides or crop protection agents, including guidance on triple rinsing and punching best practices.

In Indonesia, we continued to work with a local NGO to operate our waste bank initiative and supported the establishment of a recycling center for various types of plastic waste in rural communities. With the involvement of three waste banks and 11 collection points, 26 tons of plastic waste were collected within the first two months of the project kick-off. Out of these 26 tons, 20 tons were recycled. Through this initiative, we involved close to 500 households in collecting waste and we also fostered awareness by conducting a waste collection, sorting, and recycling procedure workshop that was attended by representatives of 14 local communities.

Looking ahead



Scott Coutts  
Senior Vice President,  
Operations

PMI’s strategy on biodiversity and water consolidates existing targets and actions to address the impacts of our business on nature, while also updating our directional ambition for 2033 and expressing longer-term goals for 2050. As a global player with a diversified value chain, we recognize the role we can play in taking actions to halt biodiversity losses and are committed to contribute to a nature-positive future in line with the Post-2020 Global Biodiversity Framework.

In 2023, we plan to update our company’s Environmental Commitment to reflect latest developments in our work and our newly established nature-related ambitions. We will also continue aligning our work with relevant updates on international methodologies, such as the Science Based Targets for Nature (SBTN) and guidance from the SBTi to set Forest, Land, and Agriculture (FLAG) science-based targets, and share best practices with others by participating in relevant forums and working groups.



Pedro Braga  
Vice President,  
Global Technical Operations

Considering the substantial impact that agriculture has on nature, our tobacco-related environmental programs are critical to our aspiration to preserving nature. In 2023, we will remain committed to progress against our deforestation-free supply chain ambition, foster the application of our Good Agricultural Practices governing the production of our tobacco, promote water stewardship and the efficient usage of natural resources, and ultimately contribute to the SBTN that we will set to guide our roadmap to reducing our environmental impacts.



Mimi Kurniawan  
Vice President,  
Operations Sustainability

With our new nature-related ambition as a compass, we are committed to rigorously look at and address the most relevant pressures on nature generated by our operations and value chain, with a focus on ecosystem use and use change. As part of our climate strategy and accounting for synergies with our nature protection ambition, we will continue to identify and invest in nature-based solutions that focus on protecting nature by avoiding deforestation, improving nature through community projects, and fostering natural ecosystems beyond forests. We are on track to achieving a deforestation-free supply chain and are committed to accelerating our afforestation and reforestation efforts in the years to come to contribute to our no net loss ambitions. Moving forward, we intend to extend our water stewardship efforts in our non-tobacco supply chain, and notably across our supply of electronics, paper and pulp-based materials, and other agricultural products. We plan to work collaboratively with suppliers and key stakeholders to drive water circularity and resilience, starting with priority areas in our supply chain. This entails, as the first step, expanding our water risk assessment process within the coming years to cover the most relevant categories of materials. We will then fine-tune a detailed roadmap to 2033 by integrating water stewardship milestones, including specific targets, and fully developing the interlinks with other areas of environmental sustainability such as biodiversity protection and waste management. Meanwhile, we will continue certifying our manufacturing sites to the Alliance for Water Stewardship standard, prioritizing our efforts based on production volume and type, water consumption, and internal capacity.





# Fundamentals

Conduct R&D responsibly and transparently	p166	Respect human rights	p176
Sustain product reliability	p168	Manage our supply chain sustainably	p179
Nicotine science	p170	Safeguard privacy and protect data	p184
Uphold business ethics and integrity	p173	Apply fair fiscal practices	p185





# Conduct R&D responsibly and transparently

World-class scientific research and development powers PMI’s delivery of a smoke-free future.

At PMI, research and development (R&D) is the catalyst for our business transformation. The rigor with which we conduct our research—and the openness with which we share our methodologies and findings—builds confidence in our science among the scientific community, regulators, and our consumers, protects our company from reputational risk, and, most importantly, allows us to commercialize our smoke-free products around the world.

Conducting our R&D responsibly and sharing our R&D methods and results openly and transparently is of utmost importance. Transparency, when coupled with scientific integrity and rigor, brings relief to skepticism and helps address mistrust, fostering an environment where collaboration and partnership can blossom. Evidence and findings from robust scientific assessments advances the debate on public health and tobacco harm reduction, to the benefit of adult smokers.

Our R&D work is focused on developing and scientifically substantiating smoke-free alternatives to cigarettes for adults who would otherwise continue to smoke. An important part of our R&D focuses on researching, understanding, and confirming that eliminating combustion can reduce levels of exposure to harmful and potentially harmful chemicals compared with smoking. In conducting R&D, we strive for excellence in our scientific methods or their execution.

Decision-making on R&D strategy and direction is handled by designated committees at the product assessment, project design, Company Management, and Board levels. Among other responsibilities, the Board’s Product Innovation and Regulatory Affairs Committee monitors the company’s internal scientific research, including our efforts to substantiate the health risk-reduction potential of our smoke-free products.

We regularly interact with an extensive network of stakeholders, including long-term study partners, research partners, production site personnel, universities, suppliers, consumers, and regulators.

We adhere to high scientific standards, and our research is aligned with the U.S. Food and Drug Administration’s draft guidance on Modified Risk Tobacco Products (2012).

In conducting our studies, we also aim to align with available international standards, such as applicable ISO standards, Organisation for Economic Co-operation and Development (OECD) Principles of Good Laboratory Practice, and Good Epidemiological Practices. Importantly, all our clinical studies are conducted in accordance with the Declaration of Helsinki and the principles of Good Clinical Practice. These standards aim to ensure the quality and integrity of nonclinical and clinical studies.

## Sharing our methods and findings

Scientific research from any corporation may be met with skepticism. Sharing our science and listening to feedback are critical to both encourage debate with experts and the broader public and build trust. We produce a regular briefing through our Scientific Update publication (see [here](#)), which complements what we share throughout the year via articles in peer-reviewed journals, presentations at conferences, and our [PMI Science website](#). Since 2008, we have published over 450 papers on smoke-free products and related science in peer-reviewed publications.

In 2022, we continued our Open Science conference series, hosting webinars and in-person events and making the recordings available on [PMIscience.com](#). In addition, our scientists continued to present their findings throughout the year at external conferences and virtual events in the fields of toxicology, aerosol engineering, and respiratory drug delivery.

By sharing our scientific data and papers, we allow the research community and broader public to gain an in-depth perspective into PMI’s research methodologies and findings. We welcome objective studies by external stakeholders who seek to contribute to a science-based debate on the critical societal question of tobacco harm reduction.

## INTERVALS

To address concerns over the reproducibility of research results, we created [INTERVALS](#), a platform specifically for sharing tobacco harm reduction science. INTERVALS is intended to be a comprehensive reduced-risk product research repository, housing data from PMI and a variety of third-party sources.

By promoting the sharing of protocols, tools, and data, this platform enables independent data reanalysis and collaboration. It was designed to allow all relevant stakeholders to share and explore toxicity assessment data produced in relation to cigarette alternatives. As of the end of 2022, a total of 91 studies, 142 protocols, and 691 datasets had been published on INTERVALS since 2018.

## Animal testing

Animal studies allow us to confirm in vivo what pharmacology and toxicology studies show in vitro. We use human-derived cells in vitro, but the animal studies in vivo enable us to assess scientifically the consistency of our findings.

Toxicology standards accept the use of rodents in scientific research. Nevertheless, we are working, to the extent possible, to replace animal testing with other approaches. We apply the “3R” guidelines: replacement, reduction, and refinement (see our [Standards for Animal Testing](#)).

In time, we hope to replace most, if not all, animal testing with alternative methods. Our Animal Welfare Committee, composed of veterinary and scientific PMI professionals with ample experience in animal testing, is responsible for reviewing protocols and examining them for compliance with scientific and animal welfare criteria. Our in vivo facility is accredited by the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC), which sets the gold standard for the humane use of animals in scientific research.



# Sustain product reliability

Our ambition to accelerate the end of cigarette smoking rests on rigorous scientific assessment, highly reliable products, and strict regulatory compliance.

Cigarette smoking causes serious disease and is addictive. We take our duty as a manufacturer seriously to ensure that—for adults who continue to smoke—any additives used (e.g., flavorings) do not increase the health risks inherent to cigarette use.

For adult smokers who switch to products that do not combust tobacco, it is of paramount importance that these alternatives are scientifically substantiated to present less risk of harm than continued smoking, and also that they are developed, tested, and manufactured according to applicable regulations and standards to ensure consistent product integrity and quality.

Developing and commercializing products that meet stringent scientific requirements and technical design criteria are critical to a smoke-free future. By maintaining and continuously improving the reliability of our products while complying with regulations, we protect our reputation and brand equity.

Our quality management system (QMS) covers all our products—smoke-free and combustible. Governance and accountability for consistent product integrity, quality, and reliability sit at the highest management level under the leadership of the Chief Life Sciences Officer at PMI and are guided by our QMS, as well as by other internal and external standards. Work on product integrity and reliability is mainly carried out by teams in our product development, procurement, manufacturing operations, and quality organization departments. Their collective efforts ensure that we preserve quality, from raw material to the retail shelf.

Our approach to product reliability starts with our contracted farmers and suppliers. We work with them to secure high-quality raw materials and components, applying robust procurement processes, detailed auditing, and rigorous quality assurance procedures.

Our factories are designed to manufacture our products to the highest quality standards, following the ISO 9001 certification principles. This includes, for example, the careful selection of materials that come into contact with semifinished and finished products during manufacturing and the appropriate training of operators.

Our manufacturing quality management systems are subject to inspection by authorities and certified bodies. Globally, a team of product quality associates ensures that all incoming materials, semifinished components, and finished products across our global footprint meet our quality assurance and quality control standards. Additionally, we have over 100 corporate quality professionals who establish and embed standards throughout our QMS processes. We supplement these measures with dedicated third-party quality management programs and by placing a PMI quality assurance colleague on-site at the locations of each key electronics manufacturing supplier of our smoke-free devices.

Product reliability also extends to the packaging, storage, and transport of finished goods to ensure that they reach the consumer in proper condition. Packaging has a crucial role to play in this regard and also helps ensure the traceability and identification of our products so we can act promptly should issues arise. Each packaging unit for our devices and consumables is imprinted with a unique serial number that allows us to trace the entire supply chain journey, from factory to market, enabling backward traceability should a product quality issue arise. In the event of a product recall, of which there were none in 2022, or an identified quality incident, we can leverage this traceability to investigate the problem and undertake any necessary containment actions in an efficient and targeted manner.

Moreover, we focus on the sustainability and longevity of our products by embedding eco-design principles and end-of-life take-back programs. Learn more [here](#).

## Smoke-free products

Our smoke-free products include, among others, heated tobacco and e-vapor products<sup>1</sup>, which comprise both consumables and electronic devices subject to strict design controls. Our process ensures that each product is developed according to predefined and controlled criteria and demonstrates reduced toxicity compared with cigarette smoking. Any alterations to the product are made under a strict change management process that assesses the impact of the change on the product's quality, safety, performance, and regulatory compliance. In addition, as part of product development, we apply use-hazard analysis. We assess the risks associated with the product's intended use and any foreseeable misuse, and we implement appropriate mitigation measures.

Our heated tobacco units and e-liquids are manufactured using ingredients compliant with applicable regulatory requirements and with industry and PMI standards. The tobacco used in our heated tobacco products is tested for the presence of crop protection agent residues to ensure it does not exceed permissible levels per industry guidelines. Nicotine and nicotine salts used in e-liquids must satisfy U.S. or European pharmacopoeia specifications. All other ingredients (with the exception of flavoring extracts from tobacco) are either food grade or satisfy U.S. or European pharmacopoeia specifications. We do not add any ingredients classified as carcinogens, mutagens, or reproductive toxicants. All consumable ingredients—and also nonsubstrate material such as the plastic and other components of cartridges that house the e-liquid and the paper and other components that house the tobacco mixture—are subject to rigorous toxicological risk assessment. We disclose the ingredients of our heated tobacco units and e-liquids on our [website](#).

### Heat-not-burn devices

The electronic devices for our heat-not-burn product are manufactured according to internal standards and ISO 9001 principles and are certified according to applicable regulations and standards. The suppliers of the devices' electronic parts and components, including batteries, must also operate under these quality standards. Each finished device is subject to rigorous controls before shipment.

PMI has established a thorough monitoring process to enable early detection of consumer pain points. We use these insights to improve our products and components.

## Heated tobacco units

IQOS heated tobacco units (HTUs) are inserted into the device holder by the consumer. Each unit is composed of a tobacco plug (*TEREA* consumables also contain a metal susceptor), a hollow acetate tube, a polymer-film filter, a cellulose acetate mouthpiece filter, and filter papers. The uniquely processed tobacco plug is made of a reconstituted blend of high-quality tobacco leaves.

The manufacturing of HTUs demands high levels of precision and consistency. We test HTUs for stability, using standard protocols covering a variety of temperature and humidity ranges. The design and packaging aim to preserve product quality and safety in the various conditions to which the product may be subjected (read more on [PMI Science](#)).

## E-vapor products

Our non-disposable e-vapor devices use a cartridge, or tank, with nicotine-containing e-liquid. The product's reliability depends on the integrity of the tank; if the tank is tampered with, the product could fail. We recognize a trade-off between product reliability and recyclability, but prioritize safety, choosing to use closed-tank systems in the development and commercialization of our e-vapor products. We also test our packaging to ensure compliance with local regulations, including the EU Tobacco Products Directive, and we engage external agencies that test the integrity and safety of our e-liquid packaging.

Our disposable e-vapor product, commercialized as *VEEBA*, requires no charging, no cleaning, and no refilling (read more [here](#)).

## Combustible tobacco products

Our combustible tobacco products are also subject to stringent product development controls. We strictly adhere to product specifications and regulations for cigarettes and apply additional internal requirements to ensure the highest quality products. Our ingredients undergo toxicological assessment to ensure their use does not increase the inherent toxicity of cigarette smoke. We disclose the ingredients used in our cigarettes on our [website](#). We keep abreast of changes in regulation and perform further assessments to ensure full compliance with applicable regulations.

Non-tobacco materials used in our products—e.g., cigarette paper, filters, and packaging materials—also undergo toxicological assessment. In assessing packaging materials, we adhere to the main requirements for food contact materials.

<sup>1</sup> See [Glossary](#).





# Nicotine science

Tobacco naturally contains nicotine. This means that nicotine is present in all tobacco products, whether combustible (e.g., cigarettes and cigars) or smoke-free (e.g., oral and heated tobacco). While e-cigarettes do not contain tobacco, most do contain nicotine, which typically is extracted from tobacco and added to the product.

Nicotine is the best-known compound in tobacco. Because it is so well known and because smoking is the most common source of nicotine uptake, many people incorrectly confuse smoking and nicotine, attributing the harms of smoking that are derived from the combustion of tobacco with nicotine. Two recent external independent surveys have highlighted nicotine misperceptions among people who smoke and healthcare professionals:

- According to the Office for Health Improvement and Disparities (formerly Public Health England), four out of 10 former smokers in the U.K. incorrectly believe that nicotine causes smoking-related cancers.<sup>1</sup>
- A survey conducted in the U.S. showed that 80 percent of U.S. physicians strongly agree that nicotine on its own contributes to cancer and 81 percent strongly agree that nicotine on its own contributes to chronic obstructive pulmonary disease (COPD). These misperceptions may dissuade adult smokers from considering alternatives to cigarettes and other combustible tobacco and delay progress toward a smoke-free future.<sup>2</sup>

While nicotine is addictive and not risk-free, it is not the primary cause of smoking-related diseases, such as cardiovascular, respiratory diseases, and cancer. These are primarily associated with chronic exposure to high levels of toxic substances emitted in the smoke when tobacco is burned. There are nearly 100 toxicants that have been directly linked to the development and risk of the aforementioned diseases.

## What is nicotine?

Nicotine occurs naturally in tobacco and, at significantly lower levels, in some plant varieties from the Solanaceae family, which includes tomatoes, potatoes, and eggplant. It is possible to extract nicotine from tobacco, as is done to extract the nicotine used in nicotine replacement therapy (NRT) products and the e-liquids used for e-cigarettes. It is also possible to produce synthetic nicotine. While this process is relatively costly, an increasing number of products (e-liquids and nicotine pouches) are using synthetic nicotine.

The route of nicotine administration (e.g., via lungs, mouth, or skin) influences the rate and amount of nicotine uptake into the body. When tobacco smoke or e-cigarette aerosol is inhaled into the lungs, it is rapidly absorbed into the bloodstream and can reach the brain as quickly as 10 to 20 seconds after the puff is taken. Peak nicotine levels following cigarette use occur approximately six to 10 minutes after the first puff. In comparison, nicotine from oral products (e.g., snus, nicotine pouches, and nicotine gums) is absorbed into the bloodstream through oral tissues, and the nicotine concentration in the blood rises gradually, reaching a plateau in about 30 minutes. The time it takes for the nicotine to reach the brain is slower compared with the inhalation route. Nicotine, when absorbed through the skin, reaches a plateau concentration in the blood even more slowly than via other routes of administration, between six and 12 hours. However, the level typically is maintained over a longer period.

For adult smokers to switch to smoke-free alternatives, it is important that the experience, including nicotine uptake, be comparable to cigarettes (read more about acceptability [here](#)). Learn more about nicotine on [PMLscience.com](#).

Nicotine, as with any active compound, binds to receptors (nicotinic acetylcholine receptors) to elicit physiological responses, including increased heart rate and increased blood pressure. Nicotine also has been shown to have certain cognitive enhancement effects, including on attention, working memory, and learning.<sup>1</sup> Finally, nicotine induces physiological adaptations that lead to dependence, which are evident upon the emergence of withdrawal syndromes following a period of abstinence and can lead to addiction, thereby making quitting difficult.

There are some populations that should not use nicotine-containing products such as minors, pregnant women, nursing mothers, and people with pre-existing conditions, such as heart disease, high blood pressure, diabetes, or epilepsy.

Nicotine plays a crucial role in the successful adoption of our smoke-free products. Its presence can help adults who would otherwise continue smoking to switch to less risky alternatives instead. For adult smokers to accept novel alternatives to smoking, it is important that aspects of the experience—including nicotine uptake—be comparable to cigarettes. Taking these criteria into consideration, we have developed a portfolio of smoke-free products that both appeal to adult smokers and expose users to less harmful or potentially harmful constituents (HPHCs) than cigarette smoke.

We are working hard to phase out cigarettes, the most harmful nicotine delivery system. While the world will undoubtedly be better off without cigarettes, it is difficult to envision how to achieve this future without offering adult smokers access to alternative nicotine-containing products that deliver a comparable sensory experience. To reach this goal, there needs to be education, understanding, research and a societal debate around the impact of nicotine consumption that is grounded in facts and science.

Independent studies have shown the harm reduction potential of making smoke-free products available to those adults who would otherwise continue to smoke (read more [here](#)). This means offering nicotine-containing products that do not combust, thus reducing exposure to HPHCs but also in ways that are acceptable to adults who would otherwise continue to smoke.

We believe it is crucial for public health organizations and regulatory bodies to continue conducting independent research, raising awareness, and educating the population about nicotine consumption—separate from smoking. Many public health authorities, individuals and organizations, already recognize the important role of nicotine in helping smokers transition away from cigarettes.

For example, the U.K.’s Royal College of Physicians has said that nicotine is not “in itself a highly hazardous drug,” further stating, “It is inherently unlikely that nicotine inhalation itself contributes significantly to the mortality or morbidity caused by smoking. The main culprit is smoke and, if nicotine could be delivered effectively and acceptably to smokers without smoke, most if not all of the harm of smoking could probably be avoided.”<sup>2</sup>

## Nicotine and addiction

Continual use of nicotine may lead to dependence, which is most evident in the emergence of withdrawal symptoms experienced during cessation. In addition to other physiological responses, long-term use of nicotine can induce changes in the brain’s reward and stress systems. Physiological dependence, coupled with altered responses from the reward and stress system, can make quitting difficult.

The rapid uptake and delivery of nicotine to the brain’s reward system via lung delivery is thought to be a primary reason for the increased addictive potential of cigarettes and other inhaled tobacco products compared with other routes of delivery. When someone smokes a cigarette, the nicotine levels peak quickly (in about six to 10 minutes), followed by a rapid decrease in nicotine levels as it is metabolized. Most nicotine replacement therapies do not deliver nicotine at the same rate or intensity, which decreases the abuse liability, or addiction potential, but also is less likely to satisfy smokers and allow them to quit cigarettes completely and permanently.

Learn more about nicotine and addiction on [PMLscience.com](#).

1 “Four in 10 smokers incorrectly think nicotine causes cancer,” Press Release, Public Health England, March 14 2018.  
2 Steinberg MB, Bover Manderski MT, Wackowski OA, Singh B, Strasser AA, Delnevo CD. Nicotine Risk Misperception Among US Physicians. doi: 10.1007/s11606-020-06172-8, September 1 2020.

1 ref: doi: 10.2174/1570159X15666171103152136  
2 <https://www.rcplondon.ac.uk/file/3563/download>



Nicotine levels in our smoke-free products

Comparing the level of nicotine in smoke-free products against that of cigarettes contributes to our understanding of the product’s harm reduction potential. Nicotine is, after all, one of the reasons people smoke, alongside other factors such as taste and ritual.

There are different ways to talk about how much nicotine is in a product, and countries have different reporting requirements.

The nicotine yield of a tobacco heat-stick refers to the amount of nicotine in the aerosol produced when the heat-stick is heated in the electronic device. In studies, this aerosol is generated using a machine that follows a specific method or puffing standard, which dictates the puff volume, puff time, and intervals between puffs. This ensures consistency between samples and allows us to compare aerosol across different products. The aerosol is collected on a Cambridge glass-fiber filter pad, and the compounds are extracted and analyzed. These analyses are conducted using standardized methodologies<sup>1</sup> and allow us to quantitatively compare the concentrations of compounds, including nicotine, that are generated by different products.

The European Tobacco Products Directive (2014) Article 3 sets per-cigarette limits on tar (10 mg), nicotine (1 mg), and carbon monoxide (10 mg). These limits are assessed using the International Organization for Standardization (ISO) “smoking regimen.”

Developing ISO methods is typically a lengthy process that allows time for ISO working groups to conduct research and build consensus. In 2005, the World Health Organization established the Tobacco Laboratory Network (TobLabNet) to develop and validate analytical methods independent of the tobacco industry.

In our research publications, we use a range of puffing regimens, including the ISO regimen (one puff every 60 seconds with no modification of filter holes) and the intense regimen (one puff every 30 seconds with all ventilation holes blocked) to report the emission levels in the tobacco heating system (THS) aerosol.<sup>2</sup>

No machine regimen can reflect every individual variation in nicotine uptake among smokers and heated tobacco product users. This is why it is essential not only to understand how much nicotine is present in the aerosol of the product but also the level of nicotine to which the user is actually exposed. Therefore, we also conduct clinical studies that measure nicotine delivered to the user. These studies allow us to get a more complete picture of nicotine.

Learn more about nicotine in our tobacco heating systems on [PMLscience.com](https://www.pmlscience.com).

1 Puffing regimes used in these studies include those developed through the ISO and Health Canada (Health Canada Intense regime) that use a more intense puffing standard.  
2 Schaller, J-P et al. [Evaluation of the Tobacco Heating System 2.2 Part 2: Chemical composition, genotoxicity, cytotoxicity, and physical properties of the aerosol](#). Regul Toxicol Pharmacol. 2016.

Therapeutic delivery of nicotine

The public health and scientific communities continue to explore ways in which nicotine and other tobacco alkaloids, when isolated from tobacco, can potentially be used as a therapeutic compound.<sup>3</sup> For instance, scientists are studying nicotine as a possible active ingredient in pharmaceutical applications for treating certain diseases, which include treatments for patients suffering from schizophrenia, depression, and anxiety disorders. Scientists are also studying the effects of nicotine on debilitating diseases and disorders such as Tourette’s, Alzheimer’s, Parkinson’s, attention deficit hyperactivity disorder (ADHD), and others.

3 [www.health.harvard.edu/newsletter\\_article/Nicotine\\_It\\_may\\_have\\_a\\_good\\_side](https://www.health.harvard.edu/newsletter_article/Nicotine_It_may_have_a_good_side)

Uphold business ethics and integrity

We conduct business ethically and with integrity. Our core ethical values—honesty, respect, and fairness—are at the heart of how we operate at PMI.

We clearly define the ethical and compliance expectations to which we hold ourselves and the third parties with whom we work, and we back up these expectations with governance and management systems to ensure we deliver on them.

Our Ethics & Compliance (E&C) program is led by our Vice President, Associate General Counsel, and Chief Ethics & Compliance Officer, who reports to PMI’s Senior Vice President & General Counsel and, periodically, to the Audit Committee of the Board of Directors.

PMI’s [Code of Conduct](#) sets clear standards and expectations. Its mandatory provisions apply to all PMI employees, officers, and directors. Key risk areas addressed in this document include, but are not limited to, anti-bribery and anti-corruption, anti-competitive practices, conflicts of interest, information protection security and data privacy, responsible marketing and sales, scientific integrity, supply chain responsibility, and workplace integrity, among others. Internal PMI Policies provide more specific guidance on these and other topics.

In 2022, we began the process of updating and enhancing our Code of Conduct to align it more closely with PMI’s business transformation strategy and industry best practices.

The updated PMI Code of Conduct was reviewed and approved by the PMI Board of Directors at the end of 2022. Accordingly, we will roll out a comprehensive employee communication and training program on the new Code of Conduct in 2023.

Employee communication and training

At PMI, we use training and communication to help employees understand the compliance-related standards and rules that are relevant to their roles and how to apply them in their daily work.

In 2022, we launched a global Code of Conduct annual certification process. To date, 98.7 percent of eligible employees, including 100 percent of senior leaders, have completed the annual PMI Code of Conduct certification.<sup>1</sup> In 2023, as we launch the updated PMI Code of Conduct, we will expand this certification requirement to all PMI employees, including our factory workers.

In addition to the PMI Code of Conduct certification, in 2022, the E&C team launched a series of five e-learning courses (available in 31 languages) to approximately 40,000 employees across the globe addressing the following key compliance risk areas: anti-corruption, conflicts of interest, insider trading, privacy, and sexual harassment. Also, regional and local compliance officers supplemented these e-learning courses with additional compliance training offerings, including in-person training sessions, to address compliance risk topics specific to their respective region(s) and market(s), as appropriate. Overall, employees and third parties completed a total of 352,796 E&C training courses in 2022 (2021: 261,890).

Also, in 2022, we revamped our E&C intranet to improve employee usability, and we continued publishing regular updates on relevant compliance topics for our employees.

1 For the purposes of the 2022 PMI Code of Conduct Annual Certification, “eligible employees” are those who have office-based computer access and “Senior Leaders” are defined as employees at a salary grade of 19 and above.



Suzanne Rich Folsom  
Senior Vice President  
& General Counsel

“In the update of our Code of Conduct, we reflected on our corporate strategic expansion into new products and markets around the globe and the many potential risks which may arise as we operate in complex regulatory environments. We focused our efforts upon making the Code more impactful, functional and intuitive—making it our touchstone document which helps guide our employees as they meet the challenges which arise when conducting day-to-day business in our dynamic operating environment.”





## Evaluating our Ethics & Compliance culture

We evaluate our E&C culture periodically, including, for example, through the use of a global online survey to understand employee experiences and attitudes related to ethical business conduct. For the last 15 years, PMI has conducted this type of survey of its global employee population every two to three years.

In addition, we regularly work with third parties to assess elements of our E&C program.

### Speaking up

At PMI, individuals may ask questions, raise concerns, or report instances of observed or suspected misconduct by contacting any of the following:

- The individual's supervisor, department head, or affiliate or function leadership
- E&C key contacts (e.g., Regional Director, Cluster Head, E&C Country/Market Head)
- PMI Global E&C confidential email address
- PMI Compliance Help Line (online or by telephone), which is a third-party operated reporting channel available 24 hours a day, seven days a week, in all languages spoken at PMI. Individuals may use the Compliance Help Line anonymously, subject to local laws and regulations

PMI also has implemented a Global Speaking Up Policy, the principles of which are reinforced by the PMI Code of Conduct and all PMI compliance policies.

There is a strong speaking-up culture at PMI, with most employees communicating directly with the E&C department and disclosing their identity when doing so. Specifically, in 2022, only 16 percent of the reports received by E&C were submitted anonymously (2021: 22 percent).

The E&C team continues to increase its outreach to employees on PMI's speaking-up program. As part of our Inside E&C initiative, for example, the department shares quarterly statistics with employees globally about speaking-up reports, compliance violations, and disciplinary actions, as well as anonymized real-life examples of misconduct and advisory guidance provided in response to employee questions.

### Compliance investigations

At PMI, we take all reports received through our speaking-up channels seriously and are committed to following up objectively and in a timely manner. We investigate all reports that raise compliance concerns, and we involve other functions or line management as warranted. We implement corrective measures to address investigation findings and calibrate disciplinary actions against past outcomes to keep the process fair. When investigating suspected E&C violations, trained personnel adhere to PMI Investigations Standards, which are designed to ensure an equitable and respectful process. We run a post-investigation quality assurance program to get feedback on how well we met these standards. We also have implemented a Retaliation Check program to detect, remedy, and prevent retaliation against people who speak up, a process that includes regular follow-ups with employees who have made a report. Finally, we run checks to ensure year-end performance assessments are fair, and we review substantial employment decisions pertaining to any employee identified as at risk of retaliation before the decisions are implemented.

We received 990 reports through Ethics & Compliance Speak Up channels in 2022 (2021: 929). This represents an increase from the prior two years, reflecting employees' return to the office following the COVID-19 disruptions. Around 54 percent of the matters that were closed in 2022 did not involve a compliance allegation and were resolved through E&C advisory services or referred to line management or appropriate departments, such as our People & Culture teams, for further action.

In 2022, we investigated and closed 429 reports that involved at least one compliance-related allegation (2021: 508). At least one violation was substantiated in 52 percent of these cases (2021: 46 percent), with "workplace integrity" accounting for 33 percent of substantiated violations (2021: 22 percent); "theft and fraud" accounting for 28 percent of substantiated violations (2021: 30 percent); and substantiated violations related to speaking up (such as failure to speak up or obstructing an investigation) accounting for 10 percent (2021: 14 percent). The appropriate parties implemented corrective measures and disciplinary sanctions following these investigations. Specifically, in 2022, termination of employment accounted for 48 percent of the disciplinary actions arising from these cases, while suspension accounted for 3 percent, written warnings for 20 percent, and verbal warnings or counseling for the remaining 29 percent.

### Preventing bribery and corruption

Our standard is clear: we do not bribe anyone, anywhere, for any reason. We recognize that our refusal to participate in corrupt activities may make doing business more difficult in some markets, but bribery is unacceptable at PMI.

Our anti-corruption standards regulate our interactions with government officials and entities, as well as with private individuals, both directly and through third parties. These standards prohibit all forms of bribery and facilitation of payments. They also describe acceptable forms of giving and receiving gifts or entertainment, govern political contributions, and set clear preapproval, reporting, and registration requirements.

We publicly disclose on [PMI.com](https://www.pmi.com) the very limited political contributions we make, and we adhere to lobbying regulations.



# Respect human rights

Human rights are inherent to the dignity of human life and a prerequisite for society to prosper. As a global company, we work to uphold human rights within our organization and across our value chain.

At PMI, fostering the promotion and continuous integration of human rights considerations into our company's strategy, policies, and business practices is not just the right thing to do; it also helps anticipate evolving legal requirements and minimizes our financial exposure and the risk of supply chain disruptions. Further, safeguarding and promoting human rights within our value chain creates the basic environment and conditions in which our stakeholders, including our employees and workers across our supply chain, can thrive and create value.

## Our approach

Across our value chain, we aim to minimize our adverse impacts and maximize opportunities to drive positive change. Establishing a strong foundation and integrating into our organization mechanisms that promote respect for human rights are an essential part of our approach to business. While this can be challenging given the breadth of our operations and the scope and complexity of the issues involved, we believe human rights are an absolute and universal requirement—a requirement we are committed to upholding.

We seek to place rights-holders, those individuals and communities whose rights could be impacted by our operations or business relationships, at the center of all we do. We work to continuously improve our due diligence with respect to identifying and addressing risks and impacts across our value chain and securing our supply of raw materials responsibly. To succeed in this endeavor, we expect our suppliers to commit to respecting human rights within their business and we seek to collaborate with them, either individually or through various multistakeholder initiatives.

Our efforts to respect, promote, and protect human rights underlie many of the activities and programs described throughout this report. A dedicated cross-functional team at our central operations coordinates our approach, which is grounded in the United Nations Guiding Principles on Business and Human Rights (UNGPs) and centered on four pillars:

- **A sound policy framework:** Our work is governed by [PMI's Human Rights Commitment](#), which is complemented by other PMI policy instruments such as our company's [Code of Conduct](#), [Responsible Sourcing Principles](#), [Marketing Standards](#), and [Good Agricultural Practices](#). Awareness-raising and training help us embed those instruments and an ethos of respect for human rights within our corporate culture.
- **Rigorous due diligence:** We have robust programs and processes in place to identify our adverse impacts across our value chain; these include our enterprise-wide assessment, human rights saliency mappings, and human rights impact assessments (HRIAs), in addition to targeted due diligence programs focused on areas of potential risks such as our tobacco and electronics supply chains. We complement these programs with external assessments and verifications.
- **Remediation:** We implement measures to address adverse impacts and maximize opportunities to drive positive change for people across our value chain. We seek to collaborate with civil society organizations, governments, and the private sector to design and deploy impactful solutions. Wherever these adverse impacts occur, we strive to ensure affected individuals have access to grievance mechanisms and effective remedy in line with the UNGPs.
- **Transparency:** A complex and international value chain carries the potential for human rights risks that we need to understand, manage, and continuously address. Reporting transparently on our progress and the challenges we face through our annual reporting and targeted communications is a vital component of our approach.

In 2023, we plan to publish a stand-alone Human Rights Report, detailing our strategy to respect and protect human rights and our progress to date in implementing our [Human Rights Commitment](#), first published in 2017. This inaugural report will lay out our recently updated Human Rights Commitment (issued at the end of 2022), lessons learned, good practices in our ongoing work across our value chain, challenges faced, and future actions.

## Reinforcing our Human Rights Commitment

At the end of 2022, we published our refreshed [Human Rights Commitment](#), which articulates our pledge to respect human rights in all our operations and business relationships. The update incorporates findings from our 2020 human rights saliency mapping (read more in our [Integrated Report 2020](#)) and discusses the impact of our continued business transformation, as well as the evolving regulatory landscape.

The updated Human Rights Commitment is already included in our company-wide Business and Human Rights e-learning. In 2022, we made this e-learning available in seven additional languages (Bahasa, German, Japanese, Polish, Portuguese, Russian, and Spanish). This key step aims, as of 2023, to facilitate its accessibility and increase the number of colleagues across our global operations who can learn about human rights and our Commitment.

## Assessing human rights impacts across our markets

To strengthen our due diligence framework, proactively identify risks, and mitigate potential adverse impacts in our operations and value chain, we have set an ambition to conduct human rights impact assessments (HRIAs) by 2025 in the 10 highest-risk countries in which we operate. Our HRIAs are carried out by independent expert organizations and follow a formal process aligned with the UNGPs. They result in tailored action plans, which we implement, monitor, and report on.

In 2022, we completed our sixth and seventh assessments since 2018 in [Brazil](#) and [Malaysia](#), respectively. We also continued monitoring the implementation of actions recommended by previous HRIAs in [Mexico](#), [Mozambique](#), [the Philippines](#), [Russia](#), and [Turkey](#).

In 2021, we developed and introduced a self-assessment tool, which we piloted to help low- and medium-risk country markets identify salient human rights risks within their organizations, and develop action plans to address them. In 2022, we used the learnings from these pilots to begin fine-tuning our methodology and toolkit. Our aim is to simplify and streamline the process without sacrificing the essential aspects and nuances that contribute to effective assessments. Our refined approach will include targeted training and new pilots.



CASE STUDY

### Conducting an end-to-end human rights impact assessment in Malaysia

In the first half of 2022, we completed our sixth country-level HRIA since 2018. The exercise focused on Malaysia and aimed to identify relevant risks and opportunities across our local affiliate's value chain, including the upstream supply of electronic devices, our local plant and office, and IQOS retail stores downstream.

[Read the case study here](#)





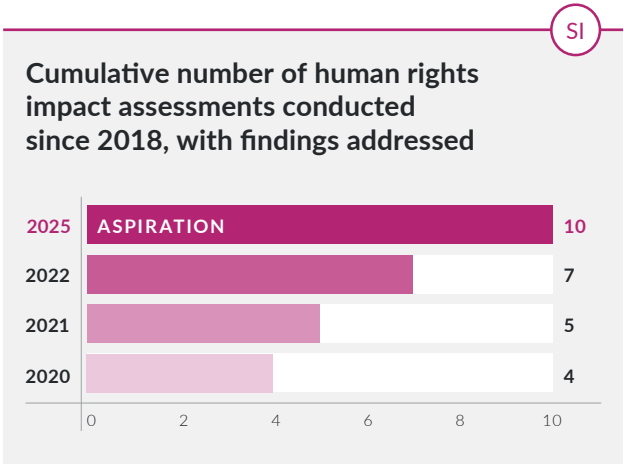


**CASE STUDY**

## Assessing human rights impacts in Brazil

We conducted another human rights impact assessment in the second half of 2022—constituting our seventh country-level assessment since 2018— to identify, prioritize, and help address potential risks and opportunities across our Brazilian affiliate's value chain.

[Read the case study here](#)



### Grievance mechanisms

Providing access to effective grievance mechanisms in our operations and across our supply chain is a core element of our human rights due diligence approach, aligned with the UNGPs. At PMI, we maintain clear policies, run regular training, and work to ensure that robust processes are in place to encourage individuals to speak up if they are aware of any suspected potential or actual violations of law, our Code of Conduct, or any of our policies.

- Specifically, we offer the following mechanisms for individuals to ask questions, raise concerns, or report instances of observed or suspected misconduct:
- The individual's PMI supervisor, department head, or affiliate or function leadership
  - The individual's PMI Ethics & Compliance key contact
  - The PMI Ethics & Compliance confidential email address
  - The PMI Compliance Help Line, which is a third-party operated reporting channel available 24 hours a day, seven days a week, in all languages spoken at PMI. Individuals may use the PMI Compliance Help Line anonymously, subject to local laws and regulations

At PMI, we protect people who speak up in good faith about a suspected compliance violation or cooperate with an investigation. We have zero tolerance for retaliation.

Moving forward, we plan to continue to review and identify opportunities for further enhancement of the implementation of our grievance mechanisms in our operations and across our supply chain.

## Manage our supply chain sustainably

Our supply chain accounts for a significant portion of our potential social and environmental risks and impacts. We are committed to identifying, managing, and addressing these risks and impacts responsibly.

### Our approach

Our operations rely on securing high-quality, cost-effective, and fit-for-use materials and services from suppliers, who are expected to adhere to PMI's environmental, social, and governance (ESG) requirements. To enhance our supply chain sustainability and achieve tangible environmental and social improvements, we identify and address current and potential risks while seizing opportunities to create a positive impact in the communities in which we and our suppliers operate.

Our approach to sustainable supply chain management is built on the following core principles:

- Proactive engagement with our suppliers is key to fostering open and transparent relationships in which expertise is shared and built together.
- We take a risk-based approach, deploying tailored tools and interventions and prioritizing areas in which we can have the greatest impact.
- We seek to support our suppliers in continuously improving their sustainability performance and achieving the highest compliance standards.
- We leverage our reach and understanding of our supply base to implement impactful programs and accelerate progress in our priority sustainability corridors, such as our efforts to tackle climate change, preserve nature, and promote fair working conditions.

Our supply chain sustainability due diligence is guided by our [Responsible Sourcing Principles \(RSP\)](#), which align with the UN Guiding Principles on Business and Human Rights (UNGPs), the Ten Principles of the UN Global Compact, and International Labour Organization (ILO) Conventions. The RSP detail our ambitions and set process and performance requirements for our suppliers of materials and services. We expect all our suppliers—and in particular our critical suppliers—to meet our RSP requirements and demonstrate good sustainability performance.

In addition to our RSP, we apply tailored due diligence instruments and mechanisms within specific segments of our supply chain. In our tobacco supply chain, our work is governed by our [Good Agricultural Practices \(GAP\)](#) and our [Agricultural Labor Practices \(ALP\) Code](#), which are operationalized at farm level by field technicians working year-round with the farmers contracted by PMI and our suppliers. In our electronics supply chain, we leverage the work of the Responsible Business Alliance (RBA).

Adherence to our RSP—and GAP for our tobacco supply chain—is built into our contractual agreements with suppliers. We use a suite of tools, including third-party assessments, on-site audits, and field visits, to monitor and encourage the continuous improvement of our suppliers.

The sustainable sourcing of goods and services involves broad cross-functional collaboration within PMI, executed by our Procurement and Global Leaf and Product Development teams with the strategic support of Operations Sustainability, and overseen by our Senior Vice President, Operations.

### Fostering collaboration with our network of suppliers

We engage and seek to influence a large number of our suppliers—companies with a diverse set of strategies, priorities, and cultures—to jointly progress on our sustainability journey. To achieve our sustainability-related ambitions, we work on common projects to drive improvements in operations and beyond. To do so, we use a variety of channels, including virtual events, webcasts, training sessions, surveys, and an annual supplier awards event.



## Overview of our supply chain in 2022

With over 30,000 tier 1 suppliers globally, our supply chain spend amounted to approximately USD 12.6 billion in 2022. Our global supply chain is organized into two main streams—direct spend (focused on materials used to manufacture our finished products), and indirect spend (focused on goods and services necessary to operate our business).

Currently, our global supply chain supports our two main finished product streams—smoke-free products that are increasing in resource allocation, in line with our growth strategy and combustible cigarettes. Smoke-free products accounted for 43 percent of our supply chain spend in 2022, up from 35 percent in 2021.

The supply chain categories exposed to the highest sustainability risks identified to date pertain to our direct spend and include:

- Tobacco production, with the main risks associated with working conditions, child labor, climate change, access to water, and the socioeconomic well-being of farming communities
- Electronics manufacturing, with the main risks relating to working conditions
- Paper and pulp-based materials, with the main risks linked to deforestation, biodiversity loss, and climate change

Find out how we work to address these specific challenges in dedicated sections of this report: [Improve the quality of life of people in our supply chain](#), [Tackle climate change](#), and [Preserve nature](#).

During the year, our supply of direct materials was under pressure due to high demand for primary commodities, a global transportation shortage, congestion, and cost inflation, largely driven by energy prices, as well as drought in Europe, flooding in Pakistan, and high pressure on fertilizers and other crop input prices. Despite these challenges, our robust contingency plans enabled us to maintain stable production in our manufacturing centers and continue contributing to our sustainability goals.

## Updating our Responsible Sourcing Principles

During 2022, we began the review of our Responsible Sourcing Principles (RSP) and related Implementation Guidance documents, enhancing the content and accounting for external trends and anticipated regulatory developments. We embedded the results of our company's most recent sustainability materiality assessment and priorities and considered our company's progress in evolving and transforming our business model.

We expect to release the updated version of our RSP in 2023. Concurrently, we will execute a robust roll-out plan that incorporates internal capability building across functions and awareness sessions with our suppliers.

## Monitoring the sustainability performance of our critical suppliers

We deploy tailored due diligence instruments across our direct materials, electronics, tobacco, and indirect materials and services supply chains. This allows us to increase the visibility of our suppliers' sustainability performance and implement risk mitigation plans with continuous improvement approach.

We have set an aspiration for 100 percent of our critical spend to be sourced sustainably by 2025. In 2022, we made continued progress, achieving 93 percent (2021: 83 percent). Critical spend refers to components used in the manufacturing of PMI's finished products. In addition to the nature of the component, a supplier's criticality is also evaluated on the basis of spend segmentation and supply flexibility, as relevant. For suppliers of direct materials and electronics, we use minimum threshold scores in our due diligence platforms to determine whether sourcing is sustainable. All tobacco purchased from contracted farmers under the integrated production system is considered sustainable.

### Direct materials supply chain

We leverage our partnership with EcoVadis—the leading global service provider of online ESG supplier assessments—to monitor and assess the sustainability performance of our suppliers of direct materials (excluding tobacco and electronics suppliers, for which we use tailored due diligence tools, as described in this section).

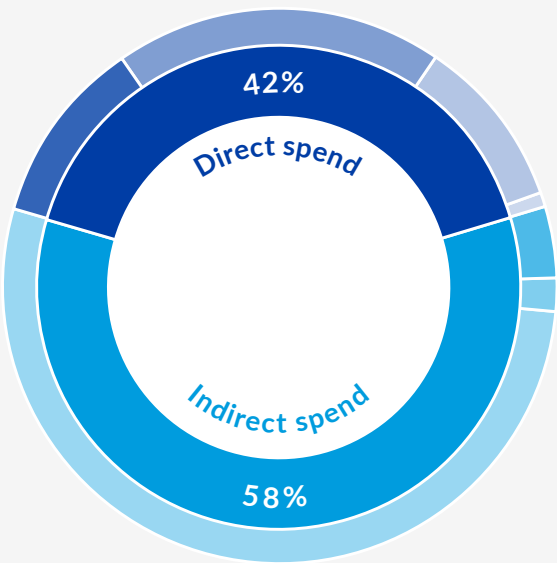
During 2022, 116 suppliers representing 97 percent of our total direct material spend were assessed. Of these, 93 percent demonstrated a good sustainability performance, based on the score provided by the assessment platform, and only 7 percent were below the minimum threshold required and had to complete a corrective action plan before reassessment in 2023. The areas for improvement identified are segmented by theme, indicator, and priority. High-priority improvement areas are mainly related to the implementation of policies in ethics and sustainable procurement across the supplier's operations. Medium- and low-priority improvement areas highlight gaps in environmental and human rights policies and reporting.

We followed up on findings from our 2021 assessments by launching, as necessary, corrective action plans, reassessments, and audits. The large majority (80 percent) of the suppliers reassessed after completing a deep-dive review of their corrective action plans improved their sustainability performance, and 60 percent of them achieved the minimum score required by PMI.

### Electronics supply chain

As our company transforms, a key area of focus is our expanding electronics manufacturing supply base. Besides being new to PMI, the electronics supply chain is complex and dynamic, and comes with specific challenges, including the presence of conflict minerals.

### Breakdown of our 2022 supply chain spend



DIRECT SPEND	42%
Tobacco leaf	10%
Direct materials used to produce and package our products (e.g., cellulose acetate tow, paperboard, nontobacco agricultural products, etc.)	19%
Electronic devices and accessories for smoke-free products	12%
Advanced procurement	<1%

INDIRECT SPEND	58%
Technical procurement to source the manufacturing equipment used in our factories	5%
R&D expenditure enabling us to conduct advanced research	2%
Indirect materials and services necessary to run our business, such as IT, office equipment, and consulting services	51%

### Assessing the sustainability performance of our indirect spend supply chain

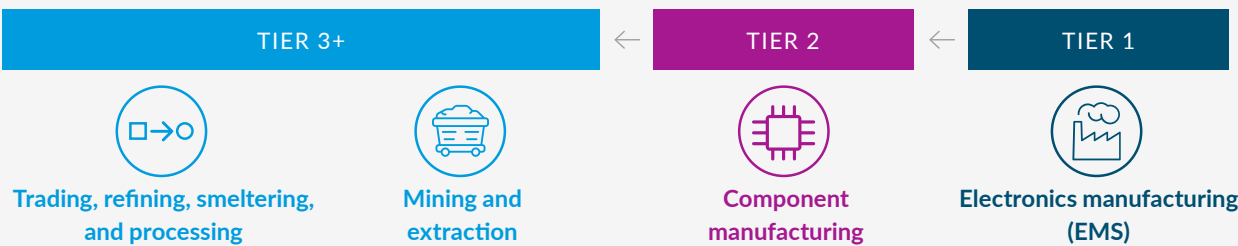
Alongside our activities on prioritized spend categories, during 2022 we further explored our indirect spend supply chain. We engaged through a multistakeholder, sector-specific working group and started the process of identifying risks and complexities of the category. In 2023, we will deepen and refine our strategy, taking the lessons learned into consideration.

In addition, we continued to assess the sustainability performance of our suppliers across other procurement categories, including indirect materials and services. This allowed us to evaluate suppliers representing approximately 40 percent of our indirect spend in 2022.





Overview of our electronics supply chain



Having joined the Responsible Business Alliance (RBA), the world's largest industry coalition for sustainable supply chains, in early 2021, we centered our work in 2022 on expanding the coverage of our suppliers with RBA available audit mechanisms. We continued to participate in RBA's Validated Assessment Program (VAP)—the standard for on-site compliance verification and effective, shareable audits. Under the program, independent external auditors review our electronics suppliers' sustainability performance against the RBA Code of Conduct, aligned with our RSP. To further increase visibility, we also leveraged Customer Managed Audits (CMAs), an additional audit standard recognized by RBA.

In 2022, 67 percent of our spend with critical electronic suppliers were covered by VAP or CMA audits. The average RBA score of our suppliers was 173 (out of a maximum of 200), compared with an RBA average of 160 in 2021. The audit reports revealed that the most common issues relate to working time, emergency preparedness, environmental management system, and low engagement of suppliers with their own suppliers to implement the RBA Code of Conduct.

In parallel, in 2022, we performed an extensive analysis of PMI's due diligence framework for our electronics supply chain as well as industry benchmarks and review of upcoming human rights legislation.

As a consequence, we will continue leveraging RBA initiatives and tools and further engage with other members to strengthen capability of our procurement teams and suppliers in 2023. A key focus will be to work with the suppliers to address identified issues.

Conflict minerals

We are committed to operating with integrity and to responsibly source 3TGs (tin, tantalum, tungsten, and gold), which are used in our products. These minerals are sometimes mined using forced labor or used to finance armed conflict in certain conflict-affected and high-risk parts of the world.

Our 2022 conflict minerals submission to the U.S. Securities and Exchange Commission, covering the year ended December 31, 2021, showed that the smelters from which our suppliers source 3TGs for PMI's Covered Products (as defined in the submission) either conformed with the Responsible Minerals Initiative (RMI) audit program (242 smelters) or were undergoing the assessment process (16 smelters).

Another mineral, cobalt, is also linked to unethical mining practices. This critical raw material is used in the batteries that power our smoke-free devices. While the quantities required for our products are minor compared with the global market size, we are deploying a due diligence program based on the RMI approach, along with tools to identify and address potential human rights risks in our supply chains. In 2022, seven battery suppliers responded to a PMI request, and one supplier was unable to provide information. Subsequent due diligence indicated that, as of December 31, 2022, each of the 19 smelters from which PMI battery suppliers source cobalt were either on RMI's conformant list (17 smelters) or undergoing the assessment process (two smelters). We continue to engage with our suppliers to improve visibility in this complex supply chain and enhance our due diligence framework.

Tobacco supply chain

We define sustainable tobacco production as the efficient and competitive production of quality tobacco in conditions that limit as much as possible the impact on the natural environment and improve the socioeconomic circumstances of the people and communities involved.

Our [Good Agricultural Practices](#) (GAP) define the principles and measurable standards to be met by all those who grow and supply tobacco to PMI. These standards focus on four areas: governance, crop, environment, and people. The latter is governed by a dedicated [Agricultural Labor Practices \(ALP\) Code](#).

GAP principles are mandatory for all suppliers of tobacco to PMI and are reflected in supply contracts.

Maintaining full traceability and monitoring in our tobacco supply chain

To a large extent, responsible sourcing stems from strong relationships on the ground. PMI's Integrated Production System (IPS) connects leaf suppliers and farmers beyond the customary boundaries of a commercial relationship and enables direct technical support, agronomic advice, financial loans, and various other services. IPS covered 99 percent of our tobacco purchases in 2022. The excluded amounts originated from Indonesia and Malawi.

IPS is vital to providing traceability and visibility in our supply base; it enables the deployment of our GAP and ALP monitoring and remediation system down to the farm level. At the center of this system are field technicians, employed by PMI or our third-party suppliers, whom we

estimate visit each farm on average at least five times during the crop season and monitor how well sustainability requirements are applied and commercial processes are working. These technicians provide agronomic assistance, deliver training to farmers, identify and address labor issues, and ensure the implementation of improvement plans.

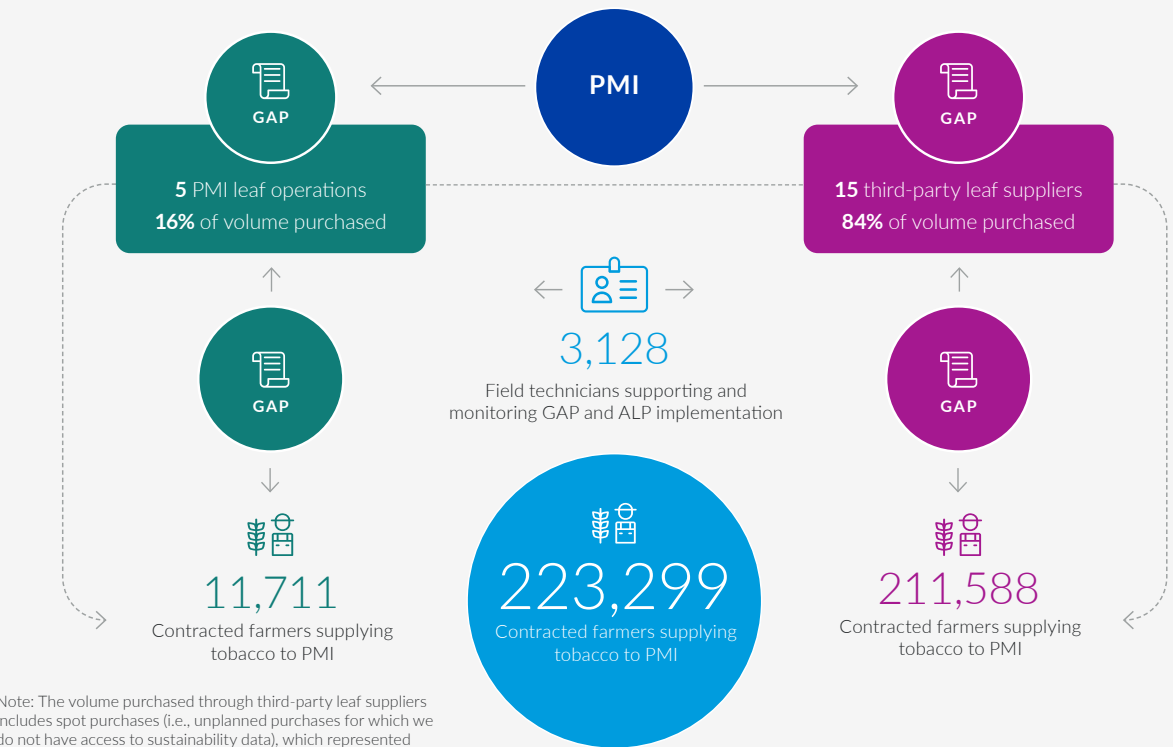
In 2022, field technicians allowed us to monitor compliance with GAP by all farmers supplying tobacco to PMI under IPS.

Third parties, such as specialized NGOs, can also monitor GAP implementation. This is an approach we have taken in Brazil since 2020 in collaboration with Produzindo Certo, a specialist company helping farmers operate more efficiently and sustainably. During 2022, almost all (over 99 percent) contracted farmers agreed to be part of this voluntary program.

Overview of tobacco sourcing under PMI's integrated production system

As a consequence of our smoke-free transition, the share of our purchased volume of tobacco directed to the manufacture of combustible cigarettes is steadily declining while the proportion dedicated to the production of consumables for heated tobacco products is increasing. Overall, we are seeing a gradual decrease in total volumes sourced, as smoke-free products use at most half the amount of tobacco required for combustible cigarettes.

These dynamics led to a sizeable decline in the amount of packed tobacco purchased (from approximately 291,000 tons in 2021 to around 281,000 in 2022). During 2022, we sourced tobacco grown across 20 countries, with most of our volume coming from Argentina, Brazil, China, and Indonesia.





## Safeguard privacy and protect data

In today’s data-driven world, data protection and cybersecurity are essential. At PMI, we use an array of expert-supported, state-of-the-art security solutions to help prevent, detect, and respond to events.

Together with our Code of Conduct, internal policies and guidelines govern our activities and ensure our everyday work is conducted in a manner consistent with our values. In particular, PMI’s global policy on data privacy sets a standard for privacy governance and accountability.

PMI’s Global Privacy Program (GPP) sets standards for data privacy and security across markets and functions. It governs the collection, processing, and sharing of personal data by PMI affiliates. Our privacy team regularly reports to PMI’s Corporate Risk Governance Committee on the businesses’ adherence to the GPP.

We use information systems to help manage business processes and collect and interpret data. We also use these systems to communicate internally and externally with employees, suppliers, consumers, and customers. Specialist third-party service providers manage some of our information systems, and we work with internal specialists to protect systems and data from unauthorized access.

Employees and contractors play a fundamental role in protecting data. By being aware of potential threats and reacting to them appropriately, our community can help keep PMI secure. In 2022, we continued to train our workforce in data protection principles and information security. We complement our training with regular simulated phishing campaigns addressed to our entire workforce to help everyone practice recognizing and reporting phishing attempts and to identify weaknesses in advance of any real attempts the business might face.

We also maintain a hub of resources on information security awareness, accessible to all employees and contractors. In addition to detailing good security practices to protect user accounts and data from cyber risk, these resources help our team remain vigilant to the indirect risks that can arise from activities such as online shopping or connecting to wireless networks. To support those employees working remotely, we have adapted our network and systems and released guidance to help remote workers secure internet connections and manage paper documents outside of our offices.

We continue to make investments in administrative, technical, and physical safeguards, including continuity planning, to provide resilience on our core processes and maintain information security protections in line with industry standards. We evaluate the adequacy of these preventative actions annually. In addition, PMI has an integrated program to manage cyber risks, to protect PMI’s data, and to safeguard the privacy of consumers and customers, including conducting third-party cyber risk assessments.

## Apply fair fiscal practices

To achieve the common goal of a safe, functional, and prosperous society, governments worldwide must have the financial resources to fund public goods, services, and infrastructure.

Corporate income tax and other taxes can generate necessary revenues and avoid passing the bill for funding today’s society to future generations. Excise tax can also ensure that societal costs are reflected in a product’s price, thereby encouraging consumers and producers of these products to shift to less harmful options.

PMI is a good corporate citizen everywhere we operate. Paying taxes commensurate with our economic activities is not only our duty but the responsible thing to do and a key component of our social contract in every country in which we do business.

In addition to the taxes reported by PMI legal entities, our importers and distributors in many countries are responsible for paying import duties and excise taxes on our products. Though such payments may not appear in PMI’s financial statements, they represent a portion of the product taxes paid by our consumers worldwide and so are included in the table below.

2022 taxes	
	Total (USD billion)
Corporate income tax	2.2
Total excise taxes on PMI products	73.4
• Excise taxes on PMI products reported by PMI affiliates	48.9
• Excise taxes reported by our importers and distributors	24.5
VAT and sales tax	9.0

PMI has implemented governance arrangements that set clear accountabilities for the management of tax compliance risks and tax planning. We maintain a comprehensive, effective, and practical risk management program that incorporates best practices, a structured and documented control framework, appropriate planning, and coordinated decision-making.

Our mandatory practices encompass the following:

- **Roles and responsibilities:** PMI’s Tax Compliance Program clearly defines the roles and responsibilities of each PMI affiliate.
- **Escalation to, and involvement of, the PMI Tax department:** Per PMI’s policies, our affiliates consult with the PMI Tax department on all important transactions, whether recurring or new, as well as on business structures and operations involving other PMI affiliates or unrelated parties. Together, they determine positions, exposures, and actions regarding material, non-routine tax or customs matters. Where there is sufficient uncertainty over the appropriate tax treatment of a particular transaction or a potentially significant impact, PMI obtains external advice.
- **Tax reporting and procedures:** PMI has designed its Tax Standards and Guidelines to ensure effective and predictable tax compliance and control measures are in place. Under these policies, all tax-filing obligations must be accurately completed in a timely fashion and in accordance with applicable laws and regulations.
- **Documentation and tax records:** PMI affiliates are responsible for the appropriate creation and retention of all relevant local tax records.

PMI supports the work of the Organisation for Economic Co-operation and Development (OECD) and Group of Twenty (G20) to prevent tax-base erosion and profit shifting. Our policies and practices ensure that PMI pays taxes commensurate with our economic activities and substance in each country. We do not engage in aggressive tax planning, abuse tax havens, or have in place any contrived tax structures. We also do not operate “letter box” companies.

PMI conducts all intercompany transactions on an arm’s-length basis, in accordance with current OECD principles, and we support greater transparency between taxpayers and tax authorities. When relevant and feasible, we have upfront conversations with tax authorities in the countries where we operate. In certain instances, we obtain tax rulings to provide a higher level of certainty not just for PMI, but also for the tax authorities.

Such rulings are not the only means of securing transparency and certainty, as we also have joined monitoring programs with tax authorities in several countries. These programs promote ongoing and transparent relations between taxpayers and tax authorities.





# Reporting and performance

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## About this report

We are pleased to share our 2022 Integrated Report, published on April 5, 2023. This report follows our 2021 Integrated Report (published in May 2022) and constitutes our eighth consecutive annual disclosure incorporating environmental, social, and governance (ESG) content. This report describes our company’s progress in delivering on its purpose.

The report content is informed by a formal sustainability materiality assessment conducted in 2021, which incorporates an assessment of our company’s impacts on society and the planet, an evaluation of the potential impact of various ESG factors on our enterprise value, and the perspectives of diverse stakeholder groups (read more [here](#)). We have structured our ESG topics around two pillars: product impact, and operational impact. Those topics pertaining to the social impacts of our products are considered most material. These and other material ESG topics form the basis of our strategy, which is organized into eight environmental and social priorities and nine related governance factors. This report provides information on context, relevance, management approach, targets, performance, and outlook for our strategic priorities. It is complemented by case studies, market stories, and additional materials available on [PMI.com](#).

Unless otherwise indicated, the data and information in this report cover our operations worldwide for the full calendar year 2022 or reflect the status as of December 31, 2022 in line with our financial reporting calendar. Unless explicitly stated, the data, information, and aspirations in this report do not incorporate PMI’s Vectura Fertin Pharma subsidiary (consolidating the 2021 acquisitions of wellness and healthcare companies Fertin Pharma A/S, Vectura Group plc., and OtiTopic, Inc.), nor the late 2022 acquisition of Swedish Match AB. Where not specified, data come from PMI financials, nonfinancials, or estimates.

PricewaterhouseCoopers SA (PwC) has provided limited independent assurance on select Business Transformation Metrics, available on page 26. For more details, see the Independent practitioner’s limited assurance report on page 202. SGS has provided external verification of our environmental and health and safety data (including our 2022 greenhouse gas (GHG) emissions data). The verification statements are available on [PMI.com](#).

This report was completed with oversight from PMI’s Board of Directors and reviewed by its Executive Chairman, as well as by all members of our Sustainability Committee—composed of Company Management members, including our Chief Executive Officer, Chief Financial Officer, and Senior Vice President and General Counsel. Additional information about our sustainability work, including previous reports and policies, is available on [PMI.com](#).

We welcome your feedback and suggestions. Please contact us at [sustainability@pmi.com](mailto:sustainability@pmi.com).

## Performance in ESG ratings, rankings, and indices















At PMI, we understand the value of participating in ESG ratings: it helps us assess our sustainability performance, benchmark ourselves against our peers, and, most importantly, identify areas for improvement on which we act when they can meaningfully contribute to improving our company’s performance in line with our sustainability strategy.


We prioritize our participation in ESG ratings that are most useful to us and our stakeholders, based on:

- The credibility of the methodology and our ability to interpret and use the results
- Recognition of the rating among the investor community, as well as participation by our competitors and peers

- Its value as a learning opportunity, including a sufficient feedback loop to allow us to improve over time
- Resources required, which should not undermine our company’s focus on performance improvement
- The organization’s openness to dialogue, allowing us to understand expectations and results, share knowledge, correct factual inaccuracies, and provide input on ratings enhancements

The following table provides an overview of certain ratings that evaluate PMI’s performance but is not intended to represent all ratings PMI is featured in.

		2022 score (and year-on-year trend)	
<b>S&amp;P Global Corporate Sustainability Assessment</b>	PMI was selected for the third year in a row as a member of the Dow Jones Sustainability North America Index (score as of March 17, 2023).	84/100	 
<b>Sustainalytics</b>	PMI maintained its “Medium ESG Risk” classification (score as of November 30, 2022).	24.1	
<b>MSCI</b>	PMI maintained a rating of BBB in the MSCI ESG Rating assessment (score as of December 23, 2022).	BBB	
<b>CDP Climate, Forest, Water Security</b>	PMI was awarded a Triple A score for the third consecutive year in recognition of its efforts to combat climate change, protect forests, and promote water security.	AAA	 
<b>CDP Supplier Engagement</b>	PMI earned a place on CDP’s Supplier Engagement Leaderboard for the sixth consecutive year.	Leaderboard	 
<b>Bloomberg Gender-Equality Index</b>	PMI was included for the third year in a row in the 2023 Bloomberg Gender-Equality Index (GEI) for its transparency in gender reporting and advancing women’s equity.	Index member	 
<b>S&amp;P ESG Evaluation</b>	PMI scored 62/100, based on its ESG Profile Score (59/100) and Preparedness Opinion (“Adequate +3”). The former is based on entity-specific scores and sector/region scores (score as of February 3, 2023; report available <a href="#">here</a> )	62/100	
<b>Tobacco Transformation Index</b>	PMI ranked second out of 15 tobacco companies assessed, leading the industry in the “Strategy and Management,” “Capital Allocation & Expenditure,” and “Marketing Policy & Compliance” categories (score as of September 2022).	3.69/5	
<b>ISS ESG</b>	PMI achieved industry leadership, maintaining a rating of “C” (score as of August 2, 2022).	C	
<b>State Street R-Factor</b>	Outperformer within the tobacco industry; industry average score of 56 (score as of February 1, 2023)	65	

Key  Improve  Maintain

### Aligning our disclosures with reporting standards and frameworks

This report has been prepared with reference to the Global Reporting Initiative (GRI) Universal Standards (2021) and relevant topic-specific standards. Our 2022 GRI Index is available on [PMI.com](#). We consider the principles and standards of the UN Global Compact (UNGC) when compiling our annual integrated report and map them against GRI indicators in our GRI Index.

We take into account guidance from the IFRS Foundation, including use of its SASB Standards, Integrated Thinking Principles, and Integrated Reporting Framework. Our SASB Index is available on [PMI.com](#). It maps content within this report and other available disclosures aligned with the Tobacco Standard, as well as with aspects of the Agricultural Products, Hardware, and Medical Equipment and Supplies standards.

We considered the Sustainable Development Goals (SDGs) during the preparation of this report, which are mapped to our [2025 Roadmap](#) and in our [2021 Sustainability Materiality Report](#), to best showcase how our company goals seek to align with those SDGs we believe we can contribute toward.

We completed a new and more extensive climate change risk and opportunity assessment and will publish our inaugural Task Force on Climate-related Financial Disclosures (TCFD) Report shortly after publication of this integrated report.





# Performance metrics



## PRODUCT IMPACT

### Maximize the benefits of smoke-free products

	2015 baseline	2020	2021	2022	2025 Aspirations
Broadening access to smoke-free products	Total number of users of PMI smoke-free products (in millions) <sup>1*</sup>	0.2	18.3	21.7	24.9 (SI)
	Estimated number of users who have switched to PMI smoke-free products and stopped smoking (in millions) <sup>1*</sup>	0.1	13.0	15.3	17.8 > 40
	Number of markets where smoke-free products are available for sale <sup>2*</sup>	7	64	71	73 100 (SI)
	Proportion of markets where smoke-free products are available for sale that are low- and middle-income markets <sup>3*</sup>	17%	39%	42%	42% > 50% (SI)
	Cumulative investment behind smoke-free products (since 2008, in billions USD) <sup>4</sup>	2.4	8.1	9.2	10.7
	Number of factories producing smoke-free products out of total number of factories <sup>5**†</sup>	3 out of 48	9 out of 39	9 out of 38	24 out of 53
	Commercial (marketing) expenditure ratio (smoke-free/total) <sup>*</sup>	8%	76%	73%	74%
	Supply chain direct spend expenditure (smoke-free/total) <sup>6</sup>	n/a	33%	35%	43%
Developing science-based better alternatives to cigarette smoking	Adjusted R&D expenditure (in millions USD) <sup>7*</sup>	423	495	566	642
	Adjusted R&D expenditure ratio (smoke-free/total) <sup>7*</sup>	70%	99%	99%	99%
	Adjusted R&D as % of net revenue <sup>7</sup>	1.6%	1.7%	1.8%	2.0%
	Number of R&D positions (FTEs) <sup>8</sup>	n/a	934	984	1,516
	Patents granted in IP5 jurisdictions relating to smoke-free products (cumulative, since 2015) <sup>9</sup>	n/a	1,300	1,770	2,500
	Number of studies completed by PMI on smoke-free products (cumulative, since 2015)				
	• Toxicological assessment	n/a	146	203	251
Marketing and selling our products responsibly	• Clinical assessment	n/a	22	24	26
	Perception and behavior (premarket and post-market)	n/a	30 (15 +15)	44 (25 + 19)	58 (38 + 20)
	Total number of people (PMI employees and third parties) who participated in at least one Marketing Codes-related training session <sup>10</sup>	n/a	n/a	70,011	75,834
	• Number of PMI employees	n/a	n/a	22,774	24,030
	• Number of third parties	n/a	n/a	47,237	51,804
	Number of violations of the Marketing Codes resulting in substantiated cases of misconduct	12	29	13	14
	Percentage of PMI's total shipment volume covered by youth access prevention programs in indirect retail channels <sup>11</sup>	n/a	94%	91%	91% maintain >90% (SI)

The 2022 metrics marked with an asterisk (\*) are subject to PwC's limited Assurance Report.

**Notes:** In the fourth quarter of 2022, we acquired Swedish Match, a market leader in oral nicotine delivery with a significant presence in the United States market. The Swedish Match acquisition is a key milestone in PMI's transformation to becoming a smoke-free company. PMI consolidated statements of earnings for the year ended December 31, 2022, include the results of operations of Swedish Match from November 11, 2022 (acquisition date) to December 31, 2022, as presented in the Form 10-K for the fourth quarter and year ended December 31, 2022.

Following the Swedish Match acquisition and a review of PMI and Swedish Match's combined product portfolio, PMI reclassified certain of its own products previously reported under its combustible tobacco product category to the newly created smoke-free product category to better reflect the characteristics of these products. Where applicable, prior years' KPIs have been recalculated to reflect the reclassification on a comparative basis. Impacted metrics are marked with (†).

(SI) Indicators included in [PMI Sustainability Index](#)

In 2023, we plan to evaluate our published aspirations to ensure they remain ambitious, reasonable, and achievable in the context of a dynamic and evolving smoke-free industry, and impacts of our recent acquisitions.

- 1 Figures pertain to total IQOS users, for definition see [Glossary](#).
- 2 Including Swedish Match. For definition of available for sale, see [Glossary](#).
- 3 Excluding PMI Duty Free. World Bank report issued in July 2022 is used on a comparative basis for income-level classification. For definition of low- and middle-income markets, see [Glossary](#).
- 4 Investments reflect research, product and commercial development, production capacity, scientific substantiation, and studies on adult smokers.
- 5 Data reflect the number of factories operated and owned by PMI at the end of the respective year, including Swedish Match and Vectura Fertin Pharma. 2022 factories include eight facilities producing heated tobacco units, two producing other smoke-free consumables and 14 Swedish Match owned facilities, primarily engaged in the production of smoke-free products.
- 6 Direct spend focuses on materials used in the manufacture of our products; it includes tobacco leaf, direct materials, and electronic devices and accessories. Data excludes Swedish Match, Vectura Fertin Pharma.
- 7 Adjusted R&D expenditure excludes asset acquisition cost related to OtiTopic, Inc. in 2021. Total reported R&D expenditure in 2021 including these items amounted to USD 617 million.
- 8 R&D positions include scientists, engineers, technicians, and support staff. Comparable data for years prior to 2018 are not available as the scope of R&D positions changed following company organizational changes. Data includes Swedish Match, Vectura Fertin Pharma full-time equivalent (FTE).
- 9 IP5 jurisdictions are Europe (patents granted by the European Patent Office), China, South Korea, Japan, and the U.S.
- 10 Indicator introduced in 2021, replacing the indicator "number of compliance training sessions conducted on PMI's Marketing Code," following the release of new Marketing Codes.
- 11 Total shipment volume includes cigarettes, other tobacco products, and smoke-free product consumables. See [PMI's ESG KPI Protocol 2022](#) for further details.

### Purposefully phase out cigarettes

	2015 baseline	2020	2021	2022	2025 Aspirations
Smoke-free product shipment ratio (smoke-free/total) <sup>1*†</sup>	0.6%	10.9%	13.3%	15.1%	> 30% (SI)
Smoke-free product shipment volume (billion units) <sup>1*†</sup>	5	80	99	114	>250
Combustible tobacco product shipment volume (billion units) <sup>1*†</sup>	877	650	645	641	<550
Change in combustible tobacco product shipment volume (billion units) vs. 2015 baseline <sup>1*†</sup>	n/a	(25.8)%	(26.4)%	(26.8)%	~ (40%)
Adjusted net revenues ratio (smoke-free/total) <sup>2*†</sup>	0.7%	24.2%	29.5%	32.1%	> 50% (SI)
Number of markets where adjusted net revenues from smoke-free products exceed 10% of adjusted total net revenues <sup>*†</sup>	0	39	49	52	
Number of markets where adjusted net revenues from smoke-free products exceed 50% of adjusted total net revenues <sup>*</sup>	0	6	10	17	

The 2022 metrics marked with an asterisk (\*) are subject to PwC's limited Assurance Report.

**Notes:** In the fourth quarter of 2022, we acquired Swedish Match, a market leader in oral nicotine delivery with a significant presence in the United States market. The Swedish Match acquisition is a key milestone in PMI's transformation to becoming a smoke-free company. PMI consolidated statements of earnings for the year ended December 31, 2022, include the results of operations of Swedish Match from November 11, 2022 (acquisition date) to December 31, 2022, as presented in the Form 10-K for the fourth quarter and year ended December 31, 2022.

Following the Swedish Match acquisition and a review of PMI and Swedish Match's combined product portfolio, PMI reclassified certain of its own products previously reported under its combustible tobacco product category to the newly created smoke-free product category to better reflect the characteristics of these products. Where applicable, prior years' KPIs have been recalculated to reflect the reclassification on a comparative basis. Impacted metrics are marked with (†).

In 2023, we plan to evaluate our published 2025 aspirations to ensure they remain ambitious, reasonable, and achievable in the context of a dynamic and evolving smoke-free industry, and impacts of our recent acquisitions.

- 1 These indicators are calculated based on millions of units. For definition of smoke-free products and combustible tobacco products, see [Glossary](#). Smoke-free products shipment volume includes volume of smoke-free products that can be converted into cigarette equivalent units, such as heat-not-burn, e-vapor, and oral nicotine. Total shipment volume includes the listed smoke-free products as well as combustible tobacco products: cigarettes and other tobacco products expressed in cigarette equivalent units. Data does not include Swedish Match and wellness and healthcare products.
- 2 For definition of net revenues related to smoke-free products, see [Glossary](#). 2022 figure includes Swedish Match net revenues from November 11, 2022 (acquisition date) to December 31, 2022. 2021 figure excludes the impact related to the Saudi Arabia customs assessments.

### Seek net positive impact in wellness and healthcare

	2015 baseline	2020	2021	2022	2025 Aspirations
Annual net revenue from wellness and healthcare products (in billion USD) <sup>1*</sup>	n/a	n/a	0.1	0.3	≥ 1 (SI)

The 2022 metrics marked with an asterisk (\*) are subject to PwC's limited Assurance Report.

- 1 For definition of net revenues related to wellness and healthcare, see [Glossary](#). 2021 figure includes portion of net revenues reported after acquisition of Vectura Fertin Pharma that took place in the third quarter of 2021.



Reduce post-consumer waste

	2020	2021	2022	Goals
Cigarette butt littering	n/a	n/a	68%	≥80% by 2025 (SI)
Smoke-free consumables	Proportion of shipment volume covered by markets with take-back programs in place for smoke-free consumables <sup>2</sup>	n/a	8.5%	≥80% by 2025 (SI)
	Proportion of HTU shipment volume covered by markets with take-back programs in place <sup>2</sup>	n/a	8.5%	
	Proportion of e-vapor shipment volume covered by markets with take-back programs in place <sup>2</sup>	n/a	50.7%	
Smoke-free devices	Proportion of PMI smoke-free devices with eco-design certification <sup>3</sup>	n/a	n/a	100% by end of 2025 (SI)
	Cumulative number of smoke-free electronic devices refreshed or repaired since 2021 (in thousands) <sup>4</sup>	n/a	62	> 1 million (2025) (SI)
	Volume of shredded materials coming from dismantled devices in the CIRCLE hubs (in tons)	191	178	
	Effective recycling rate of IQOS devices <sup>5</sup>	40%	53%	70% by 2023, 80% by 2025
	Proportion of IQOS device sales volume covered by the CIRCLE program	48%	63%	100% by 2025
	Recycling rate of IQOS devices at the CIRCLE hubs (weighted average) <sup>6</sup>	84%	86%	maintain 80%
Packaging	Proportion of packaging material that is recyclable <sup>7</sup>	93%	94%	100% by 2025
	Proportion of packaging material that is renewable	89%	90%	95% by 2025
	Total weight or volume of materials that are used to package PMI's primary products in tons (percent renewable/percent non-renewable)	n/a	427,597 (89.7%/10.3%)	452,211 (90.1%/9.9%)
	Reduction of packaging materials used versus 2018 baseline <sup>7</sup>	5%	9%	15% by 2025

<sup>1</sup> For further details on the criteria used to determine if a market has a anti-littering program in place, please see [PMI's ESG KPI Protocol 2022](#).  
<sup>2</sup> In 2022 we redefined the minimum criteria which must be met by each market to be considered as having a take-back program in place. Shipment volume includes heated tobacco units (HTUs), e-vapor cartridges, and e-vapor disposables. For more details please see the [PMI's ESG KPI Protocol 2022](#).  
<sup>3</sup> To meet our 2025 aspiration, we may consider either a type 1 or type 2 and/or type 3 product environmental statement as defined by ISO 14020:2022, as constituting an "eco-certification". For further details please see [PMI's ESG KPI Protocol 2022](#).  
<sup>4</sup> For the definition of refreshed or repaired devices, please refer to [PMI's ESG KPI Protocol 2022](#).  
<sup>5</sup> Excludes disposable products and non-PMI designed devices. The effective recycling rate is calculated based on the proportion of devices' sales volume from the markets covered by the CIRCLE program multiplied by the actual recycling rate of devices at the active CIRCLE hubs (weighted average), which includes actual recycling and energy recovery. Russia CIRCLE hub was discontinued in 2022 and is therefore excluded from the reported recycling numbers of 2022.  
<sup>6</sup> Recycling rate: percentage of the weight of each device that is recycled, weighted-average depending on device type and processing facility (includes 80% recycling, 6% incineration with energy recovery). 2022 data cover CIRCLE hubs in Hungary and Japan.  
<sup>7</sup> Prior years data have been restated to take in account more accurate computation of packaging material usage.

(SI) Indicators included in [PMI Sustainability Index](#)

OPERATIONAL IMPACT

Foster an empowered and inclusive workplace

	2020	2021	2022	Goals
Fair working conditions	Number of PMI employees <sup>1</sup>	70,849	68,547	71,070
	Number of PMI full-time equivalent (FTE) positions	70,560	67,291	70,966
	Proportion of employees covered by Collective Labor Agreements	62.1%	61.1%	60.7%
	Total number of countries with Collective Labor Agreements	34	34	35
Employee attraction, retention, and employability	Employee overall turnover rate	9.7%	12.0%	9.3%
	Women employee overall turnover rate	9.7%	9.4%	8.2%
	Employee voluntary turnover rate	3.1%	4.7%	4.6%
	Proportion of open positions filled in with internal candidates	21%	18%	24%
	Number of new hired employees	5,835	8,381	12,457
	Spend for learning per FTE (in USD) total	551	506	498
	Average hours of training per FTE	11	17	21
	• men	n/a	n/a	22
	• women	n/a	n/a	19
	Proportion of PMI employees who have access to structured lifelong learning offers <sup>2</sup>	n/a	n/a	80%
Talent attraction, retention, and employability	Proportion of employees covered by performance review <sup>3</sup>	90%	92%	90%
	Employee Net Promoter Score <sup>4</sup>	33	35	56
				maintain ≥30
Protect the health and safety of our employees	Lost time incident (LTI) rate per 200,000 hours worked—PMI employees, contracted employees, and contractors <sup>5</sup>	0.08	0.05	0.07
	LTI rate per 200,000 hours worked – PMI employees and contracted employees	0.07	0.06	0.06
	LTI rate per 200,000 hours worked—contractors	0.12	0.05	0.09
	Total Recordable Incident Rate (TRIR) per 200,000 hours worked—PMI employees, contracted employees, and contractors	0.12	0.09	0.12
	TRIR per 200,000 hours worked – PMI employees and contracted employees	0.13	0.10	0.10
	TRIR per 200,000 hours worked—contractors	0.16	0.10	0.14
	Number of fatalities – PMI employees, contracted employees, and contractors <sup>6</sup>	2	1	3
	Number of fatalities – members of the public	5	2	9
	Occupational illness frequency rate (OIFR) per 200,000 hours worked – PMI and contracted employees	0.000	0.001	0.000
	Employee self-assessment psychological well-being measure <sup>7</sup>	57%	61%	74%
				70% by 2025
	Collision rate within PMI's fleet of vehicles per year (collisions per million km driven)	0.53	0.44	0.44
	Proportion of PMI fleet equipped with telematics <sup>8</sup>	35%	47%	65%
	Proportion of manufacturing facilities with ISO 45001 certification <sup>9</sup>	100 %	100 %	98%
				maintain 100%

(SI)





Foster an empowered and inclusive workplace continued

	2020	2021	2022	Goals
<b>Gender diversity:</b>				
Proportion of female employees	41.8%	42.2%	42.1%	
Proportion of management positions held by women <sup>10</sup>	37.7%	39.7%	40.7%	≥ 40% by 2022
Proportion of female employees at different managerial levels: <sup>10,11</sup>				
• Managers	39.3%	41.4%	42.6%	
• Directors	31.0%	32.0%	31.1%	
• Senior leaders	20.2%	25.3%	26.7%	
Proportion of women in senior roles <sup>10,12</sup>	29.6%	31.1%	30.5%	32% by 2023 35% by 2025 (SI)
Proportion of new hires in management positions that are women <sup>10</sup>	38.7%	44.7%	42.7%	
Proportion of new hires at non-managerial levels that are women <sup>10</sup>	38.8%	40.5%	38.8%	
Proportion of new hires that are women	40.1%	41.3%	36.9 %	
Proportion of promotions into management positions that are women <sup>10</sup>	45.0%	47.6%	47.5%	
Proportion of promotions into senior roles that are women <sup>10</sup>	19.2%	35.4%	30.0%	
Proportion of women on PMI's Company Management <sup>13</sup>	16.0%	16.7%	16.0%	
Proportion of women on PMI's Board of Directors <sup>14</sup>	15.0%	23.1%	25.0%	
Mean gender pay gap <sup>15</sup>	33.1%	33.5%	30.0%	
Proportion of women in STEM-related positions <sup>10,16</sup>	36.6%	37.0%	36.6%	
Proportion of women in management positions in revenue-generating functions <sup>10,17</sup>	33.4%	35.7%	37.6%	
<b>Age, nationality, ethnic diversity</b>				
Proportion of employees at different age groups:				
• Below 30	16.0%	18.7%	15.3%	
• Between 30 and 50	73.0%	69.7%	71.7%	
• Above 50	11.0%	11.6%	13.0%	
Number of nationalities among PMI's employees	131	133	133	
Proportion of Asian talent in senior roles globally <sup>10,18</sup>	n/a	16.3%	17.1%	≥ 20% by 2025
Proportion of markets with at least 60% local talent in the executive management teams <sup>10,19</sup>	n/a	n/a	58%	≥ 60% in at least 80% of our markets by 2025
<b>Inclusion</b>				
Inclusion index	n/a	76	82	
Inclusion index – Men	n/a	78	83	
Inclusion index – Women	n/a	74	79	

**Note:** Select 2022 health and safety metrics are subject to external verification by SGS (see the External Verification Statement [here](#)).

<sup>1</sup> Incorporating Vectura Fertin Pharma, as well as the 2022 acquisition of Swedish Match, PMI employed approximately 79,800 people worldwide at year-end 2022.

<sup>2</sup> For further details on how we measure progress on this KPI, please see [PMI's ESG KPI Protocol 2022](#).

<sup>3</sup> 2022 data based on a total of 58,190 employees maintained in PMI's central HR system for a key date of November 1.

<sup>4</sup> We measure the engagement of our workforce using the employee Net Promoter Score (eNPS), following a methodology similar to that which we use to measure consumer engagement. The score can range from -100 to +100. 2022 findings exclude Russia as we didn't carry out the survey in Russia during 2022 (2021 and 2020 data excluding Russia would be 34 and 32, respectively).

<sup>5</sup> For definition of contracted employee and contractor, see [Glossary](#).

<sup>6</sup> PMI employees and contracted employees: zero fatalities in 2022; contractors: three fatalities in 2022.

<sup>7</sup> The indicator represents the percentage of employees who responded "good" or "very good" to the question "How would you rate your current psychological or emotional well-being at present?" in our regular employee listening survey.

<sup>8</sup> Scope covers PMI's working-tool cars (representing 75% of PMI's total fleet).

<sup>9</sup> Scope covers manufacturing facilities producing more than three billion cigarette equivalents annually. 2022 excludes Russia, due to sanctions applied to the country.

<sup>10</sup> Our diversity and inclusion data cover around 94% of PMI's total workforce, as they exclude fixed-term employees and those on salary continuation.

<sup>11</sup> For definitions of management positions, managers, directors, senior roles, and senior leaders see [Glossary](#).

<sup>12</sup> For further details on how we measure progress on this KPI, please see [PMI's ESG KPI Protocol 2022](#).

<sup>13</sup> Data as of March 11, 2023 (25 Company Management members, of whom four were women). See [PMI Annual Report 2022](#) for further details.

<sup>14</sup> Data as of March 23, 2022 (three members of PMI's Board of Directors, of whom 12 were women). See [PMI 2023 Proxy Statement](#) for further details.

<sup>15</sup> The mean gender pay gap is calculated as the percentage difference between the sum of annual base salary, bonus, and stock options.

<sup>16</sup> This figure is an estimate based on the total headcount within functions where the primary skills required for employees in their daily responsibilities related to science, technology, engineering, or mathematics (STEM). Historical data have been re-stated to remove fixed-term employees and those on salary continuation, aligned to other diversity and inclusion metrics.

<sup>17</sup> Employees holding management roles in revenue-generating functions (i.e., functions responsible for core business objectives or profit and loss).

<sup>18</sup> For the purposes of measuring progress against this indicator, PMI uses the nationality data of employees recorded in our HR systems. The determination of Asian nationalities is based on the regional groupings as listed by the United Nations and we consider the following regions: Central and Southern Asia, Eastern and South-Eastern Asia.

<sup>19</sup> Considers Managing Directors and their direct reports within PMI markets and clusters that have local nationality registered in PMI HR systems. Excludes countries where employee national identity is not collected in PMI HR systems.

PMI's workforce at year-end 2022

	2022
<b>Number of employees by employment contract (permanent and temporary), by gender</b>	
Women employed on a permanent contract	28,489
Women employed on a temporary contract	1,437
Men employed on a permanent contract	38,816
Men employed on a temporary contract	2,328
<b>Number of employees by employment contract (permanent and temporary), by Region</b>	
Employees on a permanent contract in European Union region	20,008
Employees on a temporary contract in European Union region	2,130
Employees on a permanent contract in Middle East & Africa region, including PMI Duty Free	2,958
Employees on a temporary contract in Middle East & Africa region, including PMI Duty Free	270
Employees on a permanent contract in Eastern Europe region	6,191
Employees on a temporary contract in Eastern Europe region	205
Employees on a permanent contract in South & Southeast Asia region	27,115
Employees on a temporary contract in South & Southeast Asia region	472
Employees on a permanent contract in East Asia & Australia region	3,772
Employees on a temporary contract in East Asia & Australia region	130
Employees on a permanent contract in Americas region	7,261
Employees on a temporary contract in Americas region	558
<b>Number of employees by employment type (full-time and part-time), by gender</b>	
Women employed on a full-time contract	29,258
Women employed on a part-time contract	668
Men employed on a full-time contract	40,699
Men employed on a part-time contract	445

(SI) Indicators included in [PMI Sustainability Index](#)



Improve the quality of life of people in our supply chain

	2022	Goals	
Agricultural Labor Practices (ALP)	Proportion of purchased tobacco volume for which labor practices and adherence to our Agricultural Labor Practices (ALP) Code are systematically monitored	95%	maintain >90%
	Total number of prompt actions recorded by field technicians	6,101	
	• proportion due to safe working environment	90%	
	• proportion due to hazardous work performed by children	3%	
	• proportion due to income and working hours	7%	
	Total number of ALP prompt actions resolved	5,107	
Alleviating poverty	Proportion of contracted farmers supplying tobacco to PMI who make a living income <sup>1</sup>	73%	100% by 2025 (SI)
	Proportion of contracted farmers supplying tobacco to PMI paying their workers at least the minimum legal wage or agricultural benchmark	99.9%	100% by 2022
	Number of ALP prompt actions recorded by field technicians relating to non-payment of minimum wage to farmworkers	436	
Eliminating child labor	Prevalence of child labor among contracted farms supplying tobacco to PMI <sup>2</sup>	0.1%	Zero by 2025 (SI)
	Number of ALP prompt actions recorded by field technicians relating to child labor	175	
	• Hazardous tasks <sup>3</sup>	155	
	• Under 13 working <sup>4</sup>	6	
	• Under 15 hired	14	
	Proportion of ALP prompt actions recorded by field technicians relating to child labor that were resolved	95%	
Enhancing the quality of lives of tobacco-farming communities	Proportion of contracted farmers supplying tobacco to PMI who have access to water <sup>5</sup>	75%	100% by 2025
	Proportion of tobacco farmworkers provided with safe and adequate accommodation <sup>6</sup>	100%	maintain 100%

**Note:** In 2022, we strengthened our approach to monitoring the quality of life of people in our tobacco supply chain by introducing the Sustainable Tobacco Supply Chain (STSC) framework (read more in this section). Although it is still a requirement to monitor performance against our ALP Code for all contracted farms, we decided to shift from reporting sustainability progress on all farmers contracted by PMI's suppliers or PMI leaf operations to farmers whose tobacco volumes are purchased by PMI and used in our products. [Read more here](#). Our 2022 farm-level ALP monitoring data cover 19 out of the 20 countries we sourced in 2022 as Switzerland was not included in this dataset.

- 1 Excludes China and Switzerland. For further details on how we calculate the proportion of farmers making a living income please see [PMI's ESG KPI Protocol 2022](#).
- 2 For further details on how we calculate the prevalence of child labor in PMI's tobacco supply chain please see [PMI's ESG KPI Protocol 2022](#).
- 3 Includes children of any age found to be involved in hazardous work.
- 4 Includes light work only.
- 5 Estimated based on surveys that indicate whether the farmer has an improved drinking water source within 1 km or 30 minutes round trip. Excludes China.
- 6 Scope is limited to farmers who provide accommodation to workers (approximately 2 percent of the total farmer base in 2022).

(SI) Indicators included in [PMI Sustainability Index](#)

Tackle climate change

	2019	2020	2021	2022	Goals
Energy Consumption in PMI direct operations	Total Energy Consumption in PMI factories, offices and fleet (gigajoules)	9,456,576	7,909,157	7,721,166	7,657,899
	Proportion of total energy consumed that is from renewable sources	27%	29%	33%	35%
	Energy intensity (gigajoules per million cigarettes equivalent) <sup>1</sup>	11.95	10.83	10.37	10.14
	Fuel consumption from non-renewable sources (gigajoules)	5,819,072	4,733,193	4,541,721	4,487,522
	Fuel consumption from renewable sources (gigajoules)	128,967	91,680	123,033	95,236
	Total electricity consumed (MWh) <sup>2</sup>	959,723	832,292	865,166	861,434
	Total electricity consumed that is from renewable sources (MWh)	623,940	621,620	674,903	727,283
Total GHG emissions Scope 1 + 2	Absolute CO <sub>2</sub> e scope 1 (metric tons) <sup>3</sup>	397,210	322,633	308,822	297,602
	Absolute CO <sub>2</sub> e scope 2 (metric tons) <sup>3</sup>	158,672	90,366	64,217	42,482
	Absolute CO <sub>2</sub> e scope 1+2 (metric tons) <sup>3</sup>	555,882	412,999	373,040	340,084
	• Absolute reduction versus 2019 baseline	n/a	26%	33%	39%
	Carbon offsetting certificates (metric tons) <sup>4</sup>	1,242	3,297	16,128	42,848
	Net CO <sub>2</sub> e scope 1+2 (metric tons) <sup>3</sup>	554,640	409,703	356,911	297,236
					50% by 2030 (SBT)
Scope 1 & 2 Manufacturing	CO <sub>2</sub> e scope 1+2 intensity (kg per million cigarettes equivalent) <sup>1</sup>	702	556	501	450
	Absolute CO <sub>2</sub> e scope 1+2 (metric tons) from manufacturing	394,447	305,381	267,783	242,392
	Proportion of electricity used and purchased that is from renewable sources	72%	78%	81%	87%
	Proportion of carbon-neutral factories	3%	5%	13%	35%
Scope 1 & 2 PMI Fleet					100% by 2025
	Absolute CO <sub>2</sub> e scope 1 from fleet (metric tons)	111,400	79,457	78,018	79,543
	• Absolute reduction versus 2019 baseline	n/a	29%	30%	29%
	CO <sub>2</sub> e emissions from fleet (kg CO <sub>2</sub> e per km driven)	222	216	200	191
Scope 3 Total	Proportion of hybrid or electrical vehicles in our fleet	—%	5%	10%	19%
	Absolute CO <sub>2</sub> e scope 3 ('000 metric tons) <sup>5</sup>	4,621	3,854	3,749	4,257
	• Absolute reduction versus 2019 baseline	n/a	17%	19%	8%
	CO <sub>2</sub> e scope 3 biogenic emissions ('000 metric tons)	2,598	2,312	2,386	2,331
Scope 3 Tobacco Supply Chain					25% by 2025, 50% by 2030 (SBT)
	Absolute CO <sub>2</sub> e scope 3 ('000 metric tons) from tobacco supply chain		909	804	888
	• Absolute reduction versus 2019 baseline	n/a	28%	36%	30%
	CO <sub>2</sub> e intensity reduction in tobacco curing versus 2019 baseline	n/a	44%	64%	57%
Total PMI Value Chain	Proportion of Virginia tobacco purchased cured with coal	16%	11%	3%	6%
					75 % by 2025
	Absolute CO <sub>2</sub> e scope 1+2+3 ('000 metric tons)	5,177	4,267	4,122	4,597
	• Absolute reduction versus 2019 baseline	n/a	18%	20%	11%
Total PMI Value Chain	CO <sub>2</sub> e scope 1+2+3 intensity (kg per million cigarettes equivalent) <sup>3</sup>	6,542	5,844	5,535	6,085
	• Reduction versus 2019 baseline	n/a	11%	15%	7%
	CDP Climate Change rating	A	A	A	A

**Note:** Our inventory of GHG emissions (scope 1, 2, and 3) in 2022 is subject to external verification by SGS (see the External Verification Statement for scope 1+2 [here](#), for scope 3 [here](#), and a list of the individual metrics verified [here](#)).

- 1 Intensity is measured per million cigarette equivalent sold.
- 2 Excludes electricity consumption from fleet.
- 3 Emissions from PMI-operated IQOS stores are partially excluded from scope 1+2 emissions, as de minimis. In 2022 a portion of PMI's retail stores (representing approx. 10% of total retail surface area) have been included in the scope 1+2 emissions.
- 4 2022 figure includes carbon offsetting certificates purchased in our factories in Czech Republic, Lithuania, Mexico, Portugal, Switzerland, and our 2022 figure includes carbon credit certificates retired in the name of our factories in Argentina, Brazil, Czech Republic, Greece, Indonesia (three sites, differentiated between six reporting entities for certification purposes), Lithuania, Mexico, Pakistan, Portugal, Senegal and Switzerland—in total 13 manufacturing sites—as well as our Operations Center in Switzerland and the Mexico market.
- 5 For further details on scope 3 calculation please refer to the [PMI Value Chain Methodology](#). In 2022, we further improved our carbon footprint model and data accuracy; improvements relate to, for example, increased coverage of primary data collected from direct materials suppliers and integration of emissions related to fleet purchase. This led to previous years being restated accordingly.





Preserve nature

		Scope	2020	2021	2022	Goals
Forest	Proportion of tobacco purchased at no risk of gross deforestation of primary and protected forests <sup>1</sup>		100%	100%	100%	maintain 100%
	Proportion of tobacco purchased at no risk of net deforestation of managed natural forest and no conversion of natural ecosystems <sup>1</sup>		n/a	37%	55%	100% by 2025 <sup>(SI)</sup>
	Total hectares of forest grown		n/a	355	389	
	• Due to restoration of at-risk forest	PMI tobacco supply chain	n/a	165	199	
	• Contribution to forest positive		n/a	190	190	
	Proportion of flue-cured tobacco purchased that is cured with renewable fuel sources (self-sufficient firewood and biomass adoption)		67%	75%	74%	maintain > 70%
	Approximate total number of curing barns upgraded since 2014 (cumulative)		82,519	93,700	102,806	
	CDP Forest rating	PMI value chain	A	A	A	
	Proportion of paper, board, and pulp-based purchased at no risk of gross deforestation of primary and protected forests <sup>1</sup>		n/a	n/a	64%	100% by 2025
Water	Cubic meters of water optimized in our tobacco-growing areas (cumulative since 2019) (million m³) <sup>2</sup>		0.01	0.44	4.94	≥10 million cubic meters by 2030
	Proportion of tobacco-growing areas which are covered by Local Water Risk Assessments (cumulative, since 2018)	PMI tobacco supply chain	57%	66%	81%	100% by 2025
	Quantity of blue water used per ton of tobacco produced <sup>3</sup>		307	339	263	
	Total amount of water used ('000 m³)		115,009	133,674	107,720	
	Total amount of water consumed (withdrawn minus discharged) ('000 m³)		1,619	1,481	1,547	
	Total amount of water withdrawn ('000 m³)		3,375	3,120	3,089	
	Total amount of freshwater withdrawn ('000 m³) <sup>4</sup>		2,215	2,088	2,137	
	Water ratio (water withdrawn in m³ per million units of cigarettes sold) <sup>5</sup>	PMI factories	3.5	2.6	2.5	maintain <3.1
	Proportion of PMI factories certified to AWS standard <sup>6</sup>		30%	43%	51%	100% by 2025
	CDP Water rating	PMI value chain	A	A	A	
Biodiversity	Proportion of tobacco purchased without detection of residues attributable to the use of highly hazardous pesticides (HHPs), as defined by FAO and WHO guidelines in 2016	PMI tobacco supply chain	97%	100%	100%	maintain 100%
	Proportion of tobacco purchased without detection of residues attributable to the use of WHO TOX1 group of crop protection agents		100%	100%	100%	maintain 100%

Preserve nature continued

		Scope	2020	2021	2022	Goals
Waste	Proportion of PMI factories with virtually zero waste to landfill		69%	79%	97%	100% by 2022
	Total amount of waste generated (in metric tons)		119,750	114,043	119,192	
	• Recycled		85.5%	87.3%	86.9%	maintain 85%
	• Incinerated with energy recovery		11.4%	11.4%	12.0%	
	• Incinerated without energy recovery		0.3%	0.3%	0.3%	
	• Disposed to landfill <sup>7</sup>	PMI operations	2.8%	1.1%	0.8%	<1%
	Amount of hazardous waste generated (in metric tons)		1,266	1,057	1,698	
	• Incinerated with energy recovery		42.6%	57.3%	67.4%	
	• Recycled		37.6%	20.9%	16.7%	
	• Incinerated without energy recovery		12.7%	13.5%	13.4%	
	• Disposed to landfill		7.1%	8.2%	2.5%	
Environmental management	Proportion of manufacturing facilities certified to ISO 14001 <sup>8</sup>		100%	100%	100%	maintain 100%
	Number of environmental fines (and approximate amount in USD) <sup>9</sup>	PMI factories	1 (32,000)	2 (48,000)	0	

<sup>1</sup> For definitions, please see PMI's [Zero Deforestation Manifesto](#) and [PMI's ESG KPI Protocol 2022](#).  
<sup>2</sup> Indicator is based on the World Resources Institute's volumetric benefit accounting methodology and is verified by an external third party.  
<sup>3</sup> Blue water refers to water used for irrigation, excluding rainfall.  
<sup>4</sup> Refers to amount of freshwater withdrawn from municipal sources.  
<sup>5</sup> Water intensity is measured in cubic meters per million cigarettes produced equivalent. In 2021, we updated our methodology to account for the conversion factor of heated tobacco units to conventional cigarettes of 5:1 and have restated historical data accordingly.  
<sup>6</sup> Aspiration pertains to priority manufacturing facilities identified based on site overall risk in relation to the watershed, water withdrawal, water consumption, product portfolio, and other strategic considerations.  
<sup>7</sup> Disposal to landfill includes sanitary waste, canteen waste, and waste mandated by authorities to be disposed of in landfill.  
<sup>8</sup> Scope: Manufacturing facilities producing more than three billion cigarette equivalents annually.  
<sup>9</sup> Fines above USD 10,000 (or equivalent in converted currency).



# FUNDAMENTALS

## Business integrity

	2020	2021	2022
Proportion of current employees who participated in training sessions pertaining to PMI's Code of Conduct <sup>1</sup>	n/a	71.3%	81.0%
Number of compliance training sessions completed by employees and third parties	198,170	261,890	352,796
• Employees	174,755	150,270	268,411
• Third parties	23,415	111,620	66,385
Number of reports received through Ethics & Compliance Speak Up channels	762	929	990
Total number of closed reports:	767	891	923
• number of closed reports involving at least one compliance allegation (unsubstantiated cases/substantiated cases)	431 (198/233)	508 (272/236)	429 (206/223)
• number of closed reports not involving compliance allegations	336	383	494
Disciplinary actions, by type:			
• contract termination	n/a	26%	48%
• suspension	n/a	5%	3%
• written warning	n/a	32%	20%
• verbal warning or counseling	n/a	37%	29%

**Note:** Training and cases are updated based on new information available, so a slight shift in previous years' data is reflected.

<sup>1</sup> In 2021 we adjusted our methodology to account for employees as of year end.

## Respect for human rights

	2020	2021	2022	Goals
Cumulative number of human rights impact assessments conducted since 2018, with findings addressed <sup>1</sup>	4	5	7	10 <sup>(SI)</sup> highest-risk countries by 2025

<sup>1</sup> Our assessments prioritize countries which are assessed as highest risks from a human rights standpoint. They are determined based on key parameters such as PMI's footprint and the country's human rights risk profile, as determined by internationally recognized organizations. For further details please see [PMI's ESG KPI Protocol 2022](#).

<sup>(SI)</sup> Indicators included in [PMI Sustainability Index](#)

## Managing our supply chain sustainably

	2020	2021	2022	Goals
Total	Total number of suppliers <sup>1</sup>	>28,000	>29,000	>30,000
	Total supply chain spend (in billions USD) <sup>2</sup>	10.1	11.1	12.6
	Percentage of spend with critical suppliers from whom PMI sources sustainably <sup>3</sup>	67%	83%	93%
Non-tobacco supply chain				100% by 2025
	Total procurement spend <sup>4</sup>	8.9	9.8	11.3
	Number of critical suppliers <sup>5</sup>	154	162	174
	Critical suppliers, expressed as a proportion of total procurement spend	35%	29%	30%
	Number of critical suppliers assessed in EcoVadis or Responsible Business Alliance	n/a	104	144
	Number of critical suppliers identified as having significant actual or potential negative social impacts <sup>6</sup>	n/a	15	16
	Number of critical suppliers identified as having significant actual or potential negative environmental impacts <sup>6</sup>	n/a	16	21
	<b>Direct Materials</b>			
	Number of critical suppliers assessed with EcoVadis	n/a	87	116
	Percentage of critical direct spend assessed with EcoVadis	n/a	90%	97%
	Average total EcoVadis score for critical suppliers of direct materials <sup>6</sup>	n/a	56.5	58.1
	• Average Environmental score	n/a	60.5	62.2
	• Average Ethics score	n/a	54.2	54.2
	• Average Social score	n/a	55.8	58.0
	• Average Sustainable Procurement score	n/a	50.8	51.6
	<b>Electronics</b>			
	Number of critical suppliers assessed with Responsible Business Alliance (RBA) <sup>7</sup>	n/a	17	27
	Number of site-level RBA audits completed <sup>8</sup>	n/a	31	42
	• Average RBA score achieved by suppliers during site-level audits	n/a	160	173
	• Percentage of electronic supply chain spend covered by these audits	n/a	69%	67%
	Number of RBA non-conformances			
	• priority	n/a	n/a	3
	• major	n/a	n/a	135
	• minor	n/a	n/a	38
	Closure rate of corrective actions for priority non-conformances	n/a	n/a	67%
	Number of tier 2 electronic suppliers completing Supplier Level self-assessment in RBA	n/a	21	22
	• Of tier 2 electronics suppliers assessed at supplier level, the number of site-level self-assessments completed	n/a	43	37
Tobacco supply chain	Number of tobacco farmers contracted by PMI and PMI tobacco suppliers <sup>9</sup>	285,898	253,813	n/a
	Number of tobacco farmers from whom PMI purchased tobacco in 2022 <sup>10</sup>	n/a	n/a	223,299
	Proportion of tobacco purchased through direct contracts by PMI and PMI tobacco suppliers	99%	98%	99%
	Number of third-party tobacco suppliers with whom PMI has a direct contractual relationship <sup>11</sup>	14	16	15
	Number of PMI leaf operations that contract tobacco farmers directly	6	5	5
	Number of countries where PMI sources tobacco	23	21	20
	Number of field technicians providing support to contracted farmers and monitoring the implementation of PMI's Agricultural Labor Practices (ALP)	n/a	n/a	3,128

<sup>1</sup> Suppliers refer to tier 1 suppliers (parent companies).

<sup>2</sup> Total supply chain spend includes procurement spend and tobacco leaf sourcing spend.

<sup>3</sup> Sustainable sourcing is determined based on a minimum threshold score of 45 out of 100 in EcoVadis (direct materials) or 125 out of 200 in RBA with no open priority issues (electronics). All tobacco purchased by contracted farmers, thereby covered by PMI's integrated production system, is considered sustainable.

<sup>4</sup> Procurement spend excludes tobacco leaf sourcing.

<sup>5</sup> Suppliers' criticality is evaluated considering spend segmentation and nature of component, as well as supply flexibility (single-source/not easily substitutable) as relevant. 2022 figure includes tier 1 suppliers of direct materials and electronics, tier 2 directly managed electronic suppliers, and tobacco leaf suppliers.

<sup>6</sup> EcoVadis score ranges from 0 to 100, with a minimum threshold score of 45 demonstrating satisfactory sustainability performance.

<sup>7</sup> This figure includes 27 out of 29 of our electronic critical suppliers.

<sup>8</sup> This figure includes 42 out of 46 of our electronic critical suppliers sites.

<sup>9</sup> Following the introduction in 2022 of PMI's sustainable supply chain model, data on tobacco farmers contracted by PMI tobacco suppliers are not available.

<sup>10</sup> Tobacco farmers whose tobacco are included in PMI packed products.

<sup>11</sup> Data refer to parent companies.





# Independent practitioner’s limited assurance report

on selected Key Performance Indicators 2022 in the Business Transformation Metrics Reporting 2022 to the Board of Directors of Philip Morris International Inc. Lausanne

We have been engaged by Management to perform assurance procedures to provide limited assurance on selected Key Performance Indicators 2022 (the metrics marked with an asterisk (\*)) in the Business Transformation Metrics Reporting 2022 of Philip Morris International Inc. and subsidiaries (‘PMI’) for the period ended 31 December 2022.

The selected Key Performance Indicators (“KPI”) forming part of the Business Transformation Metrics of PMI for the financial year ended December 31, 2022 are included in the Integrated Report 2022 and comprises the following in our scope:

- a. The Business Transformation Metrics as disclosed on pages 26 and 190 to 191 of PMI’s Integrated Report for the year ended December 31, 2022, respectively.
- Adjusted R&D expenditure (in millions USD)
  - Adjusted R&D expenditure ratio (smoke-free/total)
  - Number of factories producing smoke-free products out of total number of factories
  - Number of markets where smoke-free products are available for sale
  - Proportion of markets where smoke-free products are available that are low- and middle-income markets
  - Commercial (marketing) expenditure ratio (smoke-free/total)
  - Smoke-free product shipment volume (billion units)

- Combustible product shipment volume (billion units)
- Change in combustible product shipment volume (billion units) vs 2015 baseline
- Smoke-free product shipment ratio (smoke-free/total)
- Total number of users of PMI smoke-free products (in millions)
- Estimated number of users who have switched to PMI smoke-free products and stopped smoking (in millions)
- Adjusted net revenues ratio (smoke-free/total)
- Annual net revenue from wellness and healthcare products (in billion USD)
- Number of markets where adjusted net revenues from smoke-free products exceed 10% of adjusted total net revenues
- Number of markets where adjusted net revenues from smoke-free products exceed 50% of adjusted total net revenues

- b. The application of the PMI Business Transformation Framework for the preparation of the specified Key Performance Indicators in Business Transformation Metrics Report published on pages 26, 190 to 191 and 205-209 (Glossary), respectively.

We do not comment on, nor conclude on any prospective information nor did we perform any assurance procedures on the information other than those stated above for the reporting period 2022.

The Business Transformation Metrics Reporting 2022 was prepared by Management of PMI based on the Business Transformation-Linked Financing Framework (or “Business Transformation Framework” in short) and made available under <https://www.pmi.com/investor-relations/overview/business-transformation-linked-financing-framework><sup>1</sup>). Further, PMI defines the calculation of the specified KPIs in the footnotes on pages 26 and 190 to 191 as well as in the Glossary (205 to 209) in the Business Transformation Metrics Reporting 2022 (together the “suitable Criteria”).

## Inherent limitations

The accuracy and completeness of the Business Transformation Metrics Reporting 2022 are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. In addition, some KPIs are derived from different frameworks to form the Business Transformation Metrics, thus the quantification of some self-defined KPIs is subject to inherent uncertainty because of incomplete scientific definition or knowledge used to determine factors related to such KPIs and the values needed to combine. Our assurance report will therefore have to be read in connection with the Business Transformation-Linked Financing Framework prepared by PMI, its definitions and procedures in the document “Business Transformation Framework” and the footnotes on pages 26, 190 to 191 and glossary (205 to 209) in the Business Transformation Metrics Reporting 2022.

## Managements’ responsibility

The Management of Philip Morris International Inc. is responsible for preparing the Business Transformation Metrics Reporting 2022 in accordance with the suitable Criteria. This responsibility includes the design, implementation and maintenance of the internal control system related to the preparation of the Business Transformation Metrics Reporting 2022 that are free from material misstatement, whether due to fraud or error. Furthermore, the Management is responsible for the selection and application of the chosen Criteria.

## Independence and quality management

We are independent of the Philip Morris International Inc. in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code). We have fulfilled our other ethical responsibilities in accordance with the IESBA Code, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

PricewaterhouseCoopers SA applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

## Practitioner’s responsibility

Our responsibility is to perform an assurance limited engagement and to express a conclusion on the selected Key Performance Indicators 2022 in the Business Transformation Metrics Reporting 2022. We conducted our engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised) ‘Assurance engagements other than audits or reviews of historical financial information’. That standard requires that we plan and perform our procedures to obtain limited assurance whether anything has come to our attention that causes us to believe that the Key Performance Indicators 2022 (the metrics marked with an asterisk (\*)) in the Business Transformation Metrics Reporting 2022 was not, in all material aspects, prepared in accordance with the suitable Criteria as per 31 December 2022.

Based on risk and materiality considerations, we performed our procedures to obtain sufficient and appropriate assurance evidence. The procedures selected depend on the assurance practitioner’s judgement. A limited assurance engagement under ISAE 3000 (Revised) is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. Consequently, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement and therefore less assurance is obtained with a limited assurance engagement than for a reasonable assurance engagement.



We performed the following procedures, among others:

- Inquiries and detailed walkthroughs with relevant stakeholders for the selected indicators 2022 in the 2022 Sustainability Report (including the GHG statement);
- Interviewing PMI representatives responsible for the internal reporting and data collection;
- Test samples from PMI operations concerning the completeness, accuracy, consistency and classification;
- Inspecting relevant documentation on a sample basis, including PMI policies, management reporting structures and documentation;
- Reviewing and assessing the management reporting processes for Business Transformation Metrics data and consolidation and their related controls.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Conclusion

Based on the work we performed, nothing has come to our attention that causes us to believe that the selected Key Performance Indicators 2022 on the pages 26 and 190 to 191, respectively, (the metrics marked with an asterisk (\*)) in the Business Transformation Metrics Reporting 2022 of Philip Morris International Inc. and subsidiaries for the period from January 1, 2022 to December 31, 2022 are not, in all material respects, prepared in accordance with the Business Transformation Framework and the footnotes on pages 26, 190 to 191 as well as in the Glossary (205 to 209).

Intended users and purpose of the report

This report is prepared for, and only for, the Board of Directors of Philip Morris International Inc., and solely for the purpose of reporting to them on the selected Key Performance Indicators 2022 in Business Transformation Metrics Reporting 2022 and no other purpose. We do not, in giving our conclusion, accept or assume responsibility (legal or otherwise) or accept liability for, or in connection with, any other purpose for which our report including the conclusion may be used, or to any other person to whom our report is shown or into whose hands it may come, and no other persons shall be entitled to rely on our conclusion.

We permit the disclosure of our report, in full only and in combination with the suitable Criteria, to enable the Management to demonstrate that have discharged their governance responsibilities by commissioning an independent assurance report over the selected Key Performance Indicators 2022 in Business Transformation Metrics 2022, without assuming or accepting any responsibility or liability to any third parties on our part. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Management of Philip Morris International Inc. for our work or this report.

PricewaterhouseCoopers SA

Chad Mueller      Reto E. Huber

Lausanne, Switzerland  
27 March 2023

1) *The maintenance and integrity of Philip Morris International Inc.'s website and its content are the responsibility of the Management; the work carried out by the assurance provider does not involve consideration of the maintenance and integrity of the Philip Morris International Inc.'s website, accordingly, the assurance providers accept no responsibility for any changes that may have occurred to the reported selected Business Transformation Metrics in the Integrated Report 2022 or Business Transformation-Linked Financing Framework since they were initially presented on the website.*

Glossary of terms and acronyms

**3TGs** – Tin, tantalum, tungsten, and gold

**Aerosol** – Gaseous suspension of fine solid particles and/or liquid droplets

**ALP** – Agricultural Labor Practices

**ASI** – Aluminum Stewardship Initiative

**Available for sale** – When PMI products are available for general sale in the market, through direct retail, indirect retail, or e-commerce. We consider PMI smoke-free markets are available for sale when at least one variant of PMI smoke-free products is commercialized in any of our distribution channels.

**AWS** – Alliance for Water Stewardship

**B2B** – Business to business

**B2C** – Business to consumer

**CA** – Cellulose acetate

**CAGR** – Compound annual growth rate

**Caregiver** – A person who has responsibility for the care of a new-born child or newly adopted child including the child's biological parent, the child's adoptive parent, a person having legal parental responsibility for the child such as the child's guardian, a stepparent, or a child's parent through surrogacy

**Primary caregiver** – The caregiver who has the primary responsibility for the care of the new-born or newly adopted child following the child's arrival

**Secondary caregiver** – A caregiver who is not the primary caregiver

**Combustible tobacco product** – The term we use to refer to cigarettes and other tobacco products that are combusted

**Combustion** – The process of burning a substance in oxygen, producing heat and often light

**Company Management** – The term we use to refer to the senior management of the company, as presented on our www.PMI.com site (also referred to as "our leadership team" or "senior management team")

**Contracted employee** – An employee who is under the direct supervision of PMI employees but employed by a temporary employment agency

**Contracted farmers** – Tobacco farmers supplying to PMI and contracted either directly by PMI (through the company's leaf operations) or through third-party leaf suppliers

**Contractor** – A person employed or working on behalf of a third-party company contracted by PMI, who remains under the direct supervision of his or her employer rather than PMI and is often involved in project-specific or outsourcing arrangements

**COPD** – Chronic obstructive pulmonary disease

**CPA** – Crop protective agent

**Downstream supply chain** – Those stages in the supply chain in which materials (mostly in the form of finished products) flow away from the organization to the customers/consumers

**E-liquids** – A liquid solution that is used in/with e-cigarettes. E-liquids contain different levels of nicotine in a propylene glycol and/or vegetable glycerin-based solution with various flavors.

**E-vapor product** – Electrical product that generates an aerosol by heating a nicotine or non-nicotine containing liquid, such as electronic cigarettes (or "e-cigarettes")

**EHS** – Environmental, Health, and Safety

**Employee resource groups, or ERGs** – Employee-led groups that focus on particular dimensions of diversity and are intended to provide a platform for building a sense of belonging and sparking conversations

**EPR** – Extended Producer Responsibility

**ERM** – Enterprise Risk Management

**ESG** – Environmental, Social, and Governance

**FAO** – Food and Agriculture Organization of the United Nations

**FCTC** – WHO Framework Convention on Tobacco Control

**FDA** – U.S. Food and Drug Administration

**FSC** – Forest Stewardship Council

**GAP** – Good Agricultural Practices

**Gender pay gap** – Calculated as the percentage difference between the sum of annual base salary, bonus, and stock options

**General sale** – Commercial initiative by which PMI provides PMI products to adult consumers in exchange for monetary value or other considerations, including activities such as sale-for-purchase, renting, leasing, lending, and loaning. Adult consumers must have access to PMI products without any purchase restrictions imposed by PMI that go beyond local regulations (e.g., club membership, registration, etc.).

**GHG** – Greenhouse gas

**GPP** – Global Privacy Program





**Heated tobacco units, or HTUs** – The term we use to refer to heated tobacco consumables, which include the company’s *BLENDS*, *HEETS*, *HEETS Creations*, *HEETS Dimensions*, *HEETS Marlboro* and *HEETS FROM MARLBORO* (defined collectively as *HEETS*), *Marlboro Dimensions*, *Marlboro HeatSticks*, *Parliament HeatSticks*, *SENTIA* and *TEREA*, as well as the KT&G-licensed brands, *Fiit* and *Miix* (outside of South Korea).

**HPHCs** – The harmful or potentially harmful constituents which have been identified as likely causes of tobacco-related diseases by various public health institutions

**Human rights impact assessment, or HRIA** – Assessments to identify human rights risks and adverse impacts

**Human rights salient risks** – Those human rights that stand out because they are at risk of the most severe negative impact through the company’s activities or business relationships (source: UN Guiding Principles)

**Illicit trade** – Domestic non-tax paid products

**ILO** – International Labour Organization

**In-market sales, or IMS** – Sales to the retail channel, depending on the market and distribution model

**Insetting** – The act of generating a carbon credit within the corporate’s sphere of influence and retiring the unit on behalf of 1 ton of carbon that has been emitted by the corporate (source: International Carbon Reduction and Offset Alliance)

**IP5** – The five largest intellectual property offices in the world

**IPM** – Integrated Pest Management

**IPS** – Integrated Production System

**IQOS heat-not-burn devices** – Precisely controlled heating devices into which specially designed and proprietary tobacco units are inserted and heated to generate an aerosol

**KPIs** – Key performance indicators

**LCA** – Life-cycle analysis

**Low- and middle-income markets, or LMIMs** – Markets comprised of countries classified by the World Bank as low- and middle-income economies based on Gross National Income (GNI) per capita; or where no World Bank classification exists, those with GNI per capita below the World Bank LMIC threshold

**LTIR** – Lost Time Incident Rate

**Managerial roles** – The terms we use to refer to employees in different salary grades, regardless of their job title or function:

- **Junior roles** – Employees in salary grade 9 or below
- **Managers** – Employees in salary grade 10 to 13
- **Management positions** – Employees in salary grade 10 and above
- **Senior roles** – Employees in salary grade 14 and above
- **Senior leaders** – Employees in senior leadership roles including all employees in salary grade 17 and above

**Market share for HTUs** – The in-market sales volume for HTUs as a percentage of the total estimated industry sales volume for cigarettes and HTUs. For Japan, total estimated industry sales volume also includes cigarillos.

**M RTP** – Modified Risk Tobacco Product

**MVR** – Monitoring, Verification, and Reporting Framework for Sustainable Leaf Curing Fuels

**NCGC** – Nominating and Corporate Governance Committee of PMI’s Board of Directors

**Net debt** – Defined as total debt, less cash and cash equivalents

**Net revenues related to combustible tobacco products** – The operating revenues generated from the sale of these products, including shipping and handling charges billed to customers, net of sales and promotion incentives, and excise taxes. These net revenue amounts consist of the sale of our cigarettes and other tobacco products that are combusted. Other tobacco products primarily include roll-your-own and make-your-own cigarettes, pipe tobacco, cigars and cigarillos and do not include smoke-free products.

**Net revenues related to smoke-free products** – Represent operating revenues generated from the sale of these products, including shipping and handling charges billed to customers, net of sales and promotion incentives, and excise taxes, if applicable. These net revenue amounts consist of the sale of all of our products that are not combustible tobacco products, such as heat-not-burn, e-vapor, and oral nicotine, also including wellness and healthcare products, as well as consumer accessories such as lighters and matches.

**Net revenues related to wellness and healthcare products** – Represent operating revenues generated from the sale of products primarily associated with inhaled therapeutics, and oral and intra-oral delivery systems that are included in the operating results of PMI’s new Wellness and Healthcare business, Vectura Fertin Pharma.

**NGOs** – Non-governmental organizations

**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

**NRTs** – Nicotine replacement therapies

**OECD** – Organisation for Economic Cooperation and Development

**Offsetting** – The act of purchasing a carbon credit generated outside the corporate’s sphere of influence and retiring the unit on behalf of 1 ton of carbon that has been emitted by the corporate (source: International Carbon Reduction and Offset Alliance)

**OHS** – Occupational health and safety

**Other Tobacco Product**– Primarily roll-your-own and make-your-own cigarettes, pipe tobacco, cigars and cigarillos, and does not include smoke-free products

**PCI** – Portfolio of Climate Investments

**PMI Segments**

As of December 31, 2022, we managed our business in six geographical segments, a Swedish Match segment and a Wellness and Healthcare segment:

- The European Union Region (“EU”) is headquartered in Lausanne, Switzerland, and covers all the European Union countries and also Switzerland, Norway, Iceland and the United Kingdom
- The Eastern Europe Region (“EE”) is also headquartered in Lausanne and includes Southeast Europe, Central Asia, Ukraine, Israel and Russia
- The Middle East & Africa Region (“ME&A”) is also headquartered in Lausanne and covers the African continent, the MiddleEast, Turkey and our international duty free business
- The South & Southeast Asia Region (“S&SA”) is headquartered in Hong Kong and includes Indonesia, the Philippines and other markets in this region
- The East Asia & Australia Region (“EA&A”) is also headquartered in Hong Kong and includes Australia, Japan, South Korea, the People’s Republic of China (“China”) and other markets in this region, as well as Malaysia and Singapore
- The Americas Region (“AMCS”) is headquartered in Stamford, Connecticut and covers the South American continent, Central America, Mexico, the Caribbean and Canada
- Swedish Match, which reflects our fourth quarter 2022 acquisition of the company
- Wellness and Healthcare (“W&H”), which includes the operating results of our new Wellness and Healthcare business, Vectura Fertin Pharma. In the third quarter of 2021, we acquired Fertin Pharma A/S, Vectura Group plc. (also known as Vectura Group Ltd.) and OtiTopic, Inc. On March 31, 2022, we launched a new Wellness and Healthcare business consolidating these entities, Vectura Fertin Pharma. The operating results of this new business are reported in the Wellness and Healthcare segment

To further support the growth of our smoke-free business, reinforce consumer centricity, and increase the speed of innovation and deployment, in January 2023, we rearranged our operations in four geographical segments, down from the current six and as follows:

- Europe Region is headquartered in Lausanne, Switzerland, and covers all the European Union countries, Switzerland, the United Kingdom, and also Ukraine, Moldova and Southeast Europe

- South and Southeast Asia, Commonwealth of Independent States, Middle East and Africa Region is headquartered in Dubai, United Arab Emirates. It covers South and Southeast Asia, the African continent, the Middle East, Turkey, as well as Israel, Central Asia, Caucasus and Russia
- East Asia, Australia, and PMI Duty Free Region is headquartered in Hong Kong and includes the consolidation of our international duty free business with East Asia & Australia
- Americas Region is headquartered in Stamford, Connecticut and covers the United States, Canada and Latin America
- The operations of Swedish Match and our Wellness and Healthcare segment remained unchanged

We will report our financial results based on the new geographical segments as of the first quarter of 2023.

**PMI heat-not-burn products (also referred to as PMI heated tobacco products)** – Include licensed KT&G heat-not-burn products

**PMTA** – Premarket Tobacco Application

**QMS** – Quality management system

**R&D** – Research and development

**RBA** – Responsible Business Alliance

**Reduced-risk products or RRP**s –The term we use 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 continuing smoking. PMI has a range of RRP

s in various stages of development, scientific assessment and commercialization. PMI’s RRPs are smoke-free products that contain and/or generate far lower quantities of harmful and potentially harmful constituents than found in cigarette smoke.

**Refreshed devices** – Smoke-free devices resulting from the care and maintenance refresh services (which may include unpacking, diagnostics, cleaning, firmware update, cosmetic parts replacement, battery charging, and repacking of devices) that meet the agreed quality requirements to allow for their reuse as pre-owned devices

**Repaired devices** – Smoke-free devices resulting from the care and maintenance repair services (which may include unpacking, diagnostics, testing, cleaning, battery charging, firmware update, cosmetic part or battery replacement, component harvesting, and repacking of devices) that meet the agreed quality requirements to allow for their reuse as pre-owned devices

**RMI** – Responsible Minerals Initiative

**RSP** – Responsible Sourcing Principles

**SBT** – Science-based target

**SBTI** – Science Based Targets initiative

**SDGs** – Sustainable Development Goals



**Smoke** – A visible suspension of solid particles, liquid droplets, and gases in air, emitted when a material burns

**Smoke-free products or SFPs** – The term we primarily use to refer to all of its products that are not combustible tobacco products, such as heat-not-burn, e-vapor, and oral nicotine. In addition, SFPs include wellness and healthcare products, as well as consumer accessories such as lighters and matches

**Smoke-free product consumables** – The term PMI uses to refer to heated tobacco units used with heat-not-burn products, e-vapor disposables, cartridges containing e-liquids that are used for e-vapor products, and oral nicotine products including snus and nicotine pouches

**TCFD** – Task Force on Climate-related Financial Disclosures

**TGA** – Tobacco-growing area

**Tier 1 suppliers** – Suppliers that directly supply goods, materials or services to PMI

**Tier 2 suppliers** – Suppliers that provide their products and services to the tier 1 suppliers

**TNFD** – Taskforce on Nature-related Financial Disclosures

**Tons** – “Tons” equates to “metric tons” throughout this report

**Total IQOS users** – The estimated number of legal age (minimum 18 years) users of PMI heat-not-burn products, for which PMI HTUs represented at least a portion of their daily tobacco consumption over the past seven days

The estimated number of adults who have “switched to *IQOS* and stopped smoking” reflects:

- In markets where there are no heat-not-burn products other than PMI heat-not-burn products, daily individual consumption of PMI HTUs represents the totality of their daily tobacco consumption in the past seven days
- In markets where PMI heat-not-burn products are among other heat-not-burn products, daily individual consumption of HTUs represents the totality of their daily tobacco consumption in the past seven days, of which at least 70% is PMI HTUs

Note: The above *IQOS* user metrics reflect PMI estimates, which are based on consumer claims and sample-based statistical assessments with an average margin of error of +/-5% at a 95% Confidence Interval in key volume markets. The accuracy and reliability of *IQOS* user metrics may vary based on individual market maturity and availability of information.

As of December 2020, PMI heat-not-burn products and HTUs include licensed KT&G heat-not-burn products and HTUs, respectively.

**TRIR** – Total Recordable Incident Rate

**UNGPs** – United Nations Guiding Principles on Business and Human Rights

**Upstream supply chain** – Those operations in which the materials flow into the organization (i.e., it mainly refers to procurement activities and inbound logistics)

**VAP** – Validated Assessment Program of the Responsible Business Alliance (RBA) is a leading standard for on-site compliance verification and effective, shareable audits

**Voluntary standards and frameworks**

- Global Reporting Initiative (GRI)
- International Integrated Reporting Council (IIRC)
- Sustainability Accounting Standards Board (SASB)
- Task Force on Climate-related Financial Disclosures (TCFD)
- UN Global Compact (UNGC)
- UN Sustainable Development Goals (SDGs)

**WASH** – Water access, sanitation, and hygiene

**WBCSD** – World Business Council for Sustainable Development

**Wellness and Healthcare products** – The term we use to primarily refer to products associated with inhaled therapeutics and oral and intra-oral delivery systems that are included in the operating results of PMI's new Wellness and Healthcare business, Vectura Fertin Pharma

**WHO** – World Health Organization

**YAP** – Youth access prevention

**ZDM** – Zero Deforestation Manifesto

**Key definitions related to our work to improve tobacco farmer livelihoods**

A **living income** and **living wage** are both about achieving a decent standard of living. A living income is the net annual income required for a household to afford a decent standard of living for all its members and applies to, for example, self-employed farmers. A living wage is applied in the context of hired workers (e.g., in factories or on farms) (source: The Global Living Wage Coalition).

A **minimum legal wage**, as defined in PMI's ALP Code, is a wage for all workers (including temporary, piece-rate, seasonal, and migrant) that meets, at a minimum, the national legal standard or formalized agricultural benchmark standard. An agricultural benchmark may be formalized where a minimum legal wage is not available or applicable to a specific context.

**Child labor**, as defined by the ILO, is work that deprives children of their childhood, their potential, and their dignity, and that is harmful to physical and mental development. Under PMI's ALP Code, the minimum age for admission to work is not less than the age at which compulsory schooling is completed and, in any case, is not less than 15 years or the minimum age accepted by the country's laws, whichever age limit affords greater protection. No person below age 18 should be involved in any type of hazardous work. In the case of family farms, a child may only help on the farm provided that the work is non-hazardous, and the child is at least 13 years old or above the minimum age for such work as defined by the country's laws, whichever affords greater protection.

**Hazardous work** means work that, by its nature or by virtue of when or where it is carried out, is likely to harm the health, safety, or morals of children or others. The following can, for example, be hazardous, particularly without the proper personal protective equipment (PPE): applying crop protection agents (CPA); stalk cutting; stringing; carrying heavy loads; working with sharp tools; working in extreme temperatures; and working after dark.

**Green tobacco sickness, or GTS**, is a type of nicotine poisoning caused by the absorption of nicotine from the surface of wet, fresh, green tobacco leaves through the skin. The characteristic symptoms of GTS include nausea, vomiting, weakness, dizziness, stomach cramps, difficulty breathing, excessive sweating, headache, and fluctuations in blood pressure and heart rate. They can last from 12 to 48 hours.<sup>1</sup>

**Personal protective equipment, or PPE**, in tobacco farming refers to any clothes, materials, or devices that provide protection from exposure to CPA and GTS during specific activities throughout the crop cycle.<sup>2</sup>

Living income benchmark studies are studies conducted in specific regions or areas to estimate the net annual income required for a household to afford a decent standard of living for all members of that household.

**Living Income Reference Values** represent a living income for typical families in rural (or urban) areas of low income and middle-income countries.<sup>3</sup> Reference Values provide a credible estimate of living wage or income at a country level, for rural and urban areas. They offer an insightful reference beyond the currently available indicators for many countries, which are mostly limited to poverty lines and minimum wages.

**Farmer income studies** are conducted, through third-party service providers, to assess all legal income sources of contracted farmers within PMI's tobacco supply chain, including tobacco, complementary crops, and off-farm income.

**Sustainable Tobacco Supply Chain framework or STSC** – PMI's new approach focused on the full life cycle of tobacco production and targets actions toward the tobacco we purchase and use in our products.

1 Schep LJ, Slaughter RJ, Beasley DM (September–October 2009). "Nicotinic plant poisoning." *Clinical Toxicology*.  
2 Adapted from the FAO/WHO (2014) International Code of Conduct on Pesticide Management.  
3 Reference values are built on data and knowledge gained from 40 complete Anker methodology benchmark studies. Since they are based on a statistical analysis, they have a margin of error for typical rural (or urban) areas of a country, which is generally around +/- 10% using a 95% confidence interval. Sources: Living Income Reference Values | livingincome (living-income.com) and Anker Living Wage and Living Income Reference Values | Global Living Wage Coalition.





# Forward-looking and cautionary statements

This report and related materials contain projections of future results and goals and other forward-looking statements, including statements regarding business plans and strategies. Achievement of future results is subject to risks, uncertainties and inaccurate assumptions. In the event that risks or uncertainties materialize, or underlying assumptions prove inaccurate, actual results could vary materially from those contained in such forward-looking statements. Pursuant to the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995, PMI is identifying important factors that, individually or in the aggregate, could cause actual results and outcomes to differ materially from those contained in any forward-looking statements made by PMI.

PMI’s business risks include: excise tax increases and discriminatory tax structures; increasing marketing and regulatory restrictions that could reduce our competitiveness, eliminate our ability to communicate with adult consumers, or ban certain of our products in certain markets or countries; health concerns relating to the use of tobacco and other nicotine-containing products and exposure to environmental tobacco smoke; litigation related to tobacco use and intellectual property; intense competition; the effects of global and individual country economic, regulatory and political developments, natural disasters and conflicts; the impact and consequences of Russia’s invasion of Ukraine; changes in adult smoker behavior; the impact of COVID-19 on PMI’s business; lost revenues as a result of counterfeiting, contraband and cross-border purchases; governmental investigations; unfavorable currency exchange rates and currency devaluations, and limitations on the ability to repatriate funds; adverse changes in applicable corporate tax laws; adverse changes in the cost, availability, and quality of tobacco and other agricultural products and raw materials, as well as components and materials for our electronic devices; and the integrity of its information systems and effectiveness of its data privacy policies.

PMI’s future profitability may also be adversely affected should it be unsuccessful in its attempts to produce and commercialize reduced-risk products or if regulation or taxation do not differentiate between such products and cigarettes; if it is unable to successfully introduce new products, promote brand equity, enter new markets or improve its margins through increased prices and productivity gains; if it is unable to expand its brand portfolio internally or through acquisitions and the development of strategic business relationships; if it is unable to attract and retain the best global talent, including women or diverse candidates; or if it is unable to successfully integrate and realize the expected benefits from recent transactions and acquisitions. Future results are also subject to the lower predictability of our reduced-risk product category’s performance.

PMI is further subject to other risks detailed from time to time in its publicly filed documents, including PMI’s Annual Report on Form 10-K for the fourth quarter and year ended December 31, 2022. PMI cautions that the foregoing list of important factors is not a complete discussion of all potential risks and uncertainties. PMI does not undertake to update any forward-looking statement that it may make from time to time, except in the normal course of its public disclosure obligations.

# Notes

In this report, “PMI,” “we,” “us,” and “our” refer to Philip Morris International Inc. and its subsidiaries.

In this report and in related communications, the term “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.

This report contains references and links to websites operated by third parties. These references are provided as a convenience to you and as an additional avenue of access to the information contained in those sources; they should not be viewed as an endorsement by us of the content of these references and linked sites or opinions of their authors.

Unless otherwise stated, all references to IQOS are to our IQOS heat-not-burn devices and consumables.

Trademarks and service marks in this report are the registered property of, or licensed by, the subsidiaries of Philip Morris International Inc., and are italicized or shown in their logo form.

Estimates for total industry volume and market share in certain geographies reflect limitations on the availability and accuracy of industry data during pandemic-related restrictions.

Aspirational targets and goals do not constitute financial projections, and achievement of future results is subject to risks, uncertainties, and inaccurate assumptions, as outlined in our forward-looking and cautionary statements on page 210 of this report.

This integrated report should be read in conjunction with PMI’s [ESG KPI Protocol 2022](#).

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# War in Ukraine

Since the onset of the war in Ukraine, PMI’s main priority has been the safety and security of its more than 1,300 employees and their families in the country. The company has helped to evacuate more than 1,000 people from Ukraine and relocate over 2,700 others from conflict zones to locations in the country away from the heaviest fighting; provided critical aid to employees who cannot leave or who decide to remain in Ukraine; and provided those who have left the country with a range of support in neighboring countries. The company is continuing to pay salaries to all its Ukrainian employees and is also providing substantial in-kind support to them and their families. In addition, PMI has contributed approximately USD 10 million in funds and donated essential items across the country.

On February 25, 2022, in order to preserve the safety of its employees, PMI announced the temporary suspension of its commercial and manufacturing operations in Ukraine, including at its factory, in Kharkiv. The company subsequently resumed some retail activities where safety allowed, in order to provide product availability and service to adult consumers, and began to supply the market from production centers outside Ukraine, as well as through a contract manufacturing arrangement. Production at the company’s factory in Kharkiv remains suspended.

On March 24, 2022, PMI announced the concrete steps it had taken to suspend planned investments and scale down its manufacturing operations in Russia.

PMI is continuously assessing the evolving situation in Russia, including: recent regulatory constraints in the market that entail very complex terms and conditions that must be met for any divestment transaction to be granted approval by the authorities; and restrictions resulting from international regulations.



#### **Headquarters**

Philip Morris International Inc.  
677 Washington Blvd.  
Stamford, Connecticut  
USA

#### **Operations Center**

Philip Morris Products S.A.  
Avenue de Rhodanie 50  
1007 Lausanne  
Switzerland

[www.pmi.com](http://www.pmi.com)

#### **Design and production**

Friend Studio  
[www.friendstudio.com](http://www.friendstudio.com)

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