DELIVERING A SMOKE-FREE FUTURE

Progress toward a world without cigarettes

INTEGRATED REPORT 2019

PHILIP MORRIS INTERNATIONAL

PMI's response to COVID-19

In the last decade, the sustainable business agenda has advanced in many ways but one of the most remarkable shifts has been the growing focus on solutions — not only understanding what issues matter and why but also how the private sector can accelerate positive change and help communities in need.

Megatrends are significant developments that shape our lives. In contrast to normal trends, their effects are stronger, their duration longer, and their scale larger. They have had and continue to have important impacts on our lives. We refer later in this report to the ongoing megatrends that pose undoubtedly serious challenges to mankind and call for the urgent need for change – the need for sustainable development.

Although COVID-19 caught the world off-guard, global pandemics were, are, and will continue to be a looming threat and megatrend. Sustainability will redefine itself in the COVID-19 era, as times of extraordinary change require urgent adaptation. The pandemic has forced us to adapt some of our projects, but has also pressed us to make sure sustainability is truly connected to delivering value to all our stakeholders.

PMI has been actively working against this pandemic since its outbreak, with ongoing and planned initiatives in more than 60 countries where our employees live and work. These initiatives involve monetary and in-kind donations, as well as volunteer work by teams to support local efforts to combat the virus and help those most affected by it.

The company's activities include providing protective equipment to trade partners, support to care communities, procurement support to purchase items essential in the fight against COVID-19, and financial support to institutions and nongovernmental organizations (NGOs) working to end this crisis. As of the end of May 2020, PMI has provided more than USD 31 million in financial and in-kind donations, very often in response to requests for assistance from government authorities. In addition, our employees in many countries are volunteering to help the elderly, as well as the most vulnerable.

Repurposing our value chain to better respond to the crisis is a tangible example of PMI's transformation.

We are aware of significant supply disruptions for alcohol-based hand sanitizers, due to an increased demand during the COVID-19 pandemic. We temporarily repurposed parts of our factories around the world to produce large quantities of hydroalcoholic gels (hand sanitizer), distributed primarily to local hospitals and vulnerable communities, to help mitigate the spread of coronavirus.

Scientists from the Genomics and Transcriptomics laboratory at PMI's R&D Cube in Neuchâtel helped local hospitals to analyze inactivated nasopharyngeal swab samples from suspected COVID-19 patients using the World Health Organization's (WHO's) recommended RT-qPCR protocol. The work was performed respecting the safety measures under the Biosafety Level 2 and WHO Good Clinical Laboratory Practices. The anonymized raw data was then transmitted to the hospitals for interpretation. The batches of samples will continue to be analyzed at PMI's R&D Cube until hospitals are able to cope with current high demand for COVID-19 testing.

PMI's commitment to its employees is an integral part of the company's broader response during the COVID-19 crisis across the world. The company established a set of guiding principles that outline our strong commitment to our employees' job security, safety, and peace of mind throughout the global pandemic period, by guaranteeing employment and financial stability, as well as granting special recognition awards.

> "PMI will continue to contribute to the global response to this pandemic in every way we can. First and foremost, we will continue to support our employees and their families, and protect their safety and health. Nothing matters more.
>
> **André Calantzopoulos**
> Chief Executive Officer, PMI

About this report

In line with our commitment to transparency and disclosure, we are pleased to share our first integrated report, our fifth Sustainability Disclosure, which follows our last sustainability report published in May 2019. Its contents are shaped by a formal materiality assessment, refreshed in 2019, which takes into account stakeholder perspectives as well as our impacts on sustainable development.

Our sustainability topics are structured around four strategic pillars of action and two tiers, which form the basis of our reporting (see page 25).

For each tier 1 topic, this report provides information on context, relevance, topic connectivity, management approach, targets, and performance. Additional detail is provided in case studies to allow closer analysis of how we integrate sustainability at country level. We report on our tier 2 topics in an online supplement to this report on PMI.com.

Unless otherwise indicated, the scope of the data in this report embraces our operations worldwide for the full calendar year 2019 or reflect status at December 31, 2019. Where not specified, data come from PMI estimates. The external verification statement of our environmental and health and safety data can be found on PMI.com.

This report was reviewed by PMI's Board of Directors and by members of PMI's Company Management, including our Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, and President, External Affairs and General Counsel.

This report has been prepared in accordance with the GRI Standards: Core option. Our GRI Index can be found on our corporate website. In addition, we sought to align our reporting with the International Integrated Reporting Framework and to indicate our contribution to the UN Sustainable Development Goals. We also align our reporting with the principles and standards of the UN Global Compact and take into account those of the Sustainability Accounting Standards Board. Furthermore, our reporting addresses some aspects of the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), while our reporting to CDP covers some of the remainder. We will continue to develop our climate change reporting to reflect the TCFD's guidance.

We make available on our corporate website a highlights summary of this report. Previous reports are available in the Sustainability Resources area of the site.

We report on sustainability annually and always welcome your feedback. For comments or questions, please contact Esther Bares or Marie Corger at **sustainability@pmi.com**

Cover image: Employees sampling tobacco leaves in PMI's Plant Research facility where the team explores avenues for selecting crops for more environmental resilience and reduced footprint

An *IQOS* store in Athens, Greece

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About PMI

Philip Morris International (PMI) is leading a transformation in the tobacco industry to create a smoke-free future and ultimately replace cigarettes with smoke-free products to the benefit of adults who would otherwise continue to smoke, society, the company, and its shareholders. PMI is a leading international tobacco company engaged in the manufacture and sale of cigarettes, as well as smoke-free products and associated electronic devices and accessories, and other nicotine-containing products in markets outside the United States. In addition, PMI ships a version of its *IQOS* Platform 1 device and its consumables authorized by the U.S. Food and Drug Administration to Altria Group, Inc. for sale in the United States under license. PMI is building a future on a new category of smoke-free products that, while not risk-free, are a much better choice than continuing to smoke. Through multidisciplinary capabilities in product development, state-of-the-art facilities, and scientific substantiation, PMI aims to ensure that its smoke-free products meet adult consumer preferences and rigorous regulatory requirements. PMI's smoke-free *IQOS* product portfolio includes heat-not-burn and nicotine-containing vapor products. As of December 31, 2019, PMI estimates that approximately 9.7 million adult smokers around the world have already stopped smoking and switched to PMI's heat-not-burn product, available for sale in 52 markets in key cities or nationwide under the *IQOS* brand.

For more information, please visit
www.pmi.com ▸
www.pmiscience.com ▸

Key milestones

1847
Mr. Philip Morris opens a shop on London's Bond Street, selling tobacco and ready-made cigarettes

1902
Philip Morris & Co., Ltd. is incorporated in New York

1908
Marlboro, which will become the company's most famous brand, is established and registered as a trademark

1919
A new company is incorporated in Virginia under the name Philip Morris & Co. Ltd., Inc. and starts to manufacture cigarettes in its factory in Richmond by the end of the next decade

1963
The entity purchases Fabriques de Tabac Réunies in Neuchâtel, Switzerland, a family business that already began to manufacture *Marlboro* cigarettes under license in 1957

1972
Marlboro becomes the world's number-one-selling cigarette

1985
Philip Morris Companies Inc. becomes a holding company and acquires General Foods. Other acquisitions in the food sector follow over the next decade, including Kraft Foods and Jacobs Suchard

1987
Philip Morris International Inc. (PMI) is incorporated as an operating company of Philip Morris Companies Inc.

2001
PMI's Operations Center is transferred from New York to Lausanne, Switzerland

2003
Philip Morris Companies Inc. is renamed Altria Group, Inc., and remains the parent company of Kraft Foods Inc., Philip Morris International, Philip Morris USA and Philip Morris Capital Corporation

2008
PMI is spun off from Altria Group, Inc.

2009
PMI unveils its new research and development facility in Neuchâtel, Switzerland

2014
PMI pilots its heat-not-burn product, *IQOS*, in Italy and Japan

2016
PMI announces its ambition to deliver a smoke-free future, shifting its resources toward the development and responsible marketing of scientifically substantiated smoke-free products

2020
PMI's Board of Directors adopts PMI's Statement of Purpose, reaffirming the company's commitment to deliver a smoke-free future

Integrated overview of PMI's performance

The ESG metrics on these pages are explained in the relevant sections of this report. Please also refer to the glossary on page 188 ▸

This report covers the 2019 calendar year, but the aspirations, goals, and forward-looking plans it contains may be impacted by COVID-19 and its effects on our business, which are currently unknown. 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 189 ▸

Financials (in million USD)[1]

	2016	2017	2018	2019
Revenues including excise taxes	74,953	78,098	79,823	**77,921**
Excise taxes on products[2]	48,268	49,350	50,198	**48,116**
Net revenues	26,685	28,748	29,625	**29,805**
Operating income	10,903	11,581	11,377	**10,531**
Net earnings attributable to PMI	6,967	6,035	7,911	**7,185**
Total assets	36,851	42,968	39,801	**42,875**
Total liabilities	47,751	53,198	50,540	**52,474**
Capital expenditures	1,172	1,548	1,436	**852**
R&D expenditure	429	453	383	**465**

Business transformation[3]

	2016	2017	2018	2019	2025 aspirations[4]
Net revenues (smoke-free/total)[5]	2.7%	12.7%	13.8%	**18.7%**	38–42%
R&D expenditure (smoke-free/total)	72%	74%	92%	**98%**	
Commercial expenditure (smoke-free/total)	15%	39%	60%	**71%**	
Smoke-free product shipment ratio (smoke-free/total)[6]	0.9%	4.4%	5.1%	**7.6%**	>30%
Smoke-free product shipment volume (in billion units)	7.7	36	42	**60**	>250
Combustible product shipment volume (in billion units)	845	791	767	**732**	<550
Total number of users of PMI smoke-free products (in millions)[7]	2.1	6.9	9.6	**13.6**	
Estimated users who have stopped smoking and switched to PMI smoke-free products – non-OECD (in millions)[7]	0.0	0.2	1.1	**3.0**	>20
Estimated users who have stopped smoking and switched to our smoke-free products – worldwide (in millions)[7]	1.5	4.7	6.6	**9.7**	>40

Environment

	2010 baseline	2017	2018	2019	Goals
CO_2e scope 1+2 ('000 metric tons)	914	630	584	**556**	Carbon neutrality by 2030
CO_2e scope 1+2+3 ('000 metric tons)[8]	8,062	5,536	5,298	**4,682**	Carbon neutrality by 2050
CO_2e scope 1+2+3 intensity reduction versus 2010 baseline	n/a	22%	25%	**32%**	30% by 2020
Proportion of *IQOS* device sales volume covered by CIRCLE take-back program[9]	n/a	n/a	66%	**39%**	100% by 2025
Recycling rate of *IQOS* devices at CIRCLE hubs (weighted average)[10]	n/a	n/a	45%	**74%**	80% by 2025
Number of PMI affiliates with anti-littering strategy[11]	n/a	n/a	n/a	**31**	

1 The information is a summary and is qualified in its entirety by reference to the full texts of PMI's Annual Reports for the years ended 2015 through 2019, available on PMI.com.

2 This indicator refers to the amount paid by PMI entities, and excludes excise tax paid in several markets where third-party operators collected taxes on PMI products. The total amount of excise tax paid by consumers on PMI products amounted to USD 72.1 billion in 2019.

3 Smoke-free products: include heated tobacco units and e-cigarettes. Total products: include smoke-free products, cigarettes, and other combustible products.

4 Aspirations: Assuming constant PMI market share.

5 Excluding excise taxes. For future periods, at today's pricing and excise tax assumptions.

6 The smoke-free product shipment ratio is compiled based on millions of units.

7 See glossary on page 188.

8 In 2019, we reviewed our carbon footprint model (see page 149). We have restated our 2017 and 2018 data according to the new model.

9 We launched CIRCLE in 2018, and the number of markets covered was expanded in 2019. The decrease in coverage of sales volume in 2019 versus 2018 is explained by *IQOS* growth in markets not yet covered by the program.

10 Depending on device type and processing facility.

11 We introduced this indicator in 2019.

Social

	2017	2018	2019	Goals
Number of PMI employees	80,591	77,435	**73,542**	
Number of PMI full-time equivalent positions	n/a	77,039	**71,795**	
Overall employee turnover[12]	9.37%	11.51%	**14.10%**	
Voluntary employee turnover	3.96%	4.12%	**4.53%**	
Proportion of management positions held by women[13]	34.4%	35.1%	**36.1%**	40% by 2022
Proportion of women on PMI's Company Management	10%	9%	**8%**	
Proportion of women on PMI's Board of Directors	15%	25%	**25%**	
Proportion of tobacco purchased for which labor practices have been systematically monitored[14]	77%	88%	**92%**	
Proportion of farms monitored found with child labor incidents[15]	1.2%	1.3%	**0.8%**	
Number of prompt actions recorded by field technicians related to child labor incidents (proportion resolved)	4,417 (67%)	4,587 (89%)	**2,712 (88%)**	
Total recordable incidents rate (TRIR) per 200,000 hours worked – PMI and contracted employees	0.22	0.22	**0.20**	<0.30
Lost time incident (LTI) rate per 200,000 hours worked – PMI and contracted employees	0.10	0.13	**0.12**	<0.10

Governance

	2017	2018	2019	Goals
Number of training sessions completed by PMI employees and third parties on PMI's Marketing Code	37,903	23,438	**14,500**	
Number of violations of PMI's Marketing Code and Good Conversion Practices that resulted in substantiated cases of misconduct[16]	2	8	**42**	
Cumulative number of external human rights impact assessments completed in high-risk countries	0	1	**2**	10 by 2025
Critical suppliers, as a proportion of total procurement spend[17]	n/a	n/a	**35%**	
Critical suppliers' procurement spend assessed in PMI's supplier due diligence platform (STEP)[18]	n/a	n/a	**84%**	90% by 2020
Proportion of tobacco purchased through direct contracts by PMI and PMI's third-party suppliers (by volume)	90%	93%	**96%**	>90% (ongoing)

12 Our transformation journey as we mobilized to deliver our vision of a smoke-free future resulted in higher turnover in 2019. This, combined with our business strategy to close our skills gap, a number of planned restructures, and closure of some factories, contributed to the increase observed.

13 Management positions include all employees above a defined grade; it encompasses managers, directors, and senior management. We have expanded the scope of our gender diversity data to cover approximately 95 percent of PMI's total workforce and restated previous years' data accordingly.

14 The farm-level data related to our tobacco supply chain reported in this report cover 22 countries from which we source.

15 Our monitoring and reporting of child labor refer to situations of hazardous work performed by children below 18 years old.

16 The increase can be attributed to a new global training toolkit that has reinforced overall awareness, leading to higher speaking-up rates; also, there has been a constant increase in the number of *IQOS* coaches and consequently higher risk of incidences to occur (read more on page 76).

17 Suppliers' criticality is evaluated taking into account spend segmentation and nature of component, as well as supply flexibility as relevant. 2019 figure includes tier 1 suppliers of direct materials and electronics managed by PMI central procurement team. Procurement spend excludes tobacco leaf sourcing.

18 We started to formally onboard critical suppliers into our supplier due diligence platform (STEP) in July 2019.

Letter from the Chief Executive Officer

To all our stakeholders,

PMI manufactures nicotine containing products that are made of, or derived from, tobacco. Altough the vast majority of our sales is still in combustible products, mainly cigarettes, we are seeking to completely replace these by non-combustible, smoke-free products, which are a better alternative for the health of those consumers who would otherwise continue smoking.

Since we announced our vision to deliver a smoke-free future in 2016, our annual combustible product shipment volume declined by 114 billion units. Almost half of this decline can be attributed to our own efforts, complementing government measures to prevent smoking initiation and encourage cessation, as we actively and purposefully switched many smokers who would otherwise have continued smoking cigarettes to our smoke-free alternatives. The increase in our smoke-free product shipment volume by 52 billion units over the same time period is a testament to this massive business transformation.

The business case for our strategy is clear: We were able to gain overall market share in the nicotine-containing products market and deliver strong financial results in 2019. We generated an adjusted operating income of USD 11.8 billion, an increase of 11.2 percent on a currency-neutral like-for-like basis versus the prior year. This was driven by growth in smoke-free product users and sales volume, price increases of combustible products, coupled with the favorable impact of our cost-saving initiatives and increasing leverage of existing smoke-free product infrastructure.

We also improved our performance in a number of environmental, social, and governance (ESG) related areas, while strengthening our sustainability strategy, and setting new and ambitious targets for our most material sustainability topics. For example, PMI continues to demonstrate leadership in addressing climate change. We ranked on CDP's A Lists for climate and water security, achieved A- for forest disclosure, and featured on CDP's Supplier Engagement Leaderboard once more.

We have set the target to become carbon-neutral as a company by 2030, and by 2050 including the whole value chain. We also aim to reduce our absolute emissions consistent with a 1.5-degree global warming scenario.

Another ambitious and new environmental target relates to plastic and post-consumer waste, specifically the litter caused by cigarette butts. We have developed and are implementing comprehensive plans to achieve a 50 percent reduction of the plastic litter from our products by 2025.

Regarding social impact, I would like to highlight the importance we place on guarding against youth initiation and youth use of nicotine-containing products. All of our markets have been tasked to further enforce and modernize youth access prevention programs. Moreover, it is our priority to ensure that by 2023, at the latest, our full portfolio of electronic smoke-free devices will be equipped with age-verification technology.

I recognize that we still need to make meaningful progress with regard to diversity, equality, and inclusion. We are proud to be the first multinational company to achieve the Global EQUAL-SALARY certification in March 2019. More recently, I appointed a Chief Diversity Officer, reporting directly to me, to push harder toward creating a more inclusive and diverse workplace.

These are all important developments, but it is equally clear to all of us at PMI that the biggest positive impact our company can have on society is to replace cigarettes with less harmful alternatives. This is at the very core of our corporate strategy and sits atop our sustainability priorities. Our aspirational target set three years ago is that by 2025, at least 40 million adult consumers will have stopped smoking and switched to our smoke-free products. I am convinced that it is possible to completely

> “Replacing cigarettes with less harmful alternatives is at the very core of our corporate strategy and sits atop our sustainability priorities.

end cigarette sales in many countries within 10 to 15 years, but for that to happen, manufacturers and governments need to work in the same direction.

People all over the world believe that CEOs manage companies for the short term because of a single-minded focus on shareholders. To address this, academics, think tanks, corporate leaders, and NGOs have started talking about how to reform the capitalist system so that it works for everyone. In August 2019, the Business Roundtable issued a statement signed by 181 CEOs who committed to focusing on all stakeholders.

In March 2020, PMI's Board of Directors issued our company's Statement of Purpose, available in this report. It reaffirms that we are disrupting our business from the inside, leading the industry toward a future without cigarettes, while meeting the needs of our stakeholders, and ensuring the long-term viability of our company.

Clarity of purpose is essential for internal alignment; change is tough for well-established companies like ours, with strong business performance over decades. It is natural for employees to continue the behaviors that have led to strong results. Business success, more than failure, presents a big hurdle to a company's transformation, and I devote a large part of my time to ensuring that we have the right organizational capabilities and mindset.

PMI's Operations Center in Lausanne, Switzerland

Since the launch of our smoke-free product *IQOS*, we have made enormous progress in terms of organizational capabilities, know-how, the integration of sustainability in the way we operate, and in our business results. To accelerate our progress, we must further enhance our ability to stay at the forefront of consumer centricity, technology, science, and innovation – to build on PMI's unique scientific capabilities and outline the company's strategy for new products and services that go beyond tobacco and nicotine.

We continue to deal with skeptical stakeholders: international organizations, NGOs, media, and academics, who doubt that harm reduction through smoke-free alternatives is sound public health policy or argue that our purpose-driven strategy is nothing more than window dressing. Harm reduction is an accepted approach in many areas of life: from reducing salt and sugar contents in food and drinks to lowering carbon emissions by switching to electric cars. The alternatives are rarely without health risk or environmental impact, but product improvements are always welcomed when they are scientifically substantiated. I feel strongly that people who smoke cigarettes, the most harmful nicotine-containing product, should not be denied the opportunity to switch to better alternatives. We will therefore not give up and will continue to proactively engage with such critics, explaining what we are trying to achieve. Listening closely and showing that our company takes criticism seriously is an essential part of our transformation.

> “To accelerate our progress, we must further enhance our ability to stay at the forefront of consumer centricity, technology, science, and innovation.

Sustainability strategy is corporate strategy, and ESG issues are business issues. This is what we want to emphasize with this publication – our first integrated report. I hope it gives you a better insight into PMI, the challenges that we face, and the progress we have made since announcing our smoke-free vision in 2016.

I cordially invite you to respond, challenge, and most of all, work with us as we remain focused on making our business one with a sustainable purpose.

André Calantzopoulos
Chief Executive Officer

PMI's Statement of Purpose

While Philip Morris International Inc. (PMI) is widely known as a cigarette company, in 2016 it announced its new purpose: to deliver a smoke-free future by focusing its resources on developing, scientifically substantiating and responsibly commercializing smoke-free products that are less harmful than smoking, with the aim of completely replacing cigarettes as soon as possible. These innovative alternative products do not burn tobacco, do not create cigarette smoke and therefore generate significantly lower levels of carcinogens and other toxic substances compared to cigarettes.

Building on the Board's Letter to Shareholders in PMI's 2017 Proxy Statement, we would like to reaffirm PMI's purpose and acknowledge that, as the Company continues to transform its business and organization, its core effort to provide smoke-free alternatives that appeal to today's adult smokers—and to work hard to convince them to switch—will not be enough. The Company needs to continue earning the trust and active cooperation of a host of stakeholders, from its supply chain partners to regulators and public health authorities.

A smoke-free future is attainable, and the benefits it can bring to the people who would otherwise continue to smoke, and hence to global public health, are enormous. However, the Company cannot succeed alone. Together with governments and civil society we can maximize this opportunity through a consensus that smoke-free alternatives, when subject to proper government oversight and regulation, are part of a sound tobacco policy.

The Quest for Better Alternatives for Adult Smokers

Smoking causes serious disease, and the best way to avoid the harms of smoking is never to start, or to quit. For decades, tobacco control has focused on strict fiscal, marketing and other measures to deter initiation and to encourage cessation. These must be continued. Nevertheless, while smoking prevalence rates continue to slowly decline, the World Health Organization projects that the estimated number of 1.1 billion people who smoke tobacco products today will remain largely unchanged by 2025, reflecting population growth.

Nicotine, while addictive and not risk free, is not the primary cause of smoking-related disease. The primary cause is the harmful chemicals released or generated by the burning of tobacco and contained in the smoke. Eliminating combustion from nicotine-containing products is the way to significantly reduce their toxicity. Thanks to rapid advances in science and technology, and strong PMI commitment, these products are now a reality.

Currently, PMI's smoke-free portfolio comprises platforms that heat tobacco, vaporize nicotine-containing liquids or essentially contain only nicotine, all without combustion. Their development and manufacturing follow high standards of quality and consistency. The scientific evaluation to substantiate their harm reduction potential compared to cigarette smoking is based on rigorous pre-clinical and clinical assessments and sophisticated systems toxicology. The results are publicly available, are peer-reviewed and have been submitted to numerous regulatory authorities including the U.S. Food and Drug Administration. The totality of the scientific evidence makes the Company confident that switching completely to these products is likely to present less risk of harm than continuing to smoke. Post-market surveillance is necessary to continue building this confidence, and, over time, quantify the reduction in morbidity and mortality through epidemiology.

To be clear, these smoke-free alternatives are not risk free and should not be used by youth or non-smokers. For those who use nicotine in any form it is best to quit completely. The Company must market them responsibly, so as to minimize any unintended use, while maximizing the switching of adult smokers who would otherwise continue smoking.

IQOS Platform 1, a heat-not-burn tobacco product, was commercially launched in late 2015 and was very well received by adult smokers, with conversion rates exceeding 70 percent. This confirmed that the Company had the products and the science to fulfill its ambition to completely replace cigarettes. In 2016, with the full support of the Board of

> 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.

Directors, the Company announced its new purpose of delivering a smoke-free future. Since then the Company has fully aligned its employees with this purpose, and swiftly shifted its organizational focus and resources to smoke-free alternatives. The Company is essentially disrupting its traditional business from the inside out and is leading the industry in this unprecedented transformation.

While cigarette sales today remain the largest part of PMI's business in most countries, this is changing rapidly. In 2019, the Company's smoke-free products were already commercialized in 52 markets and represented 18.7 percent of PMI's global revenue, 71 percent of its commercial expense and 98 percent of its R&D expenditure. As of December 31, 2019, of the approximately 150 million people who regularly use the Company's products, approximately 14 million already use *IQOS*, of whom 9.7 million have stopped smoking and switched to this product. The Company is actively accelerating the decline of cigarette smoking beyond what can be achieved by traditional tobacco control measures alone.

Going forward, the Company is committed to providing less harmful alternatives to the hundreds of millions of adult smokers who would otherwise continue to smoke, 80 percent of whom PMI estimates are looking for better alternatives. The Company will do so through a research agenda to innovate and substantiate a portfolio of products that are affordable and acceptable for these smokers in both developed and developing countries. While PMI will continue to responsibly sell cigarettes as long as there is a significant legitimate demand, it will continue focusing its commercial efforts toward raising awareness of, and informing adult smokers in appropriate ways about, smoke-free products and the benefits of switching versus continued smoking. The Company carefully monitors the results of its marketing to best ensure its smoke-free products are not reaching non-smokers, youth and people who have already quit nicotine use altogether.

> The Company is actively accelerating the decline of cigarette smoking beyond what can be achieved by traditional tobacco control measures alone.

Key Stakeholders to Deliver a Smoke-Free Future

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. The Company will seek to engage and collaborate with relevant stakeholders to speed the transformation while mitigating negative consequences.

Employees

PMI's ability to accomplish its purpose depends on the skills, dedication and relentless efforts of its employees. The Company's focus on a smoke-free future has enhanced its ability to attract the new talent needed to support its transformation. The Company compensates its employees fairly and provides important benefits. It supports them with enriching job experiences, training and education to help them develop new skills and maximize their employability in a rapidly changing world. The Company treats employees with respect, dignity, care and fairness. It fosters diversity, inclusion, equal opportunity and equal salary policies to ensure PMI's workforce reflects modern society.

Regulators

Regulators can decisively accelerate the industry's transformation toward, and the speed at which adult smokers switch to, smoke-free products by implementing risk-proportionate regulations and taxation for all nicotine-containing products and by providing smokers with accurate information. PMI is committed to engaging transparently with regulators, sharing its scientific research and post-market data. The Company will be ready to support an industry-wide gradual phase-out of cigarettes as soon as a majority of smokers in a country have switched to scientifically substantiated smoke-free products. 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.

Public health community

The public health community is, unfortunately, polarized on the issue of smoke-free products. Without question, their work to discourage youth and non-smokers from starting to use any tobacco or nicotine product and to encourage cessation should continue. At the same time, when better alternatives to cigarettes exist, the discussion should not be whether they should be made available to the more than one billion men and women who smoke today, but how fast, and within what regulatory framework to maximize their adoption while minimizing unintended use. The Company is urging this important stakeholder group to seize the immense opportunity that smoke-free products present for advancing public health within the present generation of smokers. PMI asks the public health community to scrutinize its smoke-free products, to provide feedback for improvement and to be open to considering that PMI's purpose aligns with the societal goal to change the health trajectories of the people who smoke.

Supply chain

People working in the Company's supply chain around the world, including tobacco farmers, rely on PMI for a substantial portion of their income. PMI deals fairly and ethically with its suppliers, and is dedicated to acting as a good partner to other companies, large and small, that help us meet PMI's missions. PMI recognizes that smoke-free products differ from cigarettes and entail change for some of its supply chain partners, and PMI is ready to help them in this transition.

Shareholders

The Company is confident of the business opportunity that smoke-free products bring. It is leading this new highly promising category and is dedicated to ensuring its shareholders continue to receive strong and sustainable financial returns over time, while recognizing the initial uncertainty that transforming the Company's business model may bring. We are aware of the growing investor movement in select geographies to exclude tobacco from portfolios, but we do not believe that exclusion will convince people who smoke to quit or to improve their lives. On the contrary, by investing in PMI—a tobacco company that is aiming to end cigarette sales—and holding the Company accountable to its purpose and targets, investors can combine positive societal impact with long-term financial returns. The Company welcomes suggestions, pressure and support from engagement with both current and potential investors.

Civil society

Continued engagement and partnerships with civil society remain essential to the Company's success. PMI respects the many communities around the world where it operates. PMI works hard to protect the environment through sustainable practices across its businesses and to address both existing social and environmental challenges, such as child labor in tobacco growing, and emerging topics pertaining to its business transformation, such as helping tobacco farmers to diversify their crops. The scope, metrics and progress of these practices are outlined in PMI's annual Sustainability Report, published on PMI's website.

Achieving PMI's Purpose

The Company understands the need to continue to build legitimacy and trust by being honest, respectful, fair and transparent, and by aligning actions with words across all areas of its business. To make the Company's progress in delivering its smoke-free vision verifiable, it introduced a set of business transformation metrics, which it publishes every year. As outlined previously, there has already been significant progress.

To assess the impact of PMI's current and future value chains on society and the environment, the Company regularly conducts sustainability materiality analyses and measures its performance through financial, environmental and social metrics that are key to a sustainable corporate strategy.

The Compensation and Leadership Development Committee of the Board has ensured a strong link between executive compensation and both short- and long-term performance toward achieving the Company's smoke-free ambition. It is management's responsibility to ensure that the Company's purpose is achieved through the appropriate structures, systems, processes and people. The Board oversees management's efforts to enhance shareholder value responsibly and sustainably over the long term in ways that are consistent with the Company's purpose. Transparency and engagement between the Board and management are paramount, and the relationship is excellent.

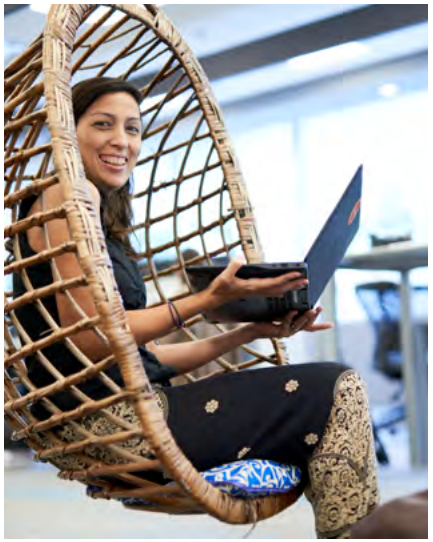
In conclusion, PMI is fully committed to its corporate purpose of delivering a smoke-free future.

> Transparency and engagement between the Board and management are paramount.

PMI's Board of Directors

André Calantzopoulos
Louis C. Camilleri
Werner Geissler
Lisa A. Hook
Jennifer Li
Jun Makihara
Kalpana Morparia
Lucio A. Noto
Frederik Paulsen
Robert B. Polet

A Statement of Purpose is a declaration, issued by a company's board of directors, that clearly articulates the company's purpose and how to harmonize commercial success with social accountability and responsibility. It specifies within that purpose those stakeholders most critical to long-term value creation and sustainability. On March 26, 2020, PMI published its 2020 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.



PMI employees in various locations worldwide

Our company

Our products and brands

We have built our company on a portfolio of leading cigarette brands that are the choice of an estimated 140 million consumers worldwide. Our cigarettes are sold in more than 180 markets, in many of which they hold the number one or number two market share position.

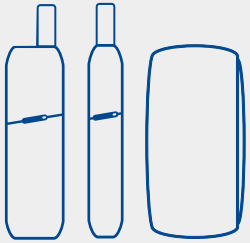
We have a wide range of premium, mid-price, and low-price cigarette brands, including *Marlboro*, *L&M*, *Chesterfield*, *Philip Morris*, *Parliament*, and *Bond Street*, which are among the 15 most popular brands in the international cigarette market (which excludes China and the United States). *Marlboro* is the world's best-selling international cigarette; in 2019, it accounted for approximately 37 percent of our total cigarette shipment volume and held a 10 percent share of the international cigarette market.

In 2016, we set a new course for the company – committing to deliver a future without cigarettes. To make our vision a reality, we are transforming our business and staking our future on a line of smoke-free products.

Our smoke-free product platforms

HEATED TOBACCO PRODUCTS

Platform 1



Platform 2

NICOTINE-CONTAINING E-VAPOR PRODUCTS

Platform 3

Platform 4

Cigarette manufacturing

Our smoke-free product development is centered on the elimination of combustion. We believe this is the most promising path to providing a better choice to those adults who would otherwise continue to smoke. We recognize that no single smoke-free product will appeal to all adult smokers. This is why we have adopted a portfolio approach, including both heat-not-burn products and nicotine-containing vapor products that are intended to appeal to a variety of distinct adult consumer preferences. Our current smoke-free product portfolio incorporates four platforms in various stages of development and commercialization.

> In 2016, we set a new course for the company, committing to deliver a future without cigarettes.

> By the end of 2019, *IQOS* was commercially available in 52 markets, representing 44 percent of the total international market, excluding China and the U.S.

Currently, our main smoke-free product is a heat-not-burn product, commercialized under the *IQOS* brand name. By the end of 2019, *IQOS* was commercially available in 52 markets, which represent 44 percent of the total international market, excluding China and the U.S., by volume. Our weighted-average geographic coverage within these markets at the time was approximately 60 percent.

In July 2018, we pilot-launched our e-vapor product *IQOS MESH*, in London. In light of the current confusion in the e-vapor category, in February 2020, we postponed our planned launch of an improved version of this product, *IQOS VEEV*, until the third quarter of 2020, expecting to reach the optimal capacity for commercialization at scale. We will adjust our launch plans based on market-specific factors. Due to the COVID-19 pandemic, these plans may be delayed.

With respect to our Platform 2 product, we are finalizing our improvements to this product and plan to conduct a consumer test at the beginning of 2021. We plan to conduct a consumer test of our Platform 3 product by the end of 2020.

An *IQOS* store in Vilnius, Lithuania

IQOS

IQOS is a tobacco-heating system, available in two versions. The first has three main components – a heated tobacco unit (marketed under brand names such as *HEETS* and *Marlboro HeatSticks*), a holder, and a charger. The second is an integrated product that combines the holder and charger and allows multiple uses without recharging the battery. Both versions work the same way: The user inserts the heated tobacco unit into the *IQOS* holder, which contains an electronically controlled heater. The user pushes a button to turn on the heater and then draws on the heated tobacco unit. *IQOS* heats tobacco at a temperature just high enough (to a maximum of 350 degrees Celsius) to release a nicotine-containing vapor without creating combustion, fire, ash, or smoke. Because the tobacco is heated and not burned, the levels of harmful constituents are significantly reduced compared with cigarette smoke. Once the heated tobacco unit is finished, the user removes it from the holder and discards it.

IQOS VEEV

IQOS VEEV is based on a new heating technology in the e-cigarette category. It uses a metallic mesh punctured with tiny holes to heat a prefilled, pre-sealed e-liquid cartridge, which contains nicotine and flavors. In each *VEEV* cap, there is a new heater, eliminating the need to manually replace it. The consumer activates the heating process by pressing a button. As the heater is in contact with the e-liquid in the cap, it heats the e-liquid to generate a nicotine-containing vapor.

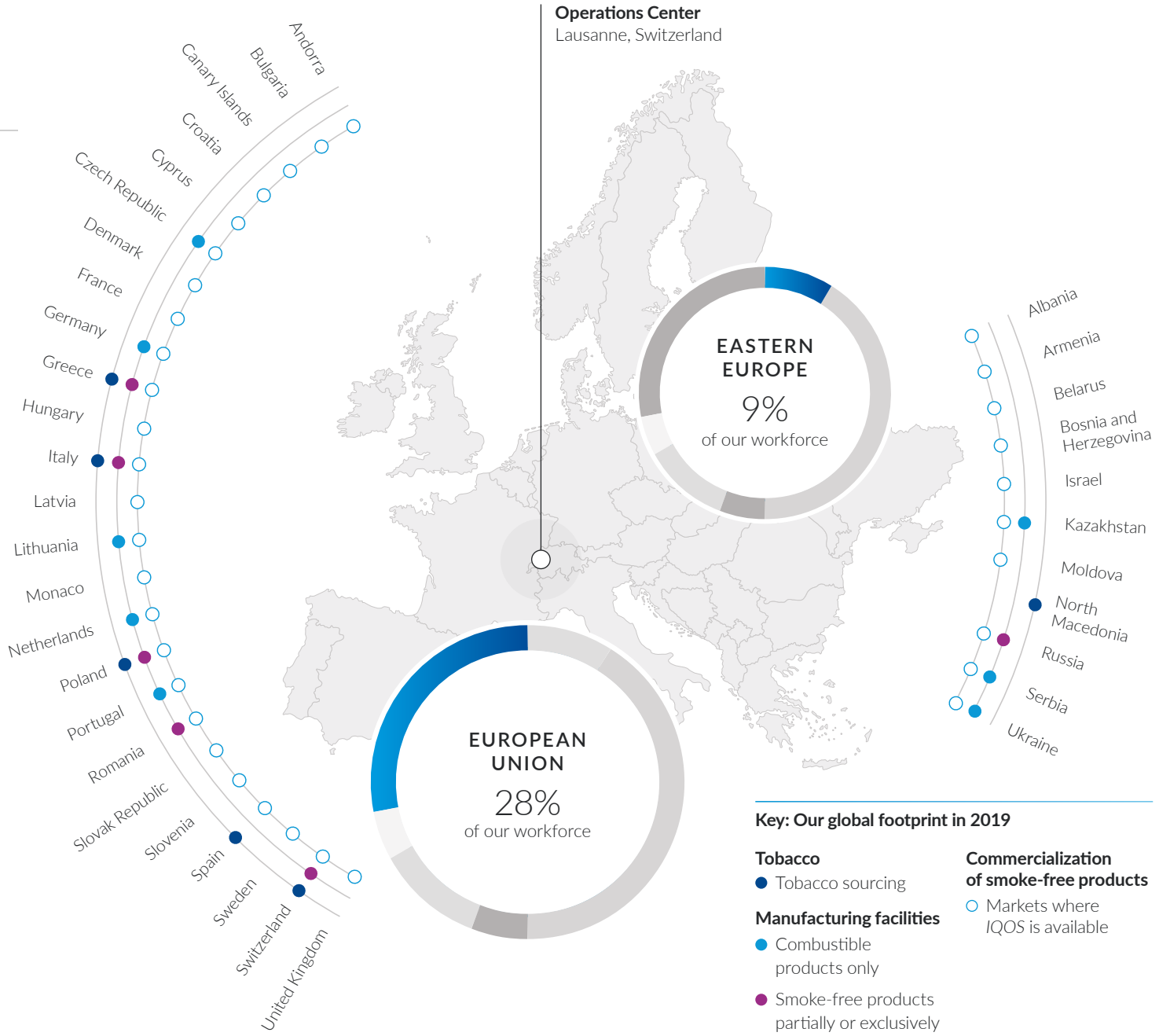
PMI's R&D center in Neuchâtel, Switzerland

Our global footprint

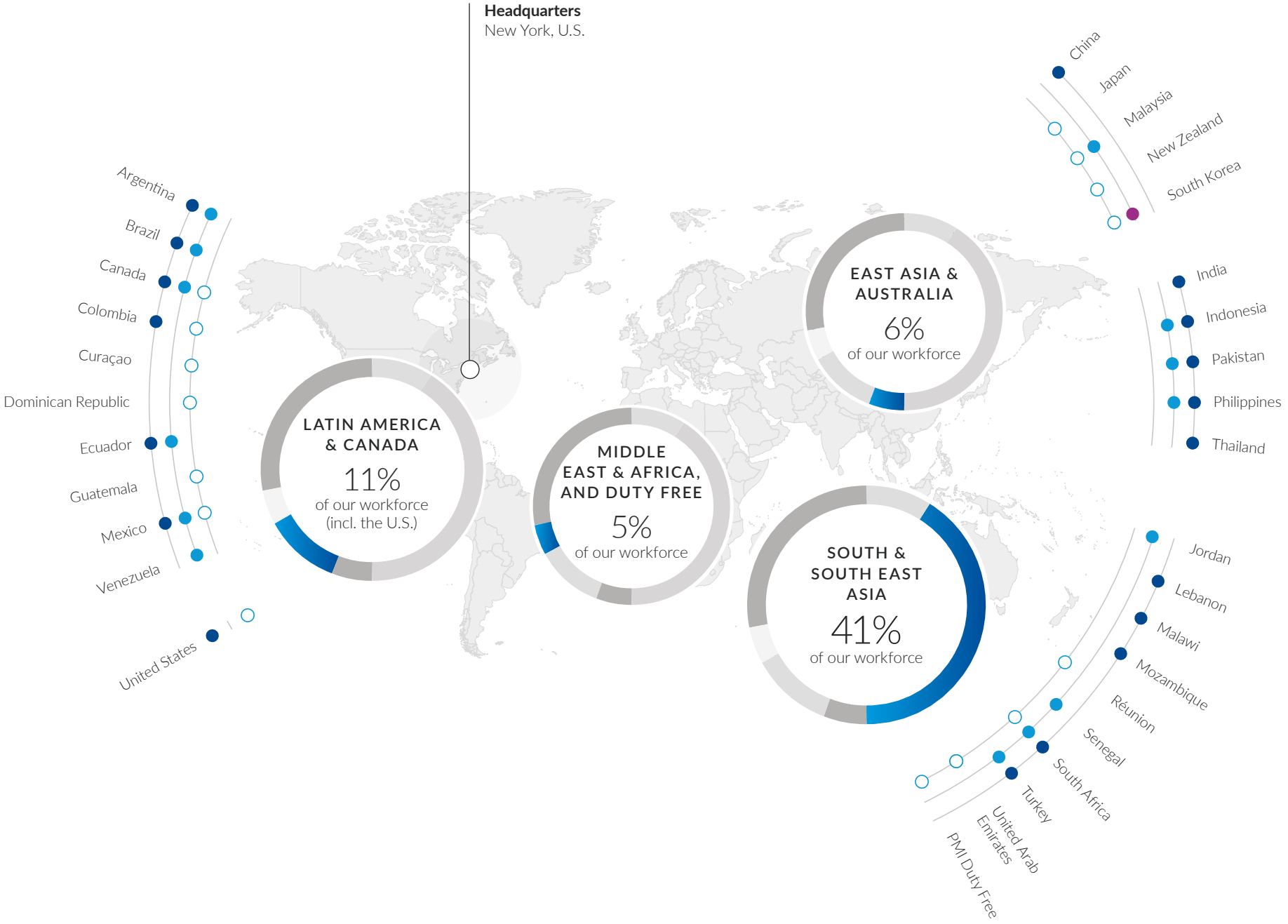
335K
Contracted farmers supplying tobacco to PMI

52
Markets where our heat-not-burn *IQOS* product is available for sale

38
PMI-owned manufacturing facilities, of which eight are partially or fully dedicated to the manufacturing of smoke-free products



Headquarters
New York, U.S.



Our business environment

Industry trends overview

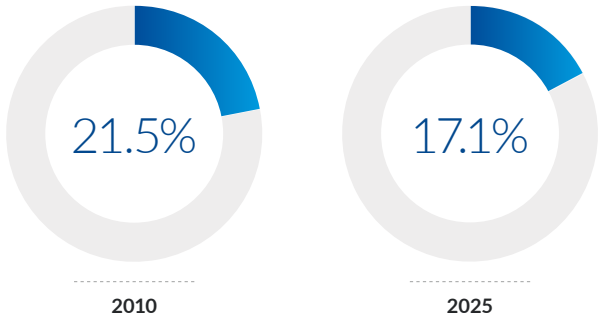
Consumers

Today, an estimated 1.1 billion men and women around the world smoke cigarettes or other combustible tobacco products. The latest projections from the World Health Organization[1] (WHO) indicate a decline in smoking prevalence (age 15+), from 21.5 percent in 2010 to an estimated 17.1 percent by 2025. At the same time, the global population is growing by around 70 million people per year. The combined effect of this population growth and declining smoking prevalence is a forecast of 1,058 million smokers by 2025 – essentially no change versus 2010.

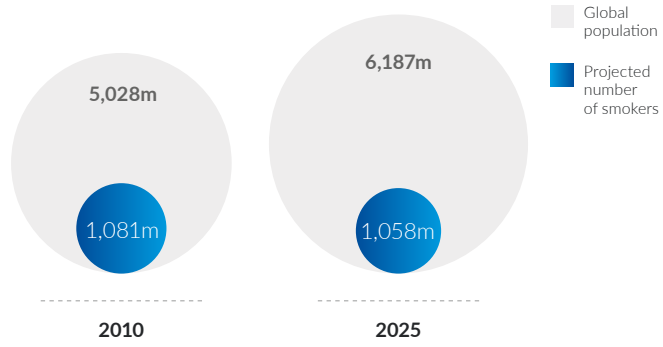
WHO member states want faster change by encouraging cessation and discouraging initiation – targeting a 30 percent reduction in the prevalence of tobacco use by 2025 (2010 baseline).[2] However, even if the WHO prevalence target is achieved, there will still be around 930 million smokers in 2025, according to PMI's calculations.

As of December 31, 2019, PMI estimates that there were close to 14 million *IQOS* users, of which over 70 percent – or nearly 10 million – had stopped smoking and switched to *IQOS*, with the remaining 4 million in various stages of conversion. For e-vapor, PMI estimates approximately 40 million users globally, of which an estimated 25 percent – or around 10 million – were exclusive users. This equates to an estimated 20 million total *IQOS* and e-vapor users globally who no longer smoke cigarettes. To put this into perspective, this would equate to around 2 percent of the world's over 1 billion smokers.

Projected smoking prevalence



Projected number of smokers



These projections are based on WHO data (2019) and refer to age 15+

1 Source: WHO Global Report on Trends in Prevalence of Tobacco Use 2000-2025, third edition (December 2019)

2 Source: WHO Global Report on Trends in Prevalence of Tobacco Smoking 2015

Customers in an *IQOS* store in Ginza, Japan

Market dynamics

The tobacco and nicotine market globally is characterized by a range of products, including combustible tobacco products (e.g., cigarettes, fine-cut tobacco, pipe tobacco, cigars, and cigarillos), smoke-free products (e.g., heated tobacco, e-vapor, and hybrid products), and oral smokeless tobacco and nicotine products (e.g., snus, chewing tobacco, moist snuff, tobacco pouches, and nicotine pouches).

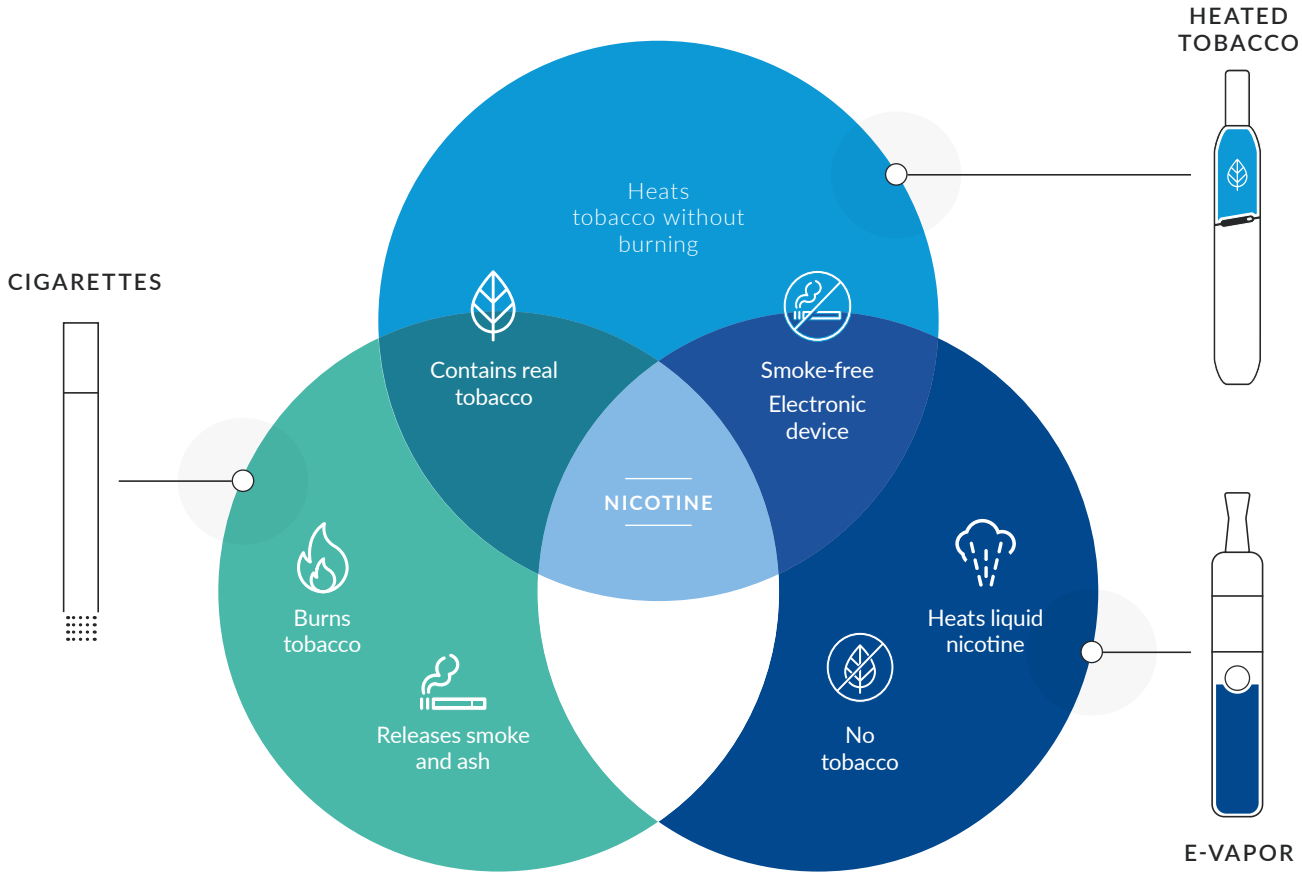
While the number of consumers of tobacco and nicotine products around the world has remained largely unchanged over recent years, the size of the total market by retail value has grown. This largely reflects the impact of excise tax-driven retail price increases for combustible tobacco products, coupled with the growth of smoke-free products, partly offset by lower volume for combustible tobacco products, mainly reflecting lower prevalence and lower average daily consumption induced by price elasticity.

In the international tobacco and nicotine market, excluding China and the U.S., the total retail value reached an estimated USD 477 billion in 2019, with growth of around 4 percent compared with the prior year.[1] Combustible tobacco products accounted for approximately 95 percent of the total retail value, with the balance mainly attributed to heated tobacco and e-vapor products.

The international market for heated tobacco and e-vapor products in 2019 reached an estimated USD 23 billion, with growth of around 20 percent versus 2018. This growth reflects the increasing number of adult smokers who are moving to smoke-free products and was mainly driven by the heated tobacco category, which represented an estimated 70 percent of the combined retail value for heated tobacco and e-vapor products in 2019.

In recent years, some governments have legalized cannabis for medical and/or recreational purposes, and some tobacco companies have invested in the category. PMI does not sell cannabis products.

The difference between combustible cigarettes, e-vapor products (also known as e-cigarettes), and heated tobacco products



1 Includes the retail value of cigarettes, fine-cut tobacco, heated tobacco and e-vapor products (including devices), snus, and nicotine pouches.

Regulation and taxation

The risks of smoking have led legislators and regulators to impose rigorous restrictions and high excise taxes on cigarettes. Such restrictions are comprehensive, covering packaging and health warnings, use of ingredients, advertising, marketing, promotions and sponsorships, and smoking spaces.

Much of the regulation that shapes the business environment in which the tobacco industry operates is driven by the WHO's Framework Convention on Tobacco Control (FCTC), which entered into force in 2005. The FCTC has as its main objective the establishment of a global agenda for tobacco regulation, with the purpose of reducing the prevalence of tobacco use and exposure to tobacco smoke. As of December 31, 2019, 180 countries and the EU were parties to the FCTC, which requires a suite of measures.

There is no global consensus among regulators on how to regulate or tax smoke-free products. Some aim to encourage these products, seeing them as presenting less risk to smokers and an opportunity for public health; others severely restrict or ban not just the communication about such products, but in some cases the products themselves.

Our perspective

For many decades, public health strategies to reduce tobacco-related morbidity and mortality focused primarily on preventing smoking initiation by youth and encouraging smokers to quit. Novel, scientifically substantiated smoke-free products provide regulators the opportunity to supplement and significantly strengthen the existing public health approach with a third pillar: tobacco harm reduction.

Government regulation of all nicotine-containing products, both combustible and non-combustible, is essential, and we advocate for a comprehensive regulatory framework that recognizes that not all these products are the same. While the most harmful products should be subject to the most restrictive measures, regulation and taxation should encourage adults who would otherwise continue to smoke to switch to less harmful alternatives.

We don't agree with preemptive bans and unreasonable restrictions on scientifically substantiated smoke-free products, because these measures deprive smokers of using alternatives that present less risk of harm than smoking. Smoke-free products contain nicotine, which is addictive, and they are not risk-free. Regulation should therefore provide minimum standards for all smoke-free product categories and specific rules for product assessment methodologies, ingredients, and labeling. We also support regulation that, at a minimum, provides for a notification process similar to what exists in the EU, as it allows regulatory authorities to have an overview of all new products entering the market.

Further, regulations should ensure that the public continues to be informed about the relative health risks of all combustible and non-combustible products. Regulation, as well as industry practices, should reflect the fact that youth should not consume nicotine in any form.

Illicit trade

The illicit tobacco trade provides a cheap and unregulated supply of tobacco products. It undermines efforts to reduce smoking prevalence, damages legitimate businesses, stimulates organized crime, increases corruption, and reduces government tax revenue. It is estimated by the WHO[1] that illicit trade accounts for as much as 10 percent of global cigarette consumption and that governments are losing USD 40 billion in tax revenues each year as a result.

Many countries have introduced or are considering actions to prevent illicit trade. In November 2012, the FCTC adopted the Protocol to Eliminate Illicit Trade in Tobacco Products (the "Protocol"), which includes supply chain control measures, such as licensing of manufacturers and distributors, enforcement in free trade zones, controls on duty free and internet sales, and the implementation of tracking and tracing technologies. As of March 31, 2020, 58 Parties, including the EU, have ratified it. The Protocol came into force in September 2018. Parties must now start implementing its measures via national legislation.

In October 2018, at their first meeting, the parties to the Protocol elected to produce a comprehensive report on good practices for tracking and tracing systems, and to prepare a conceptual framework for global information-sharing to combat the illicit tobacco trade.

Our perspective

The illicit tobacco trade is large and demands integrated action. From our side, we focus on controlling our supply chains to prevent the diversion of our products. For 15 years, we have been operating a global tracking and tracing system for our products, covering all markets. We also work with governments and other partners in the public and private sectors to combat illicit trade. Read more about our efforts to tackle illicit trade on tobacco and nicotine products on PMI.com.

1 Source: https://who.int/fctc/protocol/anniv_protocol/en/

Competition

The global tobacco sector includes four large international manufacturers – British American Tobacco (BAT), Japan Tobacco (JT), Imperial Brands (IMB), and PMI – along with two major manufacturers focused primarily on their respective domestic markets: the China National Tobacco Corporation (CNTC) in China, and Altria Group, Inc. in the U.S. Together, these six companies accounted for over 85 percent of global cigarette sales by volume in 2019. Regional and local companies, including state-owned enterprises, accounted for the remaining 14 percent.

As in other consumer goods sectors, manufacturers compete primarily on product quality, brand recognition, brand loyalty, taste, R&D, innovation, packaging, customer service, marketing, advertising, and retail price.

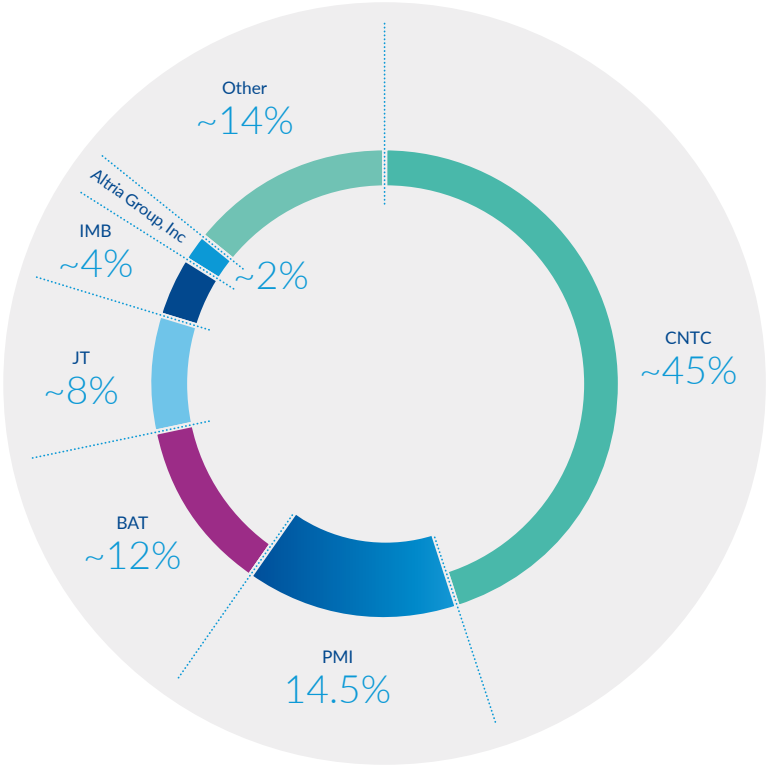
Increasingly, competition also focuses on the development and commercialization of smoke-free tobacco and nicotine products, with tobacco manufacturers shifting their resources, by varying degrees, toward the development of such products, in particular heated tobacco and e-vapor products.

The first heated tobacco products were launched by various manufacturers, including PMI, in the late 1990s, with limited commercial traction. Following the success of *IQOS* after its initial city launch in 2014, other manufacturers have introduced their own heated tobacco products in certain markets. Some manufacturers have also launched hybrid products, which combine aspects of heated tobacco and e-vapor products.

To date, competition in the heated tobacco category is primarily among combustible tobacco manufacturers.

The e-cigarette was invented in 2003 in China and – after over a decade of relatively limited success – the broader e-vapor category has recorded growth in recent years, particularly in the U.S. and certain European markets. Currently, the market for "open" e-vapor products remains heavily fragmented, while the market for "closed" e-vapor products is relatively consolidated among tobacco manufacturers and a limited number of e-vapor start-ups, such as JUUL and NJOY.

Our global market share 2019, including cigarettes and heated tobacco units



Source: PMI financials or estimates

Our perspective

We have made significant progress in transforming our business. Net revenues from smoke-free products already exceed 10 percent of total net revenues in 31 markets, and over 50 percent in four markets. We have reallocated significant amounts of commercial spending from cigarettes to smoke-free products, and have streamlined our cigarette portfolio to focus on fewer brands and variants, reducing the global number of SKUs by over 600 in the last three years. Nevertheless, cigarettes and other combustible products remain at this stage the largest part of our business, representing 92.4 percent of our volume and 81.7 percent of our revenues.

Perhaps counterintuitively, our objective to completely replace cigarettes with smoke-free alternatives is best served by maintaining our competitive position in the declining cigarette market. This has allowed us to generate the cash flows needed to continue investing in scientific research, product development, manufacturing, and the commercialization of smoke-free products. The extensive commercial and distribution infrastructure from the traditional tobacco business also provides an effective platform for launching smoke-free products at scale. Maintaining leadership within the cigarette segment furthermore enables us to engage more smokers regarding the benefits of switching, especially where we can communicate directly with our consumers, for instance through cigarette pack inserts.

One of our key transformational challenges regards deciding how to compete within the cigarette market, while simultaneously disrupting it with our smoke-free products. How should we react to product innovation by our competitors within the cigarette segment? What to do when competitors lower cigarette prices to gain market share? While seeking to remain competitive in the cigarette segment in an efficient way, we give careful consideration to the coherence of the commercial activities needed to do so, such as when selecting a few new product launches in response to changing consumer preferences or competitor actions.

We strive to make these decisions based on consumer insights, responsible practices, and guided by a clear principle: our decision to launch a new product in the combustible segment should not hinder the realization of a smoke-free future. Where appropriate, we will complement our business response with advocacy for regulatory and fiscal measures to close tax loopholes or restrict product innovation within the combustible segment, where such innovation raises concerns regarding youth use.

Megatrends

As a company operating on a global scale in a fast-paced world, our long-term success requires that we continuously monitor and adapt to major social, environmental, economic, political, and technological changes. We see five megatrends as being particularly relevant to our work within the wider context of sustainable development, representing an opportunity for PMI to lead change.

Drone used to map and scout tobacco fields, generating live data for decision-making on crop management in Bahia, Brazil

Technological progress

New technologies are emerging rapidly, including in robotics, artificial intelligence, and virtual reality. Consumer-goods companies have been at the forefront of digital innovation in marketing and sales. Automation and digital solutions are also widely implemented in manufacturing and supply chain, but they bring risks related to employment patterns, data privacy, and human rights. Taking a positive and proactive approach to shaping the future of work will enable companies to respond to people's desire for income security, well-being, empowerment, and purpose, where people's lives are enriched by advancing technology, and where society can prosper from equal access to new opportunities.

How we are responding

Breakthrough developments in science and technology, including from outside our industry, such as battery technology, enabled us to develop the innovative smoke-free products that we commercialize today. We continue to actively explore and responsibly deploy opportunities brought by new technologies for application in our business. For instance, we started using drones in tobacco-growing areas to monitor crop quality and reduce the need for pesticides. Another example relates to our fleet, where we increasingly rely on telematics to help minimize road traffic accidents, the main cause of work-related fatalities within our company. As member of WBCSD, we are part of the "Future of Work" working group, crafting a future with workforces that are secure, motivated, skilled, and prepared for challenges posed by technological change.

Changing consumer expectations

In today's connected world, consumers can more easily compare products, tapping into a wide variety of information sources, from product websites to consumer reviews. Consumers are also increasingly interested in knowing the social and environmental impacts related to the products they buy and are changing their consumption patterns accordingly. Consumers expect a seamless experience across channels, where the overall experience matters more than the channel, and where the best brands take service from transactional to personal.

How we are responding

We are continuing our shift toward becoming a more consumer-centric organization. Consumer feedback constantly feeds into our product development and improvement work, for example with *IQOS DUO* launched in 2019, which allows two consecutive uses of our main smoke-free product, without recharging the holder. We are serving our consumers through a wider variety of channels than ever before, both offline – such as our 199 *IQOS* stores and over 3,000 exclusive *IQOS* retail touchpoints – and online, including 23 call centers worldwide. Beyond offering smokers a less harmful alternative to cigarettes, we are also aiming to reduce our products' environmental footprint by integrating circularity considerations at the design stage and strengthening our programs for collection and recovery of used devices and consumables.

Climate change

The climate crisis is one of the most pressing issues of our time. As its impacts become increasingly visible, participating nations to the Paris Agreement within the United Nations Framework Convention on Climate Change committed to keeping global temperature increases this century well below 2.0 degrees Celsius above pre-industrial levels. Governments are considering various regulatory and market-based mechanisms to lower carbon emissions. Many of those are directed at businesses, which must intensify their efforts to reduce greenhouse gas emissions and improve energy efficiency.

How we are responding

Climate protection is a clear priority for PMI. We support the Paris Agreement and are aligning our targets with the recommendations of the Intergovernmental Panel on Climate Change (IPCC), aimed at stabilizing global temperature rise below the internationally agreed 1.5 degrees Celsius. We are undertaking a broad range of activities to reduce emissions and energy consumption within our operations and across our value chain, and we have committed to achieving carbon neutrality in our direct operations (scope 1+2) by 2030 and across our value chain (scope 1+2+3) by 2050. In 2020, we will improve our existing approach to internal carbon pricing, so that we better internalize external costs and achieve our carbon targets in an efficient way.

Purpose of business

Business leaders are feeling pressure to rethink the role of business in society, with social norms changing and expectations from employees, customers, and civil society rising fast. In addition, investors are increasingly pressing companies to focus on their purpose, while demanding that their reliance on people and natural resources to sustain and grow their businesses must be addressed. Companies that demonstrate a lack of empathy, that don't stretch themselves to serve others, that remain silent or self-serving, risk finding their products, brands, and reputations permanently scarred.

How we are responding

Our Board of Directors recently released our Statement of Purpose, reaffirming the company's commitment to a smoke-free future and emphasizing the need for constructive engagement and partnership to achieve our company's purpose. The Statement underscores that both our Board, as well as Company Management, considers stakeholders an essential element of our transformation, and the environmental and social impacts of our business a core part of our corporate strategy. Importantly, we regularly conduct sustainability materiality analyses, with extensive stakeholder input to ensure that we prioritize resources where we can have the biggest impact. We aim for transparency in all we do, reporting on our progress yearly and sharing topic-specific disclosures on our website.

Income inequality

Income disparity is on the rise around the globe, with an increasingly detrimental impact on society. Growth has disproportionally benefited higher-income groups, while lower-income households have been left behind. This trend increases pressure on social cohesion, economic growth, and political agendas.

How we are responding

We pay our employees equally for equal work, and we aim to provide them with equal opportunities independent of gender, country of origin, age, and other personal characteristics. In 2019, we achieved the global EQUAL-SALARY certification, which verifies that PMI pays men and woman equally for equal work everywhere we operate. Our efforts to address income inequality go beyond our own operations, as we aim for the farmers from whom we source tobacco to make a living income.

In many countries, smoking is more common among lower-income adults, exacerbating health inequalities. Alternative products present an opportunity to reduce such inequalities. Our vision of a smoke-free future is inclusive: We aim for all adult smokers who otherwise would not quit cigarettes to switch to less harmful alternatives. Ensuring access to smoke-free products is therefore a key priority as we broaden our product portfolio and develop new business models.

Creating value at PMI

Our value creation model describes what we do and how we allocate our resources to deliver long-term value for both our company and our stakeholders.

Our mission

Accelerate the end of smoking

What we do

Replace cigarettes with less harmful tobacco and nicotine products for the benefit of adults who would otherwise continue to smoke

Capitals

- Human
- Intellectual
- Manufactured
- Natural
- Financial
- Social

We use the Integrated Reporting Framework, published by the IIRC (International Integrated Reporting Council), as the basis for the presentation of information in this visual.

Inputs

$11.4bn
Annual spend on supply chain

335K
Tobacco farmers contracted by PMI and our suppliers in 24 countries

Three
Most significant non-tobacco direct materials purchased: printed paper board used in packaging, acetate tow used in filter making, and fine paper

>33,200
Suppliers worldwide

315K
Tons of packed tobacco sourced

73,542
Employees of over 125 nationalities, 41.7% are women

9.5m
Gigajoules of energy consumed in PMI factories, offices, and fleet

$465m
Total R&D expenditure, of which 98% related to smoke-free products

942
R&D positions (FTEs), including scientists, engineers, technicians, and support staff

2
Main R&D centers

Key sustainability impacts

Sourcing

- Sustainable supply chain management
- Socio-economic well-being of tobacco-farming communities
- Health, safety, and well-being at work
- Climate protection
- Respect for human rights

R&D

Outputs

84%
Of our procurement spend on critical suppliers assessed in our due diligence platform

88%
Of prompt actions related to child labor incidents in our tobacco supply chain resolved

97%
Of tobacco purchased at no risk of deforestation of old-growth forest

61%
CO_2e intensity reduction in tobacco curing versus 2010

5,800
Patents granted worldwide related to smoke-free products

27
Toxicological assessment studies completed by PMI on smoke-free products

365
Scientific publications by PMI since 2008

+16
Employee net promoter score

A
Long-term credit rating by Standard & Poor's and Fitch; A2 by Moody's

$132bn
Market capitalization (at Dec. 31, 2019)

24,000
Cars and vans in PMI fleet

71%
Of our commercial expenditure relating to smoke-free products

38
Owned manufacturing facilities – out of which 8 producing smoke-free products – and 28 third-party manufacturers

$0.9bn
Capital expenditure

4.0m
Cubic meters of water withdrawn in our factories

23
Call centers

199
IQOS stores and over 3,000 exclusive *IQOS* retail touchpoints

5.9m
Wholesalers and retailers

679K
Retailers that sell PMI smoke-free product consumables

Manufacturing and operations

Retail and consumers

- Product health impacts
- Littering prevention
- Responsible marketing and sales practices
- Access to smoke-free products
- Product eco-design and circularity

39%
Reduction in scope 1 and 2 CO_2e emissions since 2010

84%
Of waste recycled in our factories

0.12
Lost time incident rate per 200,000 hours worked

>465K
People reached through our social contributions

$2.3bn
In corporate income taxes

$72.1bn
In excise taxes on PMI products

$29.8bn
In net revenues, of which 18.7% are from smoke-free products

~140m
People consuming our products

13.6m
IQOS users, of which 9.7m have stopped smoking and switched to *IQOS*

71%
Of *IQOS* users who have stopped smoking and switched to *IQOS*

52
Markets in which *IQOS* is available for sale

>827K
Cigarette butts collected by PMI employees during World Cleanup Day

86.6%
Of employees trained on PMI Guidebook for Success

0.87
Collision rate within PMI's fleet of vehicles (per million kilometers driven)

Risks, opportunities, and trade-offs

We discuss risk factors in our 10-K and 10-Q submissions to the U.S. Securities and Exchange Commission (SEC).[1] For each of our sustainability material topics, we strive to present an overview of risks and opportunities under the "Why it is important to us and our stakeholders" heading in each section. Where relevant, we also seek to address potential trade-offs between our ambitions and sustainability efforts. These trade-offs involve, among other issues, the higher energy and water consumption tied to the production of our heated tobacco units; the need to balance tobacco pricing with the socio-economic conditions of tobacco-farming communities; and pressures to purchase products and services at the best price while also securing appropriate sustainability performance from our suppliers.

An employee in PMI's Operations Center in Lausanne, Switzerland

1 The Annual Report on Form 10-K is a report filed annually with the U.S. Securities and Exchange Commission (the "SEC"); the report presents various matters as required by the SEC and U.S. securities laws, including business and financial overview, risks, as well as certain legal proceedings. Our Annual Report on Form 10-K for the year ended December 31, 2019 was filed with the SEC on February 7, 2020.

Sustainability at PMI

To become a sustainable tobacco company, we must take every step to completely replace cigarettes with smoke-free alternatives. Innovating for better products is therefore at the core of our corporate strategy.

As we are transforming our company, we need to put increased emphasis on sustainability: Effective management of operational topics such as responsible commercialization and respect for human rights; social topics, such as the socio-economic well-being of tobacco-farming communities and the health, safety, and well-being of all at work; and environmental topics such as climate protection, littering prevention, and integrating eco-design and circularity into product development.

Our sustainability material topics are structured around four pillars of action, which form the basis of this report. Tier 1 topics are discussed in this report, whereas tier 2 topics are only reported on our website. The grouping of topics in two tiers is based on a sustainability materiality assessment we refreshed in 2019. This analysis informs our 2025 roadmap for improvement on these topics. Progress here will enable us to make our contribution to the relevant UN Sustainable Development Goals (SDGs).

Transforming for a sustainable smoke-free future

STRATEGIC PILLARS	TIER 1 TOPICS	TIER 2 TOPICS
Innovating for better products	Product health impacts Access to smoke-free products	Product addictiveness Product reliability
Operating with excellence	Responsible marketing and sales practices Sustainable supply chain management Respect for human rights	Responsible and transparent R&D Data privacy and protection Business integrity Illicit tobacco trade prevention Responsible advocacy Fair fiscal practices
Caring for the people we work with	Socio-economic well-being of tobacco-farming communities Health, safety, and well-being at work	Fair working conditions Community support Diverse and inclusive working environment Talent attraction, retention, and employability
Protecting the environment	Climate protection Littering prevention Product eco-design and circularity	Forest conservation Biodiversity Water stewardship Waste reduction

Focusing on what matters

A rigorous and formalized materiality assessment ensures that our strategy, work, and reporting cover the correct topics in the right way; this allows us to focus resources for the greatest impact and make progress against our sustainability roadmap.

We refreshed our materiality assessment at the end of 2019, owing to the rapid pace of PMI's transformation and the increasing maturity of our sustainability work. We were also keen to reach out to more of our stakeholders in the process. A detailed report of our materiality assessment can be found on PMI.com.

Working with a third party to facilitate the materiality assessment is critical to ensuring a thorough and unbiased exercise. In each of the past two years, we partnered with BSD Consulting, an ELEVATE company, to help us carry out our analysis in line with the requirements of the Global Reporting Initiative (GRI) Standards.

Our assessment process

We followed a four-step approach:

STEP 1

Identifying topics

In 2019, we revised the list of topics we had established in 2018, accounting for the internal and external feedback gathered since the last assessment, as well as a review of internal and external sources. These sources included analyses of public health debates, investor requirements, media reports, and sustainability standards and frameworks, such as the GRI and SDGs. We also took into account benchmarks of multinational peers and global sustainability trends.

We clustered some topics that were deeply connected and disaggregated others, such as forest conservation and biodiversity, to allow for a more granular assessment. Our research showed two topics – product reliability plus product eco-design and circularity – rising in relevance in line with stakeholders' evolving expectations and the significant increase in our sales of electronic devices. Finally, we refined the topic names and descriptions to enhance clarity and comprehension. In certain instances, topic descriptions were further refined during the drafting of this report.

STEP 2

Gathering stakeholder perspectives

In our 2018 assessment, we conducted insightful and probing stakeholder interviews, coupled with an online survey. In 2019, we did not interview stakeholders directly, but we expanded the survey element, collecting over 820 responses from 12 stakeholder groups across 60 countries. The highest participation rate came from employees (representing two-thirds of responses), followed by supplier representatives, members of civil society, and the business community. To ensure that the overrepresentation of internal stakeholders didn't unduly influence the survey results, we applied a scenario in which equal weight was given to internal and external stakeholder feedback. The results confirmed our initial result, with no major discrepancies noted.

The new survey incorporated two sets of questions: topic prioritization and open questions. Respondents largely confirmed the 2018 PMI prioritization, while pointing out some topics that they believed should be prioritized more highly: respect for human rights; sustainable supply chain management; health, safety, and well-being at work; and littering prevention. The responses also allowed us to assess the newly added topics, with responses to the open questions providing valuable insights into stakeholders' concerns and expectations. These questions also allowed us to identify the topics gaining momentum among respondents – namely, product eco-design and circularity, climate protection, and water stewardship.

Employees in the office of Tabaqueira, PMI's Portuguese affiliate

STEP 3

Assessing impact

We conducted a desktop assessment to understand the degree of impact – on a simplified three-level scale – of our identified 26 topics on sustainable development (outward impacts on the environment and society, inward impacts on our business) and where in our value chain they occur: upstream (e.g., tobacco growers, suppliers), in our operations, or downstream (e.g., consumers, retailers). We also evaluated the likelihood, reversibility, and severity of each impact. This work was conducted by our consultants, which complemented their expert desktop assessment with insights from subject matter experts within PMI. The impact assessment ranked each topic according to its relevance to sustainable development.

Key: Impact level

- Strong
- Medium
- Light

PMI's impacts on society

		Upstream	PMI operations	Downstream
Pillar 1	Access to smoke-free products			Strong
	Product addictiveness			Strong
	Product health impacts			Strong
	Product reliability			Light
Pillar 2	Business integrity	Light	Medium	Light
	Data privacy and protection	Light	Light	Medium
	Fair fiscal practices	Light	Medium	Medium
	Illicit tobacco trade prevention	Light	Light	Strong
	Respect for human rights	Strong	Light	Strong
	Responsible advocacy	Light	Medium	Medium
	Responsible and transparent R&D	Medium	Strong	
	Responsible marketing and sales practices			Strong
	Sustainable supply chain management	Strong		
Pillar 3	Community support		Light	Light
	Diverse and inclusive working environment	Strong	Strong	
	Fair working conditions	Strong	Medium	
	Health, safety, and well-being at work	Strong	Strong	
	Socio-economic well-being of tobacco-farming communities	Strong		
	Talent attraction, retention, and development	Medium	Strong	
Pillar 4	Biodiversity	Strong	Light	Medium
	Climate protection	Strong	Medium	Light
	Forest conservation	Strong	Light	Light
	Littering prevention			Strong
	Product eco-design and circularity			Medium
	Waste reduction	Medium	Light	
	Water stewardship	Strong	Light	

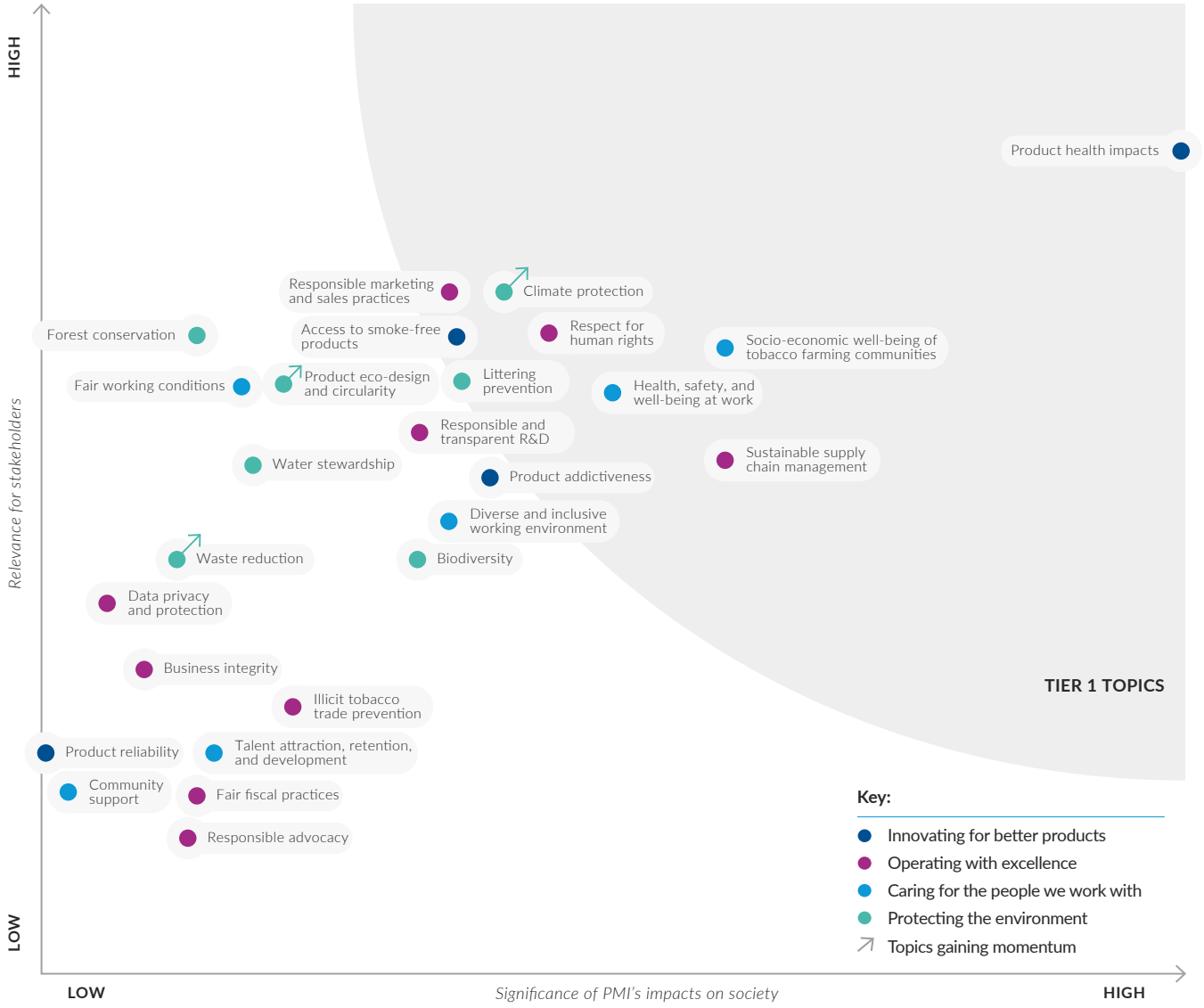
STEP 4

Building and validating the sustainability materiality matrix

Using the survey and impact assessment inputs, we generated a sustainability materiality matrix. We mapped the topics across the four pillars of our sustainability strategy and highlighted those that stakeholders believe will increase in importance. We then agreed on the threshold governing the relative materiality of each topic.

The matrix allowed us to update the prioritization set in 2018, grouping the topics into two categories: tier 1 topics and tier 2 topics. The tier 1 topics are those on which PMI believes it can have the greatest impact. They are core to our 2025 sustainability strategy, with ambitious objectives for each. Progress on these tier 1 topics is subject to senior management oversight, and performance against our objectives is published at least annually. We continue to manage and track our progress on our tier 2 topics.

The results of this assessment were reviewed by members of our Company Management, including our CEO, COO, President External Affairs and General Counsel, and SVP Operations.



Way forward

The core purpose of our materiality analysis is to guide us in prioritizing sustainability topics, help us meet stakeholders' expectations, and focus our efforts in areas where we can create the most value. In doing so, the assessment provides the groundwork for our sustainability journey. Our 2019 sustainability materiality refresh informed the development of our 2025 strategy and is shaping our reporting.

We plan to conduct a comprehensive sustainability materiality analysis every three years and will carry out light updates in between. We aim to strengthen and adjust our process with each exercise.

Meanwhile, PMI affiliates are also conducting sustainability materiality analyses to ensure their sustainability focus is tailored to the local context. In most cases, they run their assessments based on the approach and the list of topics we adopted at a global level. More information is available in our Sustainability Materiality Report on PMI.com.

Mechanization in tobacco farming in Jujuy, Argentina

Our 2025 roadmap

In our last report, we committed to further developing our goals and key performance indicators (KPIs). Throughout 2019, we crafted our 2025 roadmap, based on our sustainability materiality assessment and focusing on tier 1 topics – those areas in which we believe we can make the greatest difference. Each priority topic falls under the responsibility of a member of PMI's Company Management and is assigned a target against which our progress will be measured and reported on annually.

As we are still developing certain KPIs, we will provide a more comprehensive overview in our next report.

WE FOCUS WHERE WE CAN HAVE THE GREATEST IMPACT	OUR 2025 ASPIRATIONAL TARGETS[1]	
Product health impact and access to smoke-free products Broaden access for adult smokers to smoke-free products that are scientifically substantiated as less harmful alternatives to cigarettes	>40m	Number of adult smokers globally who switch to PMI smoke-free products
	>20m	Number of adult smokers in non-OECD countries who switch to PMI smoke-free products
	>250bn	PMI's smoke-free product shipment volume
	<550bn	PMI's combustible product shipment volume
Responsible marketing and sales practices Commercialize our products responsibly, preventing youth from accessing and using them	>90%	Youth access prevention programs in place in markets representing over 90 percent of PMI's total shipment volume by 2020
	100%	Percentage of PMI's portfolio of electronic smoke-free devices equipped with age-verification technology by 2023
Sustainable supply chain management Further embed sustainability in our procurement practices, leveraging on opportunities to create long-lasting social and environmental impact	100%	Percentage of critical suppliers from whom PMI sources sustainably
Respect for human rights Safeguard the human rights of people impacted by our activities across our value chain	10	Highest risk countries covered by external human rights impact assessments and findings addressed
Socio-economic well-being of tobacco-farming communities Eliminate child labor and provide safe and fair working conditions on tobacco farms, and promote a living income for farmers	100%	Percentage of contracted farmers supplying tobacco to PMI who make a living income
	Zero	Child labor in PMI's tobacco supply chain
Health, safety, and well-being at work Promote a safe and healthy working environment which protects the physical and mental well-being of all while at work	<0.3	Total recordable incidents rate for employees and contractors
Climate protection Mitigate climate change by decarbonizing our operations and value chain, while increasing our resilience	Net zero	Achievement of carbon neutrality of PMI's direct operations (scope 1+2) by 2030
	Net zero	Achievement of carbon neutrality of PMI's value chain (scope 1+2+3) by 2050
Littering prevention Prevent littering of our products by promoting appropriate behavior among adult consumers	-50%	Reduction of plastic litter from our products (versus 2021)
Product eco-design and circularity Integrate circularity when developing our products, improving efficiency and recyclability, and strengthening our collection program	100%	Percentage of PMI smoke-free product users who have access to collection and recovery for devices and consumables
	100%	Percentage of PMI smoke-free devices that have eco-design certification

Transforming for a sustainable smoke-free future

1 Note: Where targets refer to a different year than 2025, it is specifically indicated.

Contributing to the Sustainable Development Goals

The 2030 Agenda for Sustainable Development is a universal call for action to address global challenges. At PMI, we are committed to play our part in making the UN Sustainable Development Goals (SDGs) become a reality.

Building on our refreshed materiality assessment and our sustainability roadmap, we reviewed the SDGs to which we believe we can contribute most. We took the same approach we applied in 2018:

- We mapped our sustainability work to the 17 SDGs and 169 targets.
- We identified the SDGs for which we believe we can have the greatest positive impact.
- We aligned these SDGs to our sustainability strategy.
- We developed our SDG wheel based on the tiered structure of our strategy – tier 1 and tier 2 topics.

We identified no significant changes versus our 2018 assessment, with SDG 3 (health and well-being) remaining at the core of our efforts. SDG 2 was added to the primary SDGs on which we focus, reflecting greater emphasis on the socio-economic well-being of tobacco-farming communities and sustainable supply chain management among our tier 1 topics. With our 2025 roadmap now in place, we do not anticipate any major changes to our SDG focus in the medium term.

Primary SDGs to which PMI can contribute

SDG 2	Our efforts to sustainably manage our supply chain and promote good agricultural practices can help improve the livelihood and food security of the farmers who supply us with tobacco and other agricultural products.
SDG 3	Cigarette smoking causes serious disease. By replacing cigarettes with less harmful alternatives, we can significantly reduce the negative impact of our products on the health of our consumers.
SDG 8	We strive to provide good working conditions for all our employees and expect our suppliers to do the same for the benefit of over 1 million workers throughout our value chain.
SDG 12	We seek to improve the lifecycle impacts of our products – from reducing the environmental impacts of tobacco growing to efficient low-carbon manufacturing, litter prevention, product eco-design, and recycling programs.
SDG 13	Our carbon-neutrality program in our operations and our renewable curing fuels program in our tobacco leaf supply chain contribute to mitigating the risk of climate change.
SDG 14	Our Environmental Commitment governs our management approach to waste and water, to ensure that all effluents released are within, or better than, levels required by regulations in the countries where we operate.
SDG 15	We are committed to protecting biodiversity, especially forested areas affected by our operations, particularly in the supply chain of tobacco leaf and paper-based packaging.

Business and Human Rights Forum in PMI's Taguig office in the Philippines

Stakeholder engagement

Transformation cannot happen without conversation. While PMI's commitment to a sustainable smoke-free future is unwavering, we cannot complete this journey alone.

During our sustainability materiality assessment, we collected feedback from stakeholders on specific topics and trends involving key issues

From casual conversations and commercial business meetings to formal consultations and advocacy processes, stakeholder engagement is part of everyday life at PMI. Whether it be with governments, public health bodies, enforcement agencies, e-waste recyclers, NGOs, investors, wholesalers, farmers, or someone else, we engage through dialogue, participative processes, and the disclosure of company information. We use Principles and Practices to guide how we do it. Our Guidebook for Success (our code of conduct) and an Overview of our Engagement Principles are available on PMI.com.

PMI's Statement of Purpose (see page 8) highlights key stakeholders to achieve a smoke-free future. The table on the next page maps relevant stakeholders based on the degree to which they are impacted by our activities and relationships, as well as on their ability to influence our business objectives, and shows how we engage with different groups. Engagement enhances our mutual understanding of interests, concerns, and aspirations. The nature of our engagement changes over time to reflect the evolution of our business – particularly our transformation to smoke-free products.

During our sustainability materiality assessment, we collected feedback from stakeholders on specific topics and trends involving key issues. Our expanded survey in 2019 included a suite of open questions that resulted in valuable insights into stakeholder concerns and expectations. Many participants mentioned that PMI's progress in its sustainability work was encouraging and rightly targeted. Respondents also highlighted potential for improvement. For instance, certain employees noted their willingness to be more involved in the company's sustainability efforts. Other stakeholders stressed the need for PMI to communicate on its work further and set clear targets and performance indicators so that progress may be tracked. We took such comments into consideration when developing our sustainability strategy.

Stakeholders	Stakeholder groups	Means of engagement: Ongoing dialogue	Surveys and questionnaires	Training	Corporate communications	Formal gatherings	Forums and events	Contractual relationships	Memberships and partnerships	Regular or ad hoc visits	Reports and publications	Hotline and call centers	Consultations	Other
Adult consumers[1]	**Adult consumers**	●	●		●		●					●		
PMI employees and contracted employees	**Employees**	●	●	●	●		●	●			●	●	●	
PMI management														
Work councils														
Trade unions														
Intergovernmental organizations	**Regulators**	●		●		●	●				●		●	Submissions and consultations
Regulatory agencies														
Standard setters														
Government authorities (including legislators)														
Customs[2]														
Academia	**Public health community**	●				●	●	●	●	●	●			
Local communities														
NGOs														
Farmers and farmworkers	**Supply chain**	●	●	●	●	●	●	●	●	●	●	●	●	Access to field technician for tobacco farmers
Farmers' associations														
Third-party-operated manufacturers														
Contractors														
Wholesalers	**Retailers and wholesalers**	●		●			●	●		●				
Retailers														
Peers and other tobacco companies	**Business community**	●			●	●	●		●		●			
Trade associations														
Chambers of commerce														
Academia	**Civil society**	●	●	●	●	●	●		●		●	●	●	Social contributions
Local communities														
NGOs														
Analysts	**Financial community**	●			●	●	●				●			
Investors														
Sustainability ratings agencies														
Written press	**Media**	●	●		●		●		●		●			Studies, interviews, business achievements, and certifications
Social media														
Journalists														

1 Where appropriate and as per local regulations
2 We conduct trainings for customs and law enforcement officers as part of our efforts to fight illicit tobacco trade

Governance and management

PMI's governance structure grounds our daily activities to ensure we conduct our business in compliance with high standards and with integrity.

Board of Directors

PMI's annual Proxy Statement contains detailed information on our Board and committee structure, the independence and diversity of the members, and the responsibilities and meeting frequency of each committee.

The primary responsibility of the Board of Directors is to foster the long-term success of the company, consistent with its statutory duty to shareholders. The Board has responsibility for establishing broad corporate policies, setting strategic direction, and overseeing management, who are responsible for the day-to-day operations of the company.

The Board has established various standing committees to assist with the performance of its responsibilities. The Board has adopted written charters for each of these committees; they are available on PMI.com.

Our Board is a diverse, highly engaged group that provides strong, effective oversight of our company. Both individually and collectively, our Directors have the qualifications, skills, and experience needed to inform and oversee the company's long-term strategic growth. Each Director has senior executive experience, in many cases with large, complex organizations with significant global operations. Several Directors have leadership experience in the global consumer products sector, while others bring expertise regarding information technology, cybersecurity, digital transformation, sustainability, and ESG matters. Please see PMI's 2020 Proxy Statement on PMI.com for biographical information about each Director.

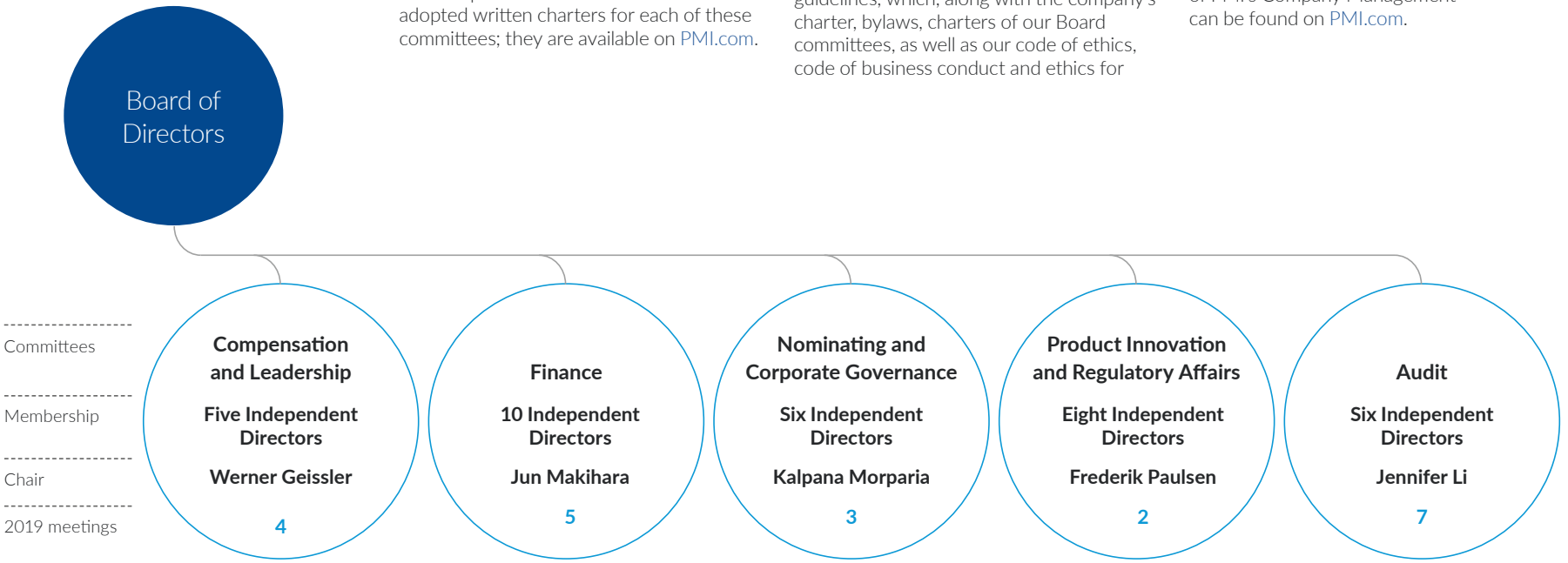
The Board adopted corporate governance guidelines, which, along with the company's charter, bylaws, charters of our Board committees, as well as our code of ethics, code of business conduct and ethics for directors, and related person transactions policy, provide the framework for the governance of the company. All of these documents are available on PMI.com.

The Board's oversight of the company's sustainability work is detailed in the sustainability governance and management section on the next page.

Company Management

PMI's Company Management encompasses those employees who are executive officers under the Section 16 rule of the Securities Exchange Act of 1934.

As of December 31, 2019, our Company Management was made up of 25 members, of whom two were women. A biography of each member of PMI's Company Management can be found on PMI.com.



The Board of Directors and its committees as of Dec. 31, 2019

Executive compensation

Our compensation and benefits program supports our business and financial objectives. Each component is designed to achieve one or more of the following objectives:

- To support our ability to attract, develop, and retain world-class leaders in a controversial industry.
- To align the interests of executives and shareholders.
- To reward performance against predefined objectives.
- To support long-term business growth, superior financial results, sustainability efforts, societal alignment, and integrity of conduct.
- To promote internal fairness and a disciplined assessment of performance.
- To align executive incentives with our risk management objectives.

These objectives provide the framework for the various components of compensation and benefits and take into account the specific nature of our business. Together, these elements form an aggregate package that is intended to be appropriately competitive. Please see PMI's Proxy Statement for further information on our executive compensation program.

Sustainability governance and management

Several committees of the Board of Directors are tasked with oversight responsibility for the topics covered in this report. The Nominating and Corporate Governance Committee (NCGC) oversees the company's sustainability strategies and performance and advises the Board on sustainability matters. Until June 2020, the Product Innovation and Regulatory Affairs Committee oversaw the scientific assessment of smoke-free products, innovation, advocacy, and consumer affairs.[1] The Audit Committee oversees, among other matters, the risk management of climate change, of manufacturing and supply chain disruption, and the cybersecurity risk assessment.

At least once a year, the NCGC is updated on progress by PMI's Chief Sustainability Officer (CSO), who reports to the President, External Affairs (EA) and General Counsel, a member of the Company Management.

The CSO leads the integration of sustainability across our business. He is a member of the External Engagement Committee (EEC), composed of the company's CEO, COO, and President, EA and General Counsel, as well as senior leaders from various functions. Supporting the Company Management, the EEC is responsible for developing and deploying strategies and programs to propel better choices for consumers. This includes the oversight of PMI's sustainability work.

Led by the CSO, PMI's sustainability team is responsible for defining and coordinating our corporate sustainability strategy. The team works closely with all functions and across all geographies to drive the implementation of the strategy. Certain functions have dedicated teams addressing sustainability in their areas of expertise, and our affiliates have dedicated local sustainability coordinators. This helps with the implementation of global strategy and programs at the local level and ensures local realities are reflected in our global work.

Risk management

Risk management is overseen by the committees of the Board as well as by the full Board. We identify and prioritize key enterprise risks based on four dimensions: the impact of a risk on PMI if it were to occur, its likelihood, its velocity, and its interconnectivity with other risks.

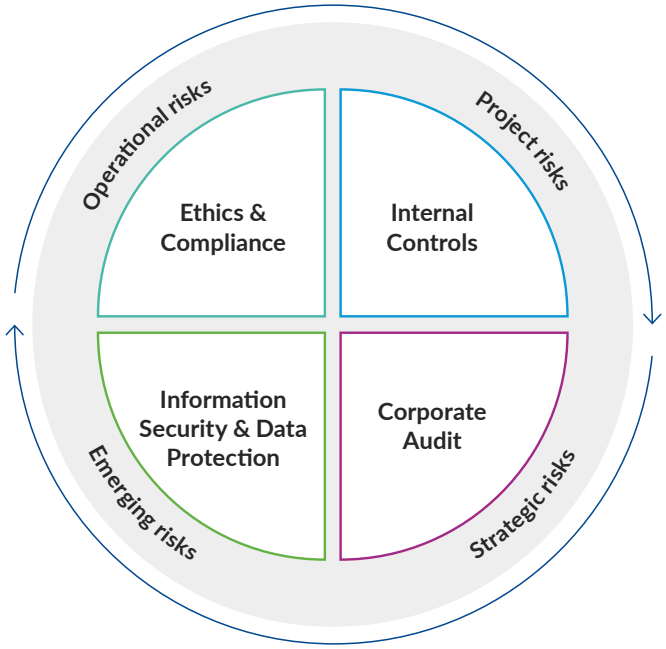
As part of the risk management process, the company has established a Corporate Risk Governance Committee (CRGC) comprising senior executive officers, including the CFO; Controller; VP, Corporate Audit; VP, Treasury and Corporate Finance; and the Chief Ethics and Compliance Officer, VP. Ownership of each of the prioritized risks is assigned to a member of senior management; its oversight is assigned to a particular Board committee or to the full Board. Management reports on these risks to the appropriate committee and to the full Board throughout the year.

The CRGC coordinates an integrated risk assessment. PMI's integrated risk assessment process brings together the functions of Corporate Audit, Internal Controls, Ethics and Compliance, and Integrated Information Security and Data Privacy. Taking a holistic approach, these groups collaborate to understand, assess, and act on strategic, emerging, project-related, and operational risks. Sustainability risks and opportunities such as safety, leaf supply, climate change, electronic waste, and labor conditions, for instance, are covered in the integrated risk assessment. In 2019, the four functions held monthly meetings, allowing for continuous evaluation of the risk environment, and a new common risk assessment tool was introduced, aligning and consolidating risks and action plans. PMI's CRGC and the Audit Committee of the Board of Directors receive quarterly updates.

Our governance and technical procedures for relevant controls align with the Sarbanes–Oxley Act. Corporate strategy and operations are managed in a way that accounts for functional, market, and product risks, and our Chief Strategy Officer reports to our CEO directly on strategic group risks.

1 In June 2020, the Board established a new Consumer Relationships and Regulation Committee. A full description of the responsibilities of each of the Board Committees is set forth in the Committee charters that are published on the Company's website.

Our risk management framework



CASE STUDY: PORTUGAL

A model for integrated sustainability

Location
Portugal

Employees
~900

Manufacturing facility
Albarraque

Founded in 1927, Tabaqueira has been part of PMI since 1997, when the company became its majority shareholder. It is the largest tobacco company in Portugal, and its factory in Albarraque is one of PMI's biggest European production centers.

Around 900 people work at Tabaqueira, with around 500 based at its factory, producing cigarettes for brands such as *Marlboro*, *L&M*, and *Chesterfield*, as well as local brands *SG* and *Português*. Several central or regional PMI business functions are also located in the country.

IQOS commercialization

At the end of 2015, Portugal became the fourth PMI market to commercialize *IQOS*, with an initial introduction in the Lisbon area. The product's commercialization required the company to adopt a consumer-centric model.

As a first step, Tabaqueira opened an *IQOS* store in Lisbon at the beginning of 2016. To ensure the product was available only to the intended audience – adult smokers – and to trial a new commercialization approach centered on direct contact with consumers, purchases initially were limited to a select group of registered users: Tabaqueira employees and adult smokers they recommended for membership.

Additional mobile and temporary points of sale were subsequently established in various locations throughout the country. Sales were then extended to include traditional retailers. As of the end of 2019, the *IQOS* device and its heated tobacco units could be purchased at thousands of points of sale across Portugal.

In parallel to making *IQOS* available to adult smokers, Tabaqueira has prioritized raising public awareness of the product and providing access to accurate information about it, while also guarding against access to youth and nonsmokers. To this end, the company instituted ID checks at points of purchase and also registers *IQOS* devices so each is linked to its user.

Customers at an *IQOS* pop-up store in Lisbon, Portugal

Tackling cigarette butt littering

To address the issue of cigarette butt littering in Portugal, Tabaqueira collaborated with multiple stakeholders, including the European Blue Flag Association, the Municipality of Oeiras, and rail and infrastructure organizations. Together, they have been implementing impactful activities designed to change consumer behavior.

In December 2018, a campaign was launched to raise awareness of the issue and encourage consumers to dispose of cigarette butts properly, in ashtrays and bins. The campaign extended nationwide throughout 2019, spreading to events such as the Regata de Portugal and summer festivals. In total, 36,000 portable ashtrays were distributed at such events.

Tabaqueira employees also took part in activities to mark World Cleanup Day and further raise local awareness of the issue.

> “Together, they have been implementing impactful activities designed to change consumer behavior.

Along with the local Sintra Municipality and Movimento Claro (an anti-littering organization), they helped to clean the beach of Praia Grande in Sintra, collecting a total of 115 kilograms of waste, including 17,500 cigarette butts.

It’s expected to continue this work in 2020, with further initiatives and cleanups planned to continue raising awareness and help drive consumer behavior change to protect the environment – forests and oceans, in particular.

PMI employees cleaning up a beach in Portugal

Alliance for Water Stewardship certification

In 2019, Tabaqueira's factory became the first in Portugal to receive the Alliance for Water Stewardship (AWS) certification, recognizing its good practices in sustainable water management.

The AWS standard specifies how a company should address its water challenges in consultation with local stakeholders, while also addressing its water consumption and discharges.

PMI chose Tabaqueira's factory as its first European site to undergo the AWS certification process because it faced several risks, including:

- Flooding – The factory is in an urbanized area where flooding is a risk during heavy rainfall.
- Water pollution – A small river runs through the factory premises. While factory activities do not impact the river, pollution is a potential risk.
- Water scarcity – The factory is in a Mediterranean location prone to drought.
- Water sanitation and hygiene – The factory water supply and its multiple uses must undergo constant monitoring and quality assurance.

These challenges were assessed during the AWS certification process, leading to interventions such as the renaturalization of the Ribeira do Marmelo, a nearby river, to mitigate the risk of flooding. Also, the factory cleaning processes were further optimized. Tabaqueira has requested permission to reuse wastewater treated in the factory to irrigate its gardens. Furthermore, a new automatic chlorination process was implemented in the factory reservoirs to improve water quality.

Thanks to its ongoing efforts to manage water responsibly, Tabaqueira decreased its water consumption by 48 percent between 2010 and 2019.

Employees in the manufacturing facility of Tabaqueira, PMI's Portuguese affiliate

An employee in the manufacturing facility of Tabaqueira, PMI's Portuguese affiliate

A focus on safety

Eliminating unsafe behaviors within the factory facilities is a priority for Tabaqueira. In 2018, the location recorded 12 minor incidents after employees returned from summer vacation, highlighting an area for improvement.

To address such incidents, the affiliate launched a "Back to Work" campaign in 2019 to remind employees returning from holidays of the safety procedures within the factory. This helped achieve a substantial reduction in incidents, with only three recorded that year.

At the same time, the affiliate reinforced the use of behavioral observation systems (BOS) as a platform. BOS works on the principle of preventing injuries by monitoring, recognizing, and reinforcing personal behavior. It provides a high awareness of safety and is a platform for everyone's involvement on a regular basis, in order to create an interdependent safety culture. Tabaqueira employees have been trained on BOS to build the capability of preventing work-related accidents and develop skills to care for colleagues while at work. The tool provides data measurement that will help to better understand the causes for unsafe behavior. BOS training has already been delivered to more than 380 factory employees (representing 72 percent of the workforce). Thanks to this training, employees have incorporated the tool into their daily work. In December 2019 alone, 2,058 observations were catalogued. The challenge for the future is to have all factory employees conducting one BOS per day. The rollout will continue throughout 2020.

PILLAR I

Innovating for better products

We recognize that cigarette smoking causes serious diseases and that the best way to avoid the harms of smoking is never to start or to quit. Nevertheless, for adult smokers who would otherwise continue to smoke, we believe that product innovation has a significant potential to benefit public health.

To be successful, we need to continue innovating in two areas. First, we are developing a product portfolio of smoke-free products with a significantly reduced health impact compared to combustible cigarettes. The reduced risk profile of these products is scientifically substantiated, following a step-by-step program derived from practices of the pharmaceutical industry.

Second, to reduce harm at the individual and population level, smokers must be interested in switching to smoke-free products, rather than continuing to smoke cigarettes. Here we need to innovate, transform our internal organization, and engage with legislators and regulators to ensure that people who would otherwise continue to smoke have access to smoke-free alternatives.

Product health impacts
Page 40

Access to smoke-free products
Page 54

Product health impacts

Experts and many regulatory bodies, such as the U.S. FDA, agree that the primary cause of smoking-related diseases is not nicotine, but the inhalation of harmful and potentially harmful constituents formed as a result of burning tobacco.[1] We are therefore developing a portfolio of products that deliver nicotine without combustion – smoke-free products.

Megatrends

- Technological progress
- Changing consumer expectations
- Purpose of business

A scientist in PMI's R&D center in Neuchâtel, Switzerland

1 Source: https://www.fda.gov/tobacco-products/health-information/nicotine-addictive-chemical-tobacco-products

Topic description

Reducing the risks to health associated with the use of our products.

Relevance of the topic

Impact in our value chain

Upstream | PMI operations | Downstream

Key stakeholders

- Adult consumers
- Public health community
- Civil society
- Regulators
- Media

Why it is important to us and our stakeholders

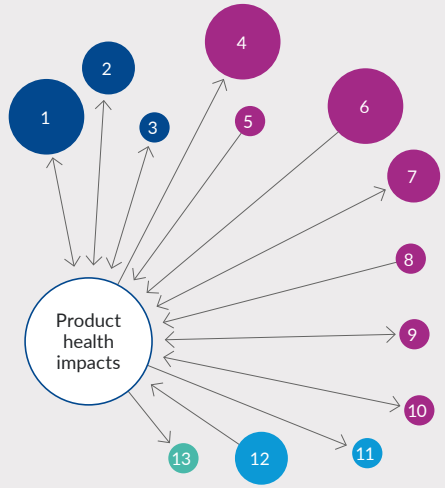
Cigarette smoking is the most dangerous form of tobacco use. It causes several serious diseases, including cardiovascular disease, lung cancer, and chronic obstructive pulmonary disease. The best way to avoid the harms of smoking is never to start or, for those who do smoke, to quit.

However, according to WHO forecasts, there will still be more than 1 billion smokers by the year 2025. For these people, alternative products that significantly reduce the risk of disease compared with continued smoking are fundamental. When properly regulated, they can complement existing regulatory efforts aimed at reducing smoking prevalence.

PMI is investing in the development and rigorous scientific assessment of a portfolio of potentially reduced-risk alternatives to cigarette smoking.

Our approach is based on the acknowledgment that new products will benefit public health if they meet three conditions: First, the totality of evidence must demonstrate that a product has the potential to significantly reduce risk in the long-term, compared with continued smoking. Second, adult smokers must consider them acceptable alternatives to cigarettes and be willing to switch to them exclusively. And third, their use by unintended audiences – youth, never smokers and former smokers – should be minimized.

Connectivity with other sustainability issues at PMI



1 Access to smoke-free products
2 Product addictiveness
3 Product reliability
4 Responsible marketing and sales practices
5 Data privacy and protection
6 Responsible and transparent R&D
7 Respect for human rights
8 Illicit tobacco trade prevention
9 Responsible advocacy
10 Business integrity
11 Health, safety, and well-being at work
12 Talent attraction, retention, and employability
13 Product eco-design and circularity

Achieving our aims

Science and technology are essential in devising solutions for bringing an end to cigarette smoking. The principal source of cigarette-related diseases is known: It is the burning process that creates the vast majority of the harmful chemicals that are the primary causes of smoking-related diseases. In our smoke-free tobacco products, we are able to precisely control temperatures so that they release nicotine and flavors but do not reach the temperature necessary for combustion to occur. By avoiding combustion, we reduce or eliminate the formation of harmful and potentially harmful chemicals (HPHCs).

The toxicological assessment of smoke-free products is guided by two fundamental principles. The first principle is derived from epidemiology: Smoking-related harm and disease are directly caused by long-term exposure to the toxicants found in cigarette smoke. The best way to avoid these harms is never to start smoking. For men and women who smoke, cessation has been demonstrated to lead to reduced harm and risk of tobacco-related disease by eliminating exposure to cigarette smoke toxicants. Complete, long-term cessation is the maximum risk-reduction that a smoker can achieve, and hence is the "gold standard" for the assessment of smoke-free products. The second principle is derived from toxicology: The degree of exposure to toxicants determines the nature and degree of adverse health effects. For exposure to take place, toxicants need to be present – meaning that they are emitted by the product or process of use. A product with significantly reduced toxic emissions compared with cigarettes has the potential to significantly reduce exposure to toxicants, which in turn will lead to a reduction in adverse health effects. In line with those two principles, our toxicological assessment program aims to compare the health outcome of switching to smoke-free products with ongoing smoking and with cessation.

Smoke-free products are not risk-free, and they contain nicotine, which is addictive. The way we assess the risk of using them is always in comparison with cigarette smoking or cessation.

A scientist in PMI's R&D center in Neuchâtel, Switzerland

The precautionary principle

While regulators should exercise precaution in matters that entail scientific uncertainty, such measures must be proportionate. Despite uncertainty, action should be taken to anticipate, prevent, or minimize possible damage in the future. Smoke-free products are not risk-free, and a regulator may claim that some risks have not yet been fully assessed. Waiting for absolute scientific certainty, however, could potentially result in greater harm. The precautionary principle should encourage regulators to engage in a holistic assessment that balances the risks and benefits on each side of the spectrum, and to take a proactive approach to allow the introduction of better alternatives to smoking, as they are more likely to improve individual and population health. Consumers should have the chance to benefit from innovation that has allowed for the creation of less harmful alternatives to cigarettes, even if the science around these alternatives is still at the nascent stages. Hazardous products should be substituted by less harmful alternatives.

Smoke-free products timeline

PMI has been working on innovative, noncombustible tobacco products to replace cigarettes for decades. After years of research and two unsuccessful commercialization attempts, we launched *IQOS*, a heat-not-burn product and our main smoke-free product, in 2015. As of the end of 2019, the product was available in 52 markets, and we estimate that approximately 9.7 million adults had stopped smoking and switched to it.

1998–99

Philip Morris USA and PMI launch the first electronically heated tobacco product, called *Accord* in the U.S. and *Oasis* in Japan.

2003

The World Health Assembly adopts the WHO Framework Convention on Tobacco Control (FCTC), which defines tobacco control as "a range of supply, demand, and harm reduction strategies that aim to improve the health of a population by eliminating or reducing their consumption of tobacco products and exposure to tobacco smoke."

2004

The first e-cigarettes are commercialized, in China.

2006

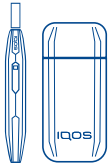
PMI launches *Heatbar* in Switzerland and Australia. *Heatbar* is the second generation of electronically heated tobacco products; consumer acceptance is low due to the bulky device and suboptimal taste, and the product is withdrawn.

2007

The U.K.'s Royal College of Physicians publishes a report on tobacco harm reduction. It states that "nicotine itself is not especially hazardous" and that "if nicotine could be provided in a form that is acceptable and effective as a cigarette substitute, millions of lives could be saved."

2009–10

PMI opens its new research and development facilities dedicated to the development and assessment of smoke-free products in Switzerland and Singapore.



2014

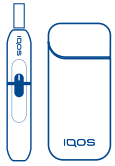
- PMI pilot launches *IQOS* in Milan, Italy, and Nagoya, Japan.
- PMI announces the investment of USD 680 million to build its first purpose-built factory for heated tobacco units, in Bologna, Italy.

2015

PMI commercially launches *IQOS* in key cities in Japan, Italy, Portugal, Romania, Russia, and Switzerland.

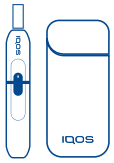
2016

- PMI announces its ambition to lead a full-scale effort to ensure that smoke-free products replace cigarettes.
- PMI submits a modified-risk tobacco product (MRTP) application for a version of *IQOS* to the U.S. Food and Drug Administration (FDA).
- Around 1.5 million adult smokers have stopped smoking and switched to *IQOS*.



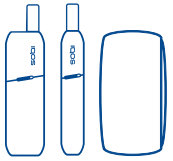
2017

- PMI submits a premarket tobacco product authorization (PMTA) application for a version of *IQOS* to the U.S. FDA.
- More than 4.7 million adult smokers have stopped smoking and switched to *IQOS*.



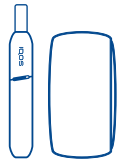
2018

- Launch of *IQOS 3* and *IQOS 3 MULTI*.
- PMI pilots *IQOS MESH*, an e-vapor product, in the U.K.
- More than 6.6 million adult smokers have stopped smoking and switched to *IQOS*.



2019

- Launch of *IQOS 3 DUO*.
- The U.S. FDA authorizes a version of *IQOS* for sale in the U.S., following its comprehensive assessment of PMI's PMTA application.
- Around 9.7 million adult smokers have stopped smoking and switched to *IQOS*.



To demonstrate that switching to our smoke-free products results in reduced exposure to toxicants, which can or does reduce the risk of disease compared with continued cigarette smoking, we are following a rigorous scientific assessment program aligned with the U.S. FDA's draft guidance on modified risk tobacco products (learn more about how we conduct our R&D on PMI.com). Our assessment program also aims to guard against the use of our smoke-free products by unintended audiences, such as former smokers, never smokers, and youth.

> We are following a rigorous scientific assessment program aligned with the U.S. FDA's draft guidance.

Our two main R&D centers, located in Switzerland and Singapore, employ hundreds of scientists, engineers, and other experts to work on the development and assessment of smoke-free products. This work is headed by our Chief Product Officer, Chief Life Science Officer, and Chief Consumer Officer, who are members of PMI's Company Management. In 2019, 98 percent of our R&D expenditure was dedicated to smoke-free products. This includes costs related to clinical studies, the development of machinery and prototypes, and product acceptability testing. The remaining 2 percent of our total R&D expenditures largely relate to regulatory compliance requirements for our combustible tobacco products. The development and assessment of smoke-free products involve a network of organizations with which we partner worldwide, including start-ups, laboratories, and universities (see the Swiss example in our case study on page 66).

It is the responsibility of any manufacturer to assess and demonstrate that switching completely to a novel tobacco and nicotine product has the potential to reduce the risk of harm compared with continued smoking. To ensure trust, this assessment must be independently verified. PMI has adopted both passive and proactive approaches to verification. Passive approaches include independently funded studies without interaction from PMI, as well as the in-depth review and inspection of PMI's R&D and manufacturing processes, study documentation, data, and premises by regulatory agencies upon regulatory submissions. Just as with our own research, it is essential that any independent study be conducted with the appropriate degree of scientific rigor. The methodologies and equipment used should be fit-for-purpose and validated, and the experimental results should be interpreted and reported in an accurate and non-misleading manner.

To complement these passive approaches, we have developed a strategy to build confidence in our scientific methods and results by taking several proactive steps, including the periodic inspection and renewal of ISO 17025 for testing and calibration laboratories and Good Laboratory Practices (GLP) accreditations by national authorities; publication of our methods and results in peer-reviewed scientific literature or on platforms such as ClinicalTrials.gov; crowdsourced verification of our methods and study results through the sbv IMPROVER platform; and proactive sharing of data to enable analysis by independent third parties through the INTERVALS platform. Read more on the transparency of our R&D on PMI.com.

It is clear that long-term epidemiological data are needed to accurately quantify the overall disease risk reduction effect associated with switching from cigarette smoking to the use of smoke-free products, as well as to evaluate the excess disease-risk associated with the use of these products. Generating epidemiological evidence requires that smoke-free products be available in the market for many years. The products must be used exclusively by a large portion of adult smokers who have fully switched for at least a decade. This renders epidemiological studies impracticable in a premarket setting or in the early phase of market introduction.

Scientific challenges in the assessment of smoke-free products

Quantifying precisely the disease risk-reduction potential of smoke-free products before, or soon after, they are introduced into the market comes with scientific challenges.

The first important challenge is that most smoking-related diseases generally occur after decades of smoking. Additionally, the reduction in excess risk upon smoking cessation – and therefore also upon switching to smoke-free products – also takes years. This is complicated even further because most smoking-related diseases are also affected by other important factors such as diet and lifestyle. Together all of this makes the measurement of health outcomes after switching difficult – if not impossible – in the short-term.

The second challenge is that smoking affects several organ systems and many biological mechanisms. As a result, no single biomarker can, on its own, cover all of the smoking-related diseases. Therefore, several biomarkers need to be considered together, to strengthen the evidentiary basis with coherent, mutually supportive data that cover the multifaceted impact of cigarette smoking. Scientists and regulators have not yet reached consensus on the range of biomarkers that should be used to assess the effects of smoking, smoking cessation or switching to smoke-free products.

Considering these two challenges in particular – the complexity and multifaceted nature of smoking-related diseases and the long-term nature of measuring disease – a totality of evidence approach is fitting in the short term to assess the disease risk-reduction potential of smoke-free products. This approach takes evidence from different studies to cover all of the steps in disease development from the emission of toxicants all the way to overt disease. For *IQOS*, the totality of evidence generated by PMI brings together extensive aerosol chemistry data, nonclinical studies (18 studies, including animal models of disease covering the major smoking-related diseases), and clinical studies (10 studies with thousands of participants with up to six months of exposure). The strength of this evidence comes from the coherence and consistency of the results across the different studies, endpoints, disease pathways, and biological systems all pointing in the direction of risk reduction. It is the totality of the evidence that allows us to conclude that *IQOS* reduces the risk of smoking-related disease.

Laboratory analysts in the manufacturing facility of Papastratos, PMI's Greek affiliate

U.S. vaping investigation

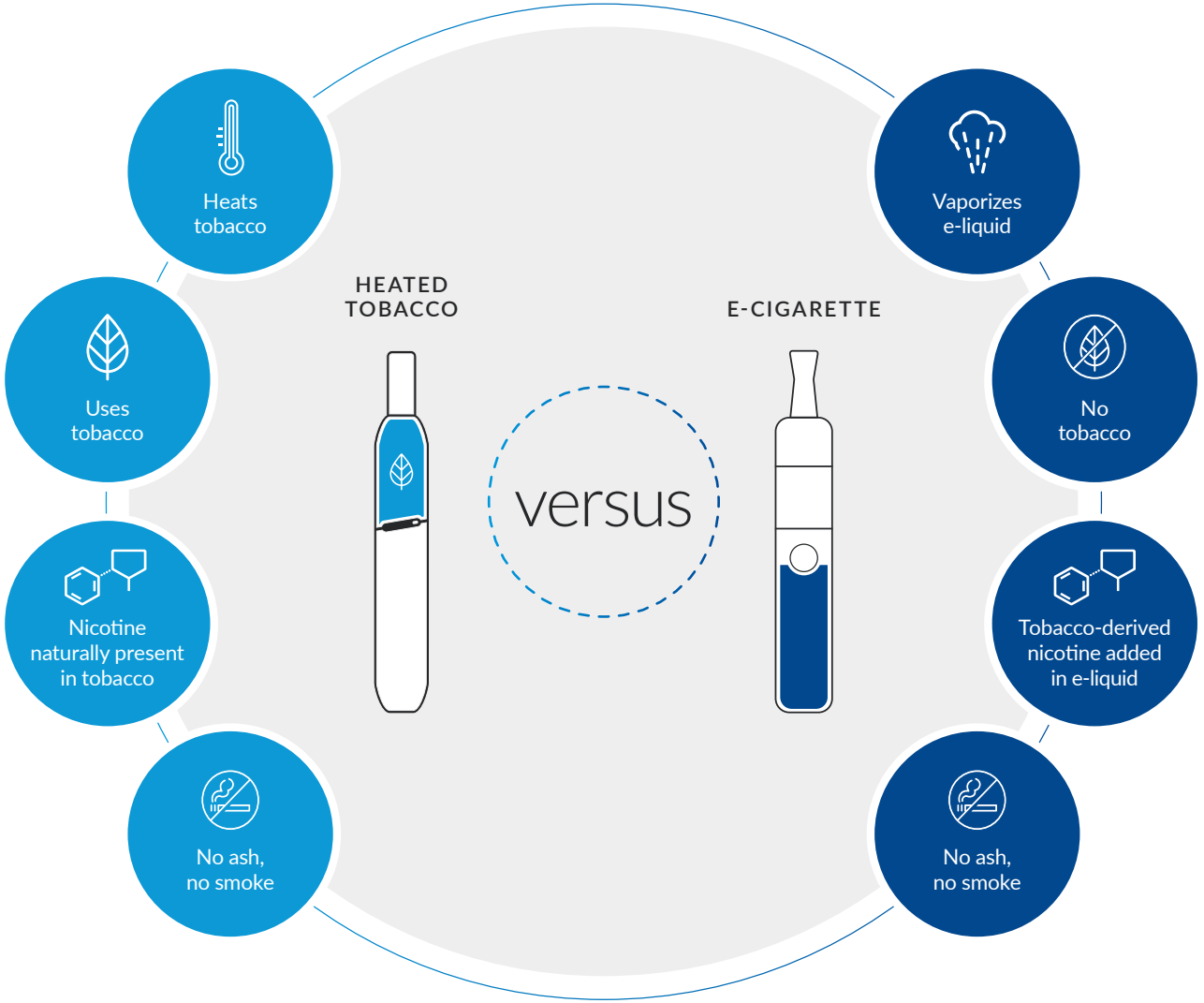
In August 2019, the U.S. Centers for Disease Control and Prevention (CDC) and the FDA started an investigation into almost 3,000 reported cases of respiratory illnesses thought to be connected to vaping. The U.S. CDC termed the illness "e-cigarette or vaping product use-associated lung injury" (EVALI) and, sadly, there were 68 confirmed deaths according to their last and final report from February 18, 2020. CDC's investigation concluded that vitamin E acetate was strongly linked to the EVALI outbreak. This chemical appears to have been added to tetrahydrocannabinol (THC)-containing vaping products – particularly those from illicit sources – which played a major role in the outbreak.

Over the latter half of 2019, there was significant – often inaccurate – news coverage of EVALI, not just in the U.S. but also worldwide. These news reports often incorrectly conflated EVALI with the use of legal, regulated e-cigarette products and were seized upon by special interest groups opposed to tobacco harm reduction. The unfortunate outcome has been confusion among smokers and e-cigarette users, resulting in a rise in the incorrect perception that e-cigarettes are equally or more harmful than cigarettes.

More worryingly, there have also been reports that smokers who had switched to e-cigarettes are turning back to cigarettes, particularly those in older age groups. Once the CDC's conclusions were available in February 2020 – making the connection between EVALI and illicit products – the damage had already been done, to the detriment of men and women who smoke.

When manufactured according to proper safety and quality rules and responsibly commercialized, smoke-free products like e-cigarettes, while not safe, have the potential to reduce the risk of tobacco-related harm for adult smokers who switch completely from combustible cigarettes. Their development, assessment, and use by adult smokers who otherwise would continue to smoke should be encouraged in the interests of public health. They should also be subject to regulation and governmental oversight. It is particularly important that regulation gives consumers confidence in the quality and safety of the products they use, and that manufacturers develop evidence that their products are better than cigarettes for adult users and for the public health overall.

The difference between heated tobacco products and e-cigarettes



Our heat-not-burn *IQOS* product

What is it and how does it work?

Our main smoke-free product, *IQOS*, is a battery-powered heat-not-burn product, which heats the tobacco to produce a nicotine-containing aerosol that is inhaled by the user without combustion of the tobacco.

IQOS works as a tobacco-heating system and is composed of three main components: a heated tobacco unit, a holder, and a charger.

The electronically heated tobacco unit is a novel product containing specially processed tobacco and two filter sections. The unit has been designed specifically and exclusively for use with the holder (the heating device). It contains a processed tobacco plug designed to be heated but not burned. It is made of tobacco leaves, which are ground and reconstituted into tobacco sheets, called "cast-leaf." These sheets are then crimped and made into a tobacco plug.

The user inserts the heated tobacco unit into the holder. Once activated, the holder heats the tobacco via an electronically controlled heating blade. The holder stores sufficient energy to permit the use of one or two heated tobacco units, depending on the *IQOS* model. Each tobacco unit provides a maximum of 14 puffs or around six minutes of consumption, whichever comes first. The holder contains a small battery, which needs to be recharged by inserting it into the charger, which in turn can be recharged using a household power socket.

The integrated version of the product, *IQOS Multi*, combines the holder and charger and allows for the use of up to 10 heated tobacco units before it is necessary to recharge the battery.

We continue to enhance our *IQOS* product, driven by consumer insights and supported by scientific substantiation. In September 2019, we launched the latest generation of the device, *IQOS DUO*, with new technology that allows for fast charging and two consecutive uses without recharging the holder.

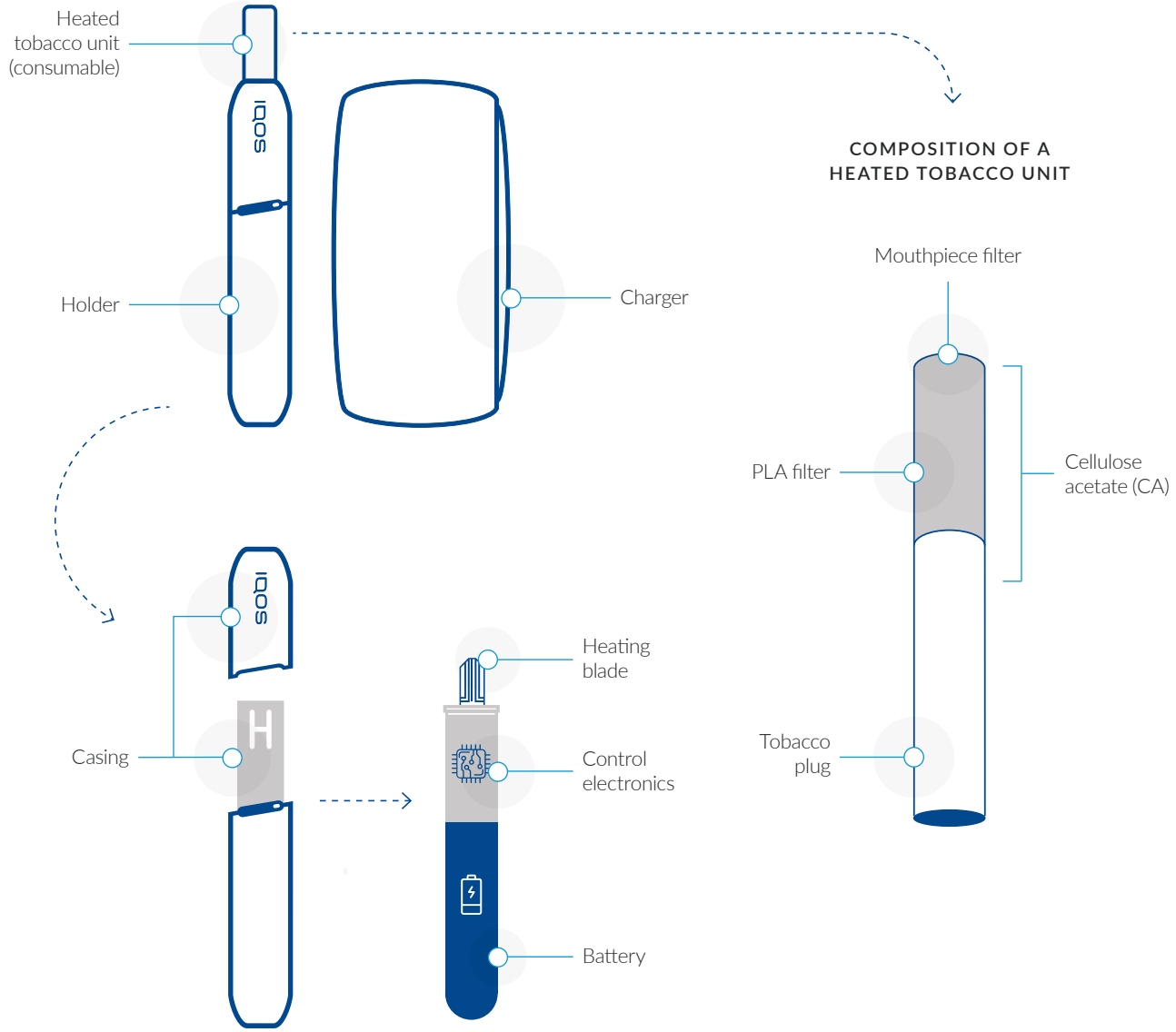
How does it reduce risk?

IQOS reduces the risk to health, compared with cigarette smoking, by avoiding burning tobacco. Decades of epidemiological data have demonstrated that the development of smoking-related diseases is triggered by the chronic inhalation of the harmful and potentially harmful chemicals (HPHCs) found in cigarette smoke. When a smoker lights a cigarette, it starts a high-temperature reaction, from 600 to 900 degrees Celsius, known as burning or combustion, which releases HPHCs. When *IQOS* is used, the device constantly monitors and controls the temperature of the tobacco so that it stays below 350 degrees Celsius. As a result, the nicotine-containing vapor the consumer inhales contains significantly lower levels of HPHCs than cigarettes. We have scientifically substantiated that during the operation of *IQOS*, no combustion occurs, and the aerosol generated has on average 95 percent lower levels of HPHCs than found in reference cigarette smoke.

What is an aerosol

The term *aerosol* is commonly used in chemistry to describe a gaseous suspension of fine solid particles and/or liquid droplets. The *IQOS* device heats a specially formulated tobacco blend to temperatures well below that necessary to initiate combustion. This heating releases nicotine and flavors, generating an aerosol that is not smoke. Experiments performed under specific nitrogen and air conditions confirm the absence of combustion in the *IQOS* device. The absence of combustion and smoke has been confirmed by multiple experts in countries that include Australia, Italy, Japan, New Zealand, Poland, the U.K., and the U.S.

The different parts of an *IQOS 3* device



A laboratory analyst in the manufacturing facility of Papastratos, PMI's Greek affiliate

What scientific evidence have we gathered to date?

IQOS is the most developed and most thoroughly assessed of our smoke-free platforms. We have accumulated extensive clinical and nonclinical data to support its potential to reduce the risk of developing smoking-related diseases compared with continued cigarette smoking.

As a first step, we compared the chemical composition of the *IQOS* aerosol with that of the smoke from a cigarette, using standardized and validated analytical methods to quantify the most important HPHCs known to be carcinogens or respiratory or cardiovascular toxicants, or to be involved in other toxic effects. We found that HPHCs are reduced on average by 95 percent compared with the reference cigarette's smoke – importantly, the carcinogens are reduced on average by more than 95 percent. Notably, nitrogen oxides and carbon monoxide, two important combustion markers, are reduced by over 96 percent. We conducted extensive chemical characterization of the *IQOS* aerosol. Our state-of-the-art untargeted screening has allowed us to characterize approximately 99.8 percent of the total aerosol mass, and we have identified all constituents present at levels ≥100 ng/stick. These analyses showed that there were over seven times fewer constituents in *IQOS* aerosol compared with reference cigarette smoke. As the U.S. FDA put it when they authorized a version of *IQOS* for sale in the U.S., they are "present at very low levels" and "do not raise significant concerns from a public health perspective."[1] We also conducted indoor air chemistry and quality studies, demonstrating that the use of *IQOS* does not negatively impact indoor air quality.

> "Importantly, the carcinogens are reduced by over 95 percent in the *IQOS* aerosol.

We then conducted toxicological studies for *IQOS*, both in vitro and in vivo, to determine whether the reduced formation of HPHCs in the aerosol leads to reduced toxicity in laboratory models. Results from the in vitro studies showed that the *IQOS* aerosol is significantly less cytotoxic and genotoxic than the smoke from cigarettes. The in vivo study found that, compared with cigarette smoke, the reduced exposure to toxicants achieved with the *IQOS* aerosol leads to a significantly reduced lung inflammation and respiratory toxicity.

IQOS is the most developed and most thoroughly assessed of our smoke-free products

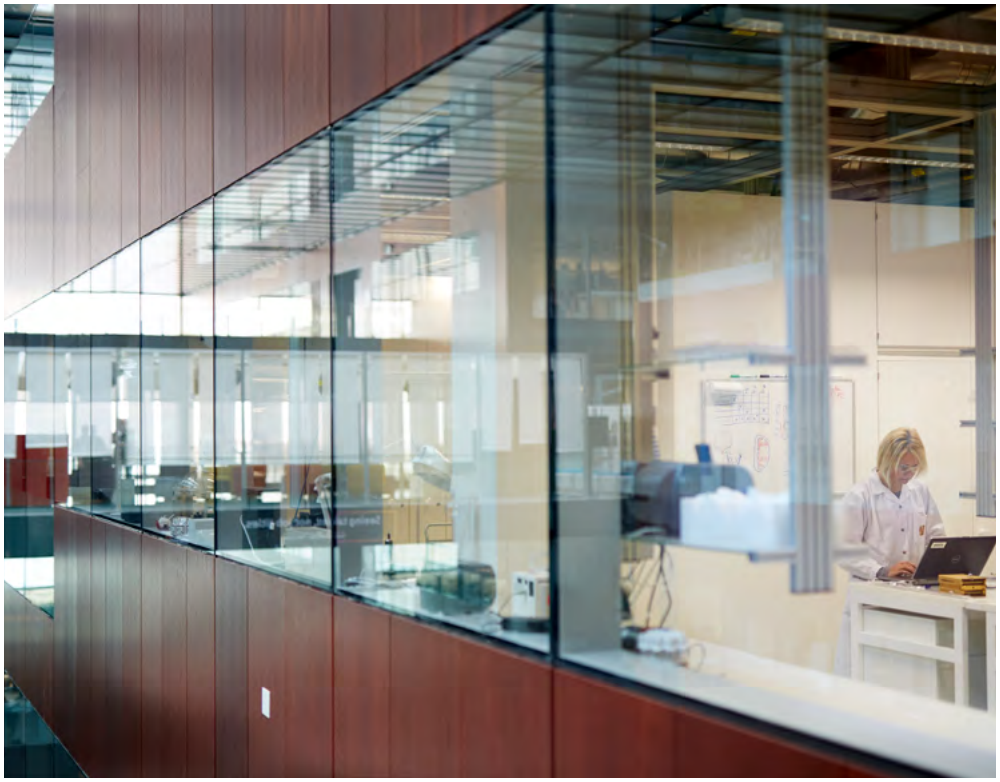
1 Source: https://www.fda.gov/media/124247/download (p41)

In the following stage, we conducted several systems toxicology studies to assess the disease-relevant biological mechanisms affected by exposure to toxicants, using human-derived in vitro cell cultures and organotypic tissue cultures. These studies showed that, compared with the reference cigarette smoke, the *IQOS* aerosol has a significantly reduced impact on key mechanisms involved in the development of respiratory and cardiovascular diseases. In a systems toxicology study conducted in an animal model of disease, we observed that switching to the *IQOS* aerosol following two months of cigarette smoke exposure reduces the development of both atherosclerosis and emphysema in a manner similar to smoking cessation. Recently, we completed an in vivo study to assess the potential of the *IQOS* aerosol to reduce the risk of lung inflammation, emphysema, and cancer compared with cigarette smoke; we expect to share the findings soon.

We conducted more than 10 clinical studies on *IQOS* involving thousands of participants and up to six months of exposure. For example, we conducted four clinical studies, each involving 160 participants, and an exposure period lasting five days to three months, to assess relative exposure to toxicants when switching to *IQOS* compared with continued cigarette smoking. The first two studies – incorporating a five-day exposure, in confinement – were conducted in Europe and Japan. The subsequent two studies extended over three months – a five-day exposure period followed by an ambulatory period of 85 days – and were conducted using *IQOS* with menthol version heated tobacco units in Japan and the U.S. The ambulatory study period was intended to assess whether reductions in exposure observed in a confined setting were sustained under more "real world" conditions, where confounding factors such as environment, diet, passive smoking, and the use of combustible cigarettes in combination with *IQOS* ("dual use") could influence the levels of exposure to HPHCs. All four studies showed a significant reduction (ranging from 47 percent to 96 percent relative to continuing cigarette smoking) in the 15 biomarkers of exposure in adult smokers who switched to *IQOS*. In addition, we conducted an exposure response study to measure clinical risk markers when adult smokers switch to *IQOS* for a six-month period. The results of this study show that all eight co-primary clinical risk markers display favorable changes upon switching to *IQOS* and that favorable changes in five out of eight markers are statistically significant.

A scientist in PMI's R&D center in Neuchâtel, Switzerland

> We conducted more than 10 clinical studies on *IQOS* involving thousands of participants.



A scientist in PMI's R&D center in Neuchâtel, Switzerland

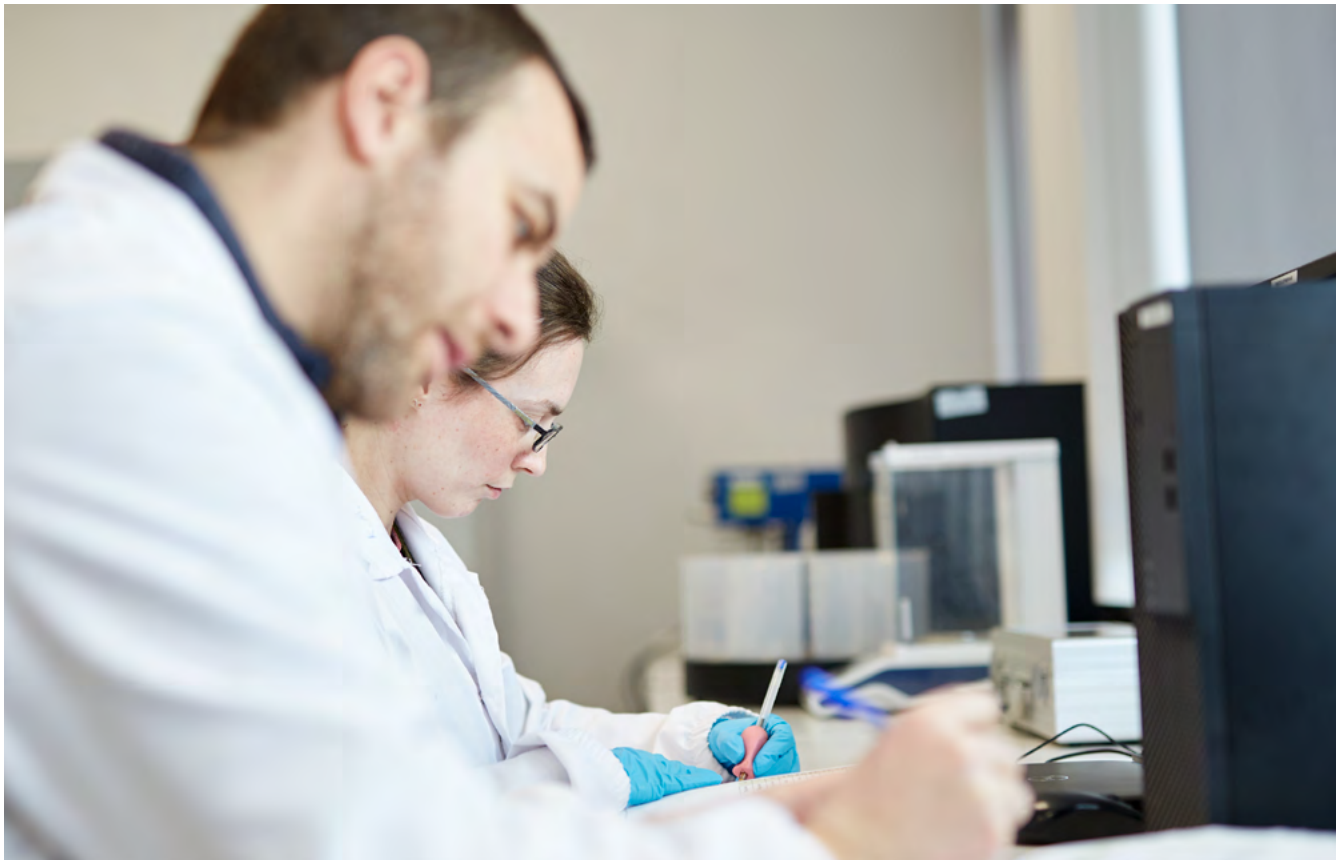
In 2019, we launched long-term assessment tools to find out how consumers understand the reduced risk associated with smoke-free products and how that understanding influences their choices. The new survey tools are intended to measure what people think about and how they use the products across a set of categories, such as perceived risk, perceived dependence, and functioning and well-being. Results of the assessment are available to the public in an article on F1000Research,[1] and its peer review is ongoing.

What are the external findings to date?

Our scientific results are supported by a growing body of independent research. Several government agencies are taking an interest in validating the available evidence or conducting research of their own. For the period of January 2019 to February 2020 alone, more than 60 third-party peer-reviewed publications and systematic reviews have been published on heated tobacco products. In addition to studies on aerosol chemistry and toxicology, the first independent clinical and post-market studies have started to emerge. In general, these studies confirm PMI's results, although some have contradictory interpretations of similar results to ours (e.g., using fresh air as the comparator instead of cigarette smoke), methodological differences (e.g., studies that do not follow OECD guidelines), or overstated conclusions. The list of independent studies published around PMI's smoke-free products and/or our methods and results as of December 19, 2019 is available on PMIscience.com.

In 2019, a version of the *IQOS* system became the first electronic heat-not-burn product to be authorized for sale in the U.S., pursuant to the 2009 law that empowers the FDA to regulate tobacco products, including through oversight of innovative products. The agency stated: "Following a rigorous science-based review through the premarket tobacco product application (PMTA) pathway, the agency determined that authorizing these products for the U.S. market is appropriate for the protection of the public health because, among several key considerations, the products produce fewer or lower levels of some toxins than combustible cigarettes. (...) While today's action permits the tobacco products to be sold in the U.S., it does not mean these products are safe or 'FDA approved.'" The FDA published a detailed report describing its assessment and conclusions, including results on aerosol chemistry, toxicology, and unintended use. The agency found that "the aerosol produced by the *IQOS* Tobacco Heating System contains fewer toxic chemicals than cigarette smoke, and many of the toxins identified are present at lower levels than in cigarette smoke" and that "Available data, while limited, also indicate that few non-tobacco users would be likely to choose to start using *IQOS*, including youth."[2] The authorization is subject to strict marketing, reporting, and other requirements and is not a guarantee that the product will remain authorized, particularly if there is a significant uptake in youth initiation. The FDA will monitor the marketing of the product.

The FDA is continuing its scientific review of PMI's MRTP applications, which were submitted for the same products on December 5, 2016. An MRTP order from the FDA would allow a tobacco product to be marketed to adult smokers in the U.S. with messages stating that switching completely from cigarettes to *IQOS* (1) reduces exposure to certain chemicals, and/or (2) that the product is less harmful than another tobacco product or would reduce the risk of tobacco-related disease.



Laboratory analysts in the manufacturing facility of Papastratos, PMI's Greek affiliate

1 Reference: https://f1000research.com/articles/8-214

2 Source: https://www.fda.gov/news-events/press-announcements/fda-permits-sale-iqos-tobacco-heating-system-through-premarket-tobacco-product-application-pathway

Scientists in PMI's R&D center in Neuchâtel, Switzerland

Our e-vapor product

What is it and how does it work?

Our second smoke-free product, *IQOS MESH*, is an e-vapor product (or e-cigarette), which is a battery-powered device producing inhalable vapor from a liquid solution containing nicotine and flavors.

We plan to launch the next generation of *IQOS MESH*, which will be launched under the brand name *IQOS VEEV*. This product is designed to maximize acceptance of adult smokers who would otherwise continue to smoke and facilitate complete switching in a manner similar to our heat-not-burn product.

IQOS VEEV is composed of a device and a disposable cartridge. The device holds the battery and the puff sensor, while the cartridge holds the heating element and the e-liquid. *IQOS VEEV* is based on a new heating technology in the e-vapor product category. When the device is switched on, puffing draws air through the bottom of the cartridge, activating the heater. To generate the vapor, the product uses a metallic mesh punctured with tiny holes, which heats e-liquid contained in the cartridge (commercialized under the *VEEV* brand). The liquid contains flavors and nicotine, the latter being extracted from tobacco leaves. *IQOS VEEV* uses closed-system e-liquid cartridges to protect against tampering and liquid leakage. Unlike typical e-vapor product cartridges, *VEEV* cartridges are manufactured, assembled, prefilled, and pre-sealed in a fully automated process, to ensure product consistency. This occurs within our European production facilities. Each cartridge contains a heater, which eliminates the need to manually replace it, and the liquid in the cartridge is sufficient for the device to be used several times for a given cartridge. *IQOS VEEV* also features puff-activated heating and a low-liquid level detection system that ensures the consistency and quality of the vapor generated and inhaled.

How does it reduce risk?

In e-vapor products, the liquid is heated to form an aerosol, which is inhaled through the mouthpiece. In contrast with cigarettes, e-vapor products deliver nicotine without the smoke constituents that arise from the combustion of tobacco.

Until recently most e-vapor products used a "coil and wick" system to heat the nicotine-containing solution. The wick draws the liquid onto a coil-heating element to heat the liquid and create an aerosol. In these systems, the temperature of the heater can vary significantly depending on how strongly the user puffs on the e-cigarette. Several studies have shown that puffing on an e-cigarette when the liquid level is low results in "dry puffs," which can significantly increase exposure to certain toxicants – especially formaldehyde. In *IQOS MESH* and *IQOS VEEV*, the wick is eliminated, and the coil is replaced by a metal mesh. When the liquid is introduced to the heater, the increased surface area provided by the mesh material helps heat the liquid in a more consistent way than it occurs with current-generation coil and wick systems. The software ensures that the temperature of the heater is stable and does not vary based on the puff strength or puff-to-puff. The low-liquid detection system cuts off the power supplied to the mesh heater once the level of the liquid has dropped below a certain level, eliminating dry puffs.

In *IQOS MESH* and *IQOS VEEV*, the wick is eliminated, and the coil is replaced by a metal mesh

> In contrast with conventional cigarettes, e-vapor products deliver nicotine without the smoke constituents that arise from the combustion of tobacco.

An employee in PMI's manufacturing facility in Crespellano, Italy

Next steps

We will continue to invest in scientific research to develop a portfolio of ever-better, affordable, and acceptable smoke-free products for existing adult smokers – in both developed and developing countries. In addition to continuously improving the two smoke-free product platforms we are currently commercializing, we are continuing R&D work on our other two product platforms.

Our R&D work, and its associated innovations, has resulted in 5,800 patents granted for smoke-free technologies as of the end of 2019. As of this year, we are introducing a new metric that tracks the number of patents and patent applications published and granted by the IP5 Offices. IP5 is the name given to a forum of the five largest intellectual property offices in the world; the IP5 Offices together handle about 80 percent of the world's patent applications.

The revision to the reported metrics reflects PMI's refined international patent filing strategy, by which it is ensuring that it is focusing its resources on enhancing patent protection for its innovations in key jurisdictions. The refined strategic geographic footprint of its patent portfolio optimizes IP value for money, reducing the average unit cost for protecting its innovations internationally, and freeing up resources to enhance the patent portfolio in key jurisdictions.

Performance

Business transformation metrics: Product health impacts	2016	2017	2018	2019
R&D expenditure (smoke-free/total)[1]	72%	74%	92%	**98%**
R&D expenditure (in millions USD)	429	453	383	**465**
Number of R&D positions (FTEs)[2]	n/a	n/a	764	**942**
Patents granted relating to smoke-free products (cumulative)	1,800	2,900	4,600	**5,800**
Patents granted in IP5 jurisdictions relating to smoke-free products (cumulative)[3]	170	300	480	**740**
Number of studies completed by PMI on smoke-free products (cumulative, since 2015)				
• Toxicological assessment	36	57	82	**109**
• Clinical assessment (short-term, focused on biomarkers)	11	12	19	**19**
• Perception and behavior	7	7	9	**9**

1 Smoke-free products include heated tobacco units, devices, and e-cigarettes. Total products include smoke-free products, cigarettes, and other combustible products.

2 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.

3 Includes published international (PCT) patent applications. IP5 jurisdictions include Europe (patent applications published and patents granted by the European Patent Office), China, South Korea, Japan, and the U.S.

LINKS

PMIscience.com ▸

PMI Scientific Updates ▸

Employees sampling tobacco leaves in PMI's Plant Research facility in Switzerland

Access to smoke-free products

The public health benefit of smoke-free products depends not only on their potential to reduce the risk of smoking-related disease, but also on their actual use as alternatives to cigarettes by adult smokers. For consumers to use them, these alternatives must be accessible. With access we refer to four aspects: improving consumer awareness, acceptability, availability, and affordability of our smoke-free products.

Megatrends

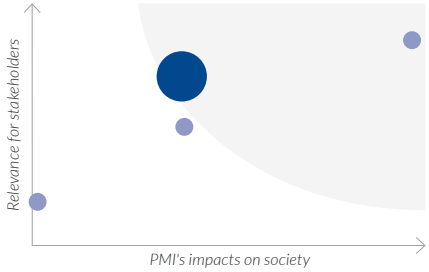
- Technological progress
- Changing consumer expectations
- Purpose of business
- Income inequality

A customer and a sales representative in an *IQOS* store in Ginza, Japan

Topic description

To provide adult smokers with meaningful access to smoke-free products, we need to raise awareness about their existence and make the products acceptable, available, and affordable so that smokers switch to them.

Relevance of the topic



Impact in our value chain

Upstream | PMI operations | Downstream

Key stakeholders

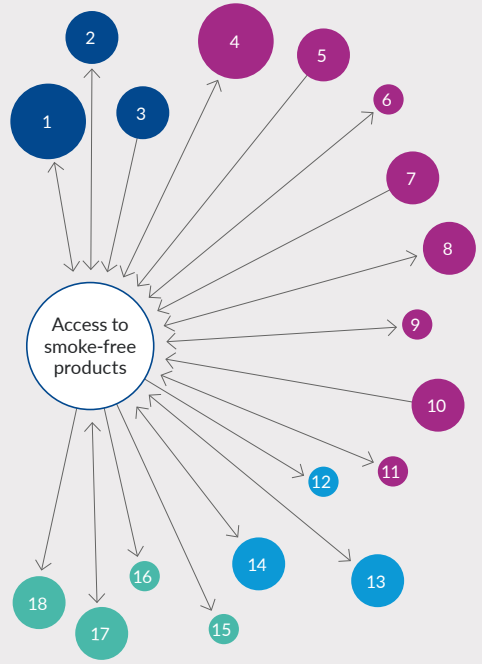
- Adult consumers
- Public health community
- Civil society
- Regulators
- Employees
- Retailers and wholesalers
- Media

Why it is important to us and our stakeholders

Innovative tobacco and nicotine products that have been scientifically substantiated as less harmful than smoking will realize their maximum potential for population harm reduction only when they are used in lieu of more hazardous tobacco products such as cigarettes. To achieve this aim, they should be globally accessible for smokers who want to continue using tobacco or nicotine products, while minimizing the use by unintended audience like youth and nonusers.

For PMI, developing scientifically substantiated smoke-free products is only the first step. The next is to make them accessible to all men and women currently smoking cigarettes or other combustible products. Our ability to do so successfully depends on various factors beyond our control, in particular government tobacco control policy and regulations. The commercialization of smoke-free products is at the core of our long-term value creation model.

Connectivity with other sustainability issues at PMI



1 Product health impacts
2 Product addictiveness
3 Product reliability
4 Responsible marketing and sales practices
5 Sustainable supply chain management
6 Data privacy and protection
7 Responsible and transparent R&D
8 Respect for human rights
9 Illicit tobacco trade prevention
10 Responsible advocacy
11 Business integrity
12 Health, safety, and well-being at work
13 Diverse and inclusive working environment
14 Talent attraction, retention, and employability
15 Climate protection
16 Littering prevention
17 Product eco-design and circularity
18 Water stewardship

Our aims

>40m

Number of adult smokers globally who switch to PMI smoke-free products by 2025

>20m

Number of adult smokers in non-OECD countries who switch to PMI smoke-free products by 2025

>250bn

PMI's smoke-free product shipment volume by 2025

<550bn

PMI's combustible product shipment voume by 2025

Achieving our aims

It is our long-standing ambition that by 2025 at least 40 million smokers switch to PMI's smoke-free products and completely stop smoking. This number can be much higher if more regulators make product harm reduction a third pillar of their tobacco public health strategy, in addition to preventing initiation and encouraging cessation. Our vision of a smoke-free future is an inclusive one. Within our global target of 40 million, we are aiming for at least 20 million smokers in non-OECD countries to switch to our smoke-free products. We have made good progress toward these objectives. We estimate that, by the end of 2019, a total of 9.7 million smokers had switched to *IQOS* and completely stopped smoking cigarettes, among them 3 million smokers in non-OECD countries.

In the three years following the announcement of our smoke-free vision in 2016, PMI's smoke-free product shipment volume increased from 7.7 to 60 billion units. We actively accelerated the decline in shipment volume of our combustible tobacco products, which contracted from 845 billion to 732 billion over that time period.

In order to succeed in making the world smoke-free, we need to provide all adult smokers with access to PMI's smoke-free products. By access we mean that:

- smokers are **aware** of the existence and benefits of smoke-free products;
- the products are **acceptable** to the smoker as a viable alternative to cigarettes;
- the products are conveniently **available** for sale to the smoker; and
- smoke-free products are **affordable** to the smoker.

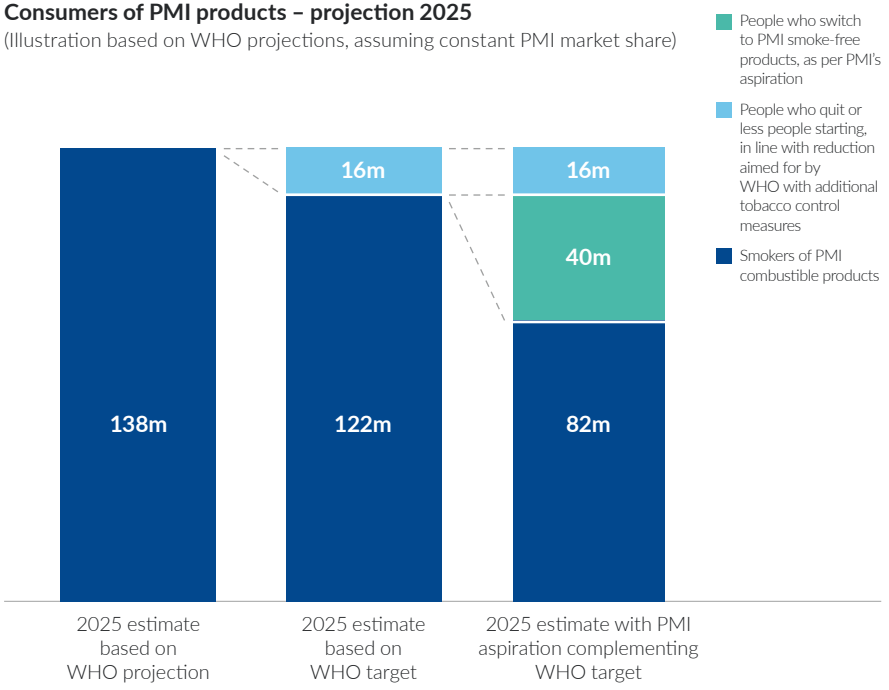
This section of the report elaborates on these four aspects of access.

To assess the strength of our ambition, we put it in the context of the latest WHO base case projections.[1] Based on these projections, which assume a world without smoke-free products, there would be 138 million smokers buying PMI cigarettes in 2025, at the current company market share. The WHO aims to further reduce smoking prevalence by strengthening measures to prevent smoking initiation and encourage cessation. Its 2025 target in this respect, translated to our consumer base, implies a 16 million reduction, equating to a total of 122 million smokers of PMI combustible products by 2025. Our smoke-free strategy supplements WHO efforts. If we succeed in our ambition to switch at least 40 million smokers to smoke-free products, there will be 82 million people smoking PMI's combustible products by 2025, compared to 138 million in the base case and 122 million as per WHO's target. This means that our aspiration is to reduce smoking more than three times faster than the target set by WHO.

To achieve our objective, we are leveraging our resources to enhance awareness, acceptability, availability, and affordability of smoke-free products. Our commercial expenditure ratio is a good overall indicator of our efforts in this regard, showing how much of our total global spend on marketing, consumer engagement, and trade activities is dedicated to smoke-free products. In 2019, 71 percent of PMI's commercial expenditures related to smoke-free products, far exceeding their share of total net revenues of 18.7 percent. While PMI is doing everything under its control by shifting resources, government policy and regulations play a key role in enabling and facilitating access, as will be described further in this section of the report.

Consumers of PMI products – projection 2025

(Illustration based on WHO projections, assuming constant PMI market share)



1 Projections are based on the WHO Global Report on Trends in Prevalence of Tobacco Use 2000-2025, third edition (December 2019)

Providing adult smokers access to our smoke-free products is top priority at PMI. In addition to the substantial resources, as explained above, we dedicate the vast majority of management time to the topic, from our entire Company Management team to the management teams in every market where we are commercializing, or plan to commercialize *IQOS*. Our Chief Operating Officer heads our efforts to roll out smoke-free products across our markets globally. The team led by PMI's Chief Consumer Officer brings together all consumer-facing experiences across the consumer journey, from trends and insights on acquisition and retention communications, to physical and digital channel strategy. In conjunction, our Commercial team, headed by PMI's Senior Vice President, Commercial, develops, tests, and deploys the routes to market for smoke-free products. Meanwhile, the team led by our Chief Product Officer continuously enhances and develops PMI smoke-free products, accounting for consumer feedback. Importantly, our Operations team, led by our Senior Vice President, Operations, works to ensure our manufacturing capabilities meet the demand for smoke-free products. Also, our External Affairs team, headed by PMI's President, External Affairs and General Counsel, is at the forefront of our efforts to advocate for regulation and policies that will ultimately help adult smokers who would otherwise continue to smoke to change to better alternatives.

This cross-functional work is guided by PMI's Guidebook for Success (our code of conduct) and overseen by specific internal policies such as those on responsible marketing and sales practices, market research, product development, and external communications and engagement.

Product awareness

The first component of our access strategy is raising awareness of smoke-free products among adult smokers. We want adult smokers to understand the difference and benefits of our smoke-free products in comparison with combustible cigarettes, but also make sure they understand that smoke-free products are addictive and not risk-free. In our awareness-raising efforts we remain cautious to guard against the use by unintended audiences such as never smokers, former smokers, and youth (read more on page 72).

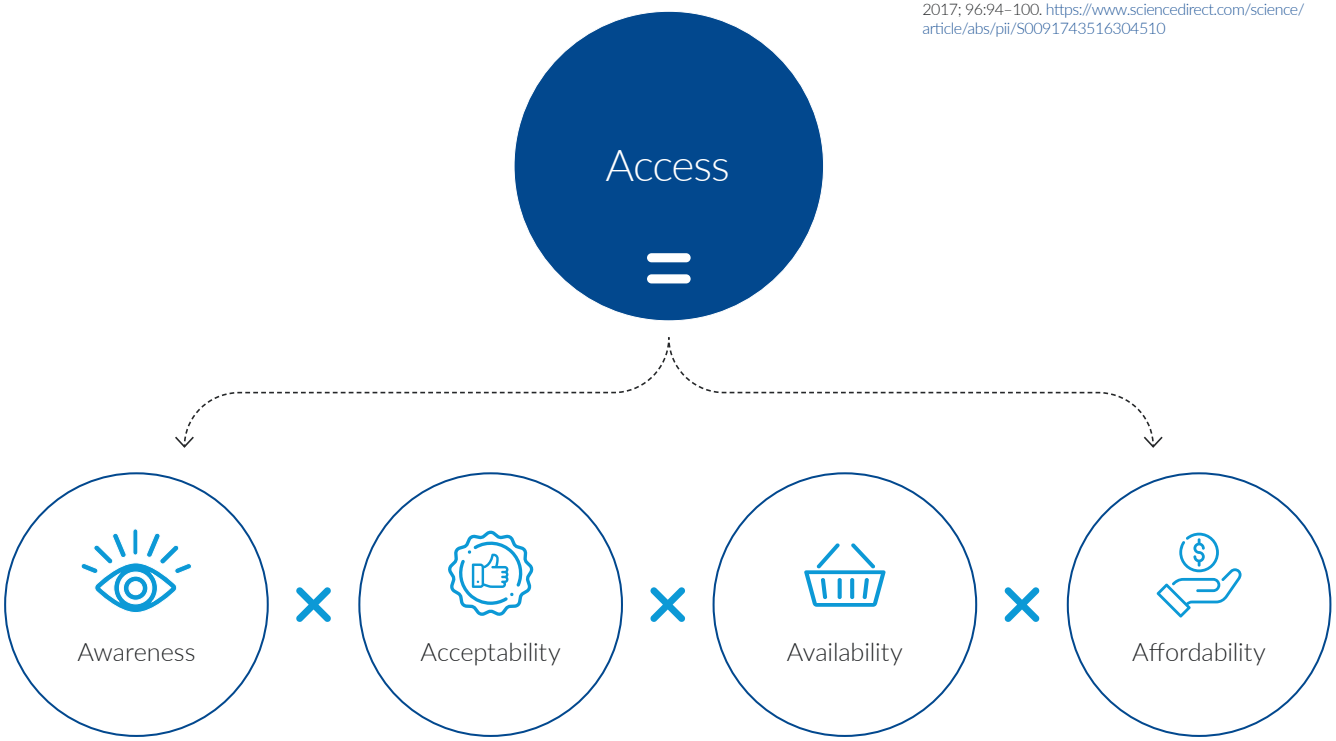
Throughout the world, tobacco product marketing is subject to extensive restrictions, including outright bans. The regulatory environment varies substantially across markets, making it more difficult – or almost impossible – in some countries than others to make people who smoke aware of alternatives to cigarettes and how and why they should use them.

Another significant hurdle is consumer confusion and misinformation that exists about the smoke-free category. People need accurate and non-misleading information to be able to make an informed decision.

To illustrate the degree of misinformation that may exist, a recent study found that up to 73 percent of U.S. citizens mistakenly believe that nicotine causes cancer.[1]

To date, based on our post-market studies, we estimate that only 36 percent of adult smokers in the markets where PMI commercializes *IQOS* are aware of the product's features and benefits compared with smoking cigarettes. This lack of information arguably presents the biggest hurdle to achieving our smoke-free vision. It is also potentially the easiest and fastest to overcome if and when public health organizations decide to inform, or allow the adult smokers to be informed, about the benefits of smoke-free products.

1 O'Brien, EK, et al. U.S. adults' addiction and harm beliefs about nicotine and low nicotine cigarettes. *Preventative Medicine*. 2017; 96:94–100. https://www.sciencedirect.com/science/article/abs/pii/S0091743516304510



> Our aspiration is to reduce smoking more than three times faster than the target set by WHO.

Product information

At PMI, we want to ensure that we provide our consumers with accurate and non-misleading information about our smoke-free products, so that adult smokers who would otherwise continue to smoke can make an informed choice.

To this end, we have internal processes in place designed to ensure our consumer messages meet this standard. We also have developed a program of perception and behavior assessment studies to understand how our smoke-free products are perceived and how users will actually behave with those products.

Consumer messages about our product features and benefits are verified by a cross-functional team comprising scientists, market researchers, lawyers, communications experts, and marketers. In order to establish whether a statement is accurate (substantiated), the team verifies available information on product design and characteristics, or scientific evidence available either from the literature or directly from our scientific studies or consumer research. To confirm a message is clear and non-misleading, in particular for health messages, we organize comprehension research in various markets and carefully analyze the results before deciding to release the message at hand.

The team also works directly with markets to ensure proper deployment of consumer communication developed centrally, or that locally developed marketing materials meet our standard.

Perception and behavior assessment studies help us to evaluate risk perceptions of smoke-free products among various adult consumer groups. The results of these studies show that adult consumer groups tested have a good understanding that *IQOS* presents less risk than cigarettes but is not risk-free, that it is not intended for nonsmokers, and that quitting the use of all tobacco is the best way to reduce the risk of tobacco-related disease.

Such premarket research is complemented by post-market surveillance studies that help us adjust our messaging (see page 61 for post-market surveillance).

We do not conduct studies on youth; however, studies we have conducted on our heat-not-burn *IQOS* product among young adult never smokers between legal age (min. 18) and 25 years old suggest that our smoke-free products are not attractive to them, as evidenced by the very low levels of intention to try and intention to use, reported when they are exposed to various forms of *IQOS*-branded communications.

Our premarket and post-market studies guide all our consumer-facing activities and communications, including the internal assessment of the consumer messages.

They also informed the development of our Good Conversion Practices, which serve as the bedrock for our engagement with adult smokers (read more on page 74).

The opinions expressed by public health organizations, regulatory bodies and NGOs about smoke-free products have a big impact on decisions made by individual smokers, so confusion must be avoided. It is essential to have an open, meaningful dialogue about the role smoke-free products can play in the improvement of public health and the effect current legislation in many countries has in preventing adult smokers from accessing accurate information. We appreciate that tobacco is an emotionally charged topic, but it is important for the hundreds of millions of smokers that science and facts prevail. We therefore are calling on leaders, policymakers, scientists, health professionals, and society as a whole to join this conversation – with the goal of achieving a future without cigarettes as soon as possible.

Our premarket and post-market studies guide all our consumer-facing activities and communications

Good Conversion Practices signage at an *IQOS* store in Lisbon, Portugal

Consumer engagement at retail

To succeed in helping smokers to transition to smoke-free products, we are shifting from a business-to-business to a consumer-centric model. This is a highly complex and resource-intensive exercise. In the table below, we illustrate some of the dimensions of this change in our business model, illustrating the complexity and scale of the change we are undertaking. This transformation requires significant changes in our organization's internal processes, skill set, and mindset. It requires substantial and long-term investment in infrastructure, systems, and capability building. Therefore, it has to be carefully paced by the company before scaling things up.

Purchasing and trying a smoke-free product is only one step along the conversion journey of an adult smoker who switches to a less harmful alternative. It is essential that we set in place the right infrastructure to support smokers along this journey. We currently have 23 consumer call centers where users can contact us if they have a question about the product itself or its use. Insights we receive are fed back into our product development.

At the end of 2019, PMI had a footprint of 199 stores dedicated to *IQOS* and over 3,000 exclusive *IQOS* retail touchpoints around the world. They offer personalized support to consumers, starting with explaining how the product should be used and how to clean it. In our boutiques, interested adult smokers can not only buy the product, but also receive education on the heated tobacco technology and its benefits, communicate with our staff, and try the product. Our *IQOS* coaches are trained on our Good Conversion Practices and required to interact only with adult smokers.

In addition to the *IQOS* stores, there are premium resellers; these are select stores in which we provide information about our smoke-free products to adult smokers, offering them an opportunity to have a session with trained staff about the product, its benefits, and explanations on how to use it, in the environment they regularly visit to purchase tobacco products. Additionally, *IQOS* users in these locations can access *IQOS*-related services such as cleaning of their devices by the premium reseller staff, replacing devices in case of defects, and experiencing and accessing new device ranges and accessories with which to personalize their *IQOS* products.

Digital capabilities help to become more efficient in serving consumers. In countries where this is permitted, adult smokers who express an interest in *IQOS* are offered the possibility to go through an online session with a remote *IQOS* coach. Consumers can also benefit from additional services via other digital touchpoints. To do this, and with the consumer's consent, we use our customer relationship management (CRM), which allows us to proactively offer tailored communications and promotions to consumers, according to their specific interests and the stage of their consumer journey. It also allows us to process, analyze, and respond swiftly to consumer feedback collected across all touchpoints.

	From	To
Product	Single product	Multiple products with multiple components (devices, consumables, accessories)
Consumer journey	Simple: from one cigarette brand to another	Complex: changing behavior[1] by adopting a smoke-free product and completely quitting smoking
Touchpoints	One type: retailer	Multiple types: own retail, independent retail, e-commerce, call centers, coaches

1 For the smokers who would otherwise continue to smoke.

An *IQOS* store in Bogotá, Colombia

Product acceptability

Smokers will only stop smoking and switch to better alternatives if these products are acceptable and meet their preferences.

An important indicator in this regard is the so-called full-switching rate: the percentage of *IQOS* users that stopped smoking versus total *IQOS* users. In 2019, the average full-switching rate for *IQOS* was 71 percent. The perfect full-switching rate is 100 percent, and this is our ultimate goal as we continue to develop and improve our products.

> In 2019, the estimated percentage of *IQOS* users who stopped smoking and switched to *IQOS* was 71 percent.

Product design

Our smoke-free products are designed to reduce disease risk compared with smoking, while replicating as much as possible the taste, nicotine delivery, and ritual characteristics of cigarettes so that adults who smoke are willing to switch to these alternative products.

The likelihood that a smoke-free product will be considered a viable alternative to cigarettes by adult smokers relies on the overall sensory experience and nicotine delivery. With regard to nicotine, the FDA stated: "*IQOS* delivers nicotine in levels close to combustible cigarettes suggesting a likelihood that *IQOS* users may be able to completely transition away from combustible cigarettes and use *IQOS* exclusively." We discuss in more detail the role of nicotine in our smoke-free products on PMI.com.

The responsible use of flavors in smoke-free products also plays an important role in product acceptance. Some flavors are important to encourage adult smokers to switch and should be preserved, while others could be particularly appealing to youth and should not be used, such as those with candy or dessert-like descriptions. In all circumstances, we agree there is a need for government oversight on products and their marketing, so they do not appeal to youth.

To continuously enhance the product experience, we are guided by consumer insights throughout the journey of developing and improving smoke-free products, from the concept design stage to their commercialization at scale. This allows us to incorporate product updates and new features designed to address consumer pain points and help adult smokers switch from cigarettes more seamlessly.

For example, *IQOS 3 DUO*, launched in 2019, allows for faster charging and two consecutive uses without recharging the holder.

Post-market studies and surveillance

We conduct post-market studies to understand how the product is used and by whom. These studies are necessary to confirm the results of the premarket perception and behavior assessments and to measure that current adult smokers switch to the product, while never and former smokers are not using it.

An *IQOS* coach and customers in an *IQOS* store in Athens, Greece

We have established *IQOS* adult owner panels in 21 countries. These dynamic longitudinal studies, which involve in total about 110,500 participants, allow us to measure the usage patterns of *IQOS* adult owners over time.

In Japan, we are conducting repeated cross-sectional surveys to measure trends of prevalence and patterns of *IQOS* use over time and to assess the impact of the product on public health. The results highlighted a very low rate of tobacco use initiation with *IQOS* (2 percent of adult *IQOS* users in 2017 and 1.3 percent in 2018) and a very low use in former smokers (only 0.1 percent of adult former smokers reinitiated tobacco use with *IQOS*). Additionally, results from an independent study commissioned by the Japanese Ministry of Health among middle- and high-school students found that the use of heated tobacco products among this group is extremely low and lower than smoking cigarettes.[1]

Overall, the data from our own studies, as well as independent studies, confirm that *IQOS* is reaching the intended audience, adult smokers, and is of very limited interest to adults who have never used nicotine products before or who had already stopped using tobacco.

Employees in PMI's office in Tokyo, Japan

A sales representative with a customer in an *IQOS* store in Cape Town, South Africa

110,500

We have established *IQOS* adult owner panels in 21 countries, involving about 110,500 participants

Product availability

Whether we can make our smoke-free products available to consumers depends on a number of essentially external factors. We need to understand a country's regulatory conditions to decide whether it is legally possible and commercially viable to launch the product there. We then build sufficient production capacity, also depending on trade zones and tariff barriers. Lastly, we need to establish the right market organization to commercialize the product, ranging from how we will actually distribute the product up to establishing a full-fledged commercial organization that can implement the extensive consumer interaction described earlier in this section.

As of December 2019, our main smoke-free product, *IQOS*, was available in 52 markets, either in key cities or nationwide, and we estimate that in total over 120 million adult smokers worldwide could buy *IQOS* devices and consumables near where they live.

1 Kumamaru H & Osaki Y (2019) Update of Current Status in Japan on Tobacco Harm Reduction. Global Nicotine Forum (GNF) 2019 presentation. Available at: https://gfn.net.co/downloads/2019/presentations/Hiroya_Kumamaru.pdf

A cigarette manufacturing line (on the right) and heated tobacco unit manufacturing line (on the left) in our manufacturing facility in Neuchâtel, Switzerland

Production capacity

Expanding the sale of smoke-free products requires significant investment in our production capacity. In particular, the manufacturing of smoke-free product consumables requires that we build new factories or convert existing cigarette factories and increase our capital expenditure – for example, to purchase new machinery. As we are replacing cigarette sales with smoke-free products, we are also consolidating our cigarette factory footprint. In 2019, the discontinuation of cigarette manufacturing in select factories in Pakistan, Colombia, Argentina, and Germany resulted in significant restructuring. We aim to manage such transitions fairly and openly, promoting constructive engagement with employees and placing the emphasis on their continued employability (read more about our efforts to conduct effective labor relations on PMI.com).

Market launch

In 2019, we launched *IQOS* in eight additional markets, including Hungary, Mexico, Sweden, the UAE, and – via a licensing agreement with Altria Group, Inc. – the U.S. This brought to 52 the total number of markets where the product was commercialized as of year-end. Of these markets, 27 are OECD countries.

A number of countries, including Australia, India, Norway, and Singapore, do not permit the sale of heated tobacco and e-vapor products. We engage with stakeholders to advocate for allowing the sale of *IQOS* and other scientifically substantiated smoke-free products in these countries. We do not believe that banning such products is a rational policy, especially considering that these countries do permit the sale of the most harmful tobacco product: cigarettes.

In the U.S., the sale of heat-not-burn tobacco products is subject to an ex-ante regulatory authorization by the FDA. On April 30, 2019, the FDA authorized the sale of a version of *IQOS*, following a rigorous scientific assessment of PMI's premarket tobacco product application, filed in 2017. Under an exclusive licensing agreement with PMI, Altria, Inc. started commercializing *IQOS* in the U.S. in the third quarter of 2019.

In addition to external factors, internal constraints also play a role in the rate at which we can roll out smoke-free products globally. PMI is present in over 180 markets, but the size and capacity of our local organizations vary. Not every market has the resources and capacity to launch smoke-free products immediately. We also evaluate the commercial viability of launching smoke-free products in a specific market to decide how to prioritize internal resources internationally.

Distribution channels

There are now 20 markets where our heat-not-burn product *IQOS* is supported commercially nationwide. In the other markets in which we have launched *IQOS*, the product initially is present in key cities, allowing PMI to gain experience and build capacity before we proceed with a nationwide rollout. We estimate at 60 percent the weighted-average geographic coverage in the 52 markets where *IQOS* was present as of the end of 2019, excluding the U.S.

Expanding the geographic availability of our smoke-free products requires that we leverage a variety of retail channels. In 2015, we started opening and running our own retail stores in markets where *IQOS* was present. These consumer touchpoints allow us to communicate and engage directly with adult smokers. They enable adult smokers to see, touch, and test the product where allowed. We rely on both stationary and temporary sales areas, with established flagship stores and pop-ups. As of the end of 2019, we had 199 permanent boutiques and stores worldwide, mainly in key cities and areas of high consumer traffic. Where legally permitted (i.e., in 30 countries), we also run e-commerce websites for *IQOS* allowing adult consumers to purchase the product online and have it delivered at home.[1]

The indirect retail environment consists of our traditional trade partners such as tobacco retailers, as well as key account chains such as convenience stores and petrol stations. Based on the product portfolio handled and the services provided to consumers, we classify the general trade and key accounts universe into three groups: consumable sellers, service points, and premium resellers. At consumable sellers, the main focus is to provide *IQOS* users with a convenient option to purchase the heated tobacco units on a regular basis. In service points, consumers can also access various services related to *IQOS*, such as replacement of the device in case of defect. Premium resellers offer consumers the full spectrum of services, including cleaning of devices and explanatory sessions, along with a full brand experience.

At the end of 2019, there were over 3,000 exclusive *IQOS* retail touchpoints[2] around the world and around 679,000 points of sale where *IQOS* heated tobacco units are sold.

We illustrate our distribution channels in our country-specific case studies on pages 36, 66, and 100.

1 As of year-end 2019, our smoke-free devices and heated tobacco units could be purchased through e-commerce websites in 19 markets. Additionally, e-commerce websites run in 11 markets allowed the online purchase of smoke-free devices only.

2 Touchpoints relate to all permanent and temporary retail touchpoints, where *IQOS* is sold exclusively (boutiques, flagship stores, pop-ups, shop-in-shop, and corners).

Product affordability

We will only achieve a smoke-free future if all adult smokers who would not quit but like to switch to smoke-free products can afford to do so.

Unlike with cigarettes, adult smokers who want to switch to *IQOS* must first buy an *IQOS* device. Their retail price ranges from around USD 40 to 115, depending on the model and country, with a geographical average price of the lowest cost *IQOS* device of USD 44. These high-quality devices have significant production costs to ensure they consistently function within the well-defined specifications that are part of the scientific substantiation package.

To address the potential cost barrier for adult smokers who would like to switch, we have implemented various solutions, including initial lending of the device or payment over time, and we have lowered the price of the existing *IQOS* device versions following the launch of newer versions. We also improved battery performance, thus improving the longevity of the devices. This not only helps to lower the average annual costs for the user, it also improves *IQOS*' ecological footprint.

A second aspect of affordability relates to the price of the consumable. At the moment, the production costs of *IQOS* heated tobacco units are somewhat higher than those of cigarettes, on average. Heated tobacco units undergo a special manufacturing process that is vastly different from the manufacturing of cigarettes, and the products require an increased level of quality assurance in factories. We also incur other costs that are not applicable to cigarettes, such as the costs of scientifically substantiating the reduced-risk profile of these products.

Importantly, *IQOS* has much higher commercialization costs compared to cigarettes that result from the need to properly introduce consumers to this new product and explain its functioning, such as the costs related to our customer care call centers and follow-up with them during their conversion journey so that they do not fall back into smoking. Generally speaking, the more restrictive the regulatory environment, the more difficult it is to effectively commercialize our smoke-free products and therefore the higher the costs related to commercialization.

Beyond costs, a key factor driving tobacco product retail prices is excise tax. Excise taxes on cigarettes are generally higher than those on smoke-free products, and within the smoke-free category, electronic cigarettes tend to be lower taxed compared with heat-not-burn tobacco products.

As a result of the combined effect of cost and tax differences, the price to the consumer of *IQOS* heated tobacco units is typically below the price of premium cigarettes and sometimes, as in New Zealand and the U.K., at the low end of the combustible tobacco products pricing. We estimate that heated tobacco units are priced the same or lower than a smoker's current cigarette brand for 47.8 percent of smokers in the geographies where we currently commercialize *IQOS*. In Japan, we started to launch *IQOS* heated tobacco units at different price points in order to extend the reach among adult smokers.

Clearly, to achieve our vision of a smoke-free future, our smoke-free products must be affordable to all adult smokers within each market.

The same reasoning applies across countries. We aim for our smoke-free products to be commercialized in all countries and have a dedicated team focused on lower- and middle-income countries.

A retailer in Lisbon, Portugal

> Our smoke-free products must be affordable to all adult smokers.

An *IQOS* coach and a customer in an *IQOS* store in Vilnius, Lithuania

To date, our smoke free-products are available in 15 upper-middle-income countries: Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Colombia, Dominican Republic, Guatemala, Kazakhstan, Malaysia, Mexico, Romania, Russian Federation, Serbia, and South Africa.

They are also available in two low- and lower-middle-income countries: Moldova and Ukraine.

We are only at the beginning of commercializing a full-fledged portfolio of smoke-free products and realize that additional efforts are necessary. We continue to work on developing a variety of product platforms, including devices and consumables with different price points.

Furthermore, we are exploring alternative business models and routes to market. A recent example is the global collaboration agreement announced in early 2020 with the South Korean tobacco company KT&G, which offers the opportunity to broaden our portfolio and to offer consumers a wider range of taste, price, and technology choices. The KT&G portfolio includes lil Hybrid, lil Mini, and lil Vapor products.

A challenge to attaining greater product affordability is the fact that the commercialization of our smoke-free products requires significant upfront investments in R&D, production, and commercial infrastructure. We expect those costs to lower over time, as we gain experience and scale.

We are exploring alternative business models and routes to market

Next steps

Our long-standing aspiration is that by 2025 at least 40 million people will have stopped smoking and switched to our smoke-free products. To achieve this ambitious goal, we will need to work on all four access drivers: awareness, acceptability, availability, and affordability. This in turn requires that we continue to massively shift resources across our company toward smoke-free products.

We have expanded our business transformation metrics introduced three years ago to provide further transparency about the scale and speed at which we are moving. We now also report on the number of stock keeping units (SKUs) that we produce within the cigarette category as well as heated tobacco products. Since announcing our smoke-free vision in 2016, we delisted over 600 cigarette SKUs globally, while significantly broadening our portfolio of heated tobacco units, to over 400 SKUs.

With the planned launch of *IQOS VEEV*, PMI will enter the e-vapor product category in more countries, providing additional smoke-free options to completely replace cigarettes.

We will continue to do everything within our ability to give all smokers who want to continue using tobacco or nicotine products full access to our smoke-free products. There are many factors outside of our own control. Governments in particular can accelerate the end of smoking. They can play a key role in providing accurate information to smokers about smoke-free products and introducing product standards to ensure that only scientifically substantiated smoke-free products are commercialized. Governments can also provide the right incentives to smokers and producers, through regulation and taxation.

Performance

Business transformation metrics: Access to smoke-free products[1]	2016	2017	2018	2019	2025 aspirations[2]
Number of factories producing smoke-free products out of total number of factories[3]	3 out of 48	4 out of 46	8 out of 44	**8 out of 38**	
Total SKU[4] count – combustible cigarettes	4,421	4,201	3,968	**3,799**	
Total SKU count – heated tobacco units	62	145	253	**414**	
Number of markets where PMI smoke-free products are available for purchase	20	38	44	**52**	
Proportion of markets where PMI smoke-free products are available, which are outside the OECD[5]	32%	43%	47%	**47%**	
Number of *IQOS* stores	26	63	81	**199**	
Number of retailers that sell PMI smoke-free product consumables (in thousands)	90	292	488	**679**	
Commercial expenditure (smoke-free/total)	15%	39%	60%	**71%**	
Net revenues (smoke-free/total)[6]	2.7%	12.7%	13.8%	**18.7%**	38–42%
Number of markets where net revenues from smoke-free products exceed 10% of total net revenues	1	5	19	**31**	
Number of markets where net revenues from smoke-free products exceed 50% of total net revenues	0	1	3	**4**	
Smoke-free product shipment volume (billion units)	7.7	36	42	**60**	>250
Combustible product shipment volume (billion units)	845	791	767	**732**	<550
Smoke-free product shipment ratio (smoke-free/total)[7]	0.9%	4.4%	5.1%	**7.6%**	>30%
Total users of PMI smoke-free products (in millions)[8]	2.1	6.9	9.6	**13.6**	
Estimated users who have stopped smoking and switched to PMI smoke-free products – non-OECD (in millions)[8]	0.0	0.2	1.1	**3.0**	>20
Estimated users who have stopped smoking and switched to PMI smoke-free products – worldwide (in millions)[8]	1.5	4.7	6.6	**9.7**	>40

1 Smoke-free products: include heated tobacco units and e-cigarettes. Total products: include smoke-free products, cigarettes, and other combustible products.
2 Aspirations: assuming constant PMI market share. Note: Aspirational targets do not constitute financial projections.
3 Previous years' data were restated to account for our second manufacturing facility in Italy, Bologna, that started producing heated tobacco units in 2016.
4 "SKU" stands for stock keeping unit.
5 Excluding PMI Duty Free.
6 Excluding excise taxes. For future periods, at today's pricing and excise tax assumptions.
7 The smoke-free product shipment ratio is compiled based on millions of units.
8 See glossary on page 188.

LINKS

PMIscience.com ▸

CASE STUDY: SWITZERLAND

Promoting sustainability through innovation

Location
Switzerland

Employees
~3,600

Manufacturing facility
Neuchâtel

Philip Morris International has a significant presence in Switzerland. The city of Lausanne is home to its global Operations Center (OC), and PMI maintains its biggest research facility, "the Cube," in Neuchâtel.

The company's Swiss history dates back to 1957, when PMI entered into an agreement with Neuchâtel-based Fabriques de Tabac Réunies to produce the first *Marlboro* cigarettes manufactured outside the U.S. In 1963, PMI acquired Fabriques de Tabac Réunies and established its Swiss affiliate, Philip Morris S.A., one year later. Since that time, the factory in Neuchâtel has been one of PMI's most important manufacturing facilities, producing cigarettes for the domestic market and for export to more than 40 countries around the world.

PMI's R&D center in Neuchâtel, Switzerland

In 2015, it was converted into PMI's first dual-production facility, producing consumables for the heated tobacco system *IQOS* alongside cigarettes. Today, almost 3,600 people work for PMI in Switzerland as part of the company's worldwide operations or for Philip Morris S.A.

In 2015, Switzerland became the third market to launch *IQOS*, after Japan and Italy, and the product is now available nationwide. The device and the heated tobacco units, marketed under the brand name *HEETS*, can be purchased in seven *IQOS* boutiques, and in almost 3,000 independent points of sale throughout the country. A further 3,000 points of sale only sell the consumables. Since early 2018, Philip Morris S.A. has ceased all marketing activities for combustible cigarettes in newspapers and magazines, on billboards, at festivals, and in cinemas; it uses such channels exclusively for the marketing of *IQOS*. In addition, the company has stopped selling cigarettes on its online commercial platforms in Switzerland.

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In 2015, Switzerland became the third market to launch *IQOS*, and the product is now available nationwide.

Becoming carbon-neutral

In October 2019, PMI announced plans to make all its factories carbon-neutral by 2030 and to only purchase certified renewable electricity for its manufacturing facilities by 2025. For the factory in Neuchâtel, the aim is to already reach carbon neutrality by the end of 2020. To this end, several measures have been put in place in recent years, including the installation of a wind turbine, solar panels, and parking spaces with charging stations for electric cars. The biggest contribution comes from taking advantage of the factory's lakeside location: The production facilities began using water from the lake at 6 degrees Celsius to cool machinery and buildings as early as 1964. Currently, the water is released back into the lake at 11 degrees Celsius, following the cooling process. Going forward, the same water will also be used for heating via two newly installed 600-kilowatt heat pumps. After use, the water temperature will be lowered again to 6 degrees Celsius before being released back into the lake.

> In Neuchâtel, the aim is to already reach carbon neutrality by the end of 2020.

This will represent a reduction of approximately 1,000 tons of CO_2 per year. The heat pumps will be in operation in the second half of 2020.

In collaboration with Swiss nonprofit certifier myclimate, PMI managed to make its global Operations Center in Lausanne carbon-neutral for the second year in 2019. The team responsible for PMI's Swiss buildings calculates the carbon footprint of the OC and assesses ways to reduce CO_2 emissions as much as possible. Any unavoidable emission is offset through myclimate. The biggest impact so far has been achieved through the installation of a heat pump and using water from Lake Geneva to fully heat and cool the building. Compared with the previously used boilers, the heat pump saves 10,000 liters of water and 40,000 cubic meters of gas annually.

For the factory in Neuchâtel, the aim is to already reach carbon neutrality by the end of 2020

An employee controlling the heat pump in PMI's Operations Center in Lausanne, Switzerland

Investing in novel technologies

With our main research facility in Neuchâtel, PMI is contributing significantly to the innovation landscape in Switzerland. In 2019, the European Patent Office (EPO) announced that PMI was their third-largest Swiss applicant with 424 patent applications, ranking 45th out of all patent applicants worldwide. The heating technology and other components for *IQOS* were developed and assessed in Neuchâtel, with the contribution of around 60 start-ups and SMEs from across Switzerland. PMI actively invests in technologies and businesses that support its vision of a smoke-free future through Lausanne-based PM Equity Partner (PMEP), the corporate venture capital fund of PMI. In 2019, PMEP partnered with MassChallenge Switzerland, a nonprofit accelerator that helps start-ups in Switzerland and elsewhere in Europe grow their businesses, to create the second edition of the PMEP start-up challenge. During this event, 10 start-ups were invited to PMI's Operations Center to pitch their business ideas on innovative solutions in the fields of digital, life sciences, and operations to a jury composed of members of PMI's Company Management.

PMI actively invests in technologies and businesses that support its vision of a smoke-free future

In addition to increasing PMI's presence within the Swiss innovation ecosystem and introducing a crowd of promising entrepreneurs to the company's vision of a smoke-free future, the competition led to several R&D collaborations with the participating start-ups.

Beyond hosting challenges and competitions, PMEP is financially supporting several other innovative start-ups. It invested, for example, in TreaTech, a start-up emanating from the École Polytechnique Fédérale de Lausanne.

TreaTech has developed a novel wastewater treatment that combines freshwater production with the opportunity to transform organic matter into biogas, valorize important minerals, and eradicate micropollutants. This investment contributes to PMI's commitment to clean and sustainable technologies.

PMI employees taking part in a cleanup activity in Lausanne, Switzerland

Reducing waste

Another measure currently being put in place to reduce PMI's environmental footprint in Switzerland aims to substantially reduce operational waste. On the Neuchâtel campus, all biogenic waste – for example, cardboard, paper, and tobacco – will be heat-treated to produce energy. The goal of this process called pyrolysis is to substitute fossil energies used on-site to produce steam and hot water, and to create a cycle whereby the waste that's produced despite reduction efforts is recycled and reused. The waste will first be mechanically crushed and shredded, then heated in a reactor. This will produce a gas that can replace the natural gas used in the boiler. We expect this process to be fully operational by the end of 2020.

Like most other fast-moving consumer goods companies, PMI is digitalizing and automating its end-to-end operations. Being able to react quickly to shifting consumer demands while using resources responsibly is a critical factor for success. Printed materials such as folding cartons have had one of the longest lead times in the supply chain, as it can take up to 12 weeks using traditional technologies to get them produced and delivered to the factories. As PMI changes its packs frequently, also as a result of changing packaging regulations, it has been difficult to respond in a timely fashion to market volatilities and changing consumer demand. Digital printing solutions can drastically reduce the lead time required. However, no economically viable option for PMI's mass volumes and quality requirements was available. Consequently, PMI's Innovation Development Center in Neuchâtel spent several years developing a hybrid digital printing and converting solution for folding cartons in-house. Since 2019, this pioneering approach has enabled PMI to print on demand. This has not only allowed the company to achieve its objectives of speed, flexibility, high finishing quality, and efficiency, but also has resulted in considerable waste reduction. There is no waste due to minimum order quantities as only the actual demand is printed. This allows the company to avoid printing the equivalent of 1,800 tons of paper per year. Furthermore, printing digitally has the potential to eliminate up to 3,000 printing cylinders made out of copper, steel, and chrome from PMI's supply chain.

> Being able to react quickly to shifting consumer demands while using resources responsibly is a critical factor for success.

Since 2019, this pioneering approach has enabled PMI to print on demand

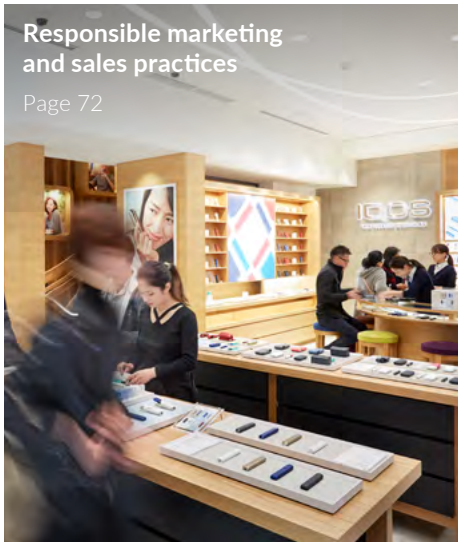
An employee operating the digital printer for packaging material in PMI's manufacturing facility in Neuchâtel, Switzerland

PILLAR 2

Operating with excellence

We strive for excellence in all we do. This includes making sure that our products are commercialized responsibly, in line with societal expectations. The programs and rules we have established help us to meet the high standards we have set ourselves for our marketing and sales activities.

Our supply chain accounts for a significant part of our social and environmental footprint. We are embedding sustainability in our supply chain management, working closely with our suppliers to create sustainable value. In all this, our guiding principle is the safeguarding of human rights of those impacted by our operations.



Responsible marketing and sales practices
Page 72

Sustainable supply chain management
Page 80

Respect for human rights
Page 92

Responsible marketing and sales practices

Globally, the commercialization of tobacco products is subject to extensive rules and regulations. At PMI, we believe that regulation should continue to dissuade people from starting to smoke and encourage cessation.

Megatrends

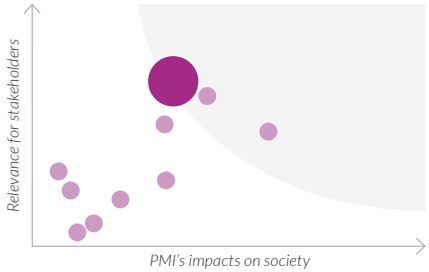
- Technological progress
- Changing consumer expectations
- Purpose of business
- Income inequality

An *IQOS* store in Ginza, Japan

Topic description

For PMI, responsible marketing and sales means commercializing our products in a way that limits access and use by unintended users, including minors and nonsmokers. It also entails advertising tobacco and nicotine-containing products in a way that is directed to adult smokers while providing clear information on the products' health risks through appropriate labeling and communication.

Relevance of the topic



Impact in our value chain

Upstream | PMI operations | Downstream

Key stakeholders

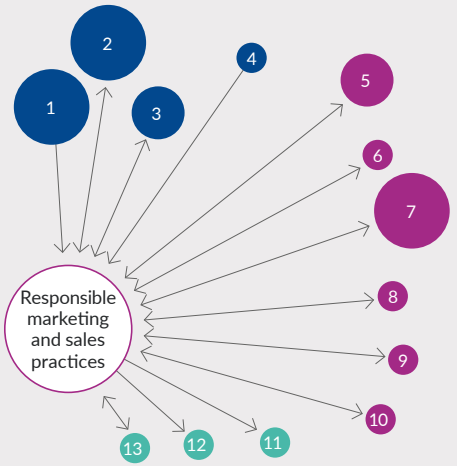
- Adult consumers
- Employees
- Regulators
- Retailers and wholesalers

Why it is important to us and our stakeholders

The responsible commercialization of tobacco and nicotine-containing products is an issue of vital interest to society. While smoking rates, including youth smoking rates, have gone down in most countries, smoking continues to be a public health issue. Moreover, while the recent availability of innovative smoke-free products offers a significant opportunity to move adult smokers away from cigarettes, efforts to commercialize these products should include steps to minimize the risk that youth and nonsmokers start using these new products.

The marketing and sale of tobacco and nicotine-containing products are at the core of PMI's revenue-generation model. Our commercialization practices support our business vision: To create awareness among adults who smoke that better alternatives to cigarettes exist and to move those adult smokers who otherwise would not quit to our smoke-free products. Doing this responsibly, by directing our activities toward adult smokers and providing them with accurate and relevant information about our products, is fundamental to our long-term success. Responsible commercialization demonstrates our commitment to regulatory compliance and our own standards, fosters credibility among our stakeholders, and presents an opportunity to accelerate a smoke-free future.

Connectivity with other sustainability issues at PMI



1 Product health impacts
2 Access to smoke-free products
3 Product addictiveness
4 Product reliability
5 Sustainable supply chain management
6 Data privacy and protection
7 Responsible and transparent R&D
8 Illicit tobacco trade prevention
9 Responsible advocacy
10 Business integrity
11 Climate protection
12 Littering prevention
13 Product eco-design and circularity

Our aims

>90%

Youth access prevention (YAP) programs in place in markets representing over 90% of PMI's total shipment volume by 2020

100%

Percentage of PMI's portfolio of electronic smoke-free devices equipped with age-verification technology by 2023

Achieving our aims

We aim to market and sell our products responsibly to adult consumers of tobacco and nicotine-containing products. Providing clear and meaningful information about our products, including the risks of consumption, through our marketing and sales activities, is fundamental to consumers.

All our commercialization activities across the world are guided by four core principles:

- We only market and sell our products to adult smokers.
- We warn consumers about the health effects of our products.
- Our marketing is honest, transparent, and accurate.
- We respect the law and our high standards.

Our marketing and sales practices are codified in PMI's Marketing Code for combustible products, which sets the global standards we follow, along with applicable national laws. Our Good Conversion Practices (GCP) are a set of rules articulated to govern the marketing and sale of our smoke-free products. Everyone involved in PMI's commercialization activities – including employees and third parties acting on our behalf – must strictly follow both the Marketing Code and the GCP without exception and regardless of country.

In regard to our combustible products, the head of each PMI market affiliate is accountable for the affiliate's compliance with the Marketing Code. All PMI employees who are responsible for the marketing and sale of combustible products, as well as any third parties who are substantively involved in such activities on behalf of PMI, must receive training on the Marketing Code. Third parties, such as creative agencies or individuals who interact with consumers on our behalf, are also contractually bound to comply with the Marketing Code.

Each market affiliate that sells smoke-free products must do so in accordance with our centrally developed guidelines, toolkits, training, and other resources. All our marketing materials and activities are reviewed by the relevant functions, to ensure consistency with our Marketing Code and the GCP.

In addition, we have developed global guidelines for digital commercial activities related to the marketing of our smoke-free products, on both the content of our digital marketing and the tools we use to reduce the likelihood of youth being exposed or, most importantly, attracted to these products.

We have policies that set out standards and requirements for conducting market research regarding both combustible and smoke-free products. Research is restricted to adults who smoke or use other nicotine-containing products, and all employees or third parties involved in market research activities must be formally trained and contractually bound to comply with the policies.

We are reviewing our practices for both combustible and smoke-free products, and we plan to publish a new Marketing Code in 2020.

Three functions – Ethics and Compliance, Internal Controls, and Corporate Audit – support and monitor compliance with the Guidebook for Success (our code of conduct) and our Principles and Practices through training, communications, controls, investigations, and audits.

In addition, we are seeking to leverage technology. PMI closely monitors the evolving technology landscape for solutions that increase the accuracy of age verification and minimize the scope for human error. We are aiming for digital age-verification processes that are both effective in preventing youth access, as well as smooth for legal-age consumers, to facilitate switching away from cigarettes. Where possible, we leverage data from legitimate sources, such as government organizations, telephone network operators, or banks, to improve the reliability of our age-verification processes when selling electronic smoke-free devices. In 2019, we were working with third-party data providers in 16 markets to authenticate identification documents, verify that the name on the document matches the name of the purchaser, and check that the purchaser has the legal age applicable in the country. We are aiming to equip all markets where we sell smoke-free products with these solutions to double check prospective purchaser identification documents. In addition, we are developing technology to activate our smoke-free devices for first use only after age verification has taken place. We plan to launch our first smoke-free devices with such technology by the end of 2020, and aim for our full portfolio of electronic smoke-free devices to be equipped with age-verification technology latest by 2023. Secure and user-friendly age-verification technology is a novel technology in the smoke-free product category, which requires strong collaboration with information technology service providers and owners of various software applications. Our teams are reaching out to the main hardware and software players in these industries to assure best-in-class technology is available for PMI's smoke-free products and the category in general.

A sales representative and a customer in an *IQOS* store in Bogotá, Colombia

Commercializing our products responsibly

Consumer communication and labeling

We warn consumers about the health effects of all our products. All advertising and consumer packaging for combustible products must contain clear and visible health warnings, even in markets where the law does not require them.

We apply strict rules to how we communicate about our combustible products with our consumers. As of 2015, we do not use social media to market our combustible products. This applies to all advertising, direct communications, campaigns, and activities, whether branded or unbranded. The same rule applies to our contracted parties, including event organizers, third-party agencies, and brand ambassadors.

Unlike combustible products, smoke-free products are a new category and still relatively unknown. Our priority is to create awareness among men and women who smoke about these better alternatives to cigarettes. Our commercial activities for smoke-free products need to strike the right balance by attracting the interest of the intended audience of adult smokers, so that they consider the product proposition and open themselves to making the effort to try and eventually switch fully to these better alternatives, while at the same time minimizing use by unintended audience like youth and nonsmokers. We also provide information to consumers on the proper use of our smoke-free products. In addition, with regard to labeling, we always include a warning on *IQOS* heated tobacco units packaging that the product is not risk-free and is addictive.

The GCP, which serve as the bedrock of our engagement with adult smokers, must be displayed for staff and consumers at stores and other direct-retail locations we own or control.

A PMI employee at a retailer in Buenos Aires, Argentina

In 2019, 14,500 training sessions on our Marketing Code were completed by PMI employees and relevant third parties

Employee and third-party training

Our responsible commercialization efforts rely on the dedication of our employees and the third parties with whom we work.

In 2019, 14,500 training sessions on our Marketing Code were delivered through various channels, around half to employees and half to relevant third parties including to suppliers, retailers, and hosts and hostesses (2018: 23,438 sessions). As we plan to publish an updated Marketing Code in 2020, we expect an increase in training sessions to follow as part of the rollout process. We also trained approximately 33,000 people on the GCP in the markets where we sell smoke-free products (2018: 27,100).

Our GCP are discussed during the recruitment of prospective employees and third parties who will interact with adult smokers and consumers of smoke-free products. We hire employees and engage third parties only if they agree to follow the GCP. Additionally, all employees and third parties interacting with consumers of our smoke-free products must complete in-person training on the GCP. Training is reinforced through in-field observation and coaching by supervisors, as well as online annual refresher training.

Monitoring and remediation

PMI has a robust and tested infrastructure aimed at ensuring compliance with its existing policies and processes. We monitor incidents of noncompliance with regulations and/or PMI's Marketing Code and the GCP concerning marketing communications, including advertising, promotion, and sponsorship.

Our Ethics and Compliance function and Corporate Audit department, which reports directly to the PMI Board's Audit Committee, play a key role in monitoring adherence to our policies on the ground.

In 2019, there were 42 substantiated violations of our Marketing Code or our GCP (2018: 8). Eleven of these violations led to termination of employment, 21 to written warnings, and the rest to suspension or verbal warning or counseling.

The increase in the number of violations of the Marketing Code or GCP can be attributed to the launch of a new global training toolkit on GCP that has reinforced the overall awareness, leading to higher speaking-up rates. In addition, there has been a constant increase in the number of *IQOS* coaches and consequently higher risk of incidences to occur. The number of cases of noncompliance is low, considering that over 35,000 PMI employees and third parties working on our behalf are directly involved in the commercialization of our products. There is also no pattern that would suggest any systemic problems.

Our commitment to youth access prevention

We support regulation that ensures that only adults can buy tobacco and nicotine-containing products, as well as the strict enforcement of minimum age laws and penalties for adults who provide tobacco products to minors.

An employee in PMI's Operations Center in Lausanne, Switzerland

We apply guidelines to all our commercial activities to reduce the likelihood that they will be particularly appealing to minors. At a minimum, for instance, we (i) do not use images or promotional materials that hold particular appeal among minors, including youth-oriented celebrities or cartoons, or brands, toys, or other merchandise that is primarily for, or used by, minors; (ii) do not use models who are or appear to be under the age of 25; (iii) do not use branding on promotional items that are visible to others when the items are used (this refers mainly to clothing items such as T-shirts or caps, which should not display a brand logo when used or worn) ; and (iv) do not pay for product placement in movies, entertainment programs, or theatrical productions, on television or radio, on the internet, or in any other production (e.g., video games) that is intended for the general public.

While PMI alone cannot prevent youth from smoking or using nicotine-containing products, there is a lot we can do, and are doing, to minimize the extent to which our marketing and products reach youth and other unintended users. We engage with various stakeholders on this issue, including retailers and governments. Further, in 2019 – in response to a 2018 shareholder resolution – a cross-functional team at PMI undertook a comprehensive and critical review of the steps we take in our commercial activities to restrict product marketing and sales activities to adults. This work was supervised by the Deputy General Counsel and the Chief Ethics and Compliance Officer, who report to the President, External Affairs and General Counsel. It resulted in *Responsible Marketing Practices at PMI*, a report approved by PMI's Board of Directors and published on PMI.com in December 2019.

The report concluded that, throughout PMI, people are deeply committed to the fundamental principle that we should not target our marketing and sales activities to minors. Our findings indicate a strong

A PMI employee at a retailer in Buenos Aires, Argentina

adherence to our responsible marketing policies and practices. The systems we have in place to detect noncompliance are working, we have taken all allegations of noncompliance seriously, and we have addressed issues that have been identified in a timely fashion. As part of our assessment, we also considered opportunities to strengthen our existing responsible marketing policies and practices. We discuss several of these measures below.

Monitoring our efforts on youth access prevention

Reviews by our Corporate Audit department in 2019 showed that only a few affiliates had issues related to responsible marketing compliance, and they were mainly procedural.

During 2019, Corporate Audit conducted additional field visits in each of PMI's six business regions with a focus on checking compliance with Marketing Code provisions related to our responsible marketing standards. Corporate Audit selected one country in each business region (China, Greece, Mexico, Indonesia, Russia, and Turkey). Members of the Corporate Audit team visited a limited number of points of sale in each of these countries to assess compliance with the Marketing Code provisions. No issues related to youth access were identified in any of the locations visited.

We also run a mystery shopping program in a sample of our smoke-free product retail stores. We contract an independent third party, which uses secret shoppers to measure the quality of services offered in our stores as well as their compliance with our GCP. We are evaluating whether this program can be scaled up to provide robust feedback on the consistency of age controls at our stores.

We encourage any member of the general public who notices PMI marketing materials or sales practices that he or she believes are inappropriate to contact us so that we can review the situation and take action as necessary.

Social media influencers

We take seriously and investigate thoroughly any specific allegation regarding youth targeting, use, or access via social media in which the company may have been implicated.

For example, we received an inquiry in 2019 from a media stakeholder about social media posts that did not appear to comply with our internal "digital influencer" guidelines. Our investigation revealed that, while no laws were broken, we fell short of our internal guidelines for digital influencer activities in certain instances (a paid digital influencer was above the legal age for smoking but under 25, the minimum age required by our internal guidelines).

On October 16, 2019, senior management decided that we would no longer engage with anyone for the purpose of generating social media posts about our products.

Engaging with our trade partners

We do not own or control the vast majority of retail outlets around the world where people buy our products. However, we set robust standards for our direct trade partners and work with them to guard against sales to youth.

During 2019, we surveyed PMI affiliates around the world on their youth access prevention programs. The results showed that not all affiliates had active programs in place and that the scope varied by country. In response, we developed a set of guidelines and tools that will help our affiliates work more effectively with their trade partners to guard against sales to underage purchasers.

The tools include templates for contract clauses that, for example, require retailers to ensure strict compliance with minimum age laws or, in the absence of such laws, to refuse sales of nicotine-containing products to anyone under the age of 18. The tools also include educational modules on youth access prevention on the digital communication platform we use with our retail trade partners in various countries (68 countries, approximately 530,000 registered points of sale). The modules include educational materials on youth access prevention for both combustible and smoke-free products, as well as knowledge checks. Trade partners who currently use the platform will be required to complete the educational modules by the end of 2020.

Other tools we provide include point-of-sale signage, communications templates to be used by our affiliates, and training to guide in-person conversations.

By the end of 2019, markets representing over 90 percent of PMI's total shipment volume had developed youth access prevention plans, which are expected to be implemented in 2020.

A retailer in Jakarta, Indonesia

Employees in PMI's office in Athens, Greece

> We set robust standards for our direct trade partners and work with them to guard against sales to youth.

We apply guidelines to all our commercial activities to reduce the likelihood that they will be particularly appealing to minors

Next steps

As described above, PMI has a robust infrastructure for monitoring compliance with our Principles and Practices.

In 2020, we will continue implementing our programs with trade partners on youth access prevention. We will include the risk of marketing and selling to youth in our annual integrated risk assessment and in our risk-based Corporate Audit program. We will maintain our monitoring of social media and audience data to detect any ongoing inappropriate marketing activities. We will also introduce additional monitoring and controls for age verification for online sales and home deliveries of smoke-free products. And we are exploring ways to strengthen our controls of our commercialization practices.

Furthermore, we aim to equip all our electronic smoke-free devices with age-verification technology latest by 2023.

PMI's ongoing transformation includes a heightened level of transparency. We will continue to monitor stakeholder feedback and track and address any complaints.

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PMI's ongoing transformation includes a heightened level of transparency. We will continue to monitor stakeholder feedback, and track and address any complaints.

An *IQOS* store coach in PMI's Operations Center in Lausanne, Switzerland

Performance

Responsible marketing and sales practices	2017	2018	2019
Total number of compliance training sessions conducted on PMI's Marketing Code (employees/third parties)	37,903	23,438	**14,500 (49%/51%)**
Number of violations of the Marketing Code or Good Conversion Practices (GCP) resulting in substantiated cases of misconduct	2	8	**42**

LINKS

Overview of marketing principles for combustible products ▸

Responsible Marketing Practices at PMI (report) ▸

Sustainable supply chain management

Our supply chain accounts for a significant part of our social and environmental footprint. With an increasingly integrated and globalized value chain, balancing the security of our supplies with cost efficiency and high quality, environmental, and social standards is a major priority and challenge.

Increasingly closer supplier relationships offer opportunities to create sustainable value. At the same time, supply chains may be exposed to potentially significant environmental, social, and governance risks. PMI is fully committed to continuously identifying and addressing such risks, thereby increasing the sustainability performance of our supply chain.

Megatrends

- Technological progress
- Climate change
- Purpose of business
- Income inequality

A field technician and tobacco farm workers in San Vicente, Argentina

Topic description

To PMI, sustainable supply chain management means embedding sustainability across our procurement strategies and practices, identifying and managing risks and impacts, and continuously evaluating and supporting our suppliers as they work to align their sustainability efforts with our requirements.

Relevance of the topic

Impact in our value chain

Upstream | PMI operations | Downstream

Key stakeholders

- Business community
- Regulators
- Civil society
- Supply chain

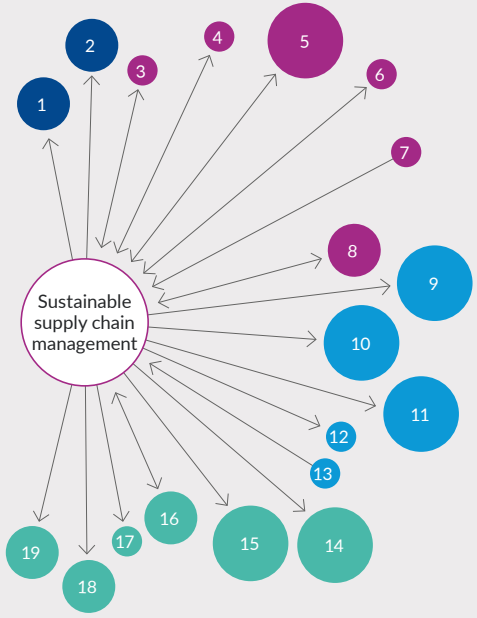
Why it is important to us and our stakeholders

Sustainable supply chain management plays a vital role in safeguarding human and labor rights, as well as protecting the health and safety of workers. Optimally, it serves to empower women and alleviate poverty. Moreover, it represents a key lever in mitigating the negative impacts of climate change, reducing greenhouse gas emissions, protecting forests and biodiversity, and promoting energy efficiency, water stewardship, and waste management.

Our business model relies on securing high-quality materials and services from suppliers who are known to us and who adhere to our environmental, social, and governance (ESG) requirements. We recognize that most of our sustainability impacts lie within our supply chain and that it is our duty to manage them responsibly and to be able to secure resources responsibly over the longer term. Responsible supply chain management helps to forge partnerships up the supply chain and improve our knowledge of suppliers. Our risk-based approach means we focus on the most important issues while also supporting efficiency gains, strengthening regulatory compliance, and helping prevent reputational risks.

There are complex connections between managing our sustainability impacts and procuring goods and services. Trying to purchase products and services at the best price while securing appropriate sustainability performance from our suppliers could be perceived as a trade-off. This is not our conception of sustainable supply chain management: We prefer to develop longer-term relationships that enable a sustainable supply chain for both PMI and our suppliers.

Connectivity with other sustainability issues at PMI



1 Access to smoke-free products
2 Product reliability
3 Responsible marketing and sales practices
4 Data privacy and protection
5 Respect for human rights
6 Illicit tobacco trade prevention
7 Responsible advocacy
8 Business integrity
9 Socio-economic well-being of tobacco-farming communities
10 Fair working conditions
11 Health, safety, and well-being at work
12 Diverse and inclusive working environment
13 Community support
14 Climate protection
15 Forest conservation
16 Product eco-design and circularity
17 Biodiversity
18 Water stewardship
19 Waste reduction

Our aim

100%

Percentage of critical suppliers from whom PMI sources sustainably by 2025

Achieving our aims

We aim to achieve measurable, tangible improvements in our supply chain, counting on the commitment and support of our suppliers to continuously improve sustainability performance. Joint efforts offer ample opportunities to strengthen our business relationships and create value for all.

PMI aims to purchase goods and services from suppliers at best value, commensurate with business needs, while appropriately managing supply, financial, legal, and sustainability aspects. To adhere to the required level of control and minimize the risk of fraud, different teams are responsible for approving commitments, confirming receipt of goods and services, and processing invoices.

We expect our suppliers to commit to continuous improvement toward best practices and ongoing compliance. PMI is fully committed to working with and supporting our suppliers on this journey. Mindful of differences across categories and geographies, timelines for full compliance are reasonable and defined.

The way we work is grounded in our Responsible Sourcing Principles (RSP), which align with the UN Guiding Principles on Business and Human Rights, the Ten Principles of the UN Global Compact, and the International Labour Organization (ILO) Conventions. The RSP, together with the implementation guidance, set process and performance standards for the suppliers of all materials and services, from the direct materials used in the manufacture of our products to all other goods and services that are required to run our business, including for example, manufacturing equipment, R&D services, and consulting.

Sustainability work in our tobacco supply chains is managed at farm level through our Good Agricultural Practices (GAP) and our Agricultural Labor Practices (ALP) programs.

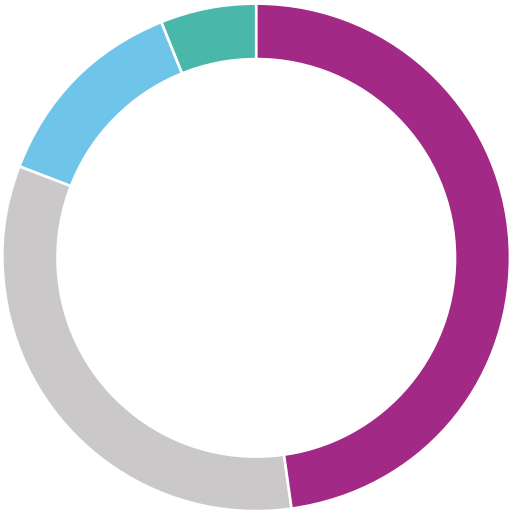
Sustainably sourcing our goods and services goes beyond the work of our procurement team and involves a strong cross-functional collaboration within PMI. With regard to our agricultural supply chain's impact on climate change, for instance, Procurement, Sustainability Operations, Leaf Department, External Affairs, and R&D work together on addressing the issue.

To monitor the adherence of our suppliers to the RSP, GAP, and ALP requirements, we have set up several processes and systems.

STEP (Sustainable Transformation Enables Performance) is the supplier due diligence and performance program to achieve supplier compliance with our RSP. It serves as the backbone for sustainably managing our first-tier suppliers; in some cases, second-tier suppliers are also included. In addition to STEP, we also engage with suppliers on more specific sustainability issues, train and empower suppliers, and conduct assessments and audits through third parties as required.

STEP is based on the risk management approach that guides our supply chain due diligence framework. Through STEP, our suppliers' potential ESG risks are determined based on the type of material or service supplied, as well as the country in which the material is produced or the service is delivered.

Overview of our supply chain spend in 2019



Indirect materials and services (including R&D)	48%
Direct materials and smoke-free product devices	33%
Tobacco leaf	13%
Manufacturing equipment	6%

With over 33,200 suppliers across more than 180 markets, our spend amounts to approximately USD 11.4 billion.

Thirty-three percent of our total supply chain spend is for direct materials (such as cellulose acetate tow for filters and paperboard for packaging) and smoke-free product devices, 13 percent is on tobacco leaf, and 6 percent on manufacturing equipment.

Our large agricultural supply chain ranges from tobacco growers to producers of other agricultural raw materials such as clove, menthol, and guar gum. Our tobacco supply chain includes 16,500 directly contracted tobacco farmers and a further 318,500 growers contracted through 13 third-party suppliers.[1] Regardless of whether our tobacco is sourced directly or through third-party suppliers, our GAP requirements and monitoring processes are the same. In 2019, we sourced tobacco from 24 countries, mostly from smallholder tobacco farms of less than two hectares. Our long-term success depends in part on our ability to secure the materials and services required for our operations in a professional and sustainable manner.

1 The scope of farm-level data related to our tobacco supply chain reported in this report cover 22 countries we source from (it excludes Ecuador and Lebanon).

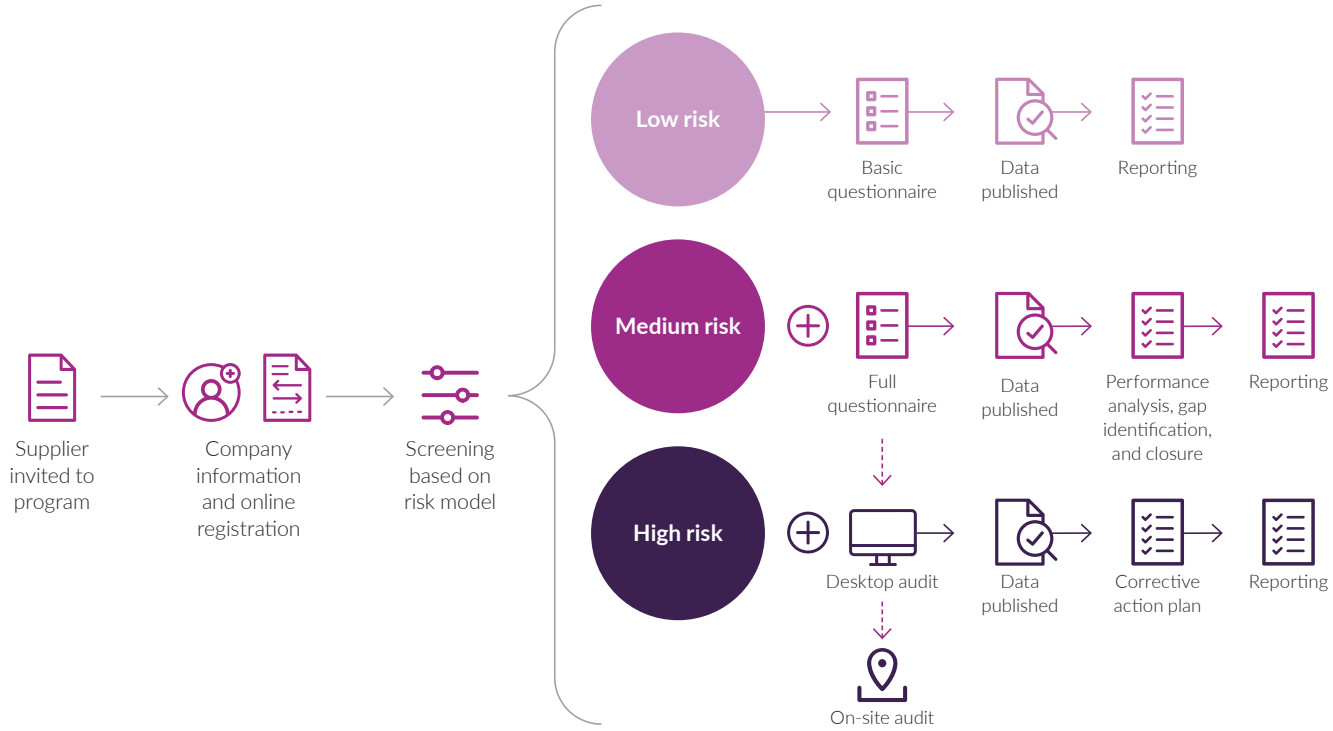
PMI employees at a tobacco buying and quality check facility in Santa Cruz do Sul, Brazil

This inherent risk profile tailors the subsequent evaluation of the suppliers' performance in addressing the relevant sustainability risks. Suppliers identified as low risk are asked to complete a basic questionnaire, while those characterized as medium or high risk complete a full questionnaire. In addition, high-risk suppliers undergo a desktop audit. Depending on the results of the questionnaire and, as applicable, the desktop audit, the supplier risk profile may be reevaluated and require further due diligence. For instance, a medium-risk supplier that did not achieve the minimum acceptable RSP compliance will be required to undergo a desktop and/or an on-site audit.

Globally, our procurement categories exposed to the highest sustainability risks are electronics manufacturing, wood-based products such as paper and board, and agricultural production across Asia, Africa, and South America. The main risks typically relate to the working and living conditions of migrant workers, deforestation, and climate change.

In our tobacco supply chain, the operationalization of our GAP and ALP codes occurs via the 2,875 field technicians who work year-round with the contracted farmers and suppliers of tobacco to PMI. Our ALP program is externally verified by Control Union, specialized in supply chain auditing, and we share their findings and action plans on PMI.com.

The process of our supplier due diligence platform (STEP)



In 2019, for the third consecutive year, PMI earned a place on CDP's Supplier Engagement Leaderboard for our actions and strategies to reduce emissions and lower climate-related risks in our supply chain

An employee in PMI's manufacturing facility in Batangas in the Philippines

Progress in 2019

STEP: Supplier due diligence process and platform

The foundation work behind our STEP due diligence platform, launched in 2019, was based on an extensive communication of our RSP to suppliers.

Existing and new suppliers will be regularly assessed. Depending on their risk profile and the outcome of the STEP assessment, PMI will engage with suppliers through corrective action plans and regular performance monitoring.

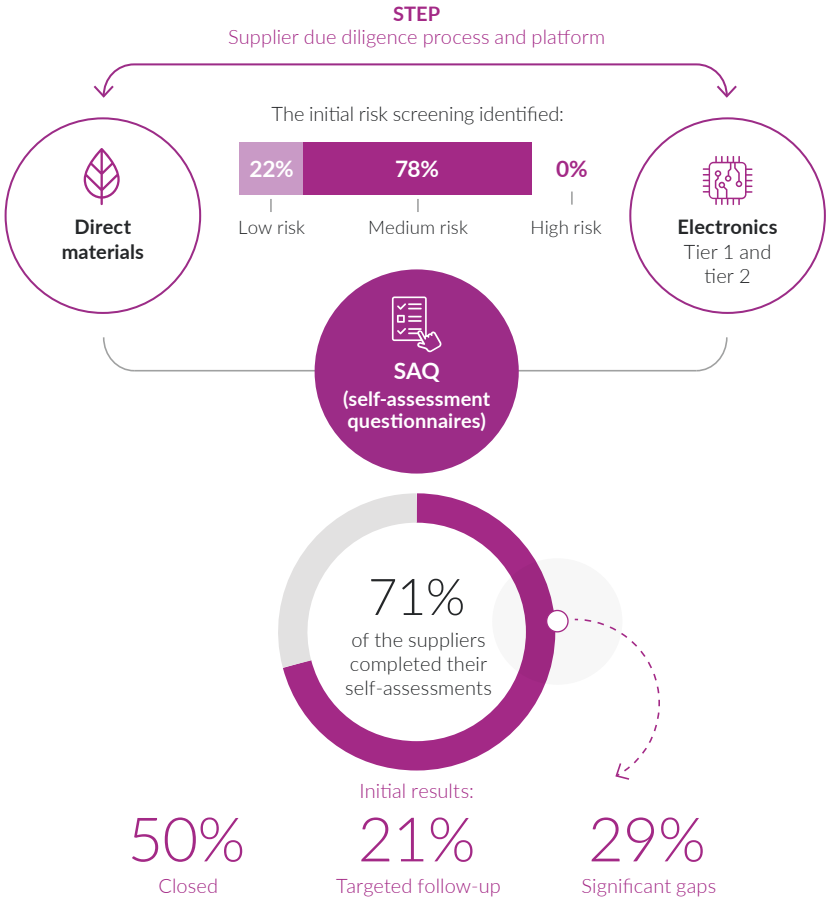
In 2019, we focused STEP deployment on critical suppliers identified by our risk-based criteria. We started to formally onboard suppliers in July. This first wave focused mainly on suppliers of direct materials and electronics.

In 2020, our target is to assess the suppliers representing 90 percent of our direct materials and electronics spend through the STEP platform. We are also onboarding key tier 2 suppliers for these two categories.

Out of the first wave of assessments, we have experienced a good level of engagement from our suppliers in terms of both response time and completion rate. We attribute this strong uptake to training and communication, webcasts, face-to-face engagement, and strong support from procurement category managers.

Overview of self-assessment questionnaires completed through STEP in 2019

By the end of 2019, the self-assessment questionnaires (SAQs) of the tier 1 and key tier 2 direct materials and electronics suppliers were processed in the STEP platform, with the below results:



Main risks identified, as per preliminary analysis:

- Occupational safety
- Risk of forced labor
- Hazardous materials
- Air emissions
- Excessive working hours

We will undertake results analysis, audit execution, and corrective action planning in the course of 2020

The STEP platform is underpinned by an external responsible-sourcing audit protocol provided by Achilles, a leading provider of sustainability supplier evaluation and PMI's partner in our STEP program. Our platform, based on the principles ISO 19011:2018 and SA8000, is overseen by a steering committee comprising representatives of PMI and Achilles who formally approve the audit process and delivery, including supplier risk profile, governance, audit frequency, and improvement cycle.

Testing the end-to-end process with a supplier

We tested our end-to-end process by assessing a battery supplier in the electronics category. This supplier completed all steps of the process, from initial risk assessment to the definition of an action plan resulting from an on-site audit conducted on its premises in China.

This supplier was classified as medium risk according to the initial risk model screening, which required the completion of the entire set of STEP questionnaires.

The outcome of the online self-assessment highlighted a need for further investigation, and the supplier was asked to complete a desktop audit. This audit revealed potential weaknesses in terms of employee working time, fair and equal treatment of employees, and the impact of minerals sourcing on human rights, as well as resource consumption and waste minimization. It was therefore decided to conduct an on-site audit, which confirmed some of the findings identified during the desktop audit and triggered the development of a corrective action plan to be implemented in the course of 2020.

Focus on our electronics supply chain

Responsible sourcing at PMI goes further than our STEP process, as we look at risks inherent to specific supply chains. For our electronics supply chain, for instance – which is key to our transformation toward a smoke-free future – we looked at risk exposure with an eye to tackling any potential issues involving our new electronic manufacturing supply base in Asia. On top of our STEP program and regular engagement, which incorporates supplier onboarding and the inclusion of sustainability clauses in supplier contracts, we strengthened our monitoring through specific sustainability scorecards and key performance indicators (KPIs) for our key suppliers and also undertook some preliminary evaluation of conflict minerals usage beyond the 3TG. We scaled up our capacity-building efforts through face-to-face and online training, focused on topics such as labor practices in our supply chain, and expanded our CDP supplier work. To ensure our upstream supply chain fulfills PMI's RSP, we worked closely with one of our tier 1 suppliers to identify the moderate- and high-risk tier 2 suppliers. Our tier 1 supplier then conducted self-assessment questionnaires and on-site audits. We regularly reviewed the process throughout. In all, a total of 37 tier 2 suppliers were audited and reported their improvement plans.

Beyond due diligence

In our engagement and communications with our electronics suppliers, PMI maintains a clear focus on our RSP. Beyond checking systems and monitoring progress, we aim to build capability and enable positive change in the areas of labor rights, human rights, environmental impacts, and business integrity.

One way in which we build capability and knowledge among our suppliers is through seminars, the first of which took place in 2019 with 53 participants representing 28 consumer electronics suppliers (tier 1 and tier 2). Participants tackled topics such as how to implement PMI's RSP, fire safety, supply chain

IQOS device manufacturing in Asia

management, ethical recruitment, and the STEP registration process.

Also in 2019, working with the Responsible Labor Initiative and Responsible Business Alliance Foundation, we reviewed management approaches to forced-labor risk, recruitment surveys, labor relations, training for migrants before they leave home, awareness of labor rights, and other third-party support for migrant workers through the Responsible Workplace Program (RWP). We put a spotlight on recruitment practices and human rights, following the lessons from our pilot project. The aim was to transform the recruitment process given the sector's reliance on migrant labor. A "new workers' helpline" was installed at our pilot study supplier as part of efforts to improve the grievance mechanism there. The compliance manager at one of our suppliers commented:

"The RWP is a good initiative for the improvement of employee–management communication. The training gave a good understanding to workers about their rights and respect for human rights."

A women's empowerment program was launched in 2019 with two suppliers in partnership with Inno, a Chinese nongovernmental organization (NGO), supported by external funding. A core focus was to "train the trainer" so that trainees could propagate the messages and practices more widely. The main training topics were communications skills, problem-solving, and stress management. In all, 140 female workers from the two suppliers took part, enhancing their knowledge and skills as part of PMI's drive to empower women and promote well-being at work. More workers will be recruited into the program in 2020.

IQOS device manufacturing in Asia

Conflict minerals

Companies are expected to demonstrate how they are respecting human rights and avoiding contributing to conflict in their mineral-purchasing decisions and practices. This applies particularly to the potential adverse impacts associated with sourcing tin, tantalum, tungsten, and gold from conflict-affected and high-risk areas of the world.

Our 2019 conflict minerals submission to the U.S. Securities and Exchange Commission, covering the year ended December 31, 2018, showed that the smelters from which our suppliers source are either compliant with the Responsible Minerals Initiative audit program (255 smelters) or have gone through the assessment process (four smelters).

Cobalt

Cobalt is a key raw material in the production of batteries used in our smoke-free products. PMI launched in 2019 a due diligence program with the objective to identify and address potential human right risks related to its sourcing. This program currently covers battery suppliers and smelters. We will provide an update on our work in this domain in our next Integrated Report.

Addressing impacts in our electronics supply chain: Progress update

In our last report, we detailed our work with a key electronics supplier in Asia. The progress made one year on is testimony to a robust process of due diligence, strong relationships, and expert support from Verité, a leading NGO in supply chain sustainability.

The potential risks to which PMI was exposed from this supplier relationship centered on migrant-worker practices, working conditions, accommodation, and safety, and oversight of external recruiters.

A second audit in 2019 yielded good news. Interviews with workers revealed a favorable response to our supplier as a result of the due diligence process; they now see that they have a voice and that the management is acting on their concerns.

Building on its success in improving recruitment standards and communication, our supplier delivered on its commitment to construct new dormitories in 2019. Further, our team in Asia is working to monitor and engage with suppliers and help improve safety, productivity, and labor conditions.

Furthermore, in 2019, electronics suppliers accounting for 80 percent of our procurement spend attended our capability-building program. We piloted KPIs to better understand working hours in our supply chain. We focused on 19 key suppliers and asked them to submit monthly data about weekly working hours and labor composition. This helped us understand the pattern of working hours and to discuss the root causes of excessive hours based on the data. We also integrated working-hour criteria into our scorecard program. Moreover, we introduced a new supplier onboarding process through self-assessment questionnaires, on-site management review, and our STEP program.

This illustrates how we work with tier 1 and tier 2 suppliers to constructively resolve gaps in performance and deliver positive social outcomes.

Hand-rollers of kretek cigarettes at Sampoerna, PMI's Indonesian affiliate

Third-party operators aligning with our standards

In 2019, we visited two third-party operations (TPO) sites that our Indonesian affiliate Sampoerna partners with, and which have a total of 38 facilities in Indonesia. Each typically employs around a thousand skilled people, mainly women, who work predominantly in the hand-rolling of cigarettes. The visits were to determine to what extent the requirements of the RSP could be incorporated into the existing social auditing that was in place. Takeaways from these visits were that working conditions at the third-party sites are very good, showing an environment that goes beyond legal compliance and where the welfare of the workers is treated as of primary importance. In addition, the Industrial and Employee Relations department of Sampoerna conducted a formal annual assessment of working conditions, compliance, pay, benefits, and environment, health, and safety. All 38 sites scored above 92.8 percent in this assessment.

The TPO we visited already have examples of systematic management of social impact, such as capping the number of internships and defining a time period (12 months) for internships. This is important because internships are not subject to Indonesia's minimum wage laws, and we want to ensure they are not used to circumvent these laws.

The TPO are looking to embrace PMI's RSP more formally in their site-based assessments. This presents an opportunity to bring around 38,000 more workers into the scope of PMI's human rights standards. We see signals of strong performance – at scale – across TPO from the reviews conducted so far. Next steps include deeper communication on RSP implementation, a governance process to guide the integration, and the development of training modules.

> “
>
> This presents an opportunity to bring around 38,000 more workers into the scope of PMI's human rights standards.

Good Agricultural Practices for tobacco farming

In our agricultural supply chains, sourcing is managed in accordance with our GAP standards and our ALP code (see page 106).

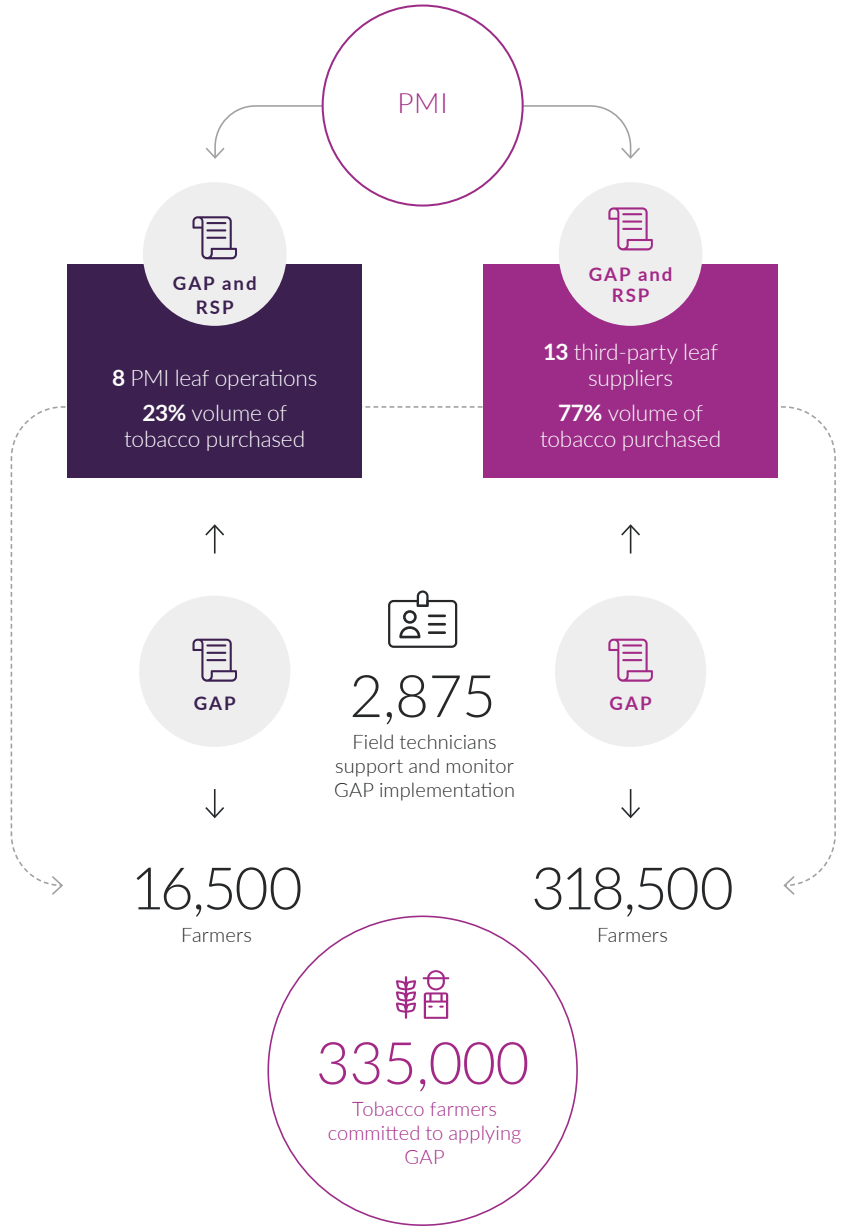
GAP is a demanding set of standards focused on governance, crop, environment, and labor practices:

- PMI expects suppliers to have in place the necessary governance, procedures, and processes to manage contracts, field technicians, visits, and training.
- The crop must meet certain criteria on quality, style, integrity, and regulatory compliance. GAP also demands that the crop is grown with the appropriate seed variety, with the correct plant nutrition, and using effective integrated pest management to minimize the use of crop protection agents while improving the yield.
- The environmental demands of GAP help farmers to use natural resources efficiently and minimize negative impacts such as deforestation, soil degradation, and pollution.
- PMI is committed to eliminating child labor and other labor issues on all farms from which we source tobacco. Our ALP code guides our work in this regard.

To a large extent, responsible sourcing succeeds when relationships on the ground are strong. At PMI, our Integrated Production System (IPS) connects leaf suppliers and farmers in a commercial relationship that enables direct technical support, agronomic advice, financial loans, and various other services. This is especially important when markets are uncertain or when prices become volatile. The support means the farmer can sell his or her production at a fair price.

A field technician and a tobacco farm worker in Malawi

PMI's tobacco supply chain



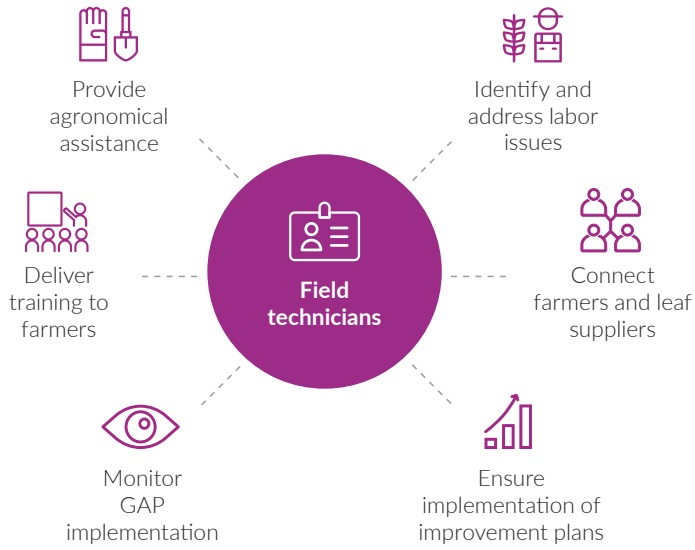
A field technician and tobacco farmers in San Vicente, Argentina

At the center of the system are field technicians: Men and women who support the implementation of GAP and monitor how well commercial and contractual processes are working.

Some 2,875 field technicians – 170 employed by PMI and 2,705 by our third-party suppliers – implement GAP among the 335,000 farmers from whom we source tobacco. These technicians are facilitators of progress on the ground. They continuously build relationships with the farmers, most of whom cultivate less than two hectares of tobacco in isolated locations with only basic infrastructure. The trust they garner is crucial to the effective monitoring of GAP and ALP. It is often their pragmatic and sensitive interventions that overcome the barriers facing a program of responsible sourcing.

> To a large extent, responsible sourcing succeeds when relationships on the ground are strong.

Field technicians



On top of the farm-by-farm monitoring by field technicians, since 2016 we have been assessing the conformity of our contracted tobacco farmers and suppliers to the GAP standards through the industry-wide Sustainable Tobacco Program (STP). Managed by independent supply chain management specialist AB Sustain, the program generates performance ratings that allow us to prioritize where corrective actions are required.

The STP process includes:

- annual self-assessments completed by tobacco suppliers (reviewed by AB Sustain);
- on-site audits conducted by AB Sustain among a sample of contracted farmers; and
- a comprehensive review of tobacco suppliers' policies, procedures, and documentation to assess the level of STP/GAP implementation.

In 2019, in order to focus on developing a new STP 2.0 program, the industry did not run collective assessments with AB Sustain. However, PMI continued to assess conformity through annual self-assessments by all our suppliers. Additionally, Control Union conducted assessments for PMI in three locations in 2019.

> Relationships and capability-building are key to improving sustainability performance.

A field technician and a tobacco farm worker in Mozambique

In 2019, PMI assessed conformity of all our tobacco suppliers with the GAP standards of the industry-wide STP through annual self-assessments

Next steps

We plan further expansion of our STEP program across all the spend categories in our supply chain and all geographic areas.

In 2020, we will build on our 2019 desktop and on-site audit pilots, and we are planning to deploy STEP to also cover nonstrategic suppliers, defined by spend thresholds. In parallel, we will look to identify and possibly select additional due diligence digital tools with which to deploy our compliance program to our tail spend. Additionally, we will expand our benchmarking activities to leverage other industry standards and possibly collaborate with individual companies on supply chain due diligence programs.

Building on the progress we have made with our tier 1 suppliers in the electronics supply chain and the initial deployment among tier 2 suppliers, we plan to expand our engagement to all tier 1 suppliers in order to evaluate also our tier 2 suppliers against our RSP.

Since relationships and capability-building are key to improving sustainability performance, we will continue organizing and delivering seminars, webcasts, and other capability-building measures.

Through 2020, we will be maintaining compliance with GAP and ALP on the ground to allow measurable impacts to show changes in environmental, social, and economic conditions.

Performance

Sustainable supply chain management	2017	2018	2019	Goal
Total number of suppliers[1]	50,000	>36,000	**>33,200**	
Total procurement spend (in USD billion)[2]	n/a	10	**9.9**	
Number of critical suppliers[3]	n/a	n/a	**95**	
Critical suppliers, expressed as a proportion of total procurement spend	n/a	n/a	**35%**	
Critical suppliers' procurement spend assessed in PMI's supplier due diligence platform (STEP)[4]	n/a	n/a	**84%**	90% by 2020
Critical suppliers of direct materials assessed in STEP, expressed as a proportion of procurement spend on critical suppliers of direct materials	n/a	n/a	**73%**	
Critical suppliers of electronics assessed in STEP, expressed as a proportion of procurement spend on critical suppliers of electronics	n/a	n/a	**100%**	
Number of tobacco farmers contracted by PMI and PMI tobacco suppliers	>350,000	>350,000	**335,000**	
Number of third-party tobacco suppliers with whom PMI has a direct contractual relationship[5]	15	15	**13**	
Number of PMI leaf operations that contract tobacco farmers directly	9	8	**8**	
Number of field technicians providing support to contracted farmers and monitoring the implementation of PMI's GAP and ALP	2,790	2,610	**2,875**	
Proportion of tobacco purchased through direct contracts by PMI and PMI tobacco suppliers	90%	93%	**96%**	>90% (ongoing)
Proportion of tobacco purchased assessed by AB Sustain (cumulative, since 2016)[6]	55%	100%	**n/a**	
Number of tobacco supplier locations (countries) assessed by Control Union on ALP topics	6	3	**3**	
Cumulative number of tobacco supplier locations (countries) assessed by Control Union since 2013 on ALP topics[7]	19	21	**22**	24 by 2020

1 Suppliers: refer to tier 1 suppliers, parent companies.

2 Procurement spend excludes tobacco leaf sourcing.

3 Suppliers' criticality is evaluated taking into account spend segmentation and nature of component, as well as supply flexibility (single source/not easily substitutable) as relevant. 2019 figure includes tier 1 suppliers of direct materials and electronics managed by PMI's central procurement team, and excludes tobacco leaf sourcing.

4 We started to formally onboard critical suppliers into our supplier due diligence platform (STEP) in July 2019.

5 Data refers to parent companies.

6 In 2019, the industry did not run collective assessments with AB Sustain as it focused on the development of a new Sustainable Tobacco Program 2.0 program, but PMI continued to assess conformity to the GAP standards through annual self-assessments completed by all our suppliers. Over the three-year cycle ending 2018, AB Sustain conducted formal assessments in 100 percent of our sourcing countries.

7 Cumulative number since 2013 excludes locations covered more than once by Control Union assessments over this period.

LINKS

Responsible Sourcing Principles (RSP) ▸

RSP Implementation Guidance ▸

Good Agricultural Practices (GAP) standards ▸

Agricultural Labor Practices (ALP) code ▸

A tobacco farm worker in Nayarit, Mexico

Respect for human rights

Respect for human rights must be embedded in the corporate culture, allowing human rights principles to shape the way we work and guide interactions with employees, suppliers, and business partners, consumers, and the communities in which we operate. Over the last few years, this topic has been gaining significant attention from all stakeholders, including governments.

Megatrends

- Technological progress
- Changing consumer expectations
- Climate change
- Purpose of business
- Income inequality

Employees in PMI's manufacturing facility in Batangas in the Philippines

Topic description

To PMI, respect for human rights means safeguarding the rights and dignity of all people affected by our activities and ensuring compliance with both international standards and PMI's internal policies.

Relevance of the topic

Impact in our value chain

Upstream | PMI operations | Downstream

Key stakeholders

- Adult consumers
- Business community
- Civil society
- Employees
- Media
- Public health community
- Regulators
- Retailers and wholesalers
- Supply chain

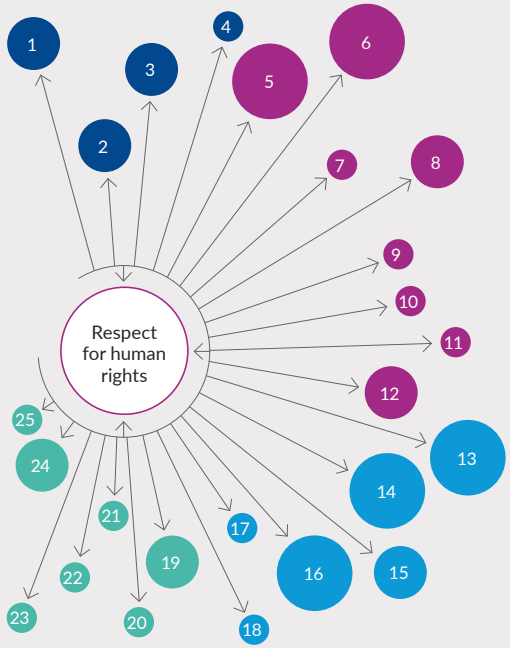
Why it is important to us and our stakeholders

From a societal standpoint, human rights are inherent to the dignity of human life and are a prerequisite for any society to prosper.

As a global company, we can have a significant impact on safeguarding the human rights of our stakeholders, and we expect and require the same behavior of our business partners, including our suppliers. Beyond being the right thing to do, protecting human rights strengthens our business by allowing us to better manage operational risks, build trust, and secure our license to operate. We aim to continuously improve our practices with respect to identifying and addressing risks and impacts to "rights holders" across our operations and supply chain, including by securing our supply of raw materials in a responsible way.

As we progress toward our vision of a smoke-free future, the realm of our human rights work is expanding into new sectors and activities. The increased scope of our work – within the electronics industry, for instance – represents an opportunity to identify and tackle human rights issues right from the start. We continually refine our approach to ensure real impact.

Connectivity with other sustainability issues at PMI



1 Product health impacts
2 Access to smoke-free products
3 Product addictiveness
4 Product reliability
5 Responsible marketing and sales practices
6 Sustainable supply chain management
7 Data privacy and protection
8 Responsible and transparent R&D
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11 Responsible advocacy
12 Business integrity
13 Socio-economic well-being of tobacco-farming communities
14 Fair working conditions
15 Health, safety, and well-being at work
16 Diverse and inclusive working environment
17 Community support
18 Talent attraction, retention, and employability
19 Climate protection
20 Forest conservation
21 Littering prevention
22 Product eco-design and circularity
23 Biodiversity
24 Water stewardship
25 Waste reduction

Our aim

10

Highest risk countries covered by external human rights impact assessments and findings addressed by 2025

Our Human Rights Commitment and our Roadmap are the cornerstones of our human rights strategy

Achieving our aims

We aim to address our adverse impacts and maximize our opportunities to drive positive change for people across our value chain. While this can be challenging given the scope and complexity of the issues and the breadth of our operations, we believe that human rights are an absolute and universal requirement – and one that we are committed to upholding.

Our Human Rights Commitment (HRC) and our Roadmap are the cornerstones of our human rights strategy. Our HRC requires us to avoid, mitigate, and remediate any human rights risks and impacts that may rise across our operations and value chain. Other policy instruments – such as our Guidebook for Success, RSP, GAP, and other internal policies and procedures – guide our approach to implementing the HRC. They commit us to managing our work in accordance with the United Nations Guiding Principles on Business and Human Rights (UNGPs).

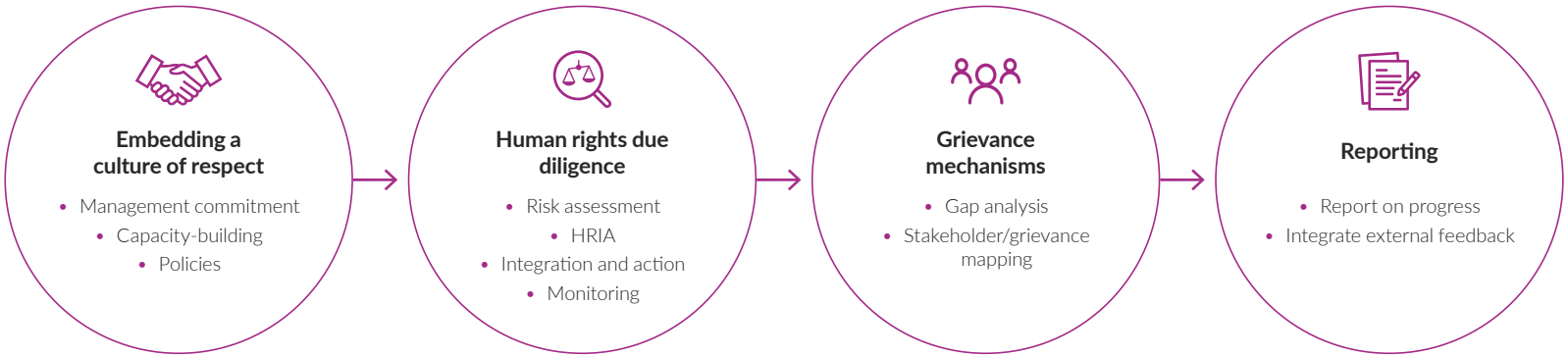
This work is governed internally by a cross-functional team and delivered through extensive internal engagement and training, externally conducted human rights impact assessment (HRIA), consultation with experts, and partnership projects with peers.

To deliver on our HRC, we have embarked on a set of actions to be completed by the end of 2020. These actions are guided by our 2018 global risk assessment, which revealed our most salient risks: those with the greatest potential to negatively impact people as a consequence of our activities. These include risks of child labor, forced labor, poor working conditions, and the safety of farmers in our agricultural supply chain. In our operations, they relate to personal safety and freedom of association. In the markets where our products are sold, they include risks related to the use of our products by youth.

Guided by our 2018 assessment, we decided to expand our work by conducting HRIAs in the 10 highest risk countries in which we operate by 2025. The high-risk countries are determined based on PMI's footprint (e.g., presence of manufacturing operations, type of supply chain, etc.), as well as the country's human rights risk profile based on internationally recognized indicators.

These follow a formal process, conducted in accordance with the UNGPs, to determine human rights risks and impacts covering internal operations and the value chain. The HRIA results in a comprehensive action plan defined and developed by the market in question in collaboration with the relevant corporate functions. Learnings from an individual market assessment can then be shared globally where applicable.

Our Human Rights Roadmap at a glance



Progress in 2019

PMI's work to embed the protection of human rights into our culture and corporate processes is built on a foundation of engagement, partnership, and technical analysis across functions and markets. Success will be defined by meaningful and systematic action to address gaps, focusing on the most salient risks first. We will be expanding the number of assessments in the next five years and, as we do so, will apply substantial focus on the depth and scope of each one.

Building on our pilot in Mexico in 2018, we conducted a second HRIA in the Philippines in 2019. The exercise covered our head office, two factories (Batangas and Marikina), one sales office (Marikina), suppliers, and surrounding communities. The scope of the HRIA was broadened to also include our tobacco supply chain and our marketing practices, better reflecting the operating context and issues at stake across our value chain.

> We will be expanding the number of assessments in the next five years, and will apply substantial focus on the depth and scope of each one.

Mexico: Driving change through our human rights impact assessment

The pilot assessment in 2018 triggered action on working hours, road safety, suppliers' working conditions, and security.

Closer analysis of factory work patterns has led to a four-shift model being trialed in the factory operations to address the issue of excessive overtime. To address risks related to road safety and personal security for workers in our distribution supply chain, we are now using GPS tracking on trucks and applying stronger checks on driver qualifications. Regarding the risks revealed in our supply chains, we are now engaging with our suppliers to encourage their efforts to provide good working conditions and fair wages.

These actions are intended to prevent risks to third-party workers and other stakeholders resulting from our business.

The process of a human rights impact assessment

Our latest HRIA in the Philippines

The assessment began early in 2019 with desktop research, stakeholder mapping, training, and awareness-raising related to the expanded scope of the exercise. Learning from our experience in Mexico the previous year, our preparation in the Philippines included deeper engagement with management teams prior to the start of the exercise, incorporating training on human rights and the assessment process. To open the on-site assessment, our local affiliate PMFTC organized a launch event that welcomed all employees, local NGOs, and government representatives to discuss human rights and the roles that companies and governments have to play in this area. Several in-country visits and interviews followed. Our human rights consultant, Article One, interviewed not only employees and contracted workers, but also our tobacco supplier, farmers, and functional experts. The consultant interviewed, individually or through focus groups, a representative sample of women and men across age groups and functions, including unionized employees of the Marikina factory.

Our assessment revealed several positive developments:

- consistent mentions of above-average salaries and industry-leading benefits, training, development, and support for nursing mothers;
- recognition of the company as an employer of choice;
- a strong culture of safety and security among employees and contractors that extends to their families and communities;
- strong awareness of available grievance-raising channels and PMI's "Speak Up" culture;
- a strong commitment to diversity and inclusion, with all feeling welcome and supported;
- good level of knowledge among sales teams of PMI's Marketing Code; and
- a leaf supplier fully committed to PMI's ALP program, with a growing awareness among farmers.

Employees in PMI's manufacturing facility in Batangas in the Philippines

In addition to these positive elements, we noted areas in need of improvement. During the focus group discussions, sales employees – especially women – raised concerns about risks to their personal safety while working in locations with high crime rates. To address these risks, we will undertake mitigating measures, including a review of route assignments in consultation with the sales staff, and ensure that two employees are teamed up when working in identified high-risk areas. The risk for sales employees of being involved in hold-ups also exists. In addition to all necessary security measures applicable, employees will be provided with appropriate counseling. Employees also raised concerns about their long working hours coupled with long commute times. In response, local management will conduct a survey of working hours and driving routes and review relevant compensation schemes.

Despite legal requirements regarding the minimum age for the sale of tobacco products, as well as awareness-raising materials and other measures, sales employees have raised concerns about "sari-sari" small neighborhood stores, which may not always comply with legal age limits. Although PMI neither owns nor has control over these retail points of sale, we recognize that we need to further raise awareness of our own standards, which align with local legislation, and work with these retailers to ensure they do not sell to underage customers. To this end, the market will roll out additional activities with retailers based on PMI's global youth access prevention program.

Our consultant also raised concerns that the wages of security and janitorial contractors, although fully compliant with legal requirements, may fall below the level of a living wage. We were advised to encourage our service providers to consider implementing performance-based wage increases as an incentive.

Based on interviews with farmer representatives and tobacco farmers, our consultant recognized PMI's commitment to the ALP program and the progress that has been made in its implementation. This includes improvements in growing and working practices, and the overall performance of our supplier in the Philippines. However, farmer representatives also stated that, while the ALP program had improved compliance with personal protective equipment (PPE) requirements, some farmers still refuse to wear safety equipment, potentially leading to green tobacco sickness and other health issues. Providing safe working conditions to both farmers and workers is a key element of our ALP program. Our supplier will continue ensuring the appropriate PPE is available, while raising awareness of safety to encourage behavior change in PPE use.

Overall this exercise raised awareness of human rights at the country level and further developed employee competencies and skills to address potential human rights issues. From a corporate perspective, we aim to use local learnings to enhance our global understanding, training, and management of human rights impacts.

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This iterative process, called ‘Human Rights Impact Assessment,’ requires us to engage with all stakeholders to whom we need to listen and from whom we need to learn. Listening to practitioners and those that confront the challenges is the first ingredient in transformation. And this transformation journey that our company is undergoing is not without new challenges or impacts on human rights – in our operations, supply chain, or even our external engagements. As an industry leader, we need to be humble and open to learning from others’ lessons, build on what works, and together plug the gaps. Together we should reinforce the key message that respect for human rights is possible. It is our responsibility and a major contribution of our business to realizing sustainable development.

The perspective of our Managing Director in the Philippines

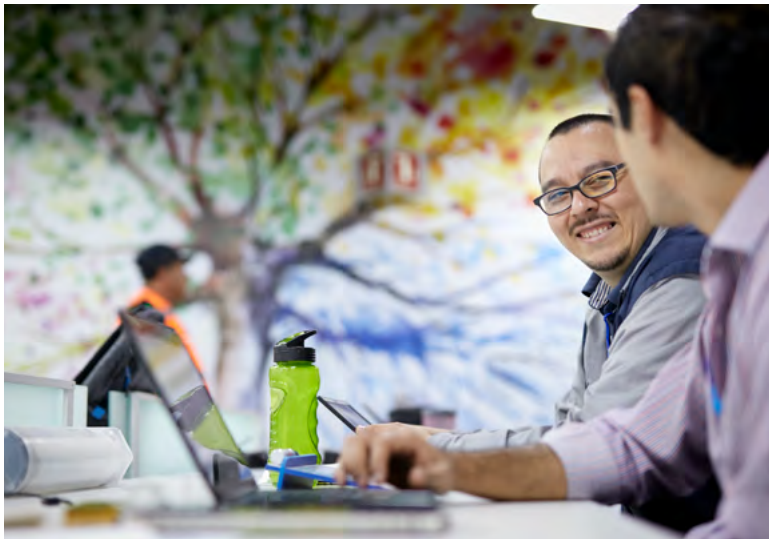
Workers at our tobacco supplier’s facility in Isabela in the Philippines

Common findings of our HRIA

Based on interviews and focus groups with employees and contractors, the assessments revealed that, in both Mexico and the Philippines, PMI is an employer of choice that inspires pride at work, fosters diversity, and pays above-average wages. Employees are aware of the available grievance mechanisms and are prepared to use them if things go wrong, with evidence showing that PMI's response is appropriate. Finally, the safety culture within our manufacturing operations proved to be strong in both countries.

We acknowledge that we cannot analyze the complexities of human rights issues in every corner of our operations straight away, but we keep strengthening our processes and deepening our understanding over time based on ongoing learnings. The journey to turn inherent risks into managed risks is ongoing. And we are encouraged by the progress made so far – for instance, on working toward alignment of working hours with the ILO standards, above-average salaries, and cultural openness. Also, thanks to the HRIA, we can shed light on local challenges such as safety issues for commercial teams operating in risky environments or factory employees requesting the review of city areas to be covered by the company's night transport. Finally, structured tools such as the HRIA provide an important evaluation of how our Guidebook for Success, ALP, RSP, and Marketing Code are implemented on the ground.

Employees in PMI's manufacturing facility in Guadalajara, Mexico



An employee in PMI's manufacturing facility in Marikina in the Philippines

> The journey to turn inherent risks into managed risks is ongoing.

We decided to revamp our human rights e-learning, informed by our most salient risks

Training employees on human rights

Embedding an ethos of respect for human rights in corporate culture starts with awareness-raising and training. We have provided tailored human rights training to the Law department and to regional and market teams within the Security function. In 2019, we also delivered specific training sessions on human rights policies and procedures to 25 percent of PMI's security personnel.

In 2019, we decided to revamp our human rights e-learning, informed by our most salient risks. The training provides an overview of human rights and key insights into child labor, forced labor, and modern slavery, freedom of association, and environmental impacts. The tool will be rolled out in 2020, and we will report on the uptake in our next report.

Human rights topics are also covered by other corporate training with respect to our Guidebook for Success, employment policy, and health, safety, and environment policies.

Next steps

We are progressing with the delivery of our Human Rights Roadmap. The rollout of our key diagnostic tool – the HRIA – will continue in 2020 in two geographies. We plan to conduct a full-fledged HRIA in a selected high-risk country, which will deliver in-depth analysis and robust action plans.

In parallel, to increase our overall impact on society, we are participating in industry-wide projects. We plan to conduct a focused impact assessment of our tobacco supply chain in Mozambique, which will cover ALP implementation and its effectiveness in addressing risks and impacts. This work will be carried out by a human rights consultant, with other industry peers, working in collaboration with our common supplier in Mozambique.

In 2020, we will also review all training materials and delivery methods of our ALP program. The objective is to further align our training with the UNGPs and our step-change approach. In parallel, we will explore new delivery methods such as e-learning and leverage real-life examples.

> We are progressing with the delivery of our Human Rights Roadmap.

Security personnel in PMI's manufacturing facility in Marikina in the Philippines

Performance

Respect for human rights	2017	2018	2019	2025 goal
Cumulative number of human rights impact assessments conducted	0	1	**2**	10

LINKS

Human Rights Commitment ▸
Human Rights Roadmap ▸

CASE STUDY: SOUTH AFRICA

Bringing a smoke-free future to the African continent

Location
South Africa

Employees
~450

***IQOS* available since**
2016

Philip Morris South Africa (PMSA) was established in 2003 and is the country's second-largest tobacco company. It distributes PMI's products domestically and also exports them to markets in the region.

Leonard Dingler (Pty) Ltd, an affiliate of PMSA located in Johannesburg, is a manufacturing entity. It produces tobacco products such as roll-your-own, pipe tobacco, and nasal snuff. In total, the two entities employ around 450 people.

PMI's Leaf Operations Center for Africa is located in the head office in Cape Town. The leaf team coordinates tobacco-buying activities in South Africa, Malawi, and Mozambique.

A customer and a sales representative in an *IQOS* pop-up store in Cape Town, South Africa

Access to smoke-free alternatives

To date, South Africa is the only African country in which PMI is commercializing its heat-not-burn tobacco system *IQOS*. The product was introduced to the market in 2016 in Cape Town. Currently, PMI is concentrating the commercialization of smoke-free products in three regions: Gauteng, with major cities Johannesburg and Pretoria; the Western Cape region, including Cape Town; and the KwaZulu-Natal region, with Durban as its biggest city.

Since the initial launch, PMI has opened a permanent *IQOS* boutique in Johannesburg and expanded the sale of the device and its heated tobacco units, marketed under the brand name *HEETS*, to 28 retail outlets. These locations are mainly in shopping malls, which attract a high volume of foot traffic from the targeted consumer group: adult smokers. In addition, up to 100 tobacconists now sell *IQOS*. A wide network of *IQOS* coaches is significantly contributing to the distribution of *IQOS* in South Africa through direct interaction with adult consumers. They are charged with presenting the product and demonstrating its use, and they also undertake activation activities in designated hot spots.

The economic circumstances and consumer preferences of South African consumers have created some hurdles. South Africa is a country with vast economic inequality, making affordability an issue. To ensure that the largest possible number of adult smokers can afford this better alternative to cigarettes, PMSA has introduced a monthly subscription program for *IQOS*. Consumers pay the retail price of the device in equal installments over 12 months, without any interest. This program started in 2019 and has delivered good initial results; it now accounts for around 20 percent of *IQOS* devices sold.

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The program started in 2019 and has delivered good initial results; it now accounts for around 20 percent of devices sold.

A customer and a sales representative in an *IQOS* store in Johannesburg, South Africa

Tackling the issue of littering and waste

In September 2019, PMSA increased its efforts to tackle the issue of cigarette butt littering. On the occasion of World Cleanup Day, PMSA employees teamed with the City of Cape Town and the Central City Improvement District to clean up the city's central business district. The 66 volunteers, 40 of them from PMSA, collected a total of 80 kilograms of cigarette butts. To raise public awareness of the littering issue and the need for proper disposal, the bags were emptied and the contents displayed on a busy square during lunchtime. Since the lack of a good disposal infrastructure is contributing to the problem, the volunteers also handed out pocket ashtrays to smokers to make proper disposal easier.

Another activity around World Cleanup Day involved waste pickup by the Leonard Dingler factory employees in Johannesburg. Some 300 employees participated, gathering a total of 340 kilograms of waste on the premises, which was then disposed of safely. The factory plans to turn this into a quarterly event. In addition, the factory is striving to not produce any waste for landfill and runs a Bokashi project with its tobacco, food, paper, and garden waste. In this composting method, the organic waste is inoculated with specific microorganisms and fermented instead of decomposed. The resulting soil amendment is then used in the landscaping around the factory. This project reduces landfill waste. In 2019, it lowered the disposal rate to around 9 percent from almost 19 percent in the year prior.

In its head office in Cape Town, PMSA has made recycling a priority and aims to become a "plastic-free" office. Measures include a dedicated waste-sorting system, a switch from plastic to glass bottles and cups, and the removal of plastic utensils.

Employees in PMI's office in Cape Town, South Africa

Improving fleet safety

Overall, PMI's fleet has a relatively low collision rate, with 0.87 collisions per million kilometers driven in 2019. The record was significantly worse in South Africa, with 5.63 collisions per million kilometers in 2018, among the worst companywide. After a thorough investigation and implementation of several measures, the rate dropped to 2.68 collisions per million kilometers in just one year, which equaled an absolute reduction from 44 to 18 collisions. These measures included an awareness campaign for driving safety and a prohibition on driving company-owned cars in the off-hours between 11 p.m. and 4 a.m., as most collisions have occurred between midnight and 6 a.m.

The most significant improvement came through the installation of telematics devices in all 134 fleet vehicles and stronger involvement on the part of the management team. The devices not only monitor speed, but also provide indications of undesirable driver behavior – e.g., changing lanes without using the indicator light or not keeping a proper distance from other vehicles. A fleet specialist analyzes these data and sends a report to line managers, who in turn give one-on-one feedback to drivers. In most cases, this first feedback session is enough to trigger a behavior change in the driver. In other cases, additional training is warranted. Using this program, the local management team aims to lower the collision rate further in 2020 and beyond.

> The local management team aims to lower the collision rate further in 2020 and beyond.

2.68

Fleet collison rate
Our fleet collision rate per million kilometers driven in South Africa dropped from 5.63 in 2018 to 2.68 in 2019

134

Vehicles equipped with telematics devices, not only monitoring speed, but also providing indications of undesirable driver behavior

An employee in PMI's manufacturing facility in Johannesburg, South Africa

Adequate housing for tobacco workers

South Africa is one of the countries from which PMI purchases tobacco. Our leaf supplier currently works with fewer than 100 farms, which in turn are contracting close to 1,800 workers. As part of its ALP program, PMI has set a goal of improving the working and living conditions of workers across its tobacco supply chain. In 2017, during the Control Union assessment of PMI's local tobacco supplier, Universal Leaf South Africa (ULSA), 14 of the 16 farms visited in the Limpopo region were found to have inadequate workers' accommodation. In the Eastern and Western Cape, seven of the 11 farms visited did not meet accommodation standards. PMI developed a plan with ULSA and strategic partner Verité to address this issue, with the goal of ensuring that workers' accommodation meets the following minimum standards: Houses need to have a waterproof and durable roof, glass windows that can be opened, and electricity (if the infrastructure exists on the farm). Moreover, safe water must be available inside the house or nearby, and houses must be no less than 30 square meters in size.

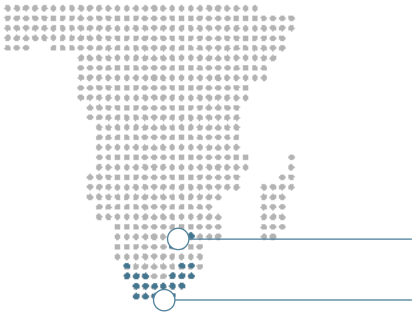
The remediation plan, endorsed by the South African Department of Labor, started with a pilot project in 2017 and expanded to focus on accommodation on larger farms in 2018. A full-scale program continued on all contracted tobacco farms through 2019.

As of the end of 2019, the project has delivered 246 new rooms, 400 renovated rooms, and 92 new or renovated toilets, as well as the installation of electricity on 31 farms that previously did not have access to it. Together, these improvements have benefited over 1,000 workers and their families on 44 farms.

The Ministry of Labor in Limpopo and Ministry of Agriculture in the Cape have validated all the newly built and renovated accommodation and confirmed that they meet the legal standards. This puts us in a great position to achieve our target of providing adequate accommodation to all contracted farms in South Africa ahead of PMI's global timeline of the end of 2020.

Workers' accommodation in Lephalale, South Africa

Tobacco farming in South Africa



Tobacco growing

Tobacco:
Dark air-cured

Crop season:
July to April

Irrigation type:
Drip irrigation

Curing method:
Air-cured, by hanging the leaves in well-ventilated barns

Average farm size:
285 hectares, out of which 16.2 hectares used for tobacco cultivation

People

~100	Farmers who supply tobacco to PMI
~1,800	Workers hired by farmers (18 workers per farm on average)
~600	People living on the farms (farmers' families), including over 400 children
~5	Field technicians, visiting the farms on average 5 times during the crop season

PILLAR 3

Caring for the people we work with

Continuously improving PMI's social impact within our operations and beyond is essential to our long-term success.

Promoting a safe and healthy working environment is key for our company. In our factories, offices, laboratories, retail outlets, and sales teams, we aim for a safe and secure workplace populated by a healthy and motivated workforce.

Our efforts extend to the labor standards we expect from our suppliers and farmers. In our tobacco supply chain, our aim is to provide a decent livelihood to all contracted farmers and prevent child labor and other labor abuses.

Socio-economic well-being of tobacco-farming communities
Page 106

Health, safety, and well-being at work
Page 120

Socio-economic well-being of tobacco-farming communities

The tobacco we source is cultivated in many regions of the world, including low- and medium-income countries, where it is typically grown on smallholder farms of less than two hectares. The socio-economic well-being of tobacco-farming communities depends on many factors, including the nation's health and educational facilities, political stability, resilience to climate shocks, access to markets, and public infrastructure, as well as regulatory frameworks and their enforcement. If these factors are not present or are insufficiently developed, tobacco communities risk being locked in a cycle of poverty, which can lead to poor working and living conditions, including the use of child labor.

Megatrends

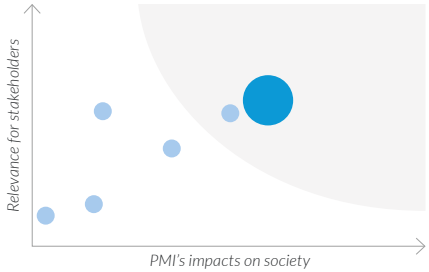
- Purpose of business
- Income inequality

A tobacco farm worker stringing tobacco under a Burley barn in Malawi

Topic description

For PMI, it means improving the capacity of tobacco-farming communities to achieve a decent standard of living, which is a key enabler to eliminating child labor and providing safe and fair working conditions on tobacco farms. Our strategy aims to ensure that contracted farmers achieve a living income, as insufficient income is often the root cause of child labor and other social and environmental issues.

Relevance of the topic



Impact in our value chain

Upstream | PMI operations | Downstream

Key stakeholders

- Civil society
- Employees
- Financial community
- Media
- Regulators
- Supply chain

Why it is important to PMI and our stakeholders

Poverty prevents farming communities from achieving acceptable levels of socio-economic well-being and stifles local economic development. It leads to labor abuses and risk of child labor on tobacco farms because farmers may be unable to hire workers or afford school costs for their children, resulting in them keeping their children home to work on the farm. Child labor affects an estimated 150 million children worldwide, with the vast majority found in agriculture. It prevents children from getting a proper education, participating in the development of their communities, and fulfilling their potential.

Child labor and other such practices are morally unacceptable to PMI. From a business perspective, these practices also raise issues of compliance, such as potential human rights violations, and reputational risk. Tobacco is the main ingredient in our products, and a stable and successful farmer base is critical to ensuring the continuity of a high-quality tobacco supply. There is opportunity for us here, as well. As a global business sourcing tobacco from 24 countries, we can help address poverty and child labor through targeted initiatives and by developing strong working relationships with farmers, suppliers, civil society, governments, industry, and other stakeholders.

As with other agricultural commodities, the price of tobacco leaf and cloves can be influenced by imbalances in supply and demand, and crop yields and quality can be affected by variations in weather patterns, including those caused by climate change. Tobacco production in certain countries is subject to a variety of controls, including government-mandated prices and production-control programs.

Connectivity with other sustainability issues at PMI

1 Sustainable supply chain management
2 Respect for human rights
3 Illicit tobacco trade prevention
4 Business integrity
5 Fair working conditions
6 Health, safety, and well-being at work
7 Diverse and inclusive working environment
8 Community support
9 Talent attraction, retention, and employability
10 Climate protection
11 Forest conservation
12 Product eco-design and circularity
13 Biodiversity
14 Water stewardship

Our aims

100%

Percentage of contracted farmers supplying tobacco to PMI who make a living income by 2025

Zero

Child labor in our tobacco supply chain by 2025

Achieving our aims

A principal aim of PMI is to provide a decent livelihood to all contracted farmers in its tobacco supply chain. This has been a focus since we introduced our Agricultural Labor Practices (ALP) program in 2011. We are committed to the following set of targets to improve the socio-economic well-being of tobacco-farming communities:

- 100 percent of contracted farmers supplying tobacco to PMI make a living income by 2025;
- zero child labor in our tobacco supply chain by 2025;
- 100 percent of tobacco farmworkers paid at least the minimum legal wage by 2022;
- 100 percent of tobacco farmworkers provided with safe and adequate accommodation by the end of 2020; and
- 100 percent of farmers and workers having access to personal protective equipment (PPE) for the application of crop protection agents (CPA) and prevention of green tobacco sickness (GTS) by the end of 2020.

We use a risk-based approach to identify, prevent, and mitigate human rights– and labor rights-related incidents in PMI's tobacco supply chain. We conduct our assessments using information on the prevailing conditions in the agricultural sector and what we have learned through years of internal monitoring and external assessments of our ALP program across our sourcing countries.

Our governance arrangements aim to guide and facilitate this work. PMI's Senior Vice President of Operations, a member of PMI's Company Management, is accountable for our success in this area, while the operational responsibility lies with the head of our Leaf Department. In each sourcing region, a management team oversees the implementation of ALP and has an established steering committee, which works closely with the dedicated local teams across our affiliates, as well as our suppliers.

Effective delivery of the ALP program depends on five core elements, which together help contracted farmers earn a decent livelihood, eliminate child labor, and achieve safe and fair working conditions.

The ALP program is supported by related policies, such as our Good Agricultural Practices (GAP), our Human Rights Commitment (HRC), and our Responsible Sourcing Principles (RSP).

In 2018, we started a "Step Change" approach to our ALP program, focusing on four priority areas: eliminating child labor, ensuring payment of at least a minimum legal wage, the availability of PPE, and adequate accommodation for all farmworkers. Step Change focuses on resolving the root causes of these persistent issues in priority countries – which we assess periodically, and is run in collaboration with our partner Verité.

The program focuses on Argentina, Mexico, Indonesia, Pakistan, Malawi, Mozambique, South Africa, and Turkey, due to the persistent nature of these issues there. A key component of the step-change approach has been to enhance external assessments and verification to support our progress toward our ambitious targets.

We are committed to a set of targets to improve the socio-economic well-being of tobacco-farming communities

A field technician and a tobacco farmer in Malawi

The five parts of the ALP program

1. The ALP Code, comprising seven principles and 33 measurable standards, applies to the 335,000 farmers from whom we source tobacco directly or indirectly. The principles are as follows: no child labor, no forced labor or human trafficking, fair treatment, safe working environment, fair income and work hours, freedom of association, and terms of employment. The code is based on International Labour Organization (ILO) conventions.

2. Awareness-raising and training for suppliers, farmers, workers, and PMI's Sustainable Agriculture teams about applying the code and addressing any shortcomings in the process.

3. Internal farm-by-farm monitoring by 2,875 field technicians employed by PMI and our tobacco leaf suppliers. These are the people at the frontline of communicating PMI's expectations, visiting farms, and working with farmers to resolve ongoing challenges.

4. External assessments and verifications – by Control Union (a specialist supply chain auditor) and local partners – to independently evaluate the implementation of the ALP program.

5. Collaboration with civil society organizations, governments, and the private sector on initiatives to address systemic issues and to empower communities through participatory processes and grievance mechanisms.

Monitoring the implementation of our ALP program

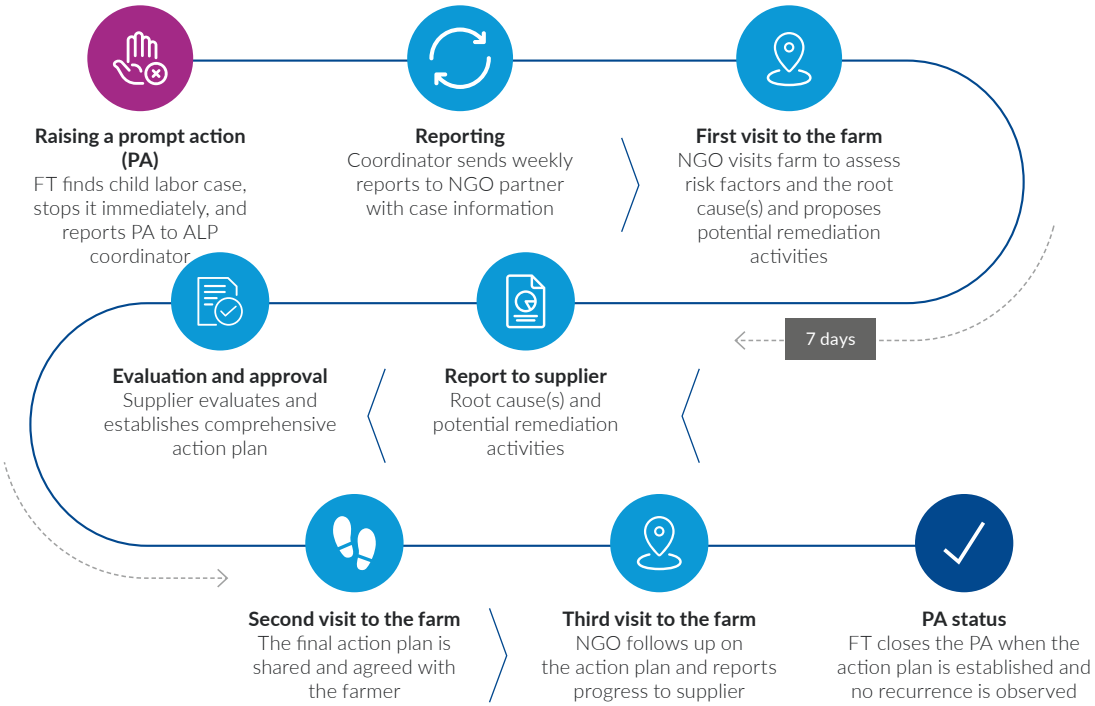
Internal monitoring: Systematic monitoring of the ALP program begins with the collection by field technicians of individual farm profile data, updated each growing season. The profiles capture key information about the people working and living on the farm, the size and type of farm, the number and categories of workers, housing arrangements, and school attendance. Field technicians then visit the farms throughout the tobacco-growing season and evaluate, among other things, how well labor practices align with the principles of the ALP Code. "Prompt actions" are raised by field technicians to flag and trigger a response to any serious ALP violations. A remediation plan is then discussed with the farmer, followed up on, and monitored. If the matter is not resolved within the agreed timeline, it is further escalated. This may lead to sanctions, which can include contract termination in line with the due diligence and consequence management process.

External assessments: External third-party assessments are conducted by Control Union (CU). CU evaluates the management system in place for ALP implementation, as well as the labor practices on the farms contracted by PMI and our suppliers. The assessment generally includes a review of prompt-action protocols and monitoring procedures. It also examines the internal capacity to implement the ALP program and understanding of farm practices, as well as how issues are being identified, recorded, and addressed. At the farm level, it assesses compliance with the measurable standards.

Focused CU assessments: Under our step-change approach, we are implementing a specific assessment of the management systems in place relating to the step-change priority areas, in addition to the farm-level ALP assessment.

External verification: The aim of third-party verification is to increase confidence in our internal monitoring data, as well as to improve the effectiveness of our program in addressing the targeted issues. Run on an ongoing basis, we use it to verify our understanding of progress on the ground, to challenge our monitoring data, to evaluate the effectiveness of our initiatives, and, ultimately, to better assess our impact. We work with local expert implementing partners in different geographies.

Child labor monitoring & remediation system



A field technician and a tobacco farmer in San Vicente, Argentina

Despite persistent issues, which the program is proactively tackling, PMI's ALP program is reaching a level of maturity and sophistication that we are proud of. To better share what we learn, and to receive ideas for how we can improve, we regularly participate in cross-sector events in which we detail our program experiences.

In 2019, we also began to publish on our website *ALP Progress Updates* to share our experiences throughout the year, and we participated in various seminars and conferences on the topic, including a webinar organized by Sustainable Brands.

Since 2000, PMI has been one of the early members of the ECLT foundation, a multi-stakeholder partnership that works to find collaborative solutions to address the root causes of child labor issues in tobacco-growing. PMI is strongly supporting ECLT's efforts to provide a framework (the ECLT Pledge of Commitment and Minimum Requirements), which is based on ILO Conventions and the UN Guiding Principles on Business and Human Rights, for all members to align, reinforce, and where necessary, expand their policies and practices to progress in sustainably eliminating child labor.

Key definitions

A **living income** and a **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 members of that household, such as self-employed farmers, whereas a living wage is applied in the context of hired workers (in factories or on farms, for instance).[1]

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 standards or formalized agricultural benchmark standards. 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 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 nonhazardous and light and the child is at least 13 years old or above the minimum age for light 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 PPE: applying crop protection agents; stalk cutting; stringing; carrying heavy loads; working with sharp tools; working in extreme temperatures; and working after dark.

Green tobacco sickness (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, and can last from 12 to 48 hours.[2]

Personal protective equipment (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.[3]

1 Source: https://www.living-income.com/the-global-living-wage-coalition

2 Reference: Schep LJ, Slaughter RJ, Beasley DM (September–October 2009). "Nicotinic plant poisoning." Clinical Toxicology. 47 (8): 771–81. doi:10.1080/15563650903252186.

3 Adapted from the FAO/WHO (2014) International Code of Conduct on Pesticide Management.

Progress in 2019

Contributing to alleviating poverty

PMI is committed to improving the livelihoods of the contracted farmers supplying tobacco to the company, and consequently the communities in which they live, not only because it is the right thing to do, but also because we see this as a fundamental enabler to address social issues in our supply chain and achieve greater sustainability.

To improve livelihoods in tobacco communities, it is vital to identify potential gaps between the actual income of a household and the regional living income benchmark, which is the net annual income required for a household in a particular place to afford a decent standard of living for all members of that household. Where an income gap is identified, we look at initiatives to improve the efficiency and productivity of tobacco production and opportunities to implement complementary crops or other income-generating activities to close the gap.

At PMI, we have designed a number of initiatives to support contracted farmers in improving their income levels and thus the livelihoods of their households. The initiatives offer a clear route to resolving labor abuses, particularly child labor, and include farming efficiency programs, improved mechanization and irrigation, crop diversification, and alternative business models. In 2019, we brought together these initiatives under a "Living Income Program," which aims to assess actual farmer income versus the living income benchmark of a given area. Our partner Verité has been assisting us to identify suitable partners to conduct assessments. In this initial stage, we are conducting the work in Pakistan, and are planning to expand to Malawi in 2020.

> We have designed a number of initiatives to support contracted farmers in improving their income levels.

Farm efficiency

To improve household income, many farmers routinely seek out efficiencies and savings in their operations throughout the year. PMI supports these efforts. Examples include farmers hiring only the labor required, more careful use of inputs such as fertilizer, and finding ways to increase yields per hectare. Additionally, introducing effective irrigation methods, such as drip systems, can save not only water, but also time and labor costs, while increasing the yield and quality of tobacco (and other complementary crops) produced. Another farm efficiency relates to crop storage, which can be improved to reduce the potential financial loss from crops spoiling and the need for insecticides after harvest. Going further, our programs support mechanization of field preparation, which can provide labor savings and elevate yields.

Diversification

Our smoke-free products require less tobacco than cigarettes, and so we foresee a gradual decrease in our tobacco leaf requirements from some countries. Consequently, supporting farmers in diversifying their crops has become an even more important focus area for PMI. Growing and marketing a range of complementary crops can improve farm income. By diversifying their crops and engaging in other income-generating activities, farmers are more resilient against climate change and economic uncertainty.

A farm worker next to a water pump used for drip irrigation in Malawi

We see it as our duty to help farmers and their families improve their livelihoods and are seeking ways to improve farmer income to a level that meets the relevant living income benchmarks in our sourcing countries.

In certain countries, irrigation can play a significant role in diversification, allowing farmers to grow crops during the dry season. In Mozambique, for instance, the low-cost treadle pump irrigation trials we began in 2018 provided interim results in 2019 that show that smallholder farmers are able to produce and market their crops during the dry period and achieve additional income.

Meanwhile, in Pakistan, we have rolled out our corn support program to 359 farmers, with the aim of increasing farmer profitability, food security, and livestock feed. This program supplements a similar project we established with 75 farmers to grow mushrooms. In 2019, we also developed and expanded a more formalized production of home allotment gardens with seven vegetable crops, which were mainly consumed by farmers' families and hired workers. This program reached a total of 1,700 farmers.

We have also supported the introduction of alternative crops beyond the low-to-middle-income countries from which most PMI tobacco is sourced. In Italy and Spain, for instance, PMI has helped to establish fairly extensive cultivation trials, around 40 hectares, of alternative crops such as hazelnuts, cardoons, broccoli, potatoes, and tomatoes.

Supporting farmers in diversifying their crops is an important focus area for PMI

Tobacco farmer's wives growing alternative crops in Malawi

PMI's Living Income Program at work improving livelihoods in Malawi

PMI has identified Malawi as a priority country for supporting farm diversification. Existing projects, run in partnership with USAID's Feed the Future program, focus on trialing new varieties of crops and improving how soybean and groundnuts are cultivated. We also work with our local third-party tobacco suppliers to trial an array of different irrigation systems, which could provide farmers who have historically relied on a single rain-fed crop with the opportunity to produce crops in a year. In 2019, production of groundnuts was increased to 3,300 hectares, with many contracted farmers establishing formal contractual arrangements with our leaf suppliers to ensure their product is sold.

Another diversification effort is beekeeping – a project started in 2018 and expanded in 2019 to supplement farm income through the production and sale of honey. We have supported our suppliers in setting up and running 640 hives on their own farms, as well as on smallholder farms in central Malawi. Specialist advice and training are provided to ensure consistently high-quality honey. The project will expand to include hundreds more hives over the next few years, and field technicians will collect monitoring data along the way to track impact. The project is an excellent example of a connection between a natural capital stock and socio-economic value. As honey production increases, it will be processed and commercialized in local and export markets.

Water and mechanization are also key. A study under way aims to identify sustainable sources of water that can be used for irrigation in central Malawi. And on mechanization, PMI is running a pilot whereby Malawian entrepreneurs provide field preparation services to farmers, using tractors. While the pilot is at an early stage, with 1,500 hectares serviced to date, we have started to measure the impact on smallholder agricultural productivity, financial feasibility, and the benefits derived from using a digital platform to monitor tractor efficiency and schedule services.

The Living Income Program also tracks progress. Along with the practical projects, we piloted a Household Welfare Survey in 2019 to analyze 2,150 farmer households and assess the impact of the ongoing agricultural initiatives. The survey assesses other non-tobacco sources of income, the poverty index, and food security and nutritional diversity. We expect to share the results of the survey in future reports.

Agricultural Labor Practices

In 2019, field technicians contracted by PMI and by our leaf suppliers monitored 92 percent of all contracted farms (an increase from 88 percent in 2018), and we are committed to continually strengthen our monitoring to improve our visibility of issues – taking a more risk-based approach, and to also be more effective in addressing identified issues. In 2019, for instance, we also piloted our overall ALP program in China, covering close to 23,000 farms.

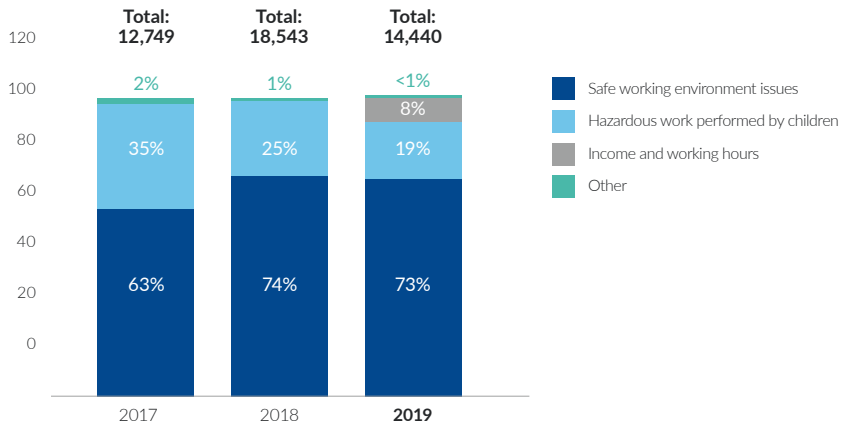
Across the countries we source tobacco from, the most recurrent and difficult problems include:

- work performed by children;
- inadequate and unsafe accommodation for farmworkers;
- payment to workers below the minimum legal wage or formalized agricultural benchmark; and
- inadequate access to PPE that can prevent harm from exposure to CPA and GTS.

We have developed and are implementing action plans to address these recurrent issues in collaboration with key stakeholders, including our strategic partner Verité, local NGOs, and governments. We have also commissioned external verification in some priority countries.

In 2019, we refined our due diligence, monitoring, follow-up, and consequence management by introducing specific guidelines. For instance, we want to reward farmers who make an effort to align with our standards and will stop doing business with those who repeatedly do not or are unwilling to change despite the support they receive from us. We clearly communicate expectations and potential sanctions at the beginning of the season, ensuring consequences are applied transparently and consistently across all contracted farmers. This systematic approach resulted in a significant increase in contract terminations due to ALP violations in 2019, with 641 contracts terminated.

Total prompt actions recorded by field technicians (2017-2019)



Key countries	Main 2019 interventions in ALP priority areas
Argentina	• Provided PPE to farmers and farmworkers • Enhanced case-by-case remediation of child-labor incidents, partnering with a specialized NGO • Supported childcare centers; provided school kits and scholarships to children of tobacco farmers • Reduced labor requirements by expanding mechanization
Indonesia	• Supported after-school program for children of tobacco farmers • Raised awareness among women of the risks of child labor • Supported skills training for family members of tobacco farmers
Malawi	• Improved accommodation for tobacco farmworkers • Provided PPE to farmers and farmworkers • Promoted women's entrepreneurial groups and financial literacy training for farmers and family members • Ensured records of payments to workers made by farmers
Mexico	• Promoted safe and adequate accommodation for migrant farmworkers • Supported childcare centers attended by children of tobacco-farming communities
Mozambique	• Provided PPE to farmers and farmworkers • Installed small-scale irrigation to prevent children from being involved in seedbed watering (also allowing complementary crop production during the dry season) • Supported a community leadership accountability program • Supported a school feeding project
Pakistan	• Supported skills training for family members of tobacco farmers • Supported summer schools during tobacco harvesting season • Introduced female field technicians to monitor GAP implementation, with a specific focus on training and raising awareness of child labor among women who work on tobacco farms
South Africa	• Improved accommodation for tobacco farmworkers
Turkey	• Provided PPE to farmers and farmworkers • Trained women farmers and farmers' wives on the risks of child labor with specialized NGO

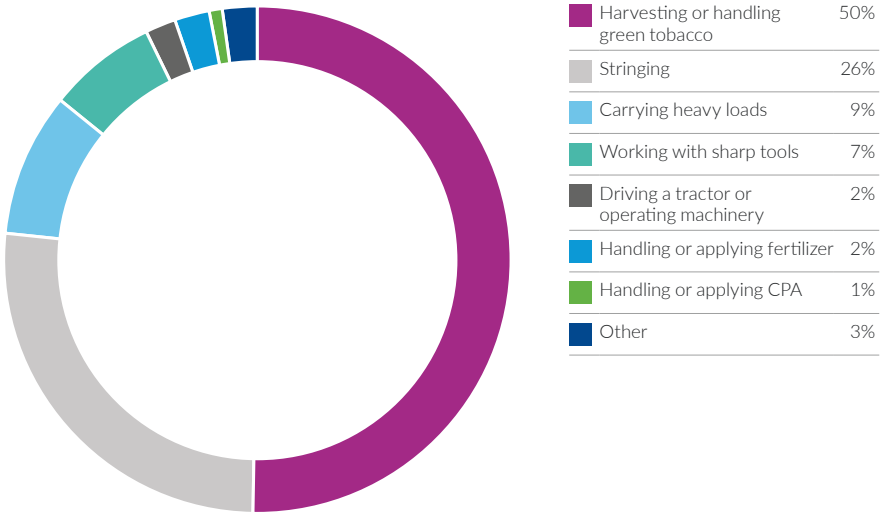
Note: Where step-change priority areas are not detailed, it is because they are not an issue in that market.

Child labor

In 2019, out of the 94 percent of farms monitored by field technicians on this topic, less than 1 percent were found with child labor incidents (children performing hazardous tasks). A total of 2,712 prompt actions were recorded by field technicians relating to hazardous work performed by 5,820 children, with 94 percent of these being the farmer's own children. This is lower than the 4,587 prompt actions recorded in 2018. The 2019 decrease is primarily driven by a reduction in prompt actions in Malawi and Turkey, and PMI no longer sourcing from Tanzania. Out of the 2,712 prompt actions recorded in 2019, 88 percent were resolved. The most common hazardous tasks that children were found doing were harvesting or handling green tobacco (50 percent), followed by stringing (26 percent) and carrying heavy loads (9 percent).

While this progress is encouraging, we must maintain a relentless focus on strengthening the reliability of our monitoring data, as well as on the remediation steps to support farmers and workers to address child labor incidents in a sustainable way. We remain cautious, and we acknowledge the limitations of our monitoring system. For example, field technicians are only present on the farms for a limited amount of time during the growing season, and the issues we face are systemic, complex, and often persistent. Consequently, in 2019, we continued to work on standardizing our monitoring process and strengthening it with better guidelines and training.

Types of prompt actions recorded in 2019 relating to hazardous work performed by children



We are also expanding and deepening the external assessments beyond the ongoing Control Union assessments. We have partnered with local and international organizations to verify the status of our four ALP priority areas and the effectiveness of our programs. We began these additional external verifications in Mexico and Argentina; in 2019, we added Turkey, Malawi, Mozambique, South Africa, and Indonesia. We are awaiting final results for external verification undertaken in 2019; but the preliminary results have indicated significant discrepancies compared to internal monitoring in some markets (for example, Turkey), while in others there is a reasonably good alignment (for example, Indonesia). In the markets where we are finding major discrepancies, we are working hard to understand the root causes of this and to develop and implement action plans to strengthen our internal monitoring, and, over time, see a closer alignment of the data. We will be using this additional layer of control to verify and report on our progress toward our targets, and look forward to providing an update in our future reporting.

In 2019, part of our work to prevent child labor focused on strengthening the support provided to farmers and workers, to remedy any cases found. Such support included awareness-raising and training; efforts to strengthen school access and attendance through provision of school materials and scholarships, school feeding, after-school activities, and improving schooling infrastructure; vocational training for older children; and other initiatives to improve household income levels such as women's self-help groups, village savings and loans associations, and crop diversification. In Argentina, for instance, we partnered with a specialist NGO to undertake case-by-case remediation of child labor (see box on the right).

Our work on the root causes of child labor intersects with women's empowerment. Consequently, we included women's empowerment as one of our guiding principles on ALP Step Change published in 2019. Efforts to tackle child labor are more effective when women play a more active role. While women are positive agents of change, they are also a vulnerable group in many rural environments. In our work to empower women, we are beginning to see results, which we will report on more extensively in the future.

In Malawi, for example, we have provided seed funding, entrepreneurial training, and links to microfinancing to 257 women's entrepreneurial groups, involving approximately 4,300 women, primarily farmers and farmers' wives. In Turkey, we delivered training to over 1,100 women. And in Pakistan, we recruited a female team to strengthen monitoring and to improve engagement with female farmers and family members and to raise awareness about access to water, sanitation, and hygiene. We also distributed 1,500 hygiene kits to women in these communities.

Our approach to social contributions

In 2019, we revised our social contributions policy approach to make it more decentralized, providing greater flexibility and autonomy for affiliates to decide on the community projects that will best meet local needs. As part of our policy changes we also introduced a distinction between charitable donations and community investments.

Charitable donations are not linked to impacts along our value chain and are made to enhance the overall quality of life in the communities where we operate. They are locally managed by our affiliates to address local priorities and include disaster relief efforts. In 2019, we made charitable donations valued at around USD 15 million, supporting 145 projects carried out with 128 partners across 39 countries. Our disaster relief efforts amounted to USD 1.2 million.

Community investments help manage social and environmental impacts associated with our value chain. In 2019, we ran 25 projects with 22 partners over 17 countries, directly reaching over 89,000 beneficiaries. In our tobacco supply chain, community investments can complement our ALP program by sustainably investing in community projects – such as schooling assistance for the children of tobacco farmers and farmworkers, after-school activities, and training for women and broader community members – which help address issues requiring a wider and more collaborative approach.

We provide further details on our approach to social contributions and our 2019 activities on PMI.com.

> “Efforts to tackle child labor are more effective when women play a more active role.

Monitoring and remediation in practice in Argentina

PMI's Argentina affiliate, Massalín Particulares (MP), was the first company to implement our new approach to external verification and to undertake case-by-case remediation of child labor incidents with a specialized NGO. Of the 32 prompt actions raised by field technicians during their visits to more than 4,600 contracted farms in 2019, 85 percent concerned children aged between 13 and 18. Working with Conciencia, an NGO and expert in child-labor elimination, we analyzed the root cause of each case, made a plan with the farmer, and followed up regularly. The remediation worked well, and many lessons were learned. Of the 32 cases, 23 were fully resolved and no recurrence was observed as a result of the action plans implemented. Five families are still receiving support, while four families showed a lack of willingness to change despite the support provided, and consequently their contracts were not renewed.

Typical root causes were low awareness of child-labor legislation, inadequate access to schools, and the entrenched belief that some hazardous work by children around the farm is acceptable. Action plans include training, scholarships and school kits (bags and books, for instance), enrollment support, and sports equipment. MP has begun working with Conciencia to identify high risks of child labor on contracted farms and to provide the necessary support to prevent them from becoming actual cases of child labor. Furthermore, the case-by-case remediation has been expanded to our supplier Cooperativa Tabacalera de Misiones.

A tobacco farm worker in Salta, Argentina

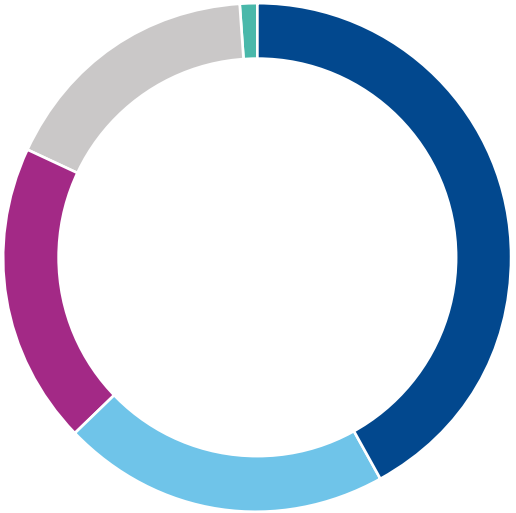
Safe working environment

In line with PMI's ALP Code, we require farmers to provide a safe workplace to prevent accidents and injury and minimize health risks. In 2019, field technicians recorded a total of 10,519 prompt actions relating to unsafe working environments (2018: 13,780). Around 42 percent of these related to unsafe or insufficient accommodation for farm workers, followed by 38 percent relating to handling green tobacco and applying CPA without the proper PPE (21 percent and 17 percent, respectively).

In 2019, we continued our monitoring and reporting of prompt actions to evaluate the availability of required PPE and ensure farmers and workers had the necessary PPE.

Together with our suppliers, we distributed a total of 1,632,031 PPE sets (for CPA application and GTS prevention), including 686,000 full sets of PPE for CPA and 945,000 pairs of GTS gloves in markets where needs were identified. In other markets, we continued to provide PPE as a standard business practice. Overall, we estimate that 99 percent of farmers (and their workers) had access to the required PPE in 2019, and we are progressing toward our target of 100 percent PPE availability by the end of 2020. In parallel, we are working to ensure farmers and their workers understand the importance of using the necessary PPE. To this end, in 2019, 89 percent of contracted farmers received safety training (CPA and GTS focus).

Types of prompt actions recorded in 2019 relating to safe working environment issues



Unsafe or insufficient work accomodation	42%
Exposure to GTS due to not wearing proper PPE	21%
CPA stored in a way that could cause a health and safety accident	19%
Exposure to CPA due to not wearing proper PPE	17%
Other	1%

Adequate accommodation for farmworkers

In line with the ALP Code, when a farmer provides workers with accommodation, we require it to be clean, safe, and meet basic standards. Accommodation standards were developed in line with local legislations, with guidance from Verité and other local partners. In 2019, 6 percent of the total farmer base provided accomodation to their workers, and we recorded a total of 4,374 prompt actions relating to accommodation. We continued to support farmers to address these issues. We specifically helped farmers address accommodation issues in the countries where standards were not yet met: Argentina, Malawi, Mexico, Mozambique, and South Africa.

While improvements take time, we estimate that, of the farmers providing workers with accomodation, 80 percent of them were meeting the standards, and we are on track to achieve our target for all accommodation to meet the standards by the end of 2020.

Tobacco farm workers' accomodation in Malawi

Access to water, sanitation, and hygiene in Malawi and Mozambique

Access to water, sanitation, and hygiene (WASH) is a fundamental human right that helps ensure healthy, prosperous communities. Malawi and Mozambique, in particular, lack the infrastructure and funding needed to provide adequate WASH services to their entire populations. The link between poverty and access to water, sanitation, and hygiene is well proven, and addressing these issues leads to improved livelihoods and increased productivity.

PMI is committed to helping ensure that 100 percent of contracted farmers supplying tobacco to PMI have access to water by 2025 and access to basic sanitation and hygiene by 2030.

In 2019, with the support of our leaf suppliers, PMI made headway on these goals by drilling 13 solar-pump boreholes and 30 hand-pump boreholes in central Malawi and 60 hand-pump boreholes in Tete Province, Mozambique. These boreholes have directly benefited more than 3,500 tobacco farmers and their families and are also estimated to benefit 80,000 community members.

The response from communities that benefit from these services has been inspiring. The impact of improved, readily available water is transformational. The economic benefits of improved sanitation can include increased productivity, reduced healthcare costs, and the prevention of illness, disability, and early death. People who have access to clean, safe, and convenient sanitation services also experience greater dignity, privacy, and security. This is especially important for women and girls, who may miss work or school when they are menstruating and do not have access to safe sanitation facilities. It also reduces the risk of sexual assault by minimizing the walking distance to water sources.

The positive impact of PMI WASH initiatives is already significant and inspires us as we continue working to reach our 2025 and 2030 goals. In 2020, PMI will perform a WASH baseline study to better understand the current situation in our tobacco supply chain and better measure the impact of future interventions. Additionally, PMI is developing a plan to provide communities with the most sustainable basic sanitation and hygiene facilities.

New boreholes have directly benefited more than 3,500 tobacco farmers and their families

Minimum wages for workers

Income earned during a pay period, or growing season, should be enough to meet workers' basic needs. Our ALP Code requires that the wages of all workers (including those of temporary, piece-rate, seasonal, and migrant workers) meet – at a minimum – national legal standards or formalized agricultural benchmark standards. In a typical crop year, less than a third of contracted farmers supplying to PMI or PMI's suppliers (or over 100,000 farmers) hire workers throughout the season.

In 2019, we expanded our monitoring of minimum wages to cover 90 percent of contracted farmers in our tobacco supply chain, compared to 82 percent the previous year, and we introduced prompt actions for the non-payment of the minimum wage, as well as external verification to validate the payments. We also conducted a number of minimum wage studies in certain countries to better understand payment schemes to workers. A total of 1,158 prompt actions were recorded by field technicians relating to farmers paying less than the minimum wage to their workers. The challenges are most commonly found in Malawi, Mozambique, the Philippines, Indonesia, Pakistan, India, and the Misiones province in Argentina. In addition to payment amounts, terms of employment may be informal or inconsistent and pay may be agreed unfairly.

Improved visibility on workers' wages enabled us to take a number of steps to tackle the issue in relevant countries and ensure farmers pay the required minimum wage. To this end, we reiterated our expectations from farmers on this matter, in line with local laws. We also equipped farmers and workers with tools – such as time-recording templates and payment records – to keep track of working time and calculate payments in line with the minimum wage. In countries where the payment gap is significant, we provided financial literacy training to farmers and supported them to improve their farm productivity and efficiency, and their overall income levels in order for them to be able to pay the minimum wage to their workers. A key component of our work to achieve payment of minimum wages and to ensure farmers are managing their costs responsibly is to support them in their hiring practices, so that they only hire workers when necessary and depending on their land size. In Mozambique, for example, we have clearly communicated the expectation for farmers to pay their workers appropriately and guided them in their hiring practices – this resulted in a 60 percent reduction in full-time workers hired by farmers with a farm size of 0.67 hectares or below.

Clearly, there are challenges to formalizing minimum wages in many communities. In India, for instance, where a national minimum wage is a challenging issue, our third-party assessment showed several farmers were paying below the minimum wage and that women workers often were paid less than men for the same type of work, a clear violation of the ALP Code. This issue is common in Indian agriculture: Farmers and workers agree on a fee in advance of the season that is in line with prevailing rates in the communities and often lower than the legal minimum wage. In 2019, we analyzed payment practices and devised action plans for delivery in 2020. Given the vulnerability of women in the rural economy, we also developed projects on capacity building and financial training, as well as self-help groups that work with existing governmental programs and microbusiness initiatives.

A tobacco farm worker in Nayarit, Mexico

PMI's position on tenancy in Malawi

Tenant farming is an agricultural production system in which landowners contribute their land, while tenant farmers contribute their labor. Tenancy agreements can take multiple forms; typically, in Malawi, landowners pay tenant farmers an agreed cash amount for each kilogram of tobacco delivered at the end of the season (a percentage of the selling price to the final buyer) and provide the crop inputs, subsistence goods, and accommodation. Historically, we have discouraged the tenancy practice because we cannot properly ensure our ALP Code is respected. In 2018, PMI went a step further and requested from our suppliers in Malawi that the tobacco supplied to us should not originate from farms with tenancy agreements. PMI maintained this position in 2019, and we expect that this has helped to mitigate the risks of exploitation of vulnerable tenant farmers and their families, as well as to drive improved adoption and implementation of our ALP standards.

Next steps

A key focus for 2020 will be to establish living income benchmarks and undertake income assessments to ascertain the income gap, validating our internal analysis with independent third-party studies following proven methodologies. In parallel, we will continue projects to alleviate poverty, and we aim to refine how we measure our impact. Our household welfare surveys will also continue in 2020 to help us measure, on an annual basis, the impacts of our projects on household income, poverty indices, food security, and nutritional diversity. Practical interventions will continue in 2020; these will include low-cost irrigation expansion, access to affordable mechanization services, and the development of agreements between farmers and offtake partners.

We will continue to strengthen our monitoring of the implementation of our ALP program, and improve the effectiveness and consistency of how we respond to identified issues. We will analyze the impact of our initiatives using indicators developed with our expert partner Verité. This will allow us to further refine our work on child labor, safe working environments, and minimum wages. We will use the results of the external verification undertaken in 2019 to improve the effectiveness of our overall program.

LINKS

ALP Code ▸
Step Change Guiding Principles ▸
ALP Progress Updates ▸
CU external assessment reports and action plans ▸

Performance

Socio-economic well-being of tobacco farming-communities[1]	2017	2018	2019	Goal
Number of tobacco farmers contracted by PMI and PMI tobacco suppliers	>350,000	>350,000	**335,000**	
Number of countries where farmers contracted by PMI and PMI tobacco suppliers are located	28	27	**24**	
Number of farmers with whom PMI has direct contracts	23,000	21,000	**16,500**	
Number of farmers who have direct contracts with PMI tobacco suppliers	332,000	>329,000	**318,500**	
Number of third-party tobacco suppliers with whom PMI has a direct contractual relationship[2]	15	15	**13**	
Number of PMI leaf operations that contract tobacco farmers directly	9	8	**8**	
Number of field technicians providing support to contracted farmers and monitoring the implementation of PMI's GAP and ALP	2,790	2,610	**2,875**	
Proportion of tobacco purchased for which labor practices have been systematically monitored	77%	88%	**92%**	
Number of terminated contracts due to ALP violations (per crop season)	36	50	**641**	
Total number of ALP prompt actions recorded by field technicians	12,749	18,543	**14,440**	
Proportion of ALP prompt actions recorded by field technicians:				
• Safe working environment	63%	74%	**73%**	
• Hazardous work performed by children	35%	25%	**19%**	
• Other	2%	1%	**8%**	
Total number of ALP prompt actions resolved	10,154	13,687	**8,137**	
Number of ALP prompt actions recorded by field technicians relating to safe working environment	8,087	13,780	**10,519**	
Number of ALP prompt actions recorded by field technicians relating to non-payment of the minimum wage to farmworkers[3]	n/a	n/a	**1,158**	
Number of ALP prompt actions recorded by field technicians relating to child labor[4]	4,417	4,587	**2,712**	
Proportion of farms monitored found with child labor incidents[4]	1.2%	1.3%	**0.8%**	
Proportion of ALP prompt actions recorded by field technicians relating to child labor that were resolved[4]	67%	89%	**88%**	
Proportion of tobacco farmworkers provided with safe and adequate accommodation[5]	n/a	n/a	**80%**	100% by 2020
Proportion of farmers and farmworkers having access to personal protective equipment[6]	n/a	n/a	**99%**	100% by 2020

1 The farm-level data related to our tobacco supply chain reported in this report cover 22 countries we source from. It excludes Ecuador and Lebanon.

2 Data refers to parent companies.

3 We introduced this category of prompt actions in 2019.

4 Our monitoring and reporting of child labor refer to situations of hazardous work performed by children below 18 years old.

5 We introduced this category of prompt actions in 2019. Scope is limited to farmers providing accommodation to workers (approximately 6 percent of the total farmer base).

6 We introduced this category of prompt actions in 2019.

Health, safety, and well-being at work

An environment that keeps everyone safe and protects the well-being of all is a prerequisite to productive work. We are committed to providing a safe and secure working environment for all employees, contractors, and visitors. Our responsibility doesn't stop at the factory gate; we expect our suppliers and tobacco growers to keep their own workers safe, too.

Megatrends

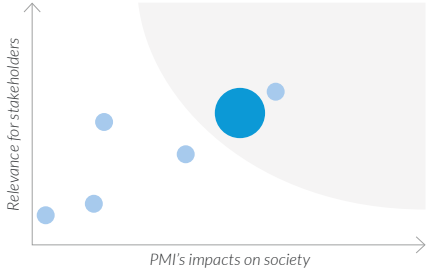
- Purpose of business
- Technological progress

Employees in the manufacturing facility of Tabaqueira, PMI's Portuguese affiliate

Topic description

To PMI, this topic means promoting a safe and healthy working environment that protects the physical and mental well-being of all involved.

Relevance of the topic



Impact in our value chain

Upstream | PMI operations | Downstream

Key stakeholders

Civil society
Regulators
Employees
Supply chain

Why it is important to us and our stakeholders

From a societal perspective, ensuring that people stay safe and well every day is of paramount importance. At work and at home, a sense of well-being helps people maintain motivation and perform at their best and lessens demands on social and healthcare systems.

Promoting a safe and healthy working environment is key for PMI, as the well-being of our employees fosters engagement and productivity. A highly dedicated and productive workforce is an enabler of PMI's business transformation. Implementing strong safety and well-being management is the right thing to do: It creates and protects value, prevents potential reputational issues, and helps us to manage operational costs. Safe and healthy working environments also equip the company to adapt to megatrends, such as technological progress.

At PMI, we see high-quality leadership and management, as well as a culture of shared responsibility – defined by personal involvement, engagement, and observation – as central to resolving such challenges.

Connectivity with other sustainability issues at PMI

1 Product health impacts
2 Access to smoke-free products
3 Sustainable supply chain management
4 Data privacy and protection
5 Respect for human rights
6 Business integrity
7 Socio-economic well-being of tobacco-farming communities
8 Fair working conditions
9 Diverse and inclusive working environment
10 Community support
11 Talent attraction, retention, and employability
12 Climate protection
13 Product eco-design and circularity

Our aim

<0.3

Total recordable incident rate for employees and contractors by 2025

Achieving our aims

In our factories, offices, laboratories, retail outlets, and fleet, we aim for a workplace promoting health and safety, and populated by a motivated workforce.

Working conditions at PMI are governed by our Guidebook for Success (our code of conduct) and our health, safety, and security principles and practices. Our safety management system enables us to monitor health and safety performance across all our manufacturing facilities. In 2019, we achieved the global multisite certification to ISO 14001 and OHSAS 18001 of 98 percent of our factories producing more than 3 billion cigarettes equivalent annually. At site level, each manufacturing operation has a dedicated team that ensures the standards are delivered on the ground. Team members constructively challenge their peers and benefit from cross-auditing by colleagues at other sites.

> In our manufacturing operations, we focus on instilling a culture of behavioral and observation-based safety.

We routinely update our systems and train our staff. Our corporate targets on incidents help us evaluate the effectiveness of our safety policies and programs.

All incidents in our manufacturing operations are subject to in-depth root cause analysis, and we apply the same thorough approach to all contractors in our manufacturing facilities.

In our manufacturing operations, the primary focus in 2019 was to instill a culture of behavioral and observation-based safety (BOS). Within such a culture, everyone involves themselves in openness, care, observation, and behavior reinforcement. We help move this culture change forward through communication with employees 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 DNA of the organization in a planned, structured, and standardized way. It will make a significant contribution to delivering on our safety ambition.

For our fleet of almost 24,000 vehicles, a total of 160 people are allocated to manage security and market safety, led by our global Head of Market and Fleet Safety. These personnel run safety programs, training, and engagement at the country level, using fleet diagnostics and performance indicators to evaluate progress annually. Our specific medium-term target in fleet operations is to reduce high-severity collisions, with an ongoing goal of eliminating fatal accidents completely.

Also important to us is achieving our well-being goals by continuing to focus on a variety of initiatives grouped under our BalancedYou program. Here, we support healthy lifestyles, including by providing medical assistance and promoting physical activity, healthy eating habits, and work-life balance.

Many teams across PMI manage and contribute to health and well-being, including Health & Safety, Inclusion & Diversity, and People & Culture (our human resources team).

BalancedYou is "owned" by employees; it is governed at the country level by health, safety, and well-being (H&WB) committees composed of workforce representatives. There are currently 55 such committees to ensure maximum employee representation and coverage.

Employees in PMI's office in Buenos Aires, Argentina

Progress in 2019

Safety in manufacturing

In 2019, shared responsibility for safety evolved rapidly across PMI. A sustainable and active attitude of care is leading to an interdependent safety culture, guided by our behavioral and observation-based approach.

Initial evidence suggests that our people are beginning to recognize the importance of behaviors such as engagement and openness, endorsement of safe personal actions, anticipatory feedback, and safety reporting. The challenge is to standardize how we create a BOS culture and then to formulate tools that work.

We share instances of success around PMI. For example, an operator in Argentina shared that he has overcome his initial skepticism of the observation-correction method: "Now that we apply BOS every day, I believe it is a good practice. It makes me more alert, and I feel more conscious of what is unsafe for me." Many teams try out the BOS approach at a simple level first; for example, asking a colleague not to walk while using a mobile phone. In Portugal, after our teams returned from vacation, we noticed a higher accident rate, so we used BOS in a "Back to Work" project to help people return to the normal heightened state of safety awareness (read more in our case study on page 36).

To promote an "active caring" approach in 2019, we delivered training on behavioral and observation-based safety to shop-floor teams, supervisors, and high-level management in selected affiliates. To complement this, we provided train-the-trainer sessions to environmental, health, and safety (EHS) managers. Following our pilots in Brazil, Poland, and the Philippines, we rolled out the full training package to all affiliates. Among other positive outcomes, supervisors now have BOS role models, helping them to set expectations and demonstrate leadership.

What is a behavioral observation-based safety culture?

It is an approach aimed at focusing employees' attention on their own and their colleagues' daily safety behaviors. Drawing on peer-to-peer observations, it allows data-driven decision-making and helps us evaluate and inform our health and safety strategy. BOS encourages every employee to demonstrate his or her personal commitment to safety, to recognize whether a behavior is safe, and to understand the triggers that lead to risky behavior. By creating a culture of mutual observation, we are encouraging colleagues to actively care for one another with kindness and genuine attention. The practice reinforces positive attitudes and behaviors while preventing accidents and injuries.

As an example, a worker may observe a colleague whose behavior poses a risk, perhaps due to fatigue or distraction. In keeping with our employee culture, the observer would address the person involved with respect and calmly offer assistance. More generally, we might use an "active care" training module to inspire colleagues demonstrating unsafe behaviors to analyze the cause of their behavior or condition. We would then offer support and solutions, and seek a personal commitment to safer actions. On an ongoing basis, we review the factors that drive or trigger particular unsafe behaviors ("safety triggers") to prevent them happening again.

Employees in PMI's manufacturing facility in Crespellano, Italy

And shop-floor workers are more confident in how to observe colleagues and clearer on using the BOS management and reporting tools. In 2019, we trained over 25 percent of manufacturing employees to practice BOS. In 2020, we aim to train and engage all employees and contractors to practice BOS on a weekly basis at a minimum. BOS digitalization will allow us to better understand the causes of unsafe behaviors and to be more focused in our prevention programs.

In 2019, based on data for PMI employees and contracted employees, our lost time incident rate (LTIR) in manufacturing was 0.06 (2018: 0.07), against a target of 0.10 or less. Our equivalent total recordable incident rate (TRIR) was 0.17 (2018: 0.20), against a target of 0.30. No employee or contractor fatalities occurred in our factories in 2019. The rates are improving versus 2018, thanks to the improved quality of accident root cause analysis and to the BOS deployment initiated in the second half of 2019.

In parallel, 2019 saw extensive work on in-depth root cause analysis for all incidents affecting employees and contractors. This involved analyzing the risk, its controls, impact severity, predictability, and near misses, helping us to direct resources to priority areas.

Allied to the evolving safety culture at PMI is the work we are doing to influence working conditions at third-party operators. In 2019, we visited two third-party manufacturing sites in Indonesia to review labor conditions, and we assessed health, safety, and well-being as part of this. Each third-party site typically employs around a thousand skilled people, mainly women, who work predominantly in the hand-rolling of cigarettes (please see page 87 for more information).

Employees in PMI's manufacturing facility in Dakar, Senegal

Focus on fleet safety

Driving presents a risk to workers at PMI. We have almost 24,000 cars on the road, covering around 500 million kilometers a year. The safety risks faced by our sales and distribution personnel, especially those at the wheel, are exacerbated in regions where road conditions can be more treacherous. Road traffic accidents not only affect PMI staff but also the public, so fleet safety management is a top priority.

PMI's fleet safety management system covers driver training, vehicle safety, and driver behavior; our procurement policy ensures maximum safety features in fleet contracts.

Although we continue to reduce collisions, it is to our deep regret that we again endured road traffic fatalities in 2019, including one PMI employee and 10 members of the public. The accidents occurred in six countries in Asia and South America, involving challenging circumstances related to distracted driving and disrespect of basic defensive-driving techniques, such as traffic anticipation and maintaining safe speeds for the road conditions. The lessons learned include an intensified need for proactive risky-driving detection, followed by adequate actions and a balance among behavioral programs, technology implementation, and a fleet safety management system.

The challenges we face in delivering safe working conditions relate to road conditions, law enforcement, and driving culture. Drivers almost always work alone, and we recognize that they may at times be under stress, so organizational risk controls can be impaired. Technology can help manage these risks, and we use telematics to monitor driver behavior to improve safety and efficiency. In various countries, the introduction of telematics, coupled with other elements of our fleet safety management system, has significantly decreased our collision rate. For instance, it dropped from 2.88 to 0.91 in Ukraine between 2014 and 2019, from 0.87 to 0.49 in Egypt between 2017 and 2019, and from 5.63 to 2.46 in South Africa between 2018 and 2019 (read more in our case study on page 100).

We will continue to focus on road safety. In 2019, globally, we reduced collisions per million kilometers driven, achieving 0.87 (2018: 0.91), and we are now working toward our target of <0.80 by 2022.

> PMI's fleet safety management system covers driver training, vehicle safety, and driver behavior.

In 2019, we reduced our fleet collision rate per million kilometers driven, achieving 0.87 (versus 0.91 in 2018)

Loading of a delivery truck in PMI's manufacturing facility in Marikina in the Philippines

Employee well-being

The pace of change in the working world creates stress and anxiety, and we recognize that this may be heightened in some instances by PMI's current transformation. We consider it our duty to equip our employees to better cope with stress and uncertainty.

Fundamental to this are the flexible work arrangements that encourage a healthy work-life balance, currently available across 85 countries where our employees are located. These arrangements include the possibility of remote work, a compressed working week, part-time employment, and unpaid leave.

Our employees want to be great parents and great professionals, and we support this by running pre-maternity, post-maternity, and new-father workshops, as well as by facilitating peer-to-peer support through the employee-run Parents@PMI network piloted in Switzerland. Building on the success of this pilot, we shared a toolkit with all our markets in order to support them in building their own parents networks if relevant. These complement employee benefits such as health insurance, paternity and maternity leave, nutritious canteen food, and sporting facilities.

On top of flexible working arrangements and life-centered benefits, and to further focus on mental health issues, we offer a blend of awareness raising, training, and coaching. To support general employee health and well-being, and to foster a better working environment, we invite employees to conduct their own health risk assessment to monitor their mental and physical biometric health data, and to act on it accordingly.

Other health and well-being initiatives for employees continued in 2019 through our Health & Well-being online platform. In some of our factories, for example, there is on-site blood pressure monitoring by nurses. Also, at shop-floor level, we provide advice on healthy lifestyles, including nutrition, heart and back health, exercise, alcohol abuse, heat stress, and dengue fever risk, for instance, depending on site location. Further, we promote active involvement in our H&WB committees as a way to improve employee involvement in how BalancedYou evolves.

Employees' mental health was also on the agenda of our work with the European Works Council regarding the Stress Management Directive.

Employees in the office of Sampoerna, PMI's Indonesian affiliate

Focusing on mental health in our Swiss operations

In 2019, PMI focused its well-being program in Switzerland on mental health, including stress management and resilience, in line with the WHO's special initiative for mental health.

We undertook various activities throughout the year, including health and well-being weeks dedicated to mental health and resilience, with more than 500 employees participating in workshops. And we tailored some of our training courses to better reflect mental health considerations. For example, our Leadership Fundamentals training now includes a focus on strengthening managerial soft skills. We also ran a pilot health risk assessment at our Operations Center throughout summer 2019 to better understand where to focus support on collective health and resilience. The assessment was optional, completely confidential, and provided by an external company. The first analysis confirmed the continued need to focus our efforts on mental health and resilience; we will use the findings to build our strategy and roadmap with targeted actions to be delivered throughout 2020. These actions will focus on individual needs, leadership behavior, and organizational stress.

Next steps

We will continue to deliver initiatives to improve manufacturing and fleet safety, and to meet country-level and global targets, backed up by certified safety management systems within our operations.

Specific priorities for fleet safety in 2020 are to refine driver safety, launch new engagement practices in priority markets, and evaluate the potential for a global telematics solution for the whole of PMI.

In manufacturing, the focus is to roll out BOS training and push the communication of safety fundamentals. We expect the impact of the BOS safety culture to take effect gradually over the next few years.

Our safety culture shift will continue as new awareness and skills make us all stop, think, and act in anticipation of unsafe behaviors and conditions. The message we will be pushing throughout 2020 is that safety is free of silo-thinking, it is cross-cutting, and it applies at all levels, from shop floor to point of sale and the boardroom.

At the top of our well-being agenda in 2020 is improved monitoring and management of mental health and personal resilience. Based on the outcome of our pilot program in our Operations Center in Switzerland, we will refine mental health management tools and programs for employees. We will also report in the future on how our new certification approach is delivering smoke-free PMI offices.

A snapshot of our efforts to promote employee well-being, and diversity and inclusion worldwide*

- In 2019, we became the first company to receive the global EQUAL-SALARY certification certifying that we pay men and women equally for equal work everywhere PMI operates in the world, covering more than 90 countries.
- 55 health, safety, and well-being committees are set up at country-level, composed of workforce representatives.
- Maternity or primary caregiver leave or benefits going beyond local legislation requirements are offered to employees in 77 of our markets.
- Women network groups are set up in 22 countries.
- Flexible working arrangements are available to PMI employees in 85 countries.
- 71 countries offer paternity or secondary caregiver leave or benefits going beyond local legislation.
- Childcare facilities or contributions are provided in 41 of our markets.
- 32 markets employ people with disability, and 65 markets have buildings accessible for disabled persons.
- We have initiatives or networks to support the LGBTQ+ community in 27 countries.

* Data was collected from over 90 countries where PMI has employees and is estimated to cover over 95 percent of office-based employees.

Performance

Health, safety, and well-being at work	2017	2018	2019	Goal
Lost time incident (LTI) rate per 200,000 hours worked – PMI and contracted employees[1]	0.10	0.13	**0.12**	<0.10
LTI rate per 200,000 hours worked – PMI employees	0.10	0.13	**0.12**	
LTI rate per 200,000 hours worked – contracted employees	0.07	0.08	**0.10**	
Total recordable incidents rate (TRIR) per 200,000 hours worked – PMI and contracted employees	0.22	0.22	**0.20**	<0.30
TRIR per 200,000 hours worked – PMI employees	0.22	0.22	**0.20**	
TRIR per 200,000 hours worked – contracted employees	0.20	0.30	**0.17**	
Number of fatalities – PMI and contracted employees	2	2	**1**	0
Number of fatalities – contractors[2]	1	1	**0**	0
Number of fatalities – members of the public[3]	9	3	**10**	0
Collision rate within PMI's fleet of vehicles per year (collisions per million km driven)	1.01	0.91	**0.87**	<0.80 by 2022
Proportion of manufacturing facilities with OHSAS 18001 and ISO 14001 certification[4]	91%	97%	**98%**	100% by 2020
Occupational illness frequency rate (OIFR) per 200,000 hours worked – PMI and contracted employees	0.0027	0.0013	**0**	
Number of markets with health and well-being committees	36	>40	**55**	

1 We define a contracted employee as an employee who is under the direct supervision of PMI employees but employed by a temporary employment agency.

2 We define a contractor as a person employed or working on behalf of a third-party company contracted by PMI, who remains under the direct supervision of their employer rather than PMI and are often involved in project-specific or outsourcing arrangements.

3 It is to our deep regret that we endured road traffic fatalities in 2019, including one PMI employee and 10 members of the public (read more on page 125).

4 Scope: manufacturing facilities producing more than 3 billion cigarette equivalents annually. The 2018 figure has been adjusted due to an internal reporting error.

LINKS

Third-party verification of PMI health and safety indicators ▸

CASE STUDY: PHILIPPINES

PMFTC: A sustainable footprint

Location
Philippines

Employees
~3,800

Manufacturing facilities
2

PMFTC is the Philippines affiliate of PMI. Established as a business combination between PMI and Fortune Tobacco in 2010, it is the leading tobacco manufacturer in the Philippines. It produces six of the 10 leading cigarette brands in the market, led by *Marlboro* and the locally best-selling brand *Fortune*. PMI is also preparing to launch its heat-not-burn product *IQOS* in the Philippines.

PMFTC's diverse workforce of around 3,800 employees is mainly spread across its corporate office in Taguig City, and two manufacturing facilities in Tanauan City, Batangas and Marikina City, Metro Manila. Its factories produce cigarettes for the domestic and export markets, and semi-finished goods such as cut filler and cigarette filters, primarily for neighboring markets.

Contributing to local communities

As a responsible corporate citizen, PMFTC is strongly committed to the development and growth of local communities. Its corporate social responsibility program, called Embrace, partners with various governmental institutions, NGOs, and local stakeholders to support programs that are based on needs assessment. The charitable giving, social contributions, and community investments are focused on access to education, empowering women, economic opportunity, and especially disaster preparedness and relief efforts. Projects supported by Embrace in 2019 were aimed at making Filipino communities in geographically isolated and disadvantaged areas more resilient, including the construction of a multi-purpose shelter for fishermen in the Batanes region, the building of a new primary school in Sitangkai in the Tawi-Tawi region, and a livelihood project to support indigenous people in the Zambales province.

Employees in PMI's manufacturing facility in Marikina in the Philippines

Due to the Philippines' geographic location, the country has a high vulnerability to natural disasters like earthquakes, volcanic eruptions, typhoons, and floods. In October and November 2019, PMFTC provided relief assistance to more than 25,000 individuals (close to 7 percent of the total affected population) in earthquake-stricken areas in Batanes and Mindanao.

After the eruption of the Taal volcano in January 2020, the company's immediate concern was the safety and welfare of affected employees. Within a short period of time, 150 displaced employees had been accounted for and were given immediate assistance.

> PMFTC employees were at the core of these relief operations.

In parallel, PMFTC provided relief to affected communities in the form of food packs, sleeping mats, face masks, and hygiene kits. A total of 7,384 families benefited from this effort.

With their strong spirit of volunteerism and compassion for the community, PMFTC employees were at the core of these relief operations. In addition to the cash donation generated by employees, the first wave of 500 relief packs were personally delivered by volunteers from the head office, sales offices, and factories to nearby evacuation centers.

A childcare center in Isabela in the Philippines

Employee engagement and well-being

Overall, there is a strong sense of community and pride among PMFTC employees. This was highlighted during our human rights impact assessment in 2019 (read more on page 96). The well-being and health of its employees is a primary concern for the company, and it launched several support initiatives in 2019. To help maintain the communal spirit, regular social events are held such as sport festivals, family summer outings, and employee fairs.

A company-wide annual physical exam did reveal instances of high blood pressure and overweightness among employees. To build awareness of their personal health and provide personal expert advice on medical, mental, nutritional, and physical fitness, PMFTC launched a "Wellness Superstar Program" across its offices and factories, focusing on:

- assessing the individual participant's status, as well as the status of the company as a whole, on different health domains such as lifestyle, medical conditions, and overall well-being;
- identifying specific factors affecting participants' health, such as food choices, physical activity, sleeping habits, and health-seeking behavior;
- providing opportunities for employees to learn about exercises and routines, create achievable goals, practice them, and attain a healthier lifestyle, through health workshops and challenges.

Initially, 150 employees have participated in the pilot project, and the company plans to improve the program based on initial results and expand it to wider participation.

Since many employees expressed that they had limited time and opportunity to exercise, PMFTC devised a number of initiatives to address this. The initiatives aimed to offer opportunities within working hours for exercise, while also providing the employees with routines they could use at home to improve their physical well-being. These measures included Zumba classes during lunchtime hours at the two factories, as well as dance classes and the provision of a fitness coach in the offices. This coach conducts five-minute exercise sessions for employees on site. The sessions focus on quick mobility workouts to demonstrate the importance of movement, especially in a sedentary workplace. They take place each Friday at the employees' workstation and are conducted with the aim of reducing stress levels and fatigue at the end of the workweek. Participation is high: around 200 to 250 employees join the workout sessions at their workstations every week.

The well-being and health of its employees is a primary concern for the company

Employees in PMI's office in Taguig in the Philippines

Forest conservation in the tobacco supply chain

To assess and mitigate the risk of deforestation, PMI has adopted a global risk map. This global map is complemented by local maps to give the company a more detailed and accurate assessment in a defined location and forms the basis to develop targeted initiatives, when necessary.

The first forest risk map had been developed in 2015 by South Pole, a leading sustainable solutions consultancy, and revised in 2017, as part of a study on the potential impacts of tobacco curing on old growth and primary forests in the Philippines. In 2019, PMI decided to update the local forest risk map for the country, following a change of farmers' bases where it sources tobacco from in the Flue Cured Virginia tobacco production areas in the provinces of Ilocos Norte, Ilocos Sur, Abra, and La Union.

The following information was included in the assessment:

- geographic location of the farmers;
- areas of old growth forests, protected forests, and other natural forests;
- tobacco forest impact zones, defined based on the location of the farmers and the maximum transport distance of the firewood from where it is sourced; and
- areas with high, medium, and low deforestation risk of old growth forests and protected forests.

This information helped to identify the farms closest to the old growth forest, protected forests, and other natural forest landscapes. The Philippines land cover map from the Department of Environment and Natural Resource (DENR) classifies between open and closed forests. Closed forests are considered to be sufficiently similar to PMI's adopted definition of old growth forest.

Tobacco farming in the Philippines

Tobacco growing

Tobacco
Ilocos: Virginia and Dark cured
Cagayan Valley: Burley and Dark cured

Crop season
Ilocos: October to May
Cagayan Valley: November to May

Irrigation type
Alternate furrow

Average farm size
Ilocos: 1.0 hectare
Cagayan Valley: 0.8 hectare

Curing method
Virginia tobacco: Flue-cured, with leaves hung into curing barns where heated air is generated, mainly using firewood
Burley and Dark cured tobacco: Air-cured, by hanging the leaves in well-ventilated barns

People

~13,600	Contracted farmers who supply tobacco to PMI
~63,500	Workers hired by farmers (four to five workers per farm on average)
~44,700	People living on the farms (farmers' family members), out of whom around are 12,600 children
~240	Field technicians, who visit the farms on average eight to 10 times during the crop season to monitor GAP and ALP implementation

The forest risk map shows that the majority of closed forest with medium and high risk is located in Abra and in Ilocos Norte.

Mitigation plans have been developed with tobacco leaf suppliers to ensure that contracted farmers are able to trace the source of the firewood they use, whether self-collected from their own wood lot or purchased from vendors, and verify that it is not coming from old growth forests.

This has been done by conducting a full inventory of farmers' sources of fuelwood, 100 percent monitoring of fuelwood consumption of farmers, providing the farmers with forestry training sessions, assisting the farmers through the provision of planting stocks for silvicultural treatment, and registering with DENR. In 2019, around 3,200 farmers either underwent a full inventory check of their wood lot or set up supply chains with accredited vendors who provide sustainable and traceable fuelwood.

Littering prevention

PMFTC has launched initiatives to help address the issue of littering, including ongoing cleanup activities, aimed at raising awareness of cigarette butt littering as a public issue and encouraging the public to take action to address it.

In 2019, cleanups around World Clean Up Day took place across four cities: Western Bicutan, Taguig; Lapasan Coastal, Cagayan de Oro; Baguio City Public Market; and Mandaue City, Cebu. Over 1,000 people participated, including 253 employees from PMFTC as well as volunteers from NGOs, government institutions, and the general public. They collected over 45 tons of waste and around 57,000 cigarette butts.

Too often, cigarette butts are not properly disposed in ashtrays or bins. To tackle this, PMFTC ran a two-pronged awareness campaign, targeted directly at adult smokers and retailers to adopt proper disposal. The company placed receptacle units directly in front of tobacco points of sale. In order to help shift the mindset of adult smokers, the team came up with innovative ways to collect the cigarette butts: the containers were designed like ballot bins, letting consumers choose between two answers and cast their "vote" by disposing their cigarette butts. After a trial period of four weeks, more than 18,000 pieces of discarded cigarette butts were collected at four points of sale.

The other campaign track included a community of commuter tricycle drivers, who were asked to collect cigarette butts in empty 330ml plastic bottles. Each full bottle could then be exchanged with a partner retailer for USD 1 worth of goods, while the participating retailers received 25 cents per bottle. Nearly 15,000 pieces of discarded cigarette butts were collected in the course of a month.

PMFTC also seeks to address the issue of litter from used cigarette packs. The retailers were engaged in these efforts, and they were asked to recover empty packs. PMFTC's salesmen would then weigh the empty pack received from retailers, and for each kilo collected, retailers would then receive a PHP 100 gift card or 10 coffee sachets (equivalent to USD 2). The affiliate would then consolidate the empty packs and send them to third-party service providers for proper disposal. The program was well received: it increased the awareness of environmental sustainability of more than 62,000 retailers nationwide, who appreciated its simplicity in terms of ease of joining. In 2019 alone, the program helped to retrieve 946kg of pack waste, which equals approximately 172 million empty packs.

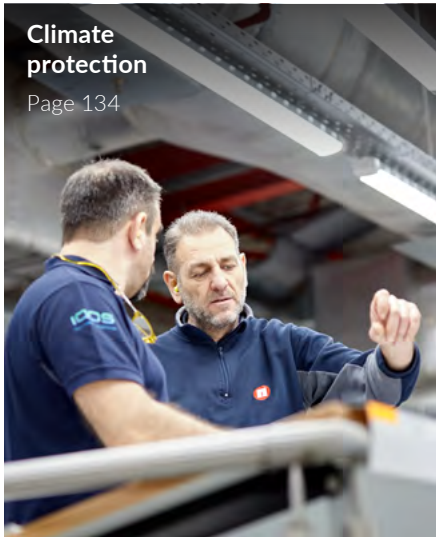
Employees in PMI's office in Taguig in the Philippines

PILLAR 4

Protecting the environment

Effective environmental management across our operations and value chain goes beyond compliance with applicable laws and regulations. We are committed to constantly improve our business activities to achieve the highest standards of environmental sustainability, in line with our Environmental Commitment.

While improving the environmental performance of our manufacturing operations is key, the majority of our environmental impacts arise elsewhere in our value chain, especially in tobacco growing and curing, and with consumer waste. Working collaboratively with tobacco growers, suppliers, retailers, NGOs, and governments is key to the success of our environmental programs and to achieving our targets.



Climate protection

Page 134

Littering prevention

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Product eco-design and circularity

Page 158

Climate protection

The climate crisis affects ecosystems, agriculture, industry, finance, and people's livelihoods.

Alongside physical impacts such as sea-level rise and changing weather patterns, there are transition risks such as new carbon-related regulations and taxes, changes in manufacturing technology, and evolving consumer preferences. Being at the forefront of addressing the global challenge of climate change also presents opportunities. Some correlate to good practices such as energy-use reduction and the protection of forests and waterways; others arise through product eco-design and adaptation measures. PMI, alongside many of its suppliers, is working within a context of stabilizing the global temperature rise to below the internationally agreed 1.5-degree Celsius scenario.[1] We understand the potential impacts of climate change across all areas of our operations, particularly upstream in our supply chain.

Megatrends

- Technological progress
- Changing consumer expectations
- Climate change
- Purpose of business
- Income inequality

Employees in the manufacturing facility of Papastratos, PMI's Greek affiliate

1 Reference: https://www.ipcc.ch/sr15/

Topic description

For PMI, climate protection means mitigating climate change by reducing greenhouse gas (GHG) emissions and energy consumption and adapting to climate change by increasing our resilience.

Relevance of the topic

Impact in our value chain

Upstream | PMI operations | Downstream

Key stakeholders

- Adult consumers
- Business community
- Civil society
- Employees
- Financial community
- Media
- Public health community
- Regulators
- Retailers and wholesalers
- Supply chain

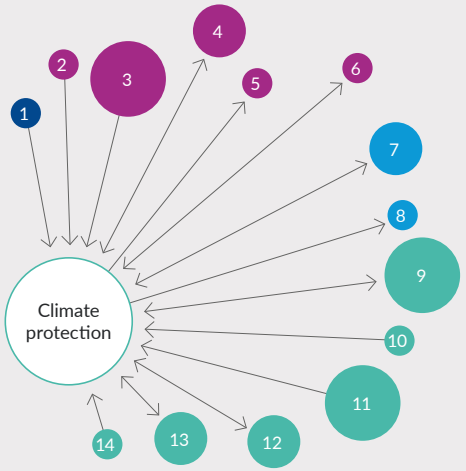
Why it is important to us and our stakeholders

The climate crisis, as acknowledged by the international community, threatens livelihoods, in particular of the most vulnerable people around the world. It impacts human population movement, biodiversity, access to water, global health, food security, and other environmental changes such as soil degradation and desertification.

Beyond its human repercussions, climate change threatens business continuity. This is especially the case for businesses involving an agricultural supply chain. For PMI, costs of raw materials such as tobacco leaf and cloves may rise, and both consumers and our employees are becoming increasingly sensitized to the environmental impact of corporate actions. Upfront investments with longer-term returns are required. Furthermore, the consequences of climate risk could expose investors to changes in corporate stock value.

At the same time, PMI's efforts to reduce GHG, such as through increased energy efficiency, could alleviate potential costs and create a competitive advantage by meeting or exceeding the expectations of consumers, employees, and other stakeholders.

Connectivity with other sustainability issues at PMI



1 Access to smoke-free products
2 Responsible marketing and sales practices
3 Sustainable supply chain management
4 Respect for human rights
5 Fair fiscal practices
6 Responsible advocacy
7 Socio-economic well-being of tobacco-farming communities
8 Health, safety, and well-being at work
9 Forest conservation
10 Littering prevention
11 Product eco-design and circularity
12 Biodiversity
13 Water stewardship
14 Waste reduction

Our aims

Net zero

Achievement of carbon neutrality of PMI's direct operations (scope 1+2) by 2030

Net zero

Achievement of carbon neutrality of PMI's value chain (scope 1+2+3) by 2050

Achieving our aims

We aim to reduce our carbon emissions across our value chain. We have several programs in place to meet corporate targets and achieve our ambition.

In this report, we provide an update on progress made to achieve our current science-based targets, which align to a scenario for a 2-degree Celsius increase in global warming.

At the same time, following the 2018 report by the Intergovernmental Panel on Climate Change (IPCC), it became clear that we must step up our ambition and reduce carbon emissions to align with the more prudent 1.5-degrees pathway. We also conducted a deeper analysis of our climate change risk assessment in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Based on these developments, we recently established new and more ambitious targets to guide our decarbonization journey:

- PMI to be carbon-neutral by 2030 (scope 1 and 2);
- our whole value chain to be carbon-neutral by 2050 (scope 1, 2, and 3);
- a reduction in absolute CO_2 emissions consistent with science-based targets for a 1.5-degree scenario.

During the course of 2020 we will submit our revised absolute reduction targets to the Science-Based Targets Initiative Committee for validation and report on progress in next year's report.

Our approach to decarbonizing our operations and value chain is guided by several corporate policies. Reducing our energy consumption and carbon emissions is embedded in our Environmental Commitment, our Guidebook for Success, our Responsible Sourcing Principles, and our Good Agricultural Practices program; protecting forests, as a fundamental climate-regulation mechanism, is directed by our Zero Deforestation Manifesto.

PMI's governance and management systems aim to ensure that climate-related risks and opportunities are considered in relevant decision-making processes. The PMI Board of Directors (BoD) believes that environmental, social and governance (ESG) factors relevant to the company's business, including those related to climate change, are important to PMI's long-term success. These factors are part of the responsibility of the Board and are considered in its evaluation of the annual performance of the company and its management. The BoD approves the company's annual budget and receives updates on its performance and targets against the budget throughout the year, including those related to the achievement of sustainability and climate protection targets.

The Nominating and Corporate Governance Committee of the BoD oversees PMI's sustainability strategies and performance, including climate change-related issues and initiatives aimed at eliminating negative impacts of our business on the environment. The Audit Committee of the BoD oversees

Employees in PMI's manufacturing facility in Guadalajara, Mexico

> We established new and more ambitious targets to guide our decarbonization journey.

the assessment and management of company risks, including those related to climate change such as natural disasters, water scarcity, and agricultural supply chain instability.

As part of PMI's risk management process, the Audit Committee oversees the management of climate change initiatives. A member of the Company Management, the Senior Vice President, Operations (SVP, Operations), was tasked with addressing climate change risk across all activities of the company, including physical climate and water-related risks. Our SVP, Operations reports directly to PMI's Chief Operating Officer (COO) and is delegated with operational responsibility, including maintaining robust business resiliency, risk assessment processes, and strategies to support business continuity. Our SVP, Operations examines and monitors climate change-related issues, ensuring that risk assessment and management are integrated into long-range plans, objectives, budgets, and performance review processes. Our COO is also a member of PMI's Company Management and reports to the CEO; he is updated regularly on climate change issues by the SVP, Operations. In 2019, the COO and SVP, Operations were the highest management level of climate-related issues. They were responsible for monitoring and reviewing PMI's objectives, strategies, and action plans related to climate change with the CEO, and they reported their findings to the Nominating and Corporate Governance Committee and Audit Committee of the BoD.

From an operational perspective, our Operations Sustainability and Corporate Sustainability functions coordinate the company's climate change-related activities. Most of the coordination takes place in the context of sustainability working groups and with local market coordinators. This helps ensure that our global strategies and programs can be implemented at the market level and that local realities are reflected in our global efforts.

Our tobacco leaf buyers, procurement managers, environmental managers, and other relevant employees are also incentivized through monetary rewards or other forms of recognition for emission reduction projects, climate change mitigation activities, and behavioral change toward climate protection.

Our carbon footprint model accounts for emissions generated across our value chain. Accordingly, our strategy responds directly to the scale and expanse of our impacts, from our supply chains for tobacco and direct materials through to our operations, land and sea transport, distribution and retail, products, and packaging. Across our global operations and upstream in our supply chain, we have in place long-standing mitigation initiatives designed to reduce our carbon footprint.

A field technician with a tobacco farm worker in Salta, Argentina

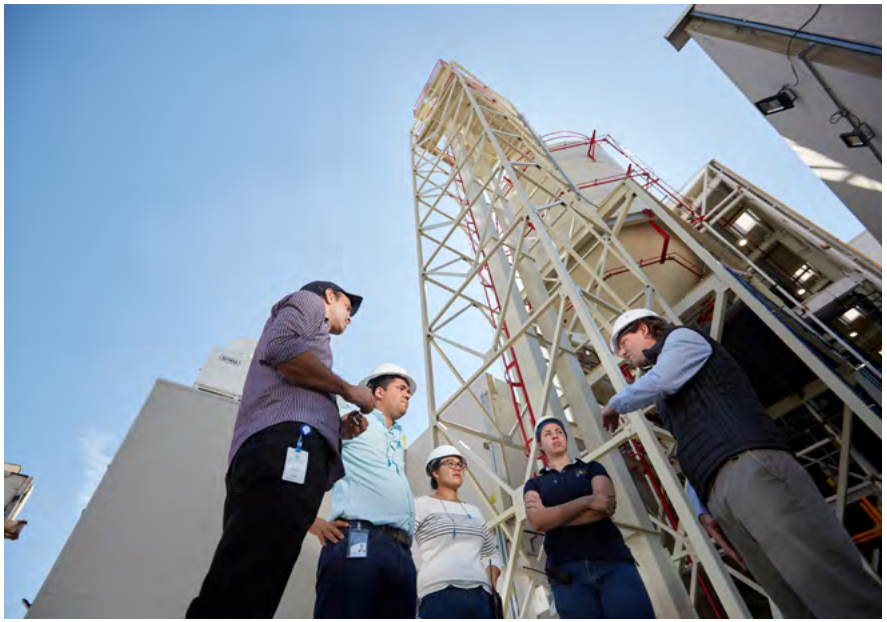
Assessing climate change risks and opportunities

On top of the company risk management process described above, we periodically conduct a climate change risk and opportunities assessment to fully understand PMI's impact across our entire value chain. This work aligns with international expectations such as the Paris Agreement to mitigate and adapt to climate impacts.

Scenario analysis formed part of the climate change risk and opportunities assessment we conducted in 2015 on physical risks and opportunities. Throughout 2018 and 2019, we updated that earlier risk assessment, accounting for changes in PMI's footprint and business model. Our objective was also to further align our work and reporting with the recommendations of the TCFD, which aims to foster voluntary climate-related financial disclosures that provide clear, reliable, and useful information to the financial community.

The updated assessment identified climate change risks and opportunities (CCRO) that align with the TCFD transition and physical risk categorizations. Throughout this process, we mapped 149 CCROs across materiality and certainty and then divided them according to PMI's risk categories: proactive, reactive, nonmaterial, watch, and potential quick wins, so we could better integrate them into the business. After further analysis, it was decided to prioritize the proactive CCROs, as they have the highest certainty and materiality levels. These results are discussed in more detail in our CDP submission, which can be found online.

The tables on the right highlight certain climate-related risks and opportunities, along with a description of how PMI is managing them based on the findings of our 2018–2019 assessment.



Employees in PMI's manufacturing facility in Guadalajara, Mexico

Climate change-related risks

Key risks	Potential financial impact under the 2-degree scenario	How we address them
Transition risk Our operations across the globe are subject to various climate-related regulations. There is a clear international trend toward stricter regulation, which could increase our operational costs.		Our energy management program, which includes energy-consumption monitoring, as well as investments to improve energy efficiency, positions us well to manage these risks. Read more on page 144 ▸
Physical risk Changes in precipitation patterns and extreme variability in weather patterns could affect the yield, quality, and availability of crops such as tobacco and cloves, changing our buying patterns and increasing operational costs in the medium term.		PMI's operations and supply chain are spread across geographies, mitigating the potential effects of severe catastrophic climatic disruption. Moreover, we have designed our business continuity management plans to mitigate the consequences of supply chain interruption and disruption. We conduct a global water risk assessment, complemented by local assessments in specific tobacco-growing areas, to mitigate risks in our supply chain. Read more on PMI.com ▸
Transition risk Increased production costs for farmers in the supply chain due to changing input prices, specifically diesel fuel costs. For PMI, this has an impact on procurement expenditure on tobacco from third-party leaf suppliers and directly contracted farmers in the long term.		Since 2002, we have been implementing our GAP program, which includes mandatory requirements for our tobacco suppliers. The program provides specific guidance on initiatives to mitigate tobacco-growing risks and impacts related to climate change. Strategic initiatives include improving efficiency and switching to low-carbon energies. Read more on page 88 ▸

Workers at our local supplier's facility in Malawi holding briquettes made out of groundnut shells and sawdust used as fuel for tobacco curing

Climate change-related opportunities

Key opportunities	Potential financial impact under the 2-degree scenario	How we seize them
Compliance with and anticipation of future country-specific legislation provide PMI with the opportunity to reduce energy consumption, lower CO_2 emissions, and reduce operational costs. This is embedded in our "zero-carbon factory" strategy, and annual and long-range plans to increase the use of renewable energy in our manufacturing sites through self-generation or purchases.		PMI's strategy to achieve carbon neutrality in our direct operations by 2030 leverages various initiatives to eliminate losses and improve operational efficiency, as well as to increase the use of renewable energy. Options to self-generate or purchase renewable energy are evaluated at the local level. Read more on page 142 ▸
Accelerating the transition to a low-carbon economy will likely require policy levers to reduce the cost of renewable technologies. This is likely to include subsidies for energy generation. Such policies are already a feature in many markets and are being used successfully to support the commercialization of renewable technologies, making them cost-competitive with conventional alternatives.		PMI's strategy to achieve carbon neutrality in our direct operations by 2030 leverages various initiatives to eliminate losses and improve operational efficiency, as well as to increase the use of renewable energy. PMI uses a marginal abatement cost curve and internal carbon price to help prioritize projects for renewable energy generation and GHG reduction. Read more on page 145 ▸
As alternatives to fossil fuels become more readily available and cost comparable to their conventional counterparts, it becomes attractive for tobacco farmers to switch from fossil fuels to low-carbon energy sources. In addition to the change in fuels used, farms may become more efficient thanks to new technologies. If PMI continues to invest in programs to improve agricultural practices and encourage the uptake of low-carbon equipment, contracted tobacco farmers' expenditures on fuel and energy inputs will fall.		Since 2002, we have been implementing our GAP program, which includes mandatory requirements for our tobacco suppliers. The program provides specific guidance on initiatives to mitigate tobacco-growing risks and impacts related to climate change. Strategic initiatives include improving efficiency and switching to low-carbon energies. For instance, PMI supports contracted farmers in improving curing-barn efficiency and switching to renewables. Read more on page 146 ▸

Progress in 2019

Our 2019 carbon footprint

Reducing carbon emissions is central to PMI's environmental management, alongside our adaptation to the potential business impacts of climate change.

All emissions generated across our value chain contribute to our carbon footprint. Carbon emissions principally occur upstream, including those generated by curing fuels and fertilizers in our tobacco supply chain, acquiring direct materials such as paper and cellulose acetate tow, and procuring indirect materials and services such as marketing, sales, and other professional services. Although manufacturing represents a smaller part of our footprint, we recognize that more energy is required to produce *IQOS* heated tobacco units compared with cigarettes, with a consequent increase in greenhouse gas emissions. We are seeking to reduce this impact.

Based on our footprint model, our carbon-reduction strategy focuses on four climate impacts across our value chain:

- Direct operations (factories, offices' and fleet): We aim to become carbon-neutral by 2030.
- Tobacco supply chain: Working with our suppliers and farmers, we seek to reduce carbon emissions created by tobacco cultivation, with a special focus on tobacco curing. We aim to improve curing efficiency, promote the adoption of biomass fuels, and ensure sustainable and traceable firewood.
- Direct materials supply chain: We are further accelerating the deployment of our supplier engagement strategy across all our procurement categories to achieve greater coverage hence carbon footprint reductions. We focus on:
  - ensuring CO_2 supplier measurement capabilities;
  - establishing deep-dive carbon value chain analysis;
  - identifying and delivering supplier improvement plans; and
  - consolidating, validating and reporting on data and results.
- Product development: We have introduced a set of sustainable design principles aimed at reducing the environmental footprint of our new products (read more on page 158).

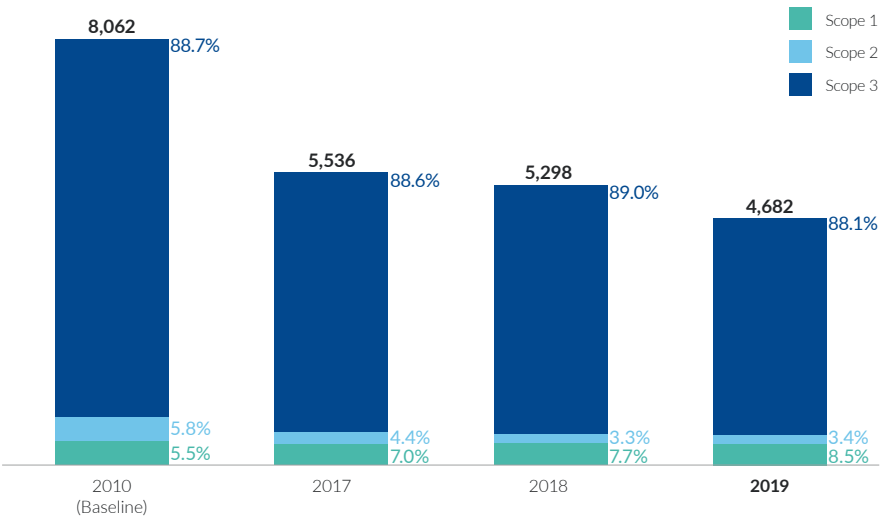
We are on track to achieve our current targets, with an absolute reduction versus 2018 in scope 1 emissions of three percent, in scope 2 of 10 percent, and in scope 3 of 12 percent, amounting to an overall reduction of 615,595 tons of CO_2e in 2019.

615,595t

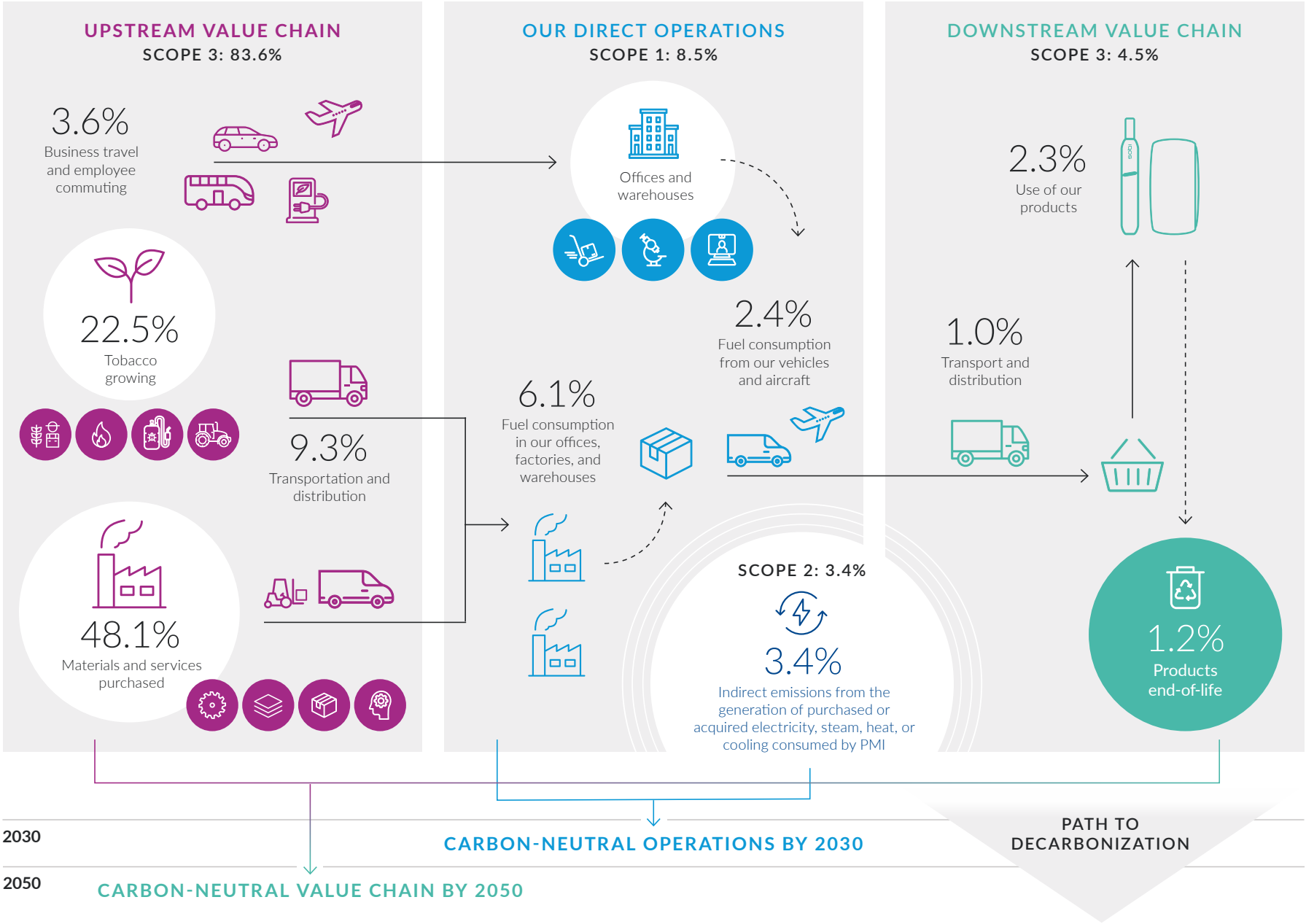
We are on track to achieve our current targets, with an overall reduction of 615,595 tons of CO_2e in 2019

An employee in PMI's manufacturing facility in Klaipėda, Lithuania

Global greenhouse gas emissions scope 1, 2, and 3 ('000 tons CO_2e)



Carbon emissions along our value chain in 2019



Presentation of information aligns with guidance of the Greenhouse Gas Protocol.

Toward carbon-neutral manufacturing

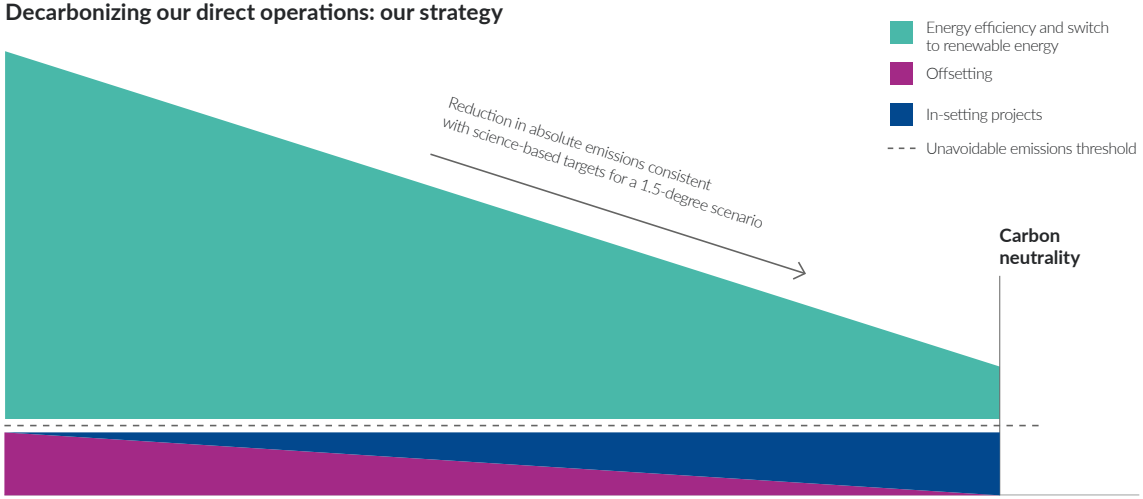
Our strategy follows a three-step approach:

- drive energy efficiency to reduce consumption;
- switch to renewable energy, including green electricity; and
- as a last resort, offset unavoidable carbon emissions, ideally by in-setting projects developed in our supply chain and generating certified carbon credits, and alternatively by purchasing carbon credits.

In 2019, our factory in Klaipėda, Lithuania, became our first carbon-neutral factory, receiving its certification from Swiss nonprofit myclimate (read more on the next page). We are aiming for an additional two production sites to be certified by 2021.

> We are aiming for an additional two production sites to be certified carbon-neutral by 2021.

Decarbonizing our direct operations: our strategy



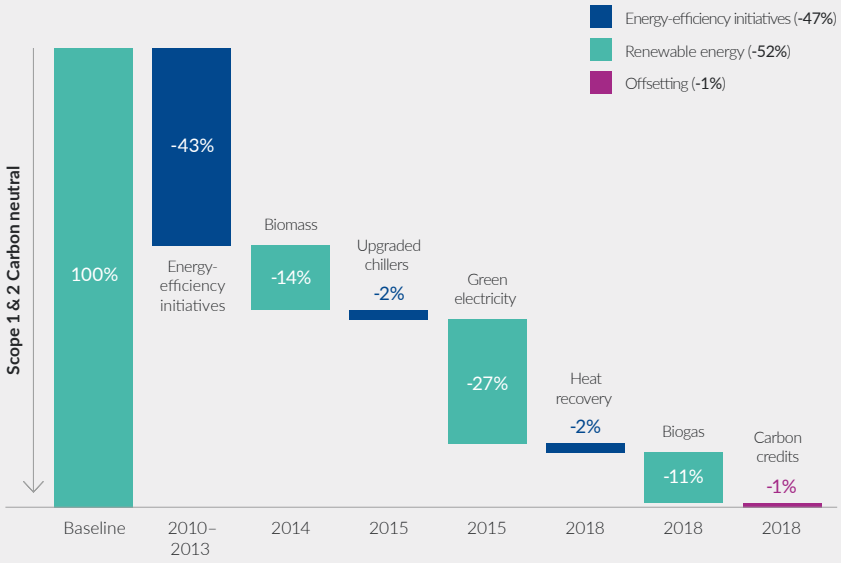
An employee in PMI's manufacturing facility in Klaipėda, Lithuania

Klaipėda, Lithuania: Our first carbon-neutral factory

In 2019, we reached the first milestone toward carbon neutrality in our factories – through energy-saving measures, renewable energies, and carbon offsets at our site in Klaipėda, Lithuania. Our factory there has been in operation since 1997 and employs over 500 people. We have been running energy-efficiency projects at the site for many years, upgrading utility equipment, such as chillers and compressors, and facilitating heat recovery to optimize fuel use, including installing a biomass boiler.

Combined, these initiatives reduced our carbon emissions by 47 percent versus our 2010 baseline. As part of our renewable energy strategy, we purchase certified renewable electricity and offset natural gas carbon emissions with biogas certificates. These efforts led to a 52 percent reduction in our carbon emissions versus 2010. To offset the remaining 1 percent carbon emissions at this factory, we invested in Gold Standard certificates from a climate protection initiative seeking to switch households in India from kerosene and firewood to biogas.

Klaipėda: carbon-neutrality journey



Employees in PMI's manufacturing facility in Klaipėda, Lithuania

Employees at a solar panel farm of Sampoerna, PMI's Indonisian affiliate, in Karawang

Driving energy efficiency

Our activities in this area center on our Drive 4 Zero program, which aims to eliminate economic losses caused by inefficient energy use. Under the program, we look for industrial and manufacturing solutions such as heat recovery and manufacturing-process optimization. We also promote behavioral change through our Zero Loss Mindset program.

In our factory in Russia, for example, it was necessary to drain around 1 percent of the steam our boiler produced to maintain the desired water-quality parameters. This meant heat loss. We found a way to recover the wasted heat by installing a heat exchanger, which used the heat to generate steam. In that same factory, the water used for domestic purposes and radiators was heated by inefficient electric heaters, leading to avoidable losses. We installed a thermal pump that was five times more efficient, leading to a reduction of 210 tons of CO_2 equivalent (CO_2e) per year.

In 2019, we installed a total of 6,660 square meters of photovoltaic panels in our manufacturing facilities

Switching to renewable energy

We implement renewable technologies across our manufacturing sites. This includes producing greener energy via photovoltaic panels and tri-generation processes (combining cooling, heat, and power). We also focus on thermal energy by installing biomass boilers and heat pumps and investigating pyrolysis techniques.

In 2019, we operated five biomass boilers in our manufacturing facilities and installed a total of 6,660 square meters of photovoltaic panels, contributing to a total of over 72,300 square meters of photovoltaic panels in our manufacturing facilities.

We select technologies based on clearly defined criteria: They must lead to an annual emissions reduction, have a payback period of no more than five years, and be among the more cost-effective projects in comparison to other carbon emissions reduction projects proposed within PMI.

To complement our approach, we also purchase certified green electricity. We aim to source 100 percent green electricity in our manufacturing sites by 2025.

Finally, we have worked to eradicate coal from our factories. We achieved this at the end of 2019 by replacing our last coal boiler, located in our South African factory.

Internal carbon pricing at PMI

Over the last years, PMI has applied an internal carbon price of USD 17 per ton of CO_2e in order to allocate capital for the best return in terms of carbon reduction and cost-effectiveness. As we are stepping up our ambition to reduce carbon emissions, we started an internal project to define a carbon price that will align with the 1.5-degree target and help to solidify the company's climate leadership.

Based on a comprehensive review of policies and methodologies applied by organizations across a variety of industries, we recognize the importance of defining a carbon price that will remain consistent over time and ensures that climate transition risks are embedded in capital expenditure decisions.

We are considering setting a shadow price to drive investment decisions as well as a carbon levy:

- Shadow pricing will enable us to include carbon prices when evaluating alternative investment options; for instance, for capital expenditure decisions.
- A carbon levy would enable us to internalize external costs by charging our business functions or affiliates for their respective emissions. With the aim of supporting behavioral change, the levy would be collected in a climate fund, which could finance high-quality carbon in-setting or off-setting projects.

We plan to finalize our approach during 2020 and report next year on its implementation.

In-setting and off-setting unavoidable carbon emissions

We compensate our absolute carbon emissions only as a last resort – once we have maximized our emissions reduction via energy efficiencies and renewable energy. We do so ideally through in-setting projects or alternatively by purchasing certified carbon credits.

As an example of an in-setting project, in collaboration with CarbonSink we evaluated the feasibility of a project that would provide access to clean and safe drinking water to farmers within the tobacco-growing areas of Mozambique – in line with our water, sanitation, and hygiene (WASH) program, also benefiting the schools we support through school feeding initiatives. We determined that the best approach would be to pilot 10 water-access sites to determine how well the selected technology works within the local context and its potential to scale up. Ideally, the project will qualify for certification by the Gold Standard Foundation, thereby generating internationally recognized verified emission reductions and contributing to PMI's carbon-neutrality targets. According to our feasibility assessment, the installation of 10 boreholes could benefit around 35,000 people and avoid 865,000 tons of CO_2 emissions over 10 years, while providing approximately 245 cubic meters of water per day.

Community project to provide farmers with access to water in Mozambique

Offices and fleet

In addition to our carbon-reduction efforts at our manufacturing facilities, which represent most of our scope 1 and 2 emissions, we are also exploring ways to reduce emissions from our offices and fleet.

> In our fleet, we plan to improve efficiency through telematics, increasing the proportion of electric and hybrid vehicles, and providing eco-driving training to reduce our emissions further.

In our fleet, we plan to improve efficiency through telematics, increasing the proportion of electric and hybrid vehicles, and providing eco-driving training to reduce our emissions further. In our offices, we are focused on strengthening our reporting to identify appropriate interventions. Some of our offices are already reducing their footprints; this is the case, for example, with our Operations Center in Switzerland, which became carbon-neutral in 2019 (read more in our case study on page 68).

Reducing carbon in our tobacco supply chain

We are currently running strategic initiatives to reduce carbon emissions in our tobacco supply chain, which are focused on three areas: reducing fuel consumption by improving curing-barn efficiency, promoting the switch from fossil fuels to biomass fuels, and ensuring sustainable and traceable firewood.

In our tobacco supply chain, we achieved an absolute reduction in 2019 of 244,423 tons of CO_2e versus the previous year, with over two-thirds of that reduction attributable to efficiency gains in curing barns and reductions in use of curing fuels.

Reducing fuel consumption by improving curing-barn efficiency

We mainly source three types of tobacco: Virginia, Burley, and Oriental. Virginia tobacco (approximately 46 percent of purchased volumes) is cultivated around the world and, once harvested, must be cured to dry out the leaves using an external heat source. Curing barns may be heated with coal, diesel, natural gas, firewood, or biofuels such as agricultural by-products. The GHG emissions of flue-cured tobacco curing represent 10 percent of our total carbon footprint.

To meet our 2020 target of a 70 percent reduction, versus our 2010 baseline, in GHG emissions per kilogram of tobacco flue-cured, we have made curing barns more efficient, with a commitment to

10%

The GHG emissions of flue-cured tobacco curing represent 10 percent of our total carbon footprint

Curing tobacco

Curing is the term used for drying tobacco. Performed after the leaves are harvested, curing plays a major role in determining the final quality and character of the tobacco leaf.

Tobacco curing must be carefully controlled to bring out the different characteristics of each tobacco type. Curing methods vary depending on the type of tobacco:

- Burley tobacco is air-cured by hanging the leaves in well-ventilated barns; the tobacco is allowed to dry over four to eight weeks.
- Oriental tobacco is sun-cured by hanging the leaves outside in the sun for about two weeks.
- Virginia tobacco is flue-cured, which means that the leaves are hung in curing barns, where heated air is generated to dry the leaves. As they lose their moisture, they develop their distinct aroma, texture, and color. Over a third of the GHG emissions related to our tobacco supply chain come from the curing process of flue-cured tobacco.

Curing barns in Jujuy, Argentina

improve 80,000 barns by 2020. While most farmers own their curing barns, PMI and our suppliers provide guidance and support to make them more fuel-efficient. A primary reason for low efficiency is lack of insulation and the thermal conductivity of the construction materials. We work with farmers and suppliers to improve combustion efficiency, ventilation, and heating control, together with insulation.

The improvement projects carried out in 2019 increased the efficiency of 4,731 barns, for a cumulative total of 80,782 barns upgraded since 2014. Data on fuel use per kilogram of tobacco cured are subject to on-the-ground audits by third-party verifiers operating within our Monitoring and Verification Framework for Sustainable Fuel; these audits cover all CO_2-reduction activities across our flue-cured tobacco supply chain. The challenges in improving curing barns pertain to farmer training, consistent delivery of the agreed improvements over the long term and verifying the new levels of efficiency.

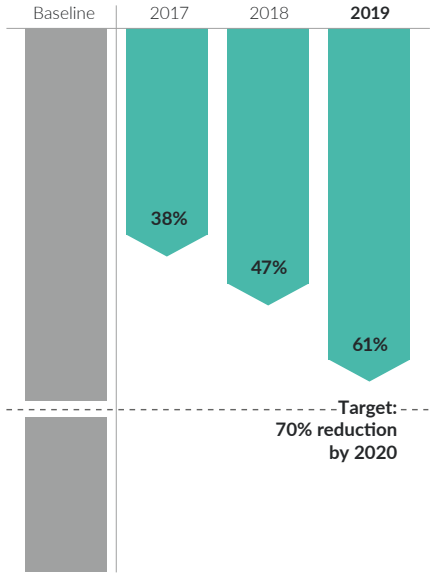
In 2019, we delivered improvement projects around the world, which typically included training farmers on fuel efficiency. Depending on the farm upgrades needed, this training might focus on better convection of hot air inside the barn; insulation of the walls, ceiling, and floor; flue pipe and chimney adaptations for better heat control; innovative heat exchanger technology; or automation of dampers to control air circulation during the curing process.

We are seeing farmer profitability improve as a result of cost savings on farms. In Brazil, for example, the use of a "bulk barn" (an all-metal, rectangular barn) reduces the cost of production by 5 percent compared with a conventional barn, leading to an average increase in income of USD 242 per hectare. Efficiency improvements have led to savings of approximately USD 46 per hectare in the Philippines and USD 215 per hectare in Malawi.

Ensuring sustainable and traceable firewood sources

The curing process depends on heat, which, in some countries, is generated by burning firewood. By 2020, we are targeting 100 percent of the tobacco we purchase to be cured at no risk of deforestation of old growth forests. In 2019, we reached 97 percent, up from 90 percent in 2018. We detail our 2019 progress in the "Forest protection" section on PMI.com.

Reduction in CO_2e emissions from tobacco flue-curing (%) – baseline 2010

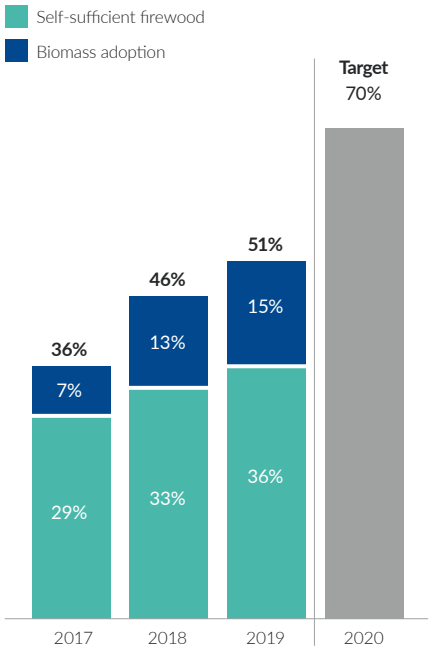


An employee of our local third-party tobacco supplier next to sustainable firewood in Malawi

Promoting the adoption of renewable fuels

Our aim was to ensure that by 2019 55 percent and by 2020 70 percent of the flue-cured tobacco we purchase is cured using renewable and fully traceable fuels.[1] These include sustainable biomass, such as wood sources, agro-pellets, or other agricultural waste products. We are applying our Monitoring and Verification Framework in all flue-cured sourcing markets. For audits begun in 2019, we aim to complete on-site visits covering all flue-cured origins by the end of 2020.

Proportion of flue-cured tobacco purchased cured with renewable sources



In 2019, 51 percent of the tobacco we purchased was cured using renewable fuels (2018: 46 percent).

We have set a target to phase out completely the use of coal in curing the tobacco we purchase by 2020, with an intermediary target to achieve maximum 10 percent by 2019 (against 15 percent in 2018). The strong collaboration with our suppliers has led to significant improvements in the past years. By the end of 2019, the share of coal used as a curing fuel unfortunately increased slightly, to 16 percent. Due to shifts in our sourcing strategy and local curing capacities in specific markets, this figure does not fully reflect the steady progress made in fuel switch as a result of barn conversions in several markets. An example has been the cooperation with the China National Tobacco Corporation (CNTC) with the conversion of 51,567 barns from coal to biomass in recent years in the provinces PMI sources from, providing a reliable and consistent increase in curing capacity with renewable fuels. We remain committed to eliminating coal from our curing fuel portfolio and will provide an update on progress made in our next report.

1 We calculate our carbon footprint using the "precautionary approach": We use a full carbon emissions factor for firewood until proof is available that the source is sustainable.

Wood chip used for fuel in Bahia, Brazil

Fertilizers

The use of fertilizers in tobacco production represented around 10 percent of PMI's total carbon footprint in 2018, making it the third largest contributor of GHG emissions, after tobacco curing and acetate tow. While we encourage the optimization of fertilizers – minimizing their use in our tobacco supply chain in line with our Good Agricultural Practices – technological developments in the manufacturing process for fertilizers have also contributed to reducing their CO_2 footprint.

In 2019, PMI updated its calculation model for fertilizers' CO_2 emissions, which had been developed in 2015, to more precisely assess their impact on the company's carbon footprint. The total emissions calculated for 2019 are based on the updated model – taking into consideration efficiency gains and technological developments occurring in the manufacturing of fertilizers – and provide a more accurate figure. Emissions for 2019 represented 8 percent of PMI's total footprint, and were significantly lower in absolute terms than in 2018. The decrease is explained both by the new emission factors, representing a 27 percent emission reduction compared with 2018 figures, and a further contribution due to a 13 percent decrease in fertilizer use.

Our direct materials supply chain

All our materials must be responsibly sourced, in line with our Responsible Sourcing Principles. In 2019, we worked on collecting primary data for our scope 3 emissions pertaining to our direct materials. The procurement categories with the greatest impact on our CO_2 footprint are cellulose acetate tow, pulp, and paper (packaging board). We are currently engaging with our suppliers to develop an emissions reduction strategy in line with our carbon emissions reduction objectives.

In 2019, the CO_2 reductions in our direct materials supply chain amounted to 71,225 tons of CO_2, contributing 12 percent to our annual reduction across our value chain. We expect to achieve increasingly greater reductions in this category as we further develop our emissions reduction strategy in this area.

How we calculate CO_2 emissions

PMI has collected CO_2 emissions data over many years as part of our efforts to improve performance and achieve targets. We need robust data for our science-based targets, carbon footprint, product life-cycle analysis, and decisions on investment in low-carbon technologies.

In line with good practices and the World Resources Institute's (WRI) GHG Protocol, we source emission factors from the U.K. government's GHG Conversion Factors for Company Reporting (2019) and the International Energy Agency's Emission Factors (2019). Global warming potential rates are sourced from the IPCC Fifth Assessment Report, 2014 (AR5). The scope of the data encompasses assets under our operational control, including PMI's fleet and offices (scope 1 and 2), as well as our overall upstream and downstream supply chain (scope 3). Scope 2 emissions are primarily market-based. Our value chain carbon footprint model aligns with the Corporate Value Chain (Scope 3) Accounting and Reporting Standard methodology from the WRI, the accepted international standard.

We undertake third-party verification of scope 1, 2, and 3 emissions to ISO 14064-3 standards (please see our verification statements online).

Real data are used where possible, but in cases where primary data are not available, we extrapolate emissions from international databases such as ecoinvent. Transport relating to the end consumer traveling to the retailer is not included under value chain or product footprint standards. Gases included in calculations are CO_2, CH_4, and N_2O (not HFCs, PFCs, SF_4, or NF_3). Biogenic CO_2 emissions are included under our scope 3 emissions. The climate neutrality at our factory in Lithuania in 2019 encompassed all scope 1 and 2 GHG emissions of the manufacturing site that were validated; all remaining emissions were offset with high-quality carbon offset projects from myclimate, using certification from the Gold Standard Foundation.

Next steps

In 2019, we were on track or already meeting most of our existing CO_2 targets, which had been based on the 2.0-degree scenario consistent with the 2016 Paris Agreement. Nevertheless, it became increasingly clear that society, including businesses, needs to be more ambitious to avert a climate crisis. The 2018 IPCC report recommended limiting global warming to 1.5 degrees, because of its "clear benefits to people and natural ecosystems," as well as to ensure "a more sustainable and equitable society." Toward the end of 2019, the European Union announced its Green Deal, aiming for EU-wide net zero carbon emissions by 2050.

These developments led to a heightened sense of urgency at PMI when it comes to reducing carbon emissions, and made us decide to step up our ambition. At the same time, the ongoing change in our business model toward smoke-free products made it opportune to update our baseline for target setting to 2019. We also wanted to better align our new targets with the ambitions conveyed by the European Union in its Green Deal, and other governments, and continue setting our targets consistent with the best scientific evidence.

Therefore, in early 2020, we established new and more ambitious targets to guide our decarbonization journey for the years to come:

- PMI to be carbon-neutral by 2030 (scope 1 and 2);
- our whole value chain to be carbon-neutral by 2050 (scope 1, 2, and 3); and
- a reduction in absolute CO_2 emissions consistent with science-based targets for a 1.5-degree scenario.

During the course of 2020, we plan to submit our absolute reduction targets to the Science-Based Targets Initiative Committee for validation and expect to report on progress in next year's report.

In addition to continuing, and where needed, stepping up our work, we also plan to roll out internal carbon pricing to drive PMI's transition to a low-carbon operating scheme. Our roadmap also includes a gradual shift from improved process technologies to more disruptive technologies such as CO_2 capture. In our product development work, we are increasingly embedding environmental criteria into the design process. To offset our unavoidable emissions, we focus on carbon in-setting projects to generate carbon credits. We will also launch an employee engagement campaign to prompt behavioral change. Finally, we will continue to improve the quality of our climate-related disclosures.

Performance

Climate protection	2010 baseline	2017	2018	2019	Goal	Scope
CO_2e scope 1 (metric tons)	443,186	388,384	408,162	**397,210**		PMI factories, offices[1], and fleet
CO_2e scope 2 (metric tons)	470,864	241,355	175,785	**158,672**		PMI factories and offices
CO_2e scope 1+2 (metric tons)	914,050	629,739	583,947	**555,882**	Carbon neutrality by 2030	PMI factories, offices, and fleet
CO_2e scope 1 from fleet (metric tons)	143,148	119,588	114,936	**111,400**		PMI fleet
CO_2e emissions from vehicles (g CO_2e per km driven)	296	226	221	**222**		PMI fleet
CO_2e scope 3 ('000 metric tons)[2]	7,148	4,906	4,714	**4,127**		PMI value chain
CO_2e scope 1+2+3 ('000 metric tons)	8,062	5,536	5,298	**4,682**	Carbon neutrality by 2050	PMI value chain
Carbon in-setting credits (metric tons)		0	0	**0**		PMI factories, offices, and fleet
Carbon off-setting certificates (metric tons)[3]		0	956	**1,242**		PMI factories, offices, and fleet
Number of carbon-neutral factories		0	0	**1**	All by 2030	PMI factories
CO_2e scope 1+2+3 intensity (kg per million cigarettes equivalent)[4]	8,706	6,687	6,552	**5,917**		PMI value chain
CO_2e scope 3 biogenic emissions ('000 metric tons)	n/a	n/a	3,442	**2,438**		PMI value chain
CO_2e scope 1+2 absolute reduction versus 2010 baseline[5]		31%	36%	**39%**	30% by 2020 40% by 2030 60% by 2040	PMI factories, offices, and fleet
CO_2e scope 1+2+3 absolute reduction versus 2010 baseline[5]		31%	34%	**42%**	40% by 2030	PMI value chain
CO_2e scope 1+2+3 intensity reduction versus 2010 baseline		22%	25%	**32%**	30% by 2020	PMI value chain
CO_2e intensity reduction in tobacco curing versus 2010 baseline		38%	47%	**61%**	70% by 2020	PMI tobacco supply chain
Proportion of flue-cured tobacco purchased cured with renewable fuel sources (self-sufficient firewood and biomass adoption)		36% (29% + 7%)	46% (33% + 13%)	**51%** **(36% + 15%)**	70% by 2020	PMI tobacco supply chain
Proportion of Virginia tobacco purchased cured with coal		20%	15%	**16%**	0% by 2020	PMI tobacco supply chain
Approximate total number of curing barns upgraded since 2014 (cumulative)		57,000	76,000	**80,800**	80,000 by 2020	PMI tobacco supply chain
Total energy consumption (gigajoules)[6]	8,025,559	8,896,274	9,353,222	**9,456,576**		PMI factories, offices, and fleet
Energy intensity (gigajoules per million cigarettes equivalent)[7]	8.60	10.75	11.57	**11.95**		PMI factories, offices, and fleet
Fuel consumption from nonrenewable sources (gigajoules)		5,597,766	5,988,022	**5,819,072**		PMI factories, offices, and fleet
Fuel consumption from renewable sources (gigajoules)		44,389	61,163	**128,967**		PMI factories, offices, and fleet
Total electricity consumed (MWh)[8]		885,385	899,706	**959,723**		PMI factories and offices
Total electricity consumed that is from renewable sources (MWh)		443,837	546,944	**623,940**		PMI factories and offices
Proportion of electricity used and purchased that is from renewable sources		50%	61%	**65%**		PMI factories, offices, and fleet

Climate protection	2010 baseline	2017	2018	2019	Goal	Scope
Proportion of electricity used and purchased that is from renewable sources	0%	53%	65%	**72%**	100% by 2025	PMI factories
CDP Climate Change rating		A	A	**A**	A	

1 We include warehouses in PMI offices.

2 In 2019, we reviewed our carbon footprint model, taking into account more primary data from suppliers and updating our methodology, leading to more accurate figures for our scope 3 emissions. We have restated our 2017 and 2018 data according to the new model. Other figures that include scope 3 emissions have also been restated.

3 2019 figure includes carbon off-setting certificates purchased in our factory in Klaipėda (see page 143) and our Operations Center in Lausanne (see page 68).

4 From 2019 onward, intensity is measured in CO_2e per million shipped cigarettes equivalent. Our baseline and previous years' data have been restated accordingly.

5 We report on our progress against our current science-based targets, which align with a 2-degree scenario: we committed to achieve an absolute reduction of our scope 1+2 emissions of 30 percent by 2020, 40 percent by 2030, and 60% by 2040; and to achieve an absolute reduction of our scope 1+2+3 emissions of 40 percent by 2030.

6 The 2018 figure has been adjusted due to an internal reporting error.

7 From 2019 onward, energy intensity is reported in gigajoules per million cigarettes shipped equivalent. Previous years' data have been restated accordingly.

8 We have reviewed the calculation methodology for our electricity consumption to account for the electricity produced in our facilities, and we have restated previous years' data accordingly. Other figures that include electricity have also been restated.

Preparing tobacco leaves for curing in Jujuy, Argentina

LINKS

PMI's Environmental Commitment ▸
PMI Zero Deforestation Manifesto ▸
Guidebook for Success ▸
Responsible Sourcing Principles ▸
Good Agricultural Practices Code ▸
Third-party verification of scope 1, 2, and 3 emissions to ISO 14064-3 standards ▸

Littering prevention

Around the world each year over 350 million tons of plastic waste are generated. Improperly disposed plastics can spoil landscapes and impact wildlife. About one million tons of cigarette filters are produced annually across the tobacco industry. While made of cellulose acetate (CA), a wood-sourced bioplastic that biodegrades slowly, they are among the most frequently found litter items. We aim to reduce littering at its source by encouraging and enabling smokers to dispose properly of their cigarette butts.

Megatrends

- Technological progress
- Changing consumer expectations
- Climate change
- Purpose of business
- Income inequality

PMI employees cleaning up a beach in Portugal

Topic description

Litter is any solid product or its packaging discarded in the environment after use. Littering refers to the act by a consumer of discarding such material in the environment. PMI's littering prevention initiatives focus on consumer awareness and cleanup campaigns of cigarette butts, in partnership with a wide range of stakeholders.

Relevance of the topic

Impact in our value chain

Upstream | PMI operations | Downstream

Key stakeholders

- Adult consumers
- Business community
- Civil society
- Employees
- Media
- Regulators

Why it is important to us and our stakeholders

A cigarette butt consists mostly of CA, fine paper, and small amounts of tobacco, ash, and smoke residues. The fine paper and tobacco residues degrade rapidly; the cigarette filter, which is made of CA, takes longer to degrade. The overall degradability of cigarette butts depends on the surrounding biophysical conditions, with degradation times ranging from three months to 15 years. Beyond environmental considerations, cigarette butt litter and litter in general have a social impact, from the cleanup costs to perceptions of untidiness and lack of safety in areas where litter is prevalent. There is also a risk, yet to be quantified, of ingestion by wild animals.

As a global manufacturer producing 766 billion cigarettes and heated tobacco units per year, sold across more than 180 markets, PMI is in a position to play an important role with its consumers in littering prevention. Plastic waste from consumables, devices, and packaging sold by PMI amounted in 2019 to 165,000 tons of plastic. The largest share (86 percent) is composed of the bioplastics used in the filters of conventional cigarettes and *IQOS* heated tobacco units.

While many consumers dispose of their waste properly, too much waste ends up in the environment. We are addressing this littering issue with a multipronged approach, including awareness-raising campaigns, ongoing research into alternatives to CA filters, and improved design of products and packaging. Such efforts also have the potential to help mitigate costs related to emerging environmental legislation. Moreover, given the highly visible nature of butt littering, addressing the issue carries reputational benefits for our brands and company.

Connectivity with other sustainability issues at PMI

1 Access to smoke-free products
2 Responsible marketing and sales practices
3 Responsible and transparent R&D
4 Respect for human rights
5 Fair fiscal practices
6 Responsible advocacy
7 Community support
8 Climate protection
9 Forest conservation
10 Product eco-design and circularity
11 Biodiversity
12 Water stewardship

Our aim

-50%

Reduction of plastic litter from our products by 2025 (versus 2021)

We have an anti-littering policy in place and are acting across PMI to deliver on it

PMI employees taking part in a cleanup activity in Lausanne, Switzerland

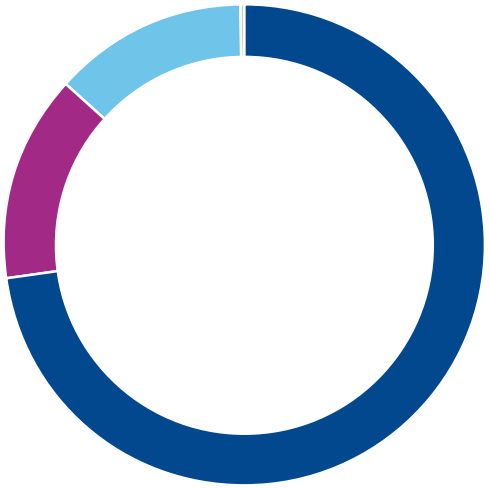
Achieving our aims

Littering is clearly linked to consumer awareness and attitudes, as well as to the availability of an adequate waste-disposal infrastructure. To curb butt littering, PMI emphasizes changing consumer habits. Many consumers do not perceive cigarette butts as having a significant environmental impact, due to the items' small size and to misconceptions about their composition and degradability. Our efforts focus on raising consumer awareness and promoting the availability of proper disposal infrastructures. We then seek to contribute to effective public policy development by sharing insights into the environmental, social, and economic aspects of anti-littering approaches.

We have an anti-littering policy in place and are acting across PMI to deliver on it. To ensure activities are implemented globally and will have a tangible impact, we have developed an anti-littering toolbox that our affiliates use to develop local, context-based strategies. By the end of 2019, 64 countries were using the toolbox to develop their plans, with 31 of them ready to start or already having started implementation. We develop, monitor, and assess both global and local programs. We are committed to working in partnership with all relevant stakeholders in our markets to develop and share the most innovative approaches.

On June 5, 2019, the EU Council and the EU Parliament adopted Directive (EU) 2019/904 (Single Use Plastics Directive) on the reduction of the impact of certain plastic products on the environment. This will require tobacco manufacturers and importers to participate in the extended producer responsibility (EPR) costs of the collection of cigarette butts from public collection systems and the cleanup of butts littered on public grounds. To take effect, the directive will have to be transposed by the European member states by July 2021. We support the concept of EPR, provided that the schemes put in place are ecologically and economically efficient and socially acceptable and deliver on the goal of reducing littering.

Plastic footprint of PMI products



Cigarette filters	72.7%
Packaging	13.5%
Heated tobacco unit filters	13.1%
Electronic devices	0.6%

Research for filters with higher degradability

For many years, PMI has been actively evaluating alternative cigarette filter materials with a lower environmental impact than cellulose acetate (CA), an already renewable and partially biodegradable material. To be acceptable, any new material has to satisfy four criteria:

- good filtration efficiency and consistency, similar to CA filters;
- significant reduction in total carbon footprint and/or significant improvement in marine, aquatic, and soil biodegradation versus a CA filter;
- acceptable taste characteristics, as a product must be successful in the market to have the desired positive impact on the environment; and
- commercially viable at scale (all materials science developments start in the laboratory and need to be conducive to industrialization at large scale and at competitive costs).

Based on extensive chemical testing, machinability trials, biodegradation evaluations, and consumer-testing conducted using prototypes, past projects have met one or more of the above criteria, but no better alternative to CA has yet been found. We will continue to explore options as new materials and processes become available.

Progress in 2019

Throughout 2019, we expanded our programs, implemented cleanup projects in 31 countries, and formalized our anti-littering policy.

Raising awareness

Anti-littering campaigns

Education is the starting point in our promotion of anti-littering. We aim to create impact by developing campaigns that raise awareness, appeal to individuals' consciences, and show them how to properly dispose of cigarette butts and other litter. An essential starting point to any campaign is to identify the littering hot spots perceived as focal areas by local authorities, anti-littering organizations, and citizens. These might include areas such as particular streets, squares, parks, beaches, and outdoor event spaces. We also collaborate with industry peers and partner with anti-littering organizations and public authorities. Smoking habits, environmental awareness, and disposal practices vary by country, and combating cigarette butt littering requires a locally customized approach.

Anti-littering programs led by PMI at the country level have grown: By the end of 2019, we had 54 anti-littering initiatives mobilizing our employees globally.

In September 2019, PMI joined the annual World Cleanup Day, the world's largest litter cleanup event. Over 3,900 PMI employees and other volunteers in 51 cities across 31 countries participated in cleanups. Highlights included:

- Mexico – 140 colleagues in seven cities filled a hundred bags with waste;
- Senegal – Our team helped to clean up the beach in Ngo, the westernmost point of the African mainland;
- Poland – We launched a digital competition through which 500 employees conducted individual cleanups;
- Indonesia – More than 260 participants between Jakarta and Surabaya gathered a total of 12,500 kilograms of waste and 25,000 cigarette butts; and
- Philippines – We mobilized community partners, recruiting more than 1,000 cleanup participants in four cities over two days.

Overall, our teams picked up 83 tons of waste and more than 827,000 cigarette butts (representing almost 170 kilograms).

While these cleanup efforts will not resolve the problem of littering, we believe they are a good way to raise awareness among the general public and show our commitment to tackling the issue of cigarette butt littering.

Technology also can play a role in raising awareness and encouraging behavior change. During World Cleanup Day, PMI trialed the technology of anti-littering organization Litterati, which empowers people to run neighborhood cleanups. Litterati's app enables users to collectively map litter hot spots by photographing and tagging items of litter.

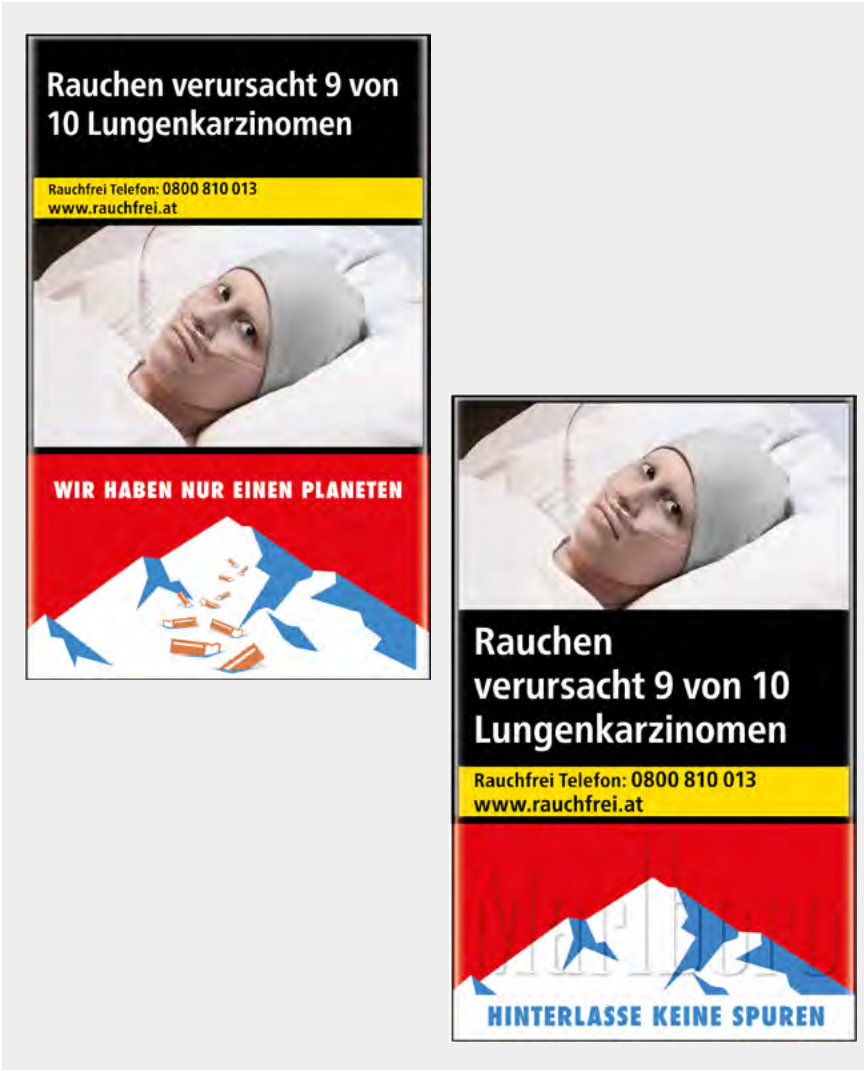
Leveraging our largest brand

Where this is allowed, cigarette packs can be a means to communicate anti-littering messages to adult smokers and inspire collective action. In 2019, we developed a limited-edition pack for our flagship *Marlboro* brand. By the end of 2019, the special pack was on sale in nine markets across the EU, with an estimated reach of 2.9 million legal age smokers and 190,000 retail outlets. The plan is to significantly scale it up by the end of 2020 to amplify our message on litter reduction among a wider audience. We will share the outcomes in future reporting.

827,000

Our teams picked up 83 tons of waste and more than 827,000 cigarette butts during World Cleanup Day

Marlboro limited-edition pack launched in Austria in 2019, communicating anti-littering messages to adult smokers ("We only have one planet"; "Leave no trace")



Anti-littering awareness campaign in Austria: piloting a multipronged approach to drive social change

PM Austria piloted a multipronged, unbranded, anti-littering campaign in the city of Vienna. This campaign aimed to (i) increase both awareness and declared non-littering behavior among adult smokers, and (ii) reduce the incidence of both cigarette butt litter and general litter in selected hot spots.

As part of the campaign, awareness messages were placed in 301 points of sale and at public transport stops. To trigger curiosity and connect with adult consumers, the team used local expressions, humor, and nudging elements into campaign visuals, design, and execution.

The on-the-ground campaign encouraged citizens to visit a website to learn more about reducing littering. This website presented factual information about cigarette butts (e.g., how long a cigarette butt takes to decompose), inspiring stories about fighting the issue, and a call to action for visitors to join an anti-litter challenge, aiming to collect pieces of litter in Vienna. This challenge was hosted on the Litterati app, which enabled users to photograph and tag individual items of litter and created a virtual community that jointly collected over 26,000 pieces of litter.

Vienna's 7th district was a special focus for this campaign, with an intensified set of activities in bars, clubs, and restaurants, as well as bus and tram stops, for instance. The team also ran different experiments to better understand what drives change in consumer behavior, using pocket ashtrays (available at points of sale, legal age meeting points, and events) and nudging techniques in fixed ashtrays (installed in private companies).

The impact of this campaign was carefully assessed and included actual physical measurements by Litterati of cigarette butt litter incidence before, during, and after the campaign.

While the campaign did not seem to measurably affect cigarette butt litter awareness nor declared non-littering behavior among consumers, the street measurements showed it did have a positive effect in reducing cigarette butt litter incidence in the city of Vienna (-8 percent), and this reduction was more pronounced (-15 percent) in the hot spots of the 7th district that were the target of the campaign's intensified set of activities.

The insights from this pilot will help us shape our future initiatives.

Exploring the potential of disposal solutions

We are clear that education must be accompanied by convenient cigarette butt disposal solutions. PMI continuously seeks expert input to develop and share innovative approaches to alternative waste receptacles and other portable solutions.

In Italy, for example, our #cambiogesto multichannel campaign in Palermo paired awareness-raising with the distribution of a portable ashtray device. It is estimated that the new awareness and practical support resulted in 120,000 fewer littered cigarette butts in Palermo's campaign beach sites during the month of August.

Where smokers are on the move, portable ashtrays can help reduce littering. Currently, however, the adoption rates of portable ashtrays among smokers are very low, typically under 1 percent. Adoption rates are higher in countries such as Japan, where local culture and legal enforcement drive their use. The limited uptake in other markets is due to inconvenience: It is an extra item to carry, it requires cleaning, extinguishing the cigarette is a more involved process, and there is some risk of mess and odor. We believe that improved design and availability will lead more consumers to accept and use the devices.

In the U.K., PMI has partnered with Clean Up Britain, a leading anti-litter behavioral change organization, to research littering behavior and portable ashtrays. The findings indicate that attitudes to littering depend on ashtray design, but also on respondent demographics, social situations, and perceived risk of fines. The factors affecting acceptance include ease of use (easy stubbing, opening, closing, cleaning), safety (perceived risk of melting and plastic), effectiveness of seal (to prevent smell or risk of spill of ashes), portability (size, shape, and presence of clip to carry), quality (reliability and durability), and design (look, customization, and sustainability). The findings will be used to develop portable solutions that are more likely to be adopted by smokers on the move.

> We are clear that education must be accompanied by convenient cigarette butt disposal solutions.

Social norms and enforcement

Enforcement can refer to penalties and fines, but it can also be more broadly interpreted to include social control and appealing to the values of citizens. To curb littering, consumers should be reminded of existing regulations and shown that littering is socially unacceptable. The #cambiogesto campaign in Italy appealed to the conscience of smokers ("Part of you already knows what to do") to shift their habits from flicking on the ground to disposing in an ashtray.

Next steps

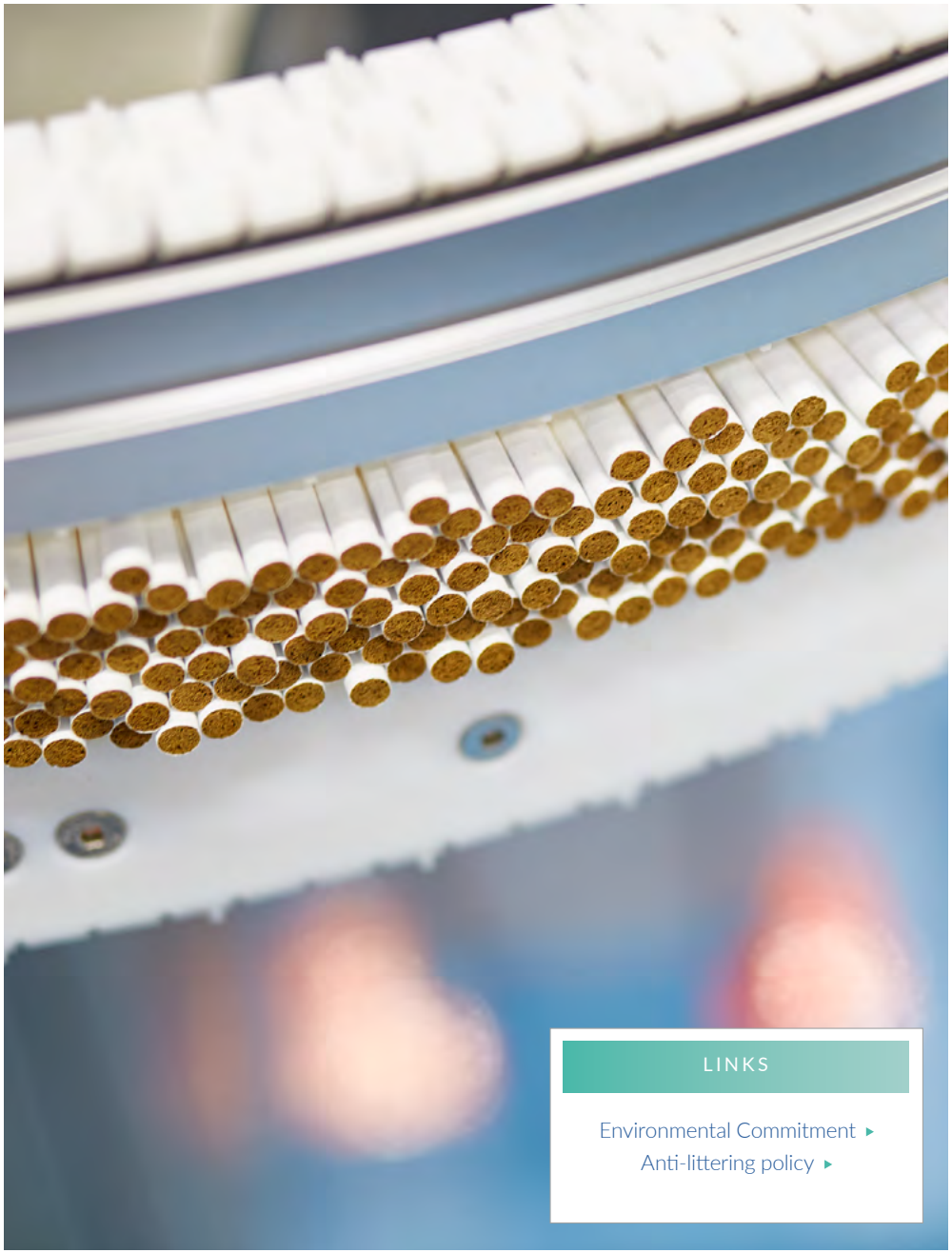
We will ramp up anti-littering campaigns across the markets where we operate, in cooperation with key stakeholders, in order to meet our target to halve the plastic litter from our products by 2025. We had planned to define the baseline in 2020, but due to the COVID-19 confinement, this year will not be representative, so we will define the baseline in 2021. We will develop an online platform to share information, testimonials, messages, and tools to encourage as many people as possible to combat littering. Our approach to materials, packaging, waste management, and electronic product stewardship increasingly aligns with the concept of the "circular economy" and is discussed on the next page.

> We will ramp up anti-littering campaigns across the markets where we operate.

Performance

Littering prevention[1]	2019
Number of anti-littering initiatives conducted	**54**
Number of affiliates with anti-littering strategy	**31**
Number of affiliates participating in World Cleanup Day	**31**
Number of participants in World Cleanup Day (PMI employees and other volunteers)	**3,962**
Number of cigarette butts collected during World Cleanup Day	**827,160**

We introduced these indicators in 2019.



LINKS

Environmental Commitment ▸
Anti-littering policy ▸

Heated tobacco units production in PMI's manufacturing facility in Neuchâtel, Switzerland

Product eco-design and circularity

There is a need to change economic models of production and use, moving to a more restorative model. Building sustainability considerations into product design is a way to control environmental and social impacts across the life cycle of a product – from development and manufacture to use and disposal.

Megatrends

- Technological progress
- Changing consumer expectations
- Climate change
- Purpose of business

IQOS device recycling hub in Japan

Topic description

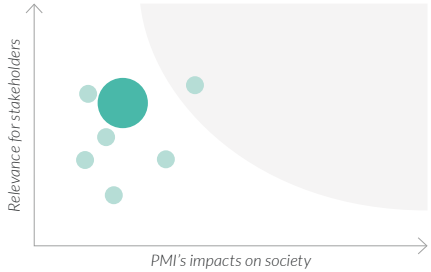
For PMI, contributing to the circular economy means developing more environmentally friendly products – devices, consumables, accessories, and packaging – by improving their recyclability, efficiency, and repairability.

Why it is important to us and our stakeholders

By integrating sustainability considerations into our products, from development to end-of-use, we can lower their environmental and social impacts and costs. Potential benefits include energy savings, reduced use of natural resources, waste reduction, and, typically, a longer product lifespan. Minimizing the negative environmental and social impacts of products commercialized at scale can help safeguard the interests of future generations.

At PMI, we are committed to playing our part in promoting a circular economy. Our stakeholders, starting with our consumers, expect products that are durable and reliable, and that are manufactured using responsibly sourced materials and the efficient use of resources. While a circular approach requires upfront investments – for example, to set up take-back and recycling systems or lower our carbon footprint – it also spurs innovation, boosts competitiveness, and adds value to our brands.

Relevance of the topic



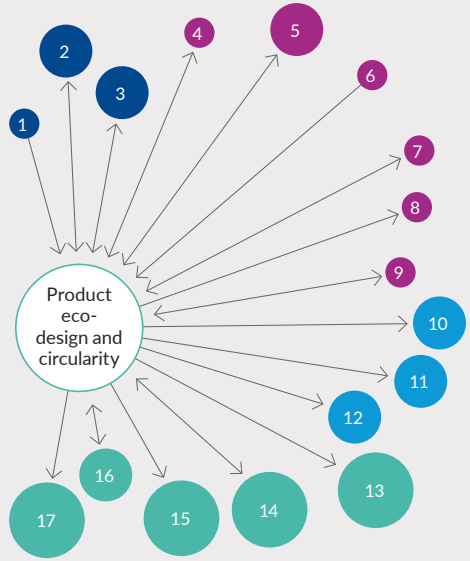
Impact in our value chain

Upstream | PMI operations | Downstream

Key stakeholders

- Adult consumers
- Civil society
- Employees
- Regulators
- Supply chain

Connectivity with other sustainability issues at PMI



1 Product health impacts
2 Access to smoke-free products
3 Product reliability
4 Responsible marketing and sales practices
5 Sustainable supply chain management
6 Responsible and transparent R&D
7 Respect for human rights
8 Fair fiscal practices
9 Illicit tobacco trade prevention
10 Socio-economic well-being of tobacco-farming communities
11 Fair working conditions
12 Health, safety, and well-being at work
13 Climate protection
14 Forest conservation
15 Littering prevention
16 Biodiversity
17 Water stewardship

Our aims

100%

Percentage of PMI smoke-free product users who have access to collection and recovery for devices and consumables by 2025

100%

Percentage of PMI's smoke-free devices that have eco-design certification by 2025

Achieving our aims

At PMI, we are committed to understanding and managing the environmental and social impacts across our entire value chain, including the life cycles of our products.

With respect to our smoke-free products, our 2025 eco-design and circularity ambitions, which extend to electronic devices, accessories, consumables, and packaging, are as follows:

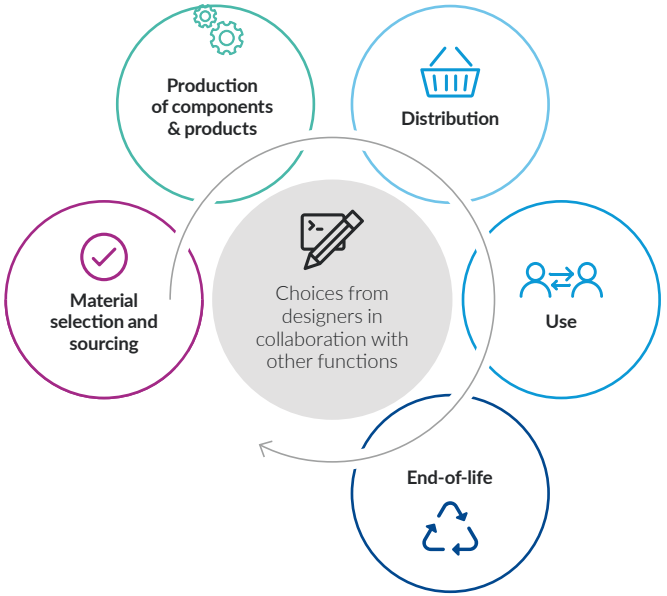
> Our journey to meet these goals relies on a systematic management approach in which sustainability is considered from the start of the product development process.

- providing collection and recovery access for the device and its consumables to all *IQOS* users;
- reducing the carbon footprint of smoke-free products to below that of combustible cigarettes per user;
- ensuring 100 percent of packaging materials are recyclable and 95 percent are from renewable sources; and
- achieving eco-certification for all our electronic devices.

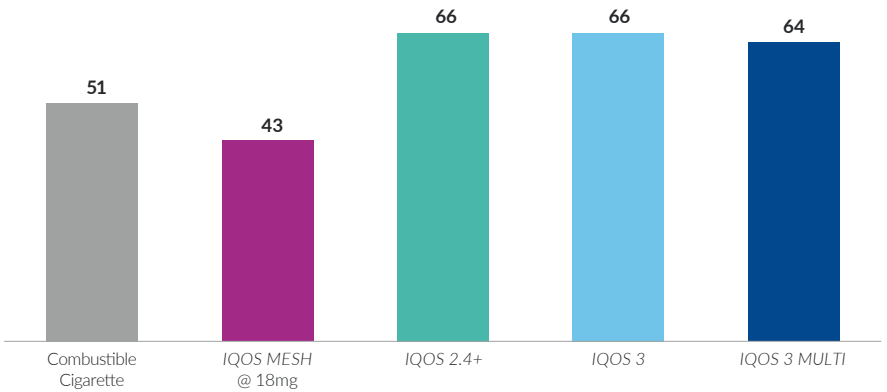
Our journey to meet these goals relies on a systematic management approach in which sustainability is considered from the start of the product development process. The way we work is guided by the foundation principles of eco-design and circularity, which account for impacts relating to materials sourcing, product function and design, manufacturing, use, and end-of-life.

These general principles informed our decision to integrate sustainable design into our corporate ambitions and ensure alignment with our R&D processes. Our designers and engineers increasingly are trained in eco-design by internal and third-party experts. Focusing on the major sustainability impacts of our products is particularly important as we deliver the technologically advanced products that are at the heart of our transition to a smoke-free future. In our operations, eco-design principles inform how we use life-cycle analysis (LCA) to assess the comparative carbon footprint of our products, from tobacco sourcing to end-of-life impacts. So far, we have analyzed *IQOS*, *IQOS MESH*, consumables (heated tobacco units), and packaging. Additionally, we are finalizing the results for the new generation of our Platform 4 product, the *IQOS VEEV*. This new version shows a continued improvement in CO_2 footprint driven by efforts to reduce the overall product size, decreasing material usage. We will benchmark ourselves against peer companies that are also operationalizing eco-design.

Foundation principles of eco-design and circularity guiding our work



Life-cycle assessment – comparison of some PMI products ($kgCO_2e$/2 years)



Note: This graphic is an internal assessment based on data compiled from three different LCAs, and assumes 20 heated tobacco units or combustible cigarettes per day. Scope includes materials, manufacturing, use, and end-of-life, but excludes logistics.

IQOS currently has a higher carbon footprint compared to combustible cigarettes due to several factors. Primarily, there is the addition of an electronic device, which involves new components and requires electricity to charge. This element accounts for 18 percent of the total carbon footprint of the *IQOS 3* system. Additionally, the process to manufacture heated tobacco units is more energy intensive than cigarettes, due to the production of the cast leaf tobacco.

We are working to close the gap between combustible and smoke-free products through improved manufacturing processes, extending the usable life of our electronic devices, and working to decrease the total CO_2 footprint through smart material selection and sustainable design practices.

Over the past two years, we have reduced the overall CO_2 impact of our smoke-free products through improvements in manufacturing processes and in our tobacco supply chain.

Focusing on the end-of-life of our devices, we adopted a centralized approach with the establishment of two recycling hubs in 2018 – one in Europe and the other in Asia. The benefits associated with such an approach include economies of scale, regional investment, illicit trade prevention, and quality enhancement (by identifying potential manufacturing and design improvements). In certain instances, owing to regulatory restrictions governing cross-border e-waste transportation, we may complement our centralized approach with more local solutions.

With regard to our consumables, for both our smoke-free and combustible products, we center our research efforts on testing biodegradable materials. We focus on materials that have the potential to perform similarly to or better than what we use currently and that may also reduce life-cycle CO_2 emissions and have scientifically verified enhanced biodegradation properties in aquatic, soil, and marine conditions.

In packaging, more than 90 percent of our materials were paper and cardboard in 2019. The primary function of packaging is to contain and protect products from the point of manufacture to the retail store or end user, as well as to provide product information. Some of our smoke-free product consumables, such as *MESH* cartridges, require additional protection, which makes it challenging to ensure that packaging is made from fully recyclable materials. To address this challenge, we are committed to developing, by 2025, packaging solutions that minimize the use of plastics and aluminum and are fully recyclable.

Governance of eco-design and circularity is guided by our design and development teams and is fully embedded within our innovation process, including regular checkpoints with senior leadership. We are committed to evaluating sustainability characteristics and making design choices that will continually enhance the performance of all our products and packaging. Life-cycle analysis (LCA) and/or other relevant environmental assessments are performed prior to the launch of any new products, and results are presented in internal decision-making forums, in accordance with our sustainable design governance programs.

IQOS device recycling hub in Japan

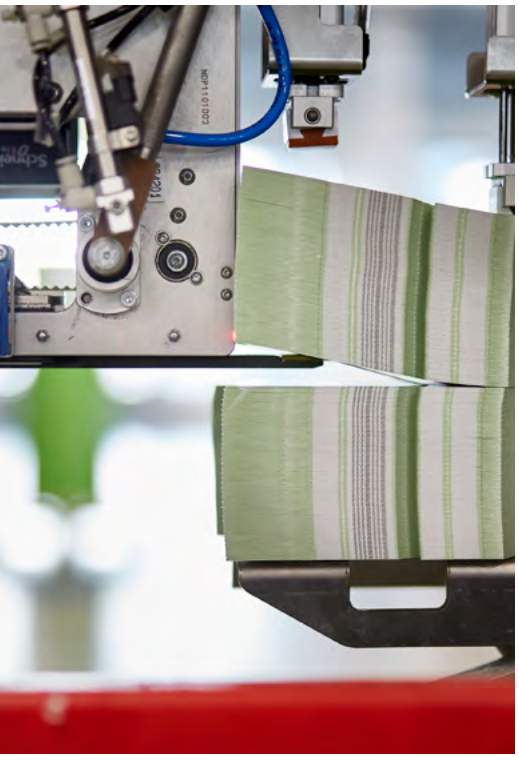
We are committed to evaluating sustainability characteristics and making design choices that will continually enhance the performance of all our products and packaging

Progress in 2019

Eco-design of smoke-free products

In 2019, we strengthened our efforts to integrate sustainability enhancements into product design.

We have formalized our operational guidance on product design to incorporate eco-design principles. Prior to each launch, we compare product versions to ensure our newest iterations reflect these principles. This guidance supports decision-making and helps to integrate sustainability into our innovation process. We will continue to monitor the process using targets and performance indicators.



Packaging of heated tobacco units in PMI's manufacturing facility in Crespellano, Italy

We promote five eco-design practices at PMI

1	**Sustainable materials**	Products should contain the correct quantities of materials, which are sustainably produced, and which have the lowest carbon footprint possible. This will deliver less waste during use and at the end-of-life. For instance, it means using recycled and sustainably sourced materials, produced in energy- and water-efficient processes.
2	**Minimize carbon footprint from energy and transport**	Energy efficiency is a priority in PMI manufacturing operations (see page 142). We are also already considering in the design process the energy consumption of the electronic devices that we sell to consumers. Furthermore, we aim to minimize the carbon footprint from transportation of raw materials and product distribution and reduce the weight of packaged products being transported.
3	**Lifetime optimization**	PMI electronic devices and accessories should be designed to have an optimal lifetime with due regard for materials, electronics, and mechanical components available. Product design should include lasting aesthetics, products should be repairable, and packaging should be reusable or recyclable.
4	**Reuse, recycling, and recovery**	We are increasingly adapting our design to use recycled materials and materials that are recyclable or biodegradable. Design should enable reuse and recycling by avoiding gluing or laminating, and new ways of doing business should embrace product take-back into a disassembly, separation, and recycling system.
5	**Social responsibility in production, use, and end-of-life**	PMI devices and accessories should have no negative social impacts. PMI strives for positive social and ethical impacts upstream in the supply chain; for instance, by avoiding selecting and sourcing conflict minerals (see page 86). Downstream, anti-littering behavior should be encouraged, and packaging should be informative about standards in production and how to recycle the device.

The five eco-design practices shown in the table are currently applied to various degrees in PMI's product innovation. Each generation of product we launch incorporates improvements in, for example, quality, functionality, ease of use, or robustness. A core group of employees – including our design and engineering teams – has been trained to our new standards, and we have set expectations and requirements for each new product iteration. These requirements are monitored throughout the design and production process, and performance is shared regularly with senior management in our Product and Consumer teams through the established development governance framework. Continued training and monitoring will occur in 2020 and beyond.

> “A core group of employees – including our design and engineering teams – has been trained to our new standards, and we have set expectations and requirements for each new product iteration.

Electronic devices and accessories

Regarding product innovation, we are pursuing improvements in areas such as durability, design for repair and/or disassembly, energy efficiency, and battery life. These characteristics will support our ambition to have all electronic devices certified to validated standards for eco-design by 2025. We will also be working toward the meaningful inclusion of recycled content in all devices by 2025.

As our business model is adjusting, circularity is steadily being applied. The user of a PMI device now has more opportunity to be part of the circular economy and to return a device that is broken or at the end of its life through a PMI take-back service.

We reported on our state-of-the-art reverse logistics hubs in our 2018 report. CIRCLE (Central Inspection and Recycling for a Closed Loop Economy) is a PMI service that provides centralized hubs that inspect, process, and separate materials from our electronic devices for recycling. In 2019, a third-party audit of our facility in Europe showed that we recycled at rates between 70 and 79 percent by weight based on device version; the remainder of materials went to energy recovery. Materials sent for energy recovery include some elements of the batteries and printed circuit board assemblies, which pose unique challenges.

In 2019, 39 percent of our *IQOS* market volume was covered by the CIRCLE take-back service, via retail stores or mail. *IQOS* users are always able to return an old device to specified locations; interested users should contact their local customer service channels for details. CIRCLE is a centralized service that ensures recycling is completed to the highest standards. To the extent possible, we are rolling out CIRCLE globally; however, it currently is not possible to implement the service in all markets due to legislative restrictions related to waste transport. In some markets where CIRCLE has not yet been implemented, *IQOS* users nonetheless can return their devices to specified locations. We aim to recycle these devices via local partners with similarly high standards of electronics recycling. We also participate in schemes that ensure a consumer can return devices to local e-waste collection centers in countries with such programs in place. In 2019, our CIRCLE hubs processed over 150 tons of end-of-life devices and materials destined for recycling or energy recovery.

The CIRCLE recycling hubs offer several benefits. The inspection of returned products allows us to improve quality by feeding back into our development process information related to possible manufacturing improvements or diagnosed defects. The recycling itself provides data that inform better design. The hubs contribute to our fight against illicit trade and counterfeiting (fewer product diversion opportunities) and bring benefits to the regional economies in which they are located. Through our CIRCLE hubs, we recover and recycle significantly more materials than if the devices were to follow traditional electronic waste streams in most markets. We continue to pursue reuse opportunities for these materials in both open- and closed-loop recycling systems.

150t

In 2019, our CIRCLE hubs processed over 150 tons of end-of-life devices and materials destined for recycling or energy recovery

IQOS device recycling hub in Japan

Consumables

As the design development process for electronic devices and accessories evolves, PMI is exploring how to minimize the environmental and social impacts of heated tobacco units – the sticks of tobacco that are inserted into an *IQOS* device.

We are clear that there is a risk that heated tobacco units (HTUs) could be littered, but we have good indications, as mentioned below, that the littering rate for HTUs is lower than for cigarette butts.

In Italy, 80 percent of respondents to our survey claimed that they "never" or "rarely" dispose of the used HTUs on the ground when using *IQOS* outdoors. The corresponding proportion for our HTUs in Japan was 90 percent. In Italy, the data suggests that respondents dispose of used HTUs more properly compared to the claimed behaviors for cigarette butts at the time when the participants were not using *IQOS* (44 percent of participants claimed that they "never" or "rarely" dispose of cigarette butts on the ground, when they were smoking cigarettes outdoors). In Japan, the behavior of disposing cigarette butts on the ground was already infrequent (85 percent of the participants claimed that they "never" or "rarely" dispose of cigarette butts on the ground).[1] These data points indicate that the new rituals introduced to legal-age smokers following their conversion to smoke-free products presents us with an opportunity to help consumers change former habits of cigarette butt littering.

We will continue in 2020 to work with partners to evaluate innovative solutions that may enable us to bring our long-term vision of full circularity of our consumables to life

In addition to these surveys, we have conducted actual counting surveys of littered HTUs as well as cigarette butts on the ground in Athens (see PMI's Sustainability Report 2018). In this instance, the share of littered HTUs in proportion to cigarette butts came out at about half of the HTUs' market share – indicating a significant lower littering propensity of HTUs compared to cigarettes.

In 2019, through extensive market research projects in some of our key markets, we continued to build our understanding of consumer behavior related to the disposal of used HTUs and consumers' potential motivations and requirements for participating in a PMI-driven collection scheme. Collectively, these insights are shaping our understanding of how we can successfully deploy an effective and economically viable end-of-life collection service for our *IQOS* users in order to further reduce littering through our products.

Our long-term vision remains to recycle any waste that we collect while minimizing our CO_2 footprint. In 2019, we continued to discuss with several waste management and recycling partners the potential second life that we could give to our recycled HTUs. Our exploration is primarily focused on the recycling of the cellulose acetate, the material our filters are made from. Our investigations to date show that the chemical properties of cellulose acetate enable the material to be upcycled into a variety of applications such as spinning of the fibers into fabrics or creation of pellets that can then be pressed/injection molded into a variety of hard goods. Though these results are promising, the recycling of cellulose acetate – unlike recycling for many metals or plastics – is not a widely available and developed waste stream across the globe that we can leverage.

We will continue in 2020 to work with partners to evaluate innovative solutions that may enable us to bring our long-term vision of full circularity of our consumables to life.

In addition to developing services to reduce the end-of-life impact of our products, our innovation and design teams are also exploring low carbon, recyclable, and biodegradable options for filters and cartridges. We are committed to significant investment into continued research on the biodegradability of filters, and we are working toward a viable solution that meets strict international standards[2], satisfies market requirements, and works with high volume manufacturing.

U.S. Food and Drug Administration

The U.S. Food and Drug Administration published its programmatic environmental assessment of *IQOS* and *HeatSticks* in March 2019 (https://www.fda.gov/media/134458/download). The assessment covered potential impacts on, among other things, air quality, biological resources, solid waste, and water, and found that no significant environmental impacts would be caused from the take-up of *IQOS* in the U.S. The report compared *IQOS* use with continued cigarette smoking and concluded that either negligible or no significant new environmental impacts were expected from a move to *IQOS* use. Of particular note is that, while the FDA considered smoking cigarettes to be associated with 14 percent of fatal residential building fires and 11 percent of brush, grass, and forest fires, the risk of fires due to discarded heated tobacco units was assessed to be negligible.

Packaging

PMI has a history of successful packaging innovation, and packaging is an important aspect of sustainable design. Our packaging is made primarily from paper and board, renewable materials that can be recycled and that biodegrade in the environment. Sometimes these sorts of materials may come from supply chains exposed to significant risks of deforestation and biodiversity loss. We are committed to sourcing board and paper from traceable, sustainable, and legal sources, and we work with our suppliers to achieve full traceability through our Zero Deforestation program (read more on PMI.com).

Plastic packaging poses a risk to the environment if it is discarded improperly, and we still have less than 10 percent of plastics-containing materials used in our portfolio, e.g. for wrapping films and pouches. To address this risk, we are testing potential alternatives to plastic packaging. The development process involves the use of recyclable cellulose materials meeting product protection requirements.

Besides plastics, one of our goals as we work toward fully recyclable packaging is to replace the non-recyclable aluminum liners used in some cigarette and HTU packets with recyclable alternatives by the end of 2022.

In addition, for our combustible products packaging, we have established a program to reduce the weight of packaging by 15 percent over five years by optimizing material specifications and avoiding over-packaging where possible without impacting product protection and package quality.

1 In a sample of 350 adult *IQOS* purchasers randomly selected from the existing consumer panel in Italy, and in a sample of 450 adult *IQOS* purchasers randomly selected from an existing online panel in Japan (see third attachment of report submitted to FDA).

2 For example, good filtration efficiency and consistency to ensure that consumers are not exposed to increased levels of HPHCs versus products made with cellulose acetate filters.

Next steps

We will continue the systematic implementation of our sustainable design principles throughout our development process. This will include a continuation of the internal training undertaken in 2019 to increase awareness and ensure uptake of our programs across PMI. This new design program will be benchmarked against leading companies to determine whether any modifications are needed to ensure the highest standards.

We will also launch a program to identify the relevant certification schemes for our smoke-free product devices as part of our efforts to reach our 2025 target for all electronic devices. We developed our eco-design principles with an eye to existing certification schemes and so anticipate that our devices will achieve these standards.

Regarding take-back for devices and consumables, such as HTUs and e-vapor cartridges, we will continue to evaluate and expand our offerings, with additional pilot programs for consumables planned in 2020. Our objective is to establish best-in-class recycling process for *VEEV* cartridges. We are working with an external partner on the collection and disintegration of the cartridges, and are entering explorations with the main polymer manufacturer of *VEEV* cartridges on how to recycle the plastic parts into new cartridges, as the polymer itself is proprietary and no independent recycling options exist.

We will also implement additional initiatives to encourage end-of-life returns of our devices to ensure our consumers have full access to our high recycling standards for electronics.

Research will continue on device, accessory, consumable, and packaging design to identify new technologies and materials that could enhance the overall sustainability of our smoke-free product portfolio. Internal cross-functional teams are already hard at work establishing these innovation pipelines.

Performance

Product eco-design and circularity	2017	2018	2019	Goal
Recycling rate of *IQOS* devices at the CIRCLE hubs (weighted average)[1]	n/a	45%	**74%**	80% by 2025
Proportion of *IQOS* device sales volume covered by the CIRCLE program[2]	n/a	66%	**39%**	100% by 2025
Carbon footprint of PMI smoke-free products per user ($kgCO_2e$/year)[3]	n/a	n/a	*IQOS 3:* **33** *IQOS 3 MULTI:* **32** *IQOS MESH:* **21.5**	
Proportion of packaging material that is recyclable[4]	94.4%	93.6%	**93.5%**	100% by 2025
Proportion of packaging material that is renewable[4]	88.9%	88.3%	**87.7%**	95% by 2025
Reduction of packaging materials used versus 2018 baseline	n/a	n/a	**3%**	15% by 2025

1 We established our two recycling CIRCLE hubs in 2018. Recycling rate: Depending on device type and processing facility (figures provided for product processed through CIRCLE hubs, varied by device type, zero landfill, remainder to energy recovery or material loss).

2 We established our two recycling CIRCLE hubs in 2018. While we expanded the number of markets covered by CIRCLE in 2019, the decrease in coverage of sales volume is explained by *IQOS* growth in markets not yet covered by the program.

3 Depends on device and assumes 20 heated tobacco units/day. Scope includes materials, manufacturing, use, and end-of-life, but excludes logistics.

4 While we continued our efforts to substitute or reduce the use of materials from non-renewable sources and non-recyclable materials in our packaging, the slightly decreasing trend in the past years is driven by the volume mix evolution over this period of time.

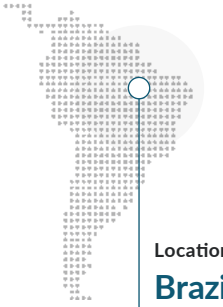
LINKS

Environmental Commitment ▸

Device research and development in PMI's R&D center in Neuchâtel, Switzerland

CASE STUDY: BRAZIL

Building on sustainable foundations



Location
Brazil

Employees
~2,300

Factory
1

Philip Morris Brazil (PMB), founded in 1973, is one of the leading tobacco companies in the Brazilian market. It employs around 2,300 people across its various locations, with over 800 employees in its factory in Santa Cruz do Sul (Rio Grande do Sul state).

The factory produces cigarettes, cut filler, and expanded tobacco for domestic consumption and export. In 2018, it became the first of PMI's factories to be certified for meeting the Alliance for Water Stewardship (AWS) standard.

Brazil is a key tobacco leaf sourcing country for PMI, and PMB is one of the largest tobacco leaf buyers locally.

Eliminating child labor in our tobacco supply chain

PMB is working with approximately 47,500 contracted farmers in Brazil. In the past few years, the approximately 330 field technicians who monitor the implementation of PMI's Agricultural Labor Practices (ALP) program in the country recorded a decrease in the number of prompt actions relating to child labor incidences. In 2019, less than 1 percent of farms had child labor incidences, and all 39 cases were resolved during the crop season. While encouraged by the progress to date, PMB remains diligent and is committed to do the utmost to address and ultimately prevent such incidences.

Ongoing farm-by-farm monitoring is used to identify the main causes that can lead to child labor incidences:

- parents wanting to teach their children farming skills to learn how to manage a farm and contribute to the household; and
- limited opportunities for professional development outside of school hours.

PMI employees in Bahia, Brazil

As part of its efforts to tackle those root causes, our Brazilian affiliate has engaged with local partners on different community projects, with the aim of providing a structured prevention and remediation system.

For instance, PMB supports the Growing Up Right Institute, which runs a rural professional learning program. Through this program, youth from underprivileged families aged 15 to 17 years are enrolled in one-year vocational training. It comprises both practical and theoretical courses centered on management and entrepreneurship skills. In the form of an apprenticeship, the project provides additional income to the students' households while offering participants a safe setting to learn the required skills to manage a farm. In 2019, around 130 students graduated and received a professional degree.

In Santa Cruz do Sul and Vale do Sol, PMB supports scholarships for youths at two schools with agricultural learning centers. Both schools offer three-year programs that consist of 5,500 hours of high school level classes focused on agriculture training. The course is based on the alternance pedagogy methodology, whereby students spend one week at the school, and one week at their farms, applying what they have learned from the previous week. In 2019, 35 students aged 15 to 19 years graduated with agriculture technician qualifications from both schools.

> Our Brazilian affiliate has engaged with local partners on different community projects.

Tobacco farmers in Santa Cruz do Sul, Brazil

Another example is PMB's support of the Digital Inclusion project, run by the local NGO Center for Digital Inclusion, which provides schools located in rural tobacco-growing areas with high-quality computer classes and access to technology. Aimed at complementing the standard public education curriculum with quality IT training, this program helps to empower both students and teachers while preventing school dropouts. In 2019, close to 500 students aged nine to 18 benefited from this digital training and graduated across the seven schools supported by the program. A total of 2,000 students have participated since PMB began supporting it in 2016.

Ensuring safe working conditions on contracted farms

PMI is committed to achieving safe and fair working conditions on all farms from which it sources tobacco. This has been a key priority since the establishment of PMI's ALP code in 2011. In Brazil, PMB has been running an itinerant farming community training program called +Campo since 2015, to increase the awareness of this topic among farmers. The courses are run by specialized PMB trainers, who visit farms with specially equipped vehicles and deliver the training directly in the fields. Up to 20 farmers and family members are trained per session.

The training content is defined year-by-year, in response to the most significant issues identified by field technicians through farm-by-farm monitoring. In 2019, two modules were developed to address the main type of incidence recorded on farms in the country: issues related to safe working environments, and in particular the availability and use of personal protective equipment (PPE). The first training module focused on the use of PPE to prevent green tobacco sickness and when applying crop protection agents (CPA), the appropriate storage of CPAs, and new technologies for their safe application. The second module reiterated the proper use of PPE, while also covering basic sanitation, electrical safety, solar exposure, and caution when handling sharp tools.

> Over 2,900 contracted farmers participated in the training sessions in 2019.

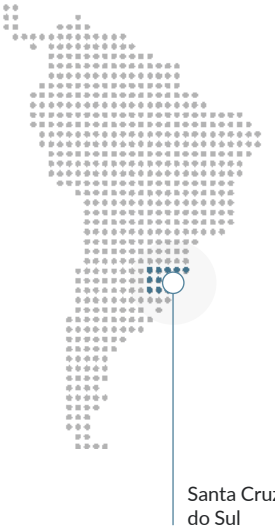
While it's a requirement to use PPE – it is included as a contractual provision in accordance with PMI's ALP code and in Brazilian law – violations remained the main issue recorded in relation to our code in the past few years in the country, even though this requirement is clearly communicated to contracted farmers and their workers, and the availability and use of PPE is monitored throughout the growing season by field technicians. To increase PPE usage for farmers and workers, PMB is not only providing training and raising awareness, but also provides the equipment needed. During the crop season 2019, over 9,000 PPE items were delivered.

Over 2,900 contracted farmers participated in the training sessions in 2019. Their level of knowledge was evaluated before and after the training sessions, and their feedback will help improve future sessions planned in 2020. The farm-by-farm monitoring should further help evaluate the effectiveness of the program, as it's expected that the prompt actions related to safe working environment raised in the upcoming growing season among participating farmers are decreasing thanks to the training.

Since women play an important role in tobacco farming in Brazil, PMB also developed +Campo Rosa, a program tailored to female farmers and farmers' wives. It was first introduced in Parana in 2017. +Campo Rosa training sessions are attended exclusively by women, with the objective of providing them with knowledge about safety on farms as well as improving their awareness of breast cancer. Overall, more than 300 women have attended the different training modules, and due to its success, the program will be expanded in 2020.

A tobacco farm worker with a PMI production technician in Bahia, Brazil

Tobacco farming in Brazil Southern Region



Tobacco growing

Tobacco
Virginia, Burley and Dark cured

Crop season
July to January

Irrigation type
Rain-fed

Curing method
Virginia: flue-cured, with leaves hung in curing barns where heated air is generated, mainly using firewood

Burley and Dark cured: air-cured, by hanging the leaves in well-ventilated barns

Average farm size
10.8 hectares, out of which 2.5 hectares used for tobacco cultivation

People

~47,500 — Contracted farmers who supply tobacco to PMI (directly or via third-party suppliers)

~35,600 — Workers hired by farmers

~94,900 — People living on the farms (farmers' families), out of which around 30,900 children

~330 — Field technicians, visiting the farms on average five times during the crop season to monitor GAP and ALP implementation

Employees in PMI's manufacturing facility in Santa Cruz do Sul, Brazil

Building an inclusive workplace

Establishing an inclusive culture that promotes equal opportunities and respect for all is a priority for PMB. Following an organic movement led by its employees to raise the importance of inclusion and diversity (I&D) within the organization, our affiliate identified three areas to focus its efforts on: LGBTQ awareness, empowering women in the business, and equal opportunities for people with disabilities.

PMB organized workshops to raise awareness around LGBTQ and gender equality issues within the company, with around 650 employees from all seniority levels participating. The workshops focused on unconscious bias, identifying what it meant by using practical examples, and how to tackle this issue in the workplace. It also included a seminar organized by the Grupo Dignidade – one of Brazil's first LGBTQ organizations – that focused on understanding common elements in LGBTQ culture, understanding terminology and its use, and creating a safe space for conversation.

In addition, more than 300 employees across PMB's operations and sales teams participated in disability awareness workshops. These helped to build knowledge and understanding of the issues faced by people with disabilities in employment. An internal analysis of three PMB sites, run in parallel to the workshops, identified issues that needed to be addressed. In the factory, the parking slots dedicated to people with disabilities were altered, guaranteeing sufficient space to move between slots. The company also adapted ramps used to access the facility and across the unit in order to make it possible for a person in a wheelchair to move around.

Performance metrics

In this section

A tractor from one of the mechanization hubs that provides preparation services used by Malawian entrepreneurs, next to alternative crops on the left, and a tobacco curing barn on the right

Closing remarks from our Chief Sustainability Officer

To our stakeholders,

The 2030 Agenda for Sustainable Development has become the North Star for stakeholders from all sectors of society and all over the world, providing an action plan for people, planet, and prosperity. Four years into the 2030 Agenda, it is clear that the actions society is collectively taking are neither sufficient nor transformational enough to achieve the 17 Sustainable Development Goals (SDGs). Our planet is deteriorating at an alarming rate, and rising inequality now affects more than two-thirds of the global population.

We are all asking ourselves how we can contribute and make a difference beyond just voting our preferred candidate into office. All individuals who hold a stake can play a role in driving change. In our case, internal and external stakeholders help shape the future of PMI and its role in society.

Together with my team, we are trying to help all of our around 73,500 employees discover their role in making PMI a more sustainable company. Until five years ago, our company was running strong sustainability programs in very specific areas, notably related to agriculture and manufacturing, yet we were reluctant to give this work much visibility, knowing that our most material issue – the product health impacts – remained unaddressed.

That changed dramatically when our company embraced the vision of a world without cigarettes. We felt the time had come to develop a more strategic, cohesive, and forward-looking corporate sustainability strategy situating product transformation at its core, while integrating other material social and environmental topics. From then on, sustainability has become a cross-functional theme affecting the work of many PMI employees – encompassing the way we source tobacco and other materials, our manufacturing operations, the circularity and eco-design of our products, and the way we commercialize our products and reduce post-consumer waste and litter.

Although at its beginning, we are working hard to make sure that PMI has the best sustainability strategy and programs in place. We are now able to leverage the motivation and energy of our company's bold purpose and empower our employees to integrate sustainability into their jobs.

My colleagues and I dedicate substantial time to engage with external stakeholders, and listen to their concerns and feedback. Our sustainability materiality assessment is an important part of this process and the backbone for our strategy development and reporting. Last year, we received input from over 800 internal and external stakeholders; although time-consuming, it has been a huge opportunity to solicit views on what PMI should be focused on. Not surprisingly, product health impacts continue to be identified as the most material issue, thus reinforcing that for our company in particular, and for the industry in general, sustainability cannot exist without transformation.

But what does transformation mean? It has become a buzzword many refer to lightly. Some companies are "transforming" by selling off the "bad" part of their business, often to private investors not subject to the level of scrutiny applied to publicly listed companies. Our stakeholders sometimes ask us why we haven't sold our cigarette business to speed up our transformation. Even though selling off our cigarette business would (indeed) make our company smoke-free faster, it would not resolve the cigarette problem – it would just become somebody else's problem to solve. Our purpose is not (only) to make our company smoke-free, but to make cigarettes obsolete. This, we are convinced, can best be achieved by transforming from the inside out, replacing cigarettes with smoke-free products, market-by-market, and as soon as possible.

How can stakeholders know if our transformation is real? Are we really doing everything we can to achieve a world without cigarettes? To allow anyone to scrutinize the pace and scale of our transformation, we introduced a set of Business Transformation Metrics in 2016 (see pages 173–174). These metrics can help our stakeholders assess our purpose, actions, resource allocation, and outcomes achieved; and we constantly review and expand the list of metrics based on stakeholder feedback.

"Even though selling off our cigarette business would (indeed) make our company smoke-free faster, it would not resolve the cigarette problem – it would just become somebody else's problem to solve.

Critics will always emerge, but data can help dispel misperceptions. This report aims to provide a comprehensive overview of what PMI is about, combined with a holistic set of metrics that go beyond our financial disclosures, covering our business transformation, as well as environmental, social, and governance topics. We support and seek to align with GRI, SASB, and TCFD disclosure standards, enabling all stakeholders to benchmark our strategy and performance.

I thank you for your time reading our first integrated report, which aims to enable all stakeholders to assess progress in fulfilling our Statement of Purpose. We appreciate your views and opinions and need your feedback to continuously improve. With your feedback you help shape PMI's future and make this world a better place.

Huub Savelkouls
Chief Sustainability Officer

ESG ratings performance

At PMI, we understand the value of participating in ESG ratings; it helps us to assess our sustainability performance, benchmark ourselves against our peers, and, most important, identify improvement areas. We prioritize our participation in ratings that are most useful to us and our stakeholders, based on:

- credibility of the methodology and our ability to interpret and use the results;
- recognition of the rating among our stakeholders and the investor community, as well as participation by our competitors and peers so we can benchmark our performance;
- value as a learning opportunity, with sufficient feedback to allow us to improve over time;
- resources required, which should not undermine our company's focus on performance improvement; and
- openness to dialogue; we want to be able to understand expectations and results, share knowledge, and provide input on ratings enhancements.

Rating agencies	PMI's performance in 2019	Score
CDP Climate	Recognized as a Climate A List company for sixth year in a row	A
CDP Forest	Achieved A- ranking for Forest Disclosure	A-
CDP Supplier Engagement	Placed on Supplier Engagement Leaderboard for third year in a row	Leader
CDP Water Security	Achieved Water Security A List	A
ISS-oekom	Earned a "C" score, achieving industry leadership	C
MSCI	Improved performance versus previous year	BBB
SAM Corporate Sustainability Assessment	Earned third place among our industry in second year of active participation	3rd rank
Sustainalytics	Ranked 34th out of 180 companies; awarded "Leader" status for environmental performance	34th rank
State Street R-factor Score	Outperformer within the tobacco industry; industry average score 44	52

Our performance

Pillar 1

Innovating for better products

Business transformation metrics: Product health impacts	**2016**	**2017**	**2018**	**2019**
R&D expenditure (smoke-free/total)[1]	72%	74%	92%	**98%**
Total R&D expenditure (in millions USD)	429	453	383	**465**
Number of R&D positions (FTEs)[2]	n/a	n/a	764	**942**
Patents granted relating to smoke-free products (cumulative)	1,800	2,900	4,600	**5,800**
Patents granted in IP5 jurisdictions relating to smoke-free products (cumulative)[3]	170	300	480	**740**
Number of studies completed by PMI on smoke-free products (cumulative, since 2015)				
• Toxicological assessment	36	57	82	**109**
• Clinical assessment (short-term, focused on biomarkers)	11	12	19	**19**
• Perception and behavior	7	7	9	**9**

1 Smoke-free products include heated tobacco units, devices, and e-cigarettes. Total products include smoke-free products, cigarettes, and other combustible products.

2 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.

3 Includes published international (PCT) patent applications. IP5 jurisdictions include Europe (patent applications published and patents granted by the European Patent Office), China, South Korea, Japan, and the U.S.

Pillar 1

Innovating for better products

Business transformation metrics: Access to smoke-free products[1]	**2016**	**2017**	**2018**	**2019**	**2025 aspirations[2]**
Number of factories producing smoke-free products out of total number of factories[3]	3 out of 48	4 out of 46	8 out of 44	**8 out of 38**	
Total SKU[4] count – cigarettes	4,421	4,201	3,968	**3,799**	
Total SKU count – heated tobacco units	62	145	253	**414**	
Number of markets where PMI smoke-free products are available for purchase	20	38	44	**52**	
Proportion of markets where PMI smoke-free products are available, which are outside the OECD[5]	32%	43%	47%	**47%**	
Number of *IQOS* stores	26	63	81	**199**	
Number of retailers that sell PMI smoke-free product consumables (in thousands)	90	292	488	**679**	
Commercial expenditure (smoke-free/total)	15%	39%	60%	**71%**	
Net revenues (smoke-free/total)[6]	2.7%	12.7%	13.8%	**18.7%**	38–42%
Number of markets where net revenues from smoke-free products exceed 10% of total net revenues	1	5	19	**31**	
Number of markets where net revenues from smoke-free products exceed 50% of total net revenues	0	1	3	**4**	
Smoke-free product shipment volume (billion units)	7.7	36	42	**60**	>250
Combustible product shipment volume (billion units)	845	791	767	**732**	<550
Smoke-free product shipment ratio (smoke-free/total)[7]	0.9%	4.4%	5.1%	**7.6%**	>30%
Total users of PMI smoke-free products (in millions)[8]	2.1	6.9	9.6	**13.6**	
Estimated users who have stopped smoking and switched to PMI smoke-free products – non-OECD (in millions)[8]	0.0	0.2	1.1	**3.0**	>20
Estimated users who have stopped smoking and switched to PMI smoke-free products – worldwide (in millions)[8]	1.5	4.7	6.6	**9.7**	>40

1 Smoke-free products: include heated tobacco units and e-cigarettes. Total products: include smoke-free products, cigarettes, and other combustible products.

2 Aspirations: assuming constant PMI market share. We do not set aspirational targets for commercial expenditure, but expect ratio to continue increasing to enable the stated outcome in terms of shipment volume. Note: Aspirational targets and goals do not constitute financial projections.

3 Previous years' data were restated to account for our second manufacturing facility in Italy, Bologna, that started producing heated tobacco units in 2016.

4 "SKU" stands for stock keeping unit.

5 Excluding PMI Duty Free.

6 Excluding excise taxes. For future periods, at today's pricing and excise tax assumptions.

7 The smoke-free product shipment ratio is compiled based on millions of units.

8 See glossary on page 188.

Pillar 2

Operating with excellence

Responsible marketing and sales practices	2017	2018	2019
Total number of compliance training sessions conducted on PMI's Marketing Code (employees/third parties)	37,903	23,438	**14,500 (49%/51%)**
Number of violations of the Marketing Code or Good Conversion Practices (GCP) resulting in substantiated cases of misconduct	2	8	**42**

Sustainable supply chain management	2017	2018	2019	Goal
Total number of suppliers[1]	50,000	>36,000	**>33,200**	
Total procurement spend (in billion USD)[2]	n/a	10	**9.9**	
Number of critical suppliers[3]	n/a	n/a	**95**	
Critical suppliers, as a proportion of total procurement spend	n/a	n/a	**35%**	
Critical suppliers' procurement spend assessed in PMI's supplier due diligence platform (STEP)[4]	n/a	n/a	**84%**	90% by 2020
Critical suppliers of direct materials assessed in STEP, expressed as a proportion of procurement spend on critical suppliers of direct materials	n/a	n/a	**73%**	
Critical suppliers of electronics assessed in STEP, expressed as a proportion of procurement spend on critical suppliers of electronics	n/a	n/a	**100%**	
Number of tobacco farmers contracted by PMI and PMI tobacco suppliers	>350,000	>350,000	**335,000**	
Number of third-party tobacco suppliers with whom PMI has a direct contractual relationship[5]	15	15	**13**	
Number of PMI leaf operations that contract tobacco farmers directly	9	8	**8**	
Number of field technicians providing support to contracted farmers and monitoring the implementation of PMI's Good Agricultural Practices (GAP) and Agricultural Labor Practices (ALP)	2,790	2,610	**2,875**	
Proportion of tobacco purchased through direct contracts by PMI and PMI tobacco suppliers	90%	93%	**96%**	>90% (ongoing)
Proportion of tobacco purchased for which labor practices have been systematically monitored	77%	88%	**92%**	
Proportion of tobacco purchased assessed by AB Sustain (cumulative, since 2016)[6]	55%	100%	**n/a**	
Number of tobacco supplier locations (countries) assessed by Control Union on ALP topics	6	3	**3**	
Cumulative number of tobacco supplier locations (countries) assessed by Control Union since 2013 on ALP topics[7]	19	21	**22**	24 by 2020

1 Suppliers refers to tier 1 suppliers, parent companies.

2 Procurement spend excludes tobacco leaf sourcing.

3 Suppliers' criticality is evaluated taking into account spend segmentation and nature of component, as well as supply flexibility (single source/not easily substitutable) as relevant. 2019 figure includes tier 1 suppliers of direct materials and electronics managed by PMI's central procurement team, and excludes tobacco leaf sourcing.

4 We started to formally onboard critical suppliers into our supplier due diligence platform (STEP) in July 2019.

5 Data refers to parent companies.

6 In 2019, the industry did not run collective assessments with AB Sustain as it focused on the development of a new Sustainable Tobacco Program (STP) 2.0 program, but PMI continued to assess conformity to the GAP standards through annual self-assessments completed by all our suppliers. Over the three-year cycle ending 2018, AB Sustain conducted formal assessments in 100% of our sourcing countries.

7 Cumulative number since 2013 excludes locations covered more than once by Control Union assessments over this period.

Pillar 2

Operating with excellence

Respect for human rights	2017	2018	2019	2025 goal
Cumulative number of human rights impact assessments conducted	0	1	**2**	10

Responsible and transparent R&D	2017	2018	2019
Cumulative number of scientific publications by PMI since 2008	<200	340	**365**
Cumulative number of institutions that have taken part in sbv IMPROVER since 2011	400	450	**500**
Cumulative number of countries where institutions that have taken part in sbv IMPROVER since 2011 are located	60	63	**65**
Cumulative number of peer-reviewed publications issued as a result of sbv IMPROVER challenges since 2011[1]	16	16	**16**
Cumulative number of studies published on INTERVALS platform since 2018	n/a	9	**40**
Cumulative number of protocols published on INTERVALS platform since 2018	n/a	57	**103**
Cumulative number of data sets published on INTERVALS platform since 2018	n/a	144	**354**

1 Peer-reviewed publications issued as a result of sbv IMPROVER challenges conducted in the past three years are currently under preparation or validation, and are expected to be published in 2020.

Business integrity	2017	2018	2019
Proportion of employees participating in training sessions pertaining to PMI's Guidebook for Success	93.5%	86.9%	**86.6%**
Total number of compliance training sessions on PMI's Guidebook for Success completed (employees/third parties)	189,696 (75%/25%)	193,063 (82%/18%)	**253,763 (88%/12%)**
Total number of reports received, involving compliance allegations and other concerns	714	872	**977**
Number of closed cases involving compliance allegations (number of unsubstantiated cases/number of substantiated cases)	505 (188/317)	582 (246/338)	**653 (284/369)**
Proportion of substantiated claims, out of all closed cases involving compliance allegations	62.8%	57.7%	**56.5%**

Illicit tobacco trade prevention[1]	2017	2018	2019	Goal
Coverage for tracking and tracing – master case level[2]	100%	100%	**100%**	100%
Tracking and tracing – proportion of packs sold with unique code applied[3]	75%	85%	**100%**	100%
Additional Framework Cooperation Agreements signed with law enforcement agencies/governments in a given year – number of countries	10	5	**2**	+5 by 2021 +12 by 2025
Regional studies and country analysis to improve awareness of illicit trade – proportion of global consumption covered[4]	25%	27%	**20%**	35% by 2020
Number of law enforcement officers trained on how to authenticate PMI products[5]	717	500	**6,617**	500 by 2021 + 2,500 by 2025
Number of countries with law enforcement agencies trained on how to authenticate PMI products	15	10	**23**	10 per year
Anti-Counterfeiting Cooperation Agreements signed with our suppliers				100% by 2025
Number of PMI IMPACT projects selected per funding round[6]	31	29	**0**	90 by 2021
Number of countries from which PMI IMPACT projects were selected per funding round[6]	16	22	**0**	60 by 2021
Number of applications (project proposals) received by PMI IMPACT per funding round[6]	157	0	**0**	540 by 2021
Number of countries from which applications were received by PMI IMPACT per funding round[6]	56	0	**0**	140 by 2021
PMI IMPACT grants allocated in USD million[7]	28	20	**0**	100

1 Data cover PMI combustible tobacco products and smoke-free product consumables and devices.

2 Full coverage equates to 95 percent tracking and tracing in our supply chain (excluding kretek business). Five percent of master cases are not covered; these are destined to countries that are not identified as a source of potential diversion or where PMI sells to a single customer in the country.

3 Excludes kretek business.

4 In 2019, we did not reach our target of 35 percent, as one study was not carried out.

5 The number of training sessions delivered each year depends on specific needs and requests raised locally by law enforcement agencies. The significant increase in 2019 was mainly driven by additional training sessions delivered in Latin America and Canada to better tackle the nature of illicit trade in the region, where smuggled "illicit white" cigarettes are predominant, whereas counterfeiting of PMI cigarettes remains low within the illicit trade of cigarettes.

6 There were no funding rounds of PMI IMPACT in 2018-2019. Data for 2017 and 2018 were restated: one project in 2017 was implemented without PMI IMPACT funding, and two projects in 2018 were not implemented. Other data related to PMI IMPACT were restated accordingly.

7 PMI pledged USD 100 million to PMI IMPACT. Goals related to PMI IMPACT are stated for the period 2016-2021.

Pillar 3

Caring for the people we work with

Socio-economic well-being of tobacco-farming communities[1]	2017	2018	2019	Goal
Number of tobacco farmers contracted by PMI and PMI tobacco suppliers	>350,000	>350,000	**335,000**	
Number of countries where farmers contracted by PMI and PMI tobacco suppliers are located	28	27	**24**	
Number of farmers with whom PMI has direct contracts	23,000	21,000	**16,500**	
Number of farmers who have direct contracts with PMI tobacco suppliers	332,000	>329,000	**318,500**	
Number of third-party tobacco suppliers with whom PMI has a direct contractual relationship[2]	15	15	**13**	
Number of PMI leaf operations that contract tobacco farmers directly	9	8	**8**	
Number of field technicians providing support to contracted farmers and monitoring the implementation of PMI's Good Agricultural Practices (GAP) and Agricultural Labor Practices (ALP)	2,790	2,610	**2,875**	
Proportion of tobacco purchased for which labor practices have been systematically monitored	77%	88%	**92%**	
Number of terminated contracts due to ALP violations (per crop season)	36	50	**641**	
Total number of ALP prompt actions recorded by field technicians	12,749	18,543	**14,440**	
Proportion of ALP prompt actions recorded by field technicians:				
• safe working environment	63%	74%	**73%**	
• hazardous work performed by children	35%	25%	**19%**	
• other	2%	1%	**8%**	
Total number of ALP prompt actions resolved	10,154	13,687	**8,137**	
Number of ALP prompt actions recorded by field technicians relating to safe working environment	8,087	13,780	**10,519**	
Number of ALP prompt actions recorded by field technicians relating to non-payment of minimum wage to farmworkers[3]	n/a	n/a	**1,158**	
Number of ALP prompt actions recorded by field technicians relating to child labor[4]	4,417	4,587	**2,712**	
Proportion of farms monitored found with child labor incidents[4]	1.2%	1.3%	**0.8%**	
Proportion of ALP prompt actions recorded by field technicians relating to child labor that were resolved[4]	67%	89%	**88%**	
Proportion of tobacco farmworkers provided with safe and adequate accommodation[5]	n/a	n/a	**80%**	100% by 2020
Proportion of farmers and farmworkers having access to personal protective equipment[6]	n/a	n/a	**99%**	100% by 2020

1 The farm-level data related to our tobacco supply chain reported in this report cover 22 countries we source from. It excludes Ecuador and Lebanon.
2 Data refers to parent companies.
3 We introduced this category of prompt actions in 2019.
4 Our monitoring and reporting of child labor refer to situations of hazardous work performed by children below 18 years old.
5 We introduced this category of prompt actions in 2019. Scope is limited to farmers providing accommodation to workers (approximately 6 percent of the total farmer base).
6 We introduced this category of prompt actions in 2019.

Health, safety, and well-being at work	2017	2018	2019	Goal
Lost time incident (LTI) rate per 200,000 hours worked – PMI and contracted employees[1]	0.10	0.13	**0.12**	<0.10
LTI rate per 200,000 hours worked – PMI employees	0.10	0.13	**0.12**	
LTI rate per 200,000 hours worked – contracted employees	0.07	0.08	**0.10**	
Total recordable incidents rate (TRIR) per 200,000 hours worked – PMI and contracted employees	0.22	0.22	**0.20**	<0.30
TRIR per 200,000 hours worked – PMI employees	0.22	0.22	**0.20**	
TRIR per 200,000 hours worked – contracted employees	0.20	0.30	**0.17**	
Number of fatalities – PMI and contracted employees	2	2	**1**	0
Number of fatalities – contractors[2]	1	1	**0**	0
Number of fatalities – members of the public[3]	9	3	**10**	0
Collision rate within PMI's fleet of vehicles per year (collisions per million km driven)	1.01	0.91	**0.87**	<0.80 by 2022
Proportion of manufacturing facilities with OHSAS 18001 and ISO 14001 certification[4]	91%	97%	**98%**	100% by 2020
Occupational illness frequency rate (OIFR) per 200,000 hours worked – PMI and contracted employees	0.0027	0.0013	**0**	
Number of markets with health and well-being committees	36	>40	**55**	

1 We define a contracted employee as an employee who is under the direct supervision of PMI employees but employed by a temporary employment agency.

2 We define a contractor as a person employed or working on behalf of a third-party company contracted by PMI, who remains under the direct supervision of their employer rather than PMI and are often involved in project-specific or outsourcing arrangements.

3 It is to our deep regret that we endured road traffic fatalities in 2019, including one PMI employee and 10 members of the public (read more on page 125).

4 Scope: manufacturing facilities producing more than 3 billion cigarette equivalents annually. The 2018 figure has been adjusted due to an internal reporting error.

Fair working conditions	2017	2018	2019
Number of PMI employees	80,591	77,435	**73,542**
Number of PMI full-time equivalent (FTE) positions	n/a	77,039	**71,795**
Proportion of employees covered by Collective Labor Agreements	67%	65%	**63%**
Total number of Collective Labor Agreements	80	81	**80**
Total number of countries with Collective Labor Agreements	35	35	**35**

Pillar 3

Caring for the people we work with

PMI's workforce at year-end 2019

Number of employees by employment contract (permanent and temporary), by gender	
Women employed on a permanent contract	29,137
Women employed on a temporary contract	1,494
Men employed on a permanent contract	40,965
Men employed on a temporary contract	1,946
Number of employees by employment contract (permanent and temporary), by region	
Employees on a permanent contract in European Union region	18,167
Employees on a temporary contract in European Union region	2,272
Employees on a permanent contract in Eastern Europe region	6,786
Employees on a temporary contract in Eastern Europe region	171
Employees on a permanent contract in Middle East & Africa region, including PMI Duty Free	3,239
Employees on a temporary contract in Middle East & Africa region, including PMI Duty Free	186
Employees on a permanent contract in South & Southeast Asia region	29,646
Employees on a temporary contract in South & Southeast Asia region	137
Employees on a permanent contract in East Asia & Australia region	4,365
Employees on a temporary contract in East Asia & Australia region	154
Employees on a permanent contract in Latin America & Canada region, and U.S.	7,899
Employees on a temporary contract in Latin America & Canada region, and U.S.	520
Number of employees by employment type (full-time and part-time), by gender	
Women employed on a full-time contract	30,028
Women employed on a part-time contract	603
Men employed on a full-time contract	42,667
Men employed on a part-time contract	244

All data as of December 31, 2019. Presentation of information and data aligns with guidance of GRI standard 102-8 (2016).

Diverse and inclusive working environment	2017	2018	2019	Goal
Proportion of female employees	41.6%	42.1%	**41.7%**	
Proportion of management positions held by women[1]	34.4%	35.1%	**36.1%**	At least 40% by 2022
Proportion of female employees at different managerial levels[1]:				
• managers	36.1%	36.6%	**37.5%**	
• directors	27.9%	29.4%	**31.2%**	
• senior management	13.7%	15.2%	**17.4%**	
Proportion of new hires in management positions that are women[1]	42.8%	40.6%	**40.7%**	50%
Proportion of new hires at junior levels that are women[1]	40.6%	40.4%	**43.8%**	50%
Proportion of promotions in management positions that are women[1]	37.4%	37.8%	**37.4%**	
Number of women on PMI's Company Management	2 (out of 20)	2 (out of 22)	**2 (out of 25)**	
Proportion of women on PMI's Company Management	10%	9%	**8%**	
Number of women on PMI's Board of Directors	2 (out of 13)	3 (out of 12)	**3 (out of 12)**	
Proportion of women on PMI's Board of Directors	15%	25%	**25%**	
Proportion of employees at different age groups:				
• below 30	n/a	18.6%	**17.3%**	
• between 30 and 50		71.6%	**72.0%**	
• above 50 years old		9.8%	**10.7%**	
Number of nationalities among PMI's employees	n/a	>100	**126**	
Number of countries with affiliates with LGBTQ+ initiatives or networks	n/a	25	**27**	

1 We have expanded the scope of our gender diversity data to cover approximately 95 percent of PMI's total workforce. Other related data and previous years' data have been restated accordingly.

Talent attraction, retention, and employability	2017	2018	2019	Goal
Employee overall turnover rate[1]	9.37%	11.51%	**14.10%**	
Women employee overall turnover rate	7.72%	10.80%	**15.54%**	
Employee voluntary turnover rate	3.96%	4.12%	**4.53%**	
Spend for learning per employee (in USD)[2]	n/a	n/a	**464**	
Proportion of employees covered by performance review[3]	77.3%	77.0%	**79.4%**	
Employee Net Promoter Score[4]	n/a	n/a	**+16**	At least +30 by 2025

1 Our transformation journey as we mobilized to deliver our vision of a smoke-free future resulted in higher turnover in 2019. This, combined with our business strategy to close our skills gap, a number of planned restructures, and closure of some factories, contributed to the increase observed.

2 2019 figure only covers external vendor spend.

3 Data cover approximately 75 percent of PMI's total workforce.

4 In 2019, we conducted a global survey to which over 34,000 employees (close to half our total workforce) responded. We measured the engagement of our workforce using the employee Net Promoter Score (eNPS), following a methodology similar to that we use to measure consumer engagement. The score can range from -100 to +100. The 2019 Transformation survey will serve as a baseline through which to track employee engagement.

Pillar 3

Caring for the people we work with

Community support	2017	2018	2019
Number of social contributions supported by PMI (charitable donations/community investments)[1]	275	280	**170 (145/25)**
Number of partner organizations supported by PMI's social contributions[1]	242	239	**147**
Number of countries where projects supported by PMI's social contributions were implemented	63	63	**43**
Number of direct beneficiaries of projects supported by PMI's social contributions	n/a	>300,000	**>467,000**
Value of cash contributions (in millions USD) (charitable donations/community investments)	29.5	28.3	**17.0 (14.8/2.2)**
Approximate value of in-kind donations (in '000 USD)	175	260	**205**
Approximate value of management costs of PMI's social contributions (in '000 USD)[2]	n/a	n/a	**650**
Approximate total number of volunteer hours by PMI employees[3]	n/a	18,000	**16,700**
Approximate value of employee time spent on volunteering (in '000 USD)[3]	n/a	500	**430**

1 The decline in value and number of social contributions in 2019 resulted from the decentralization of our policy approach and the elimination of the central budget that was previously allocated to the markets on an yearly basis. As part of our policy changes we also introduced a distinction between charitable donations and community investments. Our charitable donations are now funded and initiated by the markets while the community investments, focused on sustainability issues associated with our value chain, are now funded and managed by the business function leading the efforts to address the issue (e.g., child labor prevention programs in tobacco growing communities are now managed by our Leaf department). While these changes led to a reduction in both charitable donations and community investments in this first year, we do expect to see an increase in community investments in coming years.

2 This indicator was introduced in 2019.

3 Data was initially collected in 2018 and covers volunteering during paid working hours. The decrease in 2019 is mainly driven by changes in Japan and Russia: PM Japan had a large volunteering event in 2018 that did not take place in 2019, and PM Russia conducted a higher number of activities outside of working hours (with the purpose of involving employees' family). We are currently finalizing a PMI wide volunteering guideline, which will be rolled out in 2020 and that we expect will significantly boost employee volunteering.

Pillar 4

Protecting the environment

Climate protection	2010 baseline	2017	2018	2019	Goal	Scope
CO_2e scope 1 (metric tons)	443,186	388,384	408,162	**397,210**		PMI factories, offices[1], and fleet
CO_2e scope 2 (metric tons)	470,864	241,355	175,785	**158,672**		PMI factories and offices
CO_2e scope 1+2 (metric tons)	914,050	629,739	583,947	**555,882**	Carbon neutrality by 2030	PMI factories, offices, and fleet
CO_2e scope 1 from fleet (metric tons)	143,148	119,588	114,936	**111,400**		PMI fleet
CO_2e emissions from vehicles (g CO_2e per km driven)	296	226	221	**222**		PMI fleet
CO_2e scope 3 ('000 metric tons)[2]	7,148	4,906	4,714	**4,127**		PMI value chain
CO_2e scope 1+2+3 ('000 metric tons)	8,062	5,536	5,298	**4,682**	Carbon neutrality by 2050	PMI value chain
Carbon in-setting credits (metric tons)		0	0	**0**		PMI factories, offices, and fleet
Carbon off-setting certificates (metric tons)[3]		0	956	**1,242**		PMI factories, offices, and fleet
Number of carbon-neutral factories		0	0	**1**	All by 2030	PMI factories
CO_2e scope 1+2+3 intensity (kg per million cigarettes equivalent)[4]	8,706	6,687	6,552	**5,917**		PMI value chain
CO_2e scope 3 biogenic emissions ('000 metric tons)		n/a	3,442	**2,438**		PMI value chain
CO_2e scope 1+2 absolute reduction versus 2010 baseline[5]		31%	36%	**39%**	30% by 2020 40% by 2030 60% by 2040	PMI factories, offices, and fleet
CO_2e scope 1+2+3 absolute reduction versus 2010 baseline[5]		31%	34%	**42%**	40% by 2030	PMI value chain
CO_2e scope 1+2+3 intensity reduction versus 2010 baseline		22%	25%	**32%**	30% by 2020	PMI value chain
CO_2e intensity reduction in tobacco curing versus 2010 baseline		38%	47%	**61%**	70% by 2020	PMI tobacco supply chain
Proportion of flue-cured tobacco purchased cured with renewable fuel sources (self-sufficient firewood and biomass adoption)		36% (29% + 7%)	46% (33% + 13%)	**51%** **(36% + 15%)**	70% by 2020	PMI tobacco supply chain
Proportion of Virginia tobacco purchased cured with coal		20%	15%	**16%**	0% by 2020	PMI tobacco supply chain

Pillar 4

Protecting the environment

Climate protection	2010 baseline	2017	2018	2019	Goal	Scope
Approximate total number of curing barns upgraded since 2014 (cumulative)		57,000	76,000	**80,800**	80,000 by 2020	PMI tobacco supply chain
Total energy consumption (gigajoules)[6]	8,025,559	8,896,274	9,353,222	**9,456,576**		PMI factories, offices, and fleet
Energy intensity (gigajoules per million cigarettes equivalent)[7]	8.60	10.75	11.57	**11.95**		PMI factories, offices, and fleet
Fuel consumption from non-renewable sources (gigajoules)		5,597,766	5,988,022	**5,819,072**		PMI factories, offices, and fleet
Fuel consumption from renewable sources (gigajoules)		44,389	61,163	**128,967**		PMI factories, offices, and fleet
Total electricity consumed (MWh)[8]		885,385	899,706	**959,723**		PMI factories and offices
Total electricity consumed that is from renewable sources (MWh)		443,837	546,944	**623,940**		PMI factories and offices
Proportion of electricity used and purchased that is from renewable sources		50%	61%	**65%**		PMI factories, offices, and fleet
Proportion of electricity used and purchased that is from renewable sources	0%	53%	65%	**72%**	100% by 2025	PMI factories
CDP Climate Change rating		A	A	**A**	A	

1 We include warehouses in PMI offices.

2 In 2019, we reviewed our carbon footprint model, taking into account more primary data from suppliers and updating our methodology, leading to more accurate figures for our scope 3 emissions. We have restated our 2017 and 2018 data according to the new model. Other figures that include scope 3 emissions have also been restated.

3 2019 figure includes carbon off-setting certificates purchased in our factory in Klaipėda (see page 143) and our Operations Center in Lausanne (see page 68).

4 From 2019 onward, intensity is measured in CO_2e per million shipped cigarettes equivalent. Our baseline and previous years' data have been restated accordingly.

5 We report on our progress against our current science-based targets, which align with a 2-degree scenario: We committed to achieve an absolute reduction of our scope 1+2 emissions of 30% by 2020, 40% by 2030, and 60% by 2040; and to achieve an absolute reduction of our scope 1+2+3 emissions of 40% by 2030.

6 The 2018 figure has been adjusted due to an internal reporting error.

7 From 2019 onward, energy intensity is reported in gigajoules per million shipped cigarettes equivalent. Previous years' data have been restated accordingly.

8 We have reviewed the calculation methodology for our electricity consumption to account for the electricity produced in our facilities, and we have restated previous years' data accordingly. Other figures that include electricity have also been restated.

Littering prevention[1]	2019
Number of anti-littering initiatives conducted	**54**
Number of affiliates with anti-littering strategy	**31**
Number of affiliates participating in World Cleanup Day	**31**
Number of participants in World Cleanup Day (PMI employees and other volunteers)	**3,962**
Number of cigarette butts collected during World Cleanup Day	**827,160**

1 These indicators were introduced in 2019.

Product eco-design and circularity	2017	2018	2019	Goal
Recycling rate of *IQOS* devices (weighted average)[1]	n/a	45%	**61-79%**	80% by 2025
Proportion of *IQOS* device sales volume covered by the CIRCLE program[2]	n/a	66%	**39%**	100% by 2025
Carbon footprint of PMI smoke-free products per user ($kgCO_2e$/year)[3]	n/a	n/a	*IQOS 3.0*: **33** *IQOS 3 MULTI*: **32** *IQOS MESH*: **21.5**	
Proportion of packaging material that is recyclable[4]	94.4%	93.6%	**93.5%**	100% by 2025
Proportion of packaging material that is renewable[4]	88.9%	88.3%	**87.7%**	95% by 2025
Reduction of packaging materials used versus 2018 baseline	n/a	n/a	**3%**	15% by 2025

1 We established our two recycling CIRCLE hubs in 2018. Recycling rate: Depending on device type and processing facility (figures provided for product processed through CIRCLE hubs, varied by device type, zero landfill, remainder to energy recovery or material loss).

2 We established our two recycling CIRCLE hubs in 2018. While we expanded the number of markets covered by CIRCLE in 2019, the decrease in coverage of sales volume is explained by *IQOS* growth in markets not yet covered by the program.

3 Depends on device and assumes 20 heated tobacco units/day. Scope includes materials, manufacturing, use, and end-of-life, but excludes logistics.

4 While we continued our efforts to substitute or reduce the use of materials from non-renewable sources and non-recyclable materials in our packaging, the slightly decreasing trend in the past years is driven by the volume mix evolution over this period of time.

Forest protection	2017	2018	2019	Goal
Proportion of tobacco purchased cured at no risk of deforestation of old-growth forests[1]	94%	90%	**97%**	100% by 2020
Proportion of flue-cured tobacco purchased cured with renewable sources (self-sufficient firewood and biomass adoption)	36% (29%+7%)	46% (33%+13%)	**51% (36%+15%)**	70% by 2020
Approximate cumulative number of curing barns upgraded since 2014	57,000	76,000	**80,800**	80,000 by 2020
CDP forest rating	n/a	B	**A-**	A

1 The category "old-growth forests" includes both primary (untouched) forests and secondary high conservation value forests. Old-growth forests are living, functional ecosystems that need protection. We use our Monitoring and Verification Framework for Sustainable Curing Fuel to systematically monitor the sustainability of all fuel types used in our tobacco supply chain.

Pillar 4

Protecting the environment

Water stewardship	2010 baseline	2017	2018	2019	Goal	Scope
Total amount of water withdrawn ('000 m^3)	4,998	4,152	4,371	**4,008**		PMI factories
Total amount of water consumed (withdrawn minus discharged) ('000 m^3)	2,449	1,672	1,958	**1,883**		PMI factories
Water ratio (water withdrawn in m^3 per million cigarettes equivalent)[1]	5.35	4.83	5.14	**4.74**	4.4 by 2020 3.1 by 2022	PMI factories
Number of fines[2]		0	0	**1**		PMI factories
Number of spills[2]		0	0	**1**		PMI factories
Cumulative number of local water risk assessments performed		n/a	8	**15**	22 by 2020	Tobacco supply chain
Quantity of water used per ton of tobacco produced (m^3)		n/a	266	**330**		Tobacco supply chain
Total amount of water used ('000 m^3)		n/a	119,600	**138,200**		Tobacco supply chain
CDP water rating		A	B	**A**	A	

1 From 2019 onward, water intensity is measured in m^3 per million cigarettes produced equivalent. Our baseline and previous years' data have been restated accordingly.

2 Last year in the waste water treatment plant in Yangsan Factory of Philip Morris Korea, some of the waste water was accidentally drained to rainwater due to operational mistake of the contracted service provider. PMI informed the authorities, implemented preventive measures, and paid the corresponding fine.

Biodiversity	2017	2018	2019	Goal
Proportion of tobacco purchased without detection of residues attributable to the use of WHO Toxicity Class 1 crop protection agents[1]	99%	100%	**n/a**	100% by crop year 2018
Proportion of tobacco purchased without detection of residues attributable to the use of HHPs, as defined by FAO and WHO guidelines in 2016[1]	88%	89%	**n/a**	100% by crop year 2020

1 The 2019 crop season data were not available at the time of the publication of this report.

Waste reduction[1]	2010 baseline	2017	2018	2019	Goal
Total amount of waste generated (metric tons)	143,596	140,316	134,367	**131,104**	
Proportion of total waste generated that is recycled	79%	81%	84%	**84%**	85%
Proportion of total waste generated that is incinerated with energy recovery	9%	12%	12%	**12%**	
Proportion of total waste generated that is disposed to landfill		6%	4%	**4%**	
Proportion of total waste generated that is incinerated without energy recovery		<1%	<1%	**<1%**	
Amount of hazardous waste generated (metric tons)		1,357	1,423	**1,486**	
Proportion of hazardous waste generated that is recycled		37%	41%	**33%**	
Proportion of hazardous waste generated that is incinerated with energy recovery		44%	44%	**49%**	
Proportion of hazardous waste generated that is disposed to landfill		9%	6%	**8%**	
Proportion of hazardous waste generated that is incinerated without energy recovery		10%	9%	**10%**	

1 The scope of waste data covers factory waste but excludes marketing and project waste.

Glossary and acronyms

In this report, "PMI," "we," "us," and "our" refers to Philip Morris International Inc. and its subsidiaries.

Trademarks: 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.

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.

Aerosol – Gaseous suspension of fine solid particles and/or liquid droplets

ALP – Agricultural Labor Practices

AWS – Alliance for Water Stewardship

CDP – Carbon Disclosure Project

CHTP – Carbon-Heated Tobacco Product

CLAs – Collective Labor Agreements

Combustible products – The term PMI uses to refer to cigarettes and OTP, combined

Combustion – The process of burning a substance in oxygen, producing heat and often light

CPA – Crop protective agent

EHTS – Electrically Heated Tobacco System

E-liquids – Refers to 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

EPR – Extended Producer Responsibility

Estimated users who have stopped smoking and switched to *IQOS* – For markets where *IQOS* is the only heat-not-burn product, this is defined as the daily individual consumption of PMI HTUs representing the totality of their daily tobacco consumption in the past seven days. For markets where *IQOS* is one among other heat-not-burn products, this is the daily individual consumption of HTUs representing the totality of their daily tobacco consumption in the past seven days, of which at least 70% are PMI HTUs

EVA – Economic value added

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")

FAO – Food and Agriculture Organization of the United Nations

FCTC – Framework Convention on Tobacco Control

FDA – U.S. Food and Drug Administration

FTs – Field technicians monitoring the implementation of PMI's Good Agricultural Practices and Agricultural Labor Practices programs

GAP – Good Agricultural Practices

GDPR – General Data Protection Regulation

GHG – Greenhouse gas

GPP – Global Privacy Program

GTS – Green tobacco sickness

HCV – High conservation value

Heated tobacco product or HTP – A manufactured tobacco product that delivers a nicotine-containing vapor (aerosol), without combustion of the tobacco mixture

Heated tobacco units or HTUs – The term PMI uses to refer to heated tobacco consumables, which for PMI include the company's *HEETS*, *HEETS Creations*, *HEETS Marlboro* and *HEETS FROM MARLBORO*, defined collectively as *HEETS*, as well as *Marlboro HeatSticks* and *Parliament HeatSticks*

HHPs – Highly hazardous pesticides

HPHCs – The harmful or potentially harmful constituents which have been identified as likely causes of tobacco-related diseases

Illicit trade – Refers to domestic non-tax paid products

IPM – Integrated Pest Management

IPS – Integrated Production System

KPIs – Key performance indicators

LMICs – Low and middle income countries

LTI – Lost Time Injury

MRTP – Modified Risk Tobacco Product, the term used by the U.S. FDA to refer to RRPs

MRTPA – Modified Risk Tobacco Product Application under section 911 of the Federal Food, Drug, and Cosmetic Act

NGOs – Non-governmental organizations

OECD – Organisation for Economic Co-operation and Development

OTP – Defined as "other tobacco products," primarily roll-your-own and make-your-own cigarettes, pipe tobacco, cigars and cigarillos, and does not include reduced-risk products

P&C – People and Culture

PMI Regions – Effective January 1, 2018, PMI began managing its business in six reporting segments as follows: the European Union Region (EU); the Eastern Europe Region (EE); the Middle East & Africa Region (ME&A), which includes PMI Duty Free; the South & Southeast Asia Region (S&SA); the East Asia & Australia Region (EA&A); and the Latin America & Canada Region (LA&C)

PPE – Personal protective equipment

Reduced-risk products (RRPs) or smoke-free products – Products that present, are likely to present, or have the potential to present less risk of harm to smokers who switch to these products versus continued smoking. PMI has a range of RRPs in various stages of development, scientific assessment and commercialization. PMI's RRPs are smoke-free products that produce an aerosol that contains far lower quantities of harmful and potentially harmful constituents than found in cigarette smoke

R&D – Research and development

RSP – Responsible Sourcing Principles

SDGs – Sustainable Development Goals

Smoke – A visible suspension of solid particles, liquid droplets, and gases in air, emitted when a material burns

Smoke-free product consumables – The term PMI uses to refer to heated tobacco units used with the *IQOS* heat-not-burn product, and cartridges containing e-liquids that are used for e-vapor products

STP – Sustainable Tobacco Program

SUP – Single-use plastics

THS – Tobacco Heating System

Tons – "Tons" equates to "metric tons" throughout this report

Total *IQOS* users – The estimated number of legal age (minimum 18 years) *IQOS* users that used PMI HTUs for at least 5% of their daily tobacco consumption over the past seven days

Total shipment volume – The combined total of cigarette shipment volume and HTU shipment volume

TPSAC – Tobacco Products Scientific Advisory Committee

UNGPs – United Nations Guiding Principles on Business and Human Rights

WASH – Water access, sanitation, and hygiene

WHO – World Health Organization

Forward-looking and cautionary statements

This report contains projections of future results and other forward-looking statements. 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; health concerns relating to the use of tobacco and nicotine-containing products and exposure to environmental tobacco smoke; litigation related to tobacco use; intense competition; the effects of global and individual country economic, regulatory, and political developments, natural disasters and conflicts; changes in adult smoker behavior; 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 and quality of tobacco and other agricultural products and raw materials; 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; or if it is unable to attract and retain the best global talent. Future results are also subject to the lower predictability of our reduced-risk product category's performance.

The COVID-19 pandemic has created significant societal and economic disruption, and resulted in closures of stores, factories and offices, and restrictions on manufacturing, distribution, and travel, all of which will adversely impact our business, results of operations, cash flows, and financial position during the continuation of the pandemic. Our business continuity plans and other safeguards may not be effective to mitigate the results of the pandemic.

While much of the COVID-19 pandemic and its effect on our business is still unknown, currently, significant risks include our diminished ability to convert adult smokers to our RRPs as store closures preclude in-person guided trials, significant volume declines in our duty-free business and certain other key markets, disruptions or delays in our manufacturing and supply chain, increased currency volatility, and delays in certain cost saving, transformation, and restructuring initiatives. Our business could also be adversely impacted if key personnel or a significant number of employees or business partners become unavailable due to the COVID-19 outbreak.

The significant adverse impact of COVID-19 on the economic or political conditions in markets in which we operate could result in changes to the preferences of our adult consumers and lower demand for our products, particularly for our mid-price or premium-price brands. Continuation of the pandemic could disrupt our access to the credit markets or increase our borrowing costs. Governments may temporarily be unable to focus on the development of science-based regulatory frameworks for the development and commercialization of RRPs or on the enforcement or implementation of regulations that are significant to our business. In addition, messaging about the potential negative impacts of the use of our products on COVID-19 risks may lead to increasingly restrictive regulatory measures on the sale and use of our products, negatively impact demand for our products, the willingness of adult consumers to switch to our RRPs and our efforts to advocate for the development of science-based regulatory frameworks for the development and commercialization of RRPs.

The impact of these risks also depends on factors beyond our knowledge or control, including the duration and severity of the outbreak and actions taken to contain its spread and to mitigate its public health effects, and the ultimate economic consequences thereof.

PMI is further subject to other risks detailed from time to time in its publicly filed documents, including the Form 10-Q for the quarter ended March 31, 2020. Aspirational targets do not constitute financial projections. 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.

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