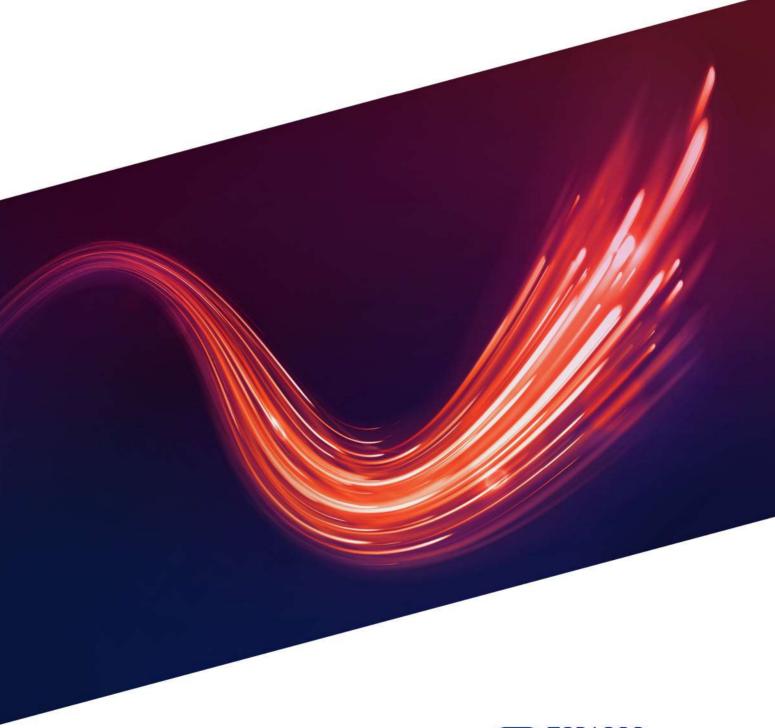
2020 INDEX Ranking Report





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Foreword

The Tobacco Transformation Index strives to stimulate competition among companies to deliver the necessary transformation of the tobacco industry for the benefit of public health. The Index creates value by highlighting differences across tobacco companies based on their actions in support of this transformation. Every two years, the Index will rank the world's 15 most globally and regionally influential tobacco companies on their relative progress in supporting tobacco harm reduction. This ranking and supporting analyses will equip all stakeholders with valuable information for understanding and engaging with the companies to drive change. The Index is an initiative of the Foundation for a Smoke-Free World, compatible with the Industry Transformation pillar of its Strategic Plan and the smoke-free purposes set forth in its Certificate of Incorporation.

The Foundation views the first publication of the Tobacco Transformation Index as a baseline. Only a small number of tobacco companies have started along the path of tobacco harm reduction, demonstrating varying and mostly limited degrees of commitment, transparency, and performance. A majority of the 15 companies evaluated are not meaningfully addressing tobacco harm reduction at the time of this report. The goal of the Index in future iterations is to objectively measure, company by company, progress or the lack thereof against this baseline.

The publication of the first index marks a significant milestone in a journey that began in 2018 with the release of the Foundation's Global Trends in Nicotine report and initiation of the Tobacco Transformation Index (originally referred to as the Smoke-Free Index) program. During the course of 2019, the Index team conducted extensive stakeholder dialogues through eight sessions in seven countries with more than 150 participants, which drove the initial design of the index methodology.

In 2020, the preliminary index design was made available for review and comment to stakeholders and expert reviewers. The Index team undertook careful consultation with multiple companies, with related documentation made publicly available throughout the process. In addition, the index development process was supported by an independent Index Advisory Panel.

What's next? The Index team will perform a post-publication review of the first Index with an eye toward future enhancements. With input from the lead consultants, the Advisory Panel, experts, and other stakeholders, the Foundation will allocate resources toward a work program in 2021. Such a program could include spotlights into specific topics and/or geographies, along with further analysis of the data compiled through the first index. The second Tobacco Transformation Index will be published in 2022. In parallel, the Foundation intends to evaluate alternative governance structures, including funding mechanisms, to maximize the impact of the Index on its purpose for the long term.

We are deeply grateful to everyone who has taken the time to engage with this important initiative, and for the thoughtful and critical feedback they shared. We learned a great deal through these interactions and the Index is substantially stronger as a result. The Foundation remains committed to engaging with all stakeholders. In that spirit, we welcome continued dialogue and encourage all who feel they can contribute constructively to this cause to contact the Foundation for further discussion.



David JanazzoEVP Operations and Finance
Foundation for a Smoke-Free World
September 2020

Executive Summary

The World Health Organization (WHO) estimates there are at least 1.1 billion smokers globally and more than eight million people die from tobacco-related causes each year.¹ While decades of sustained international effort, including the ongoing implementation of the WHO Framework Convention on Tobacco Control (FCTC), have helped to produce a gradual decline in smoking rates in many parts of the world, overall progress remains frustratingly slow.

To accelerate progress, we need new strategies and tools to complement ongoing tobacco control efforts. In particular, a concerted effort to transform the global tobacco industry via a strategy of tobacco harm reduction could reduce users' current health risks and eventually help them to stop smoking entirely. This could in turn help drive cigarettes and other high-risk tobacco products out of the market, and improve and prolong hundreds of millions of lives.

Some tobacco companies already claim to support this agenda, but stakeholders are understandably skeptical of their motives or whether they will genuinely follow through. Other companies either haven't taken a position or are working to preserve the status quo. The Tobacco Transformation Index seeks to influence and hold companies accountable by objectively evaluating their commitments and actions on tobacco harm reduction.

Specifically, the Index assesses tobacco companies' activities concerning:

- 1. Phasing out high-risk tobacco products;
- **2.** Developing and responsibly offering reduced-risk alternatives to support current users to move away from high-risk products;
- **3.** Preventing access and marketing of such alternatives to all non-smokers and non-users of high-risk products, especially youth; and,
- **4.** Ensuring consistency of tobacco harm reduction activities across all markets of operation, within regulatory guidelines.

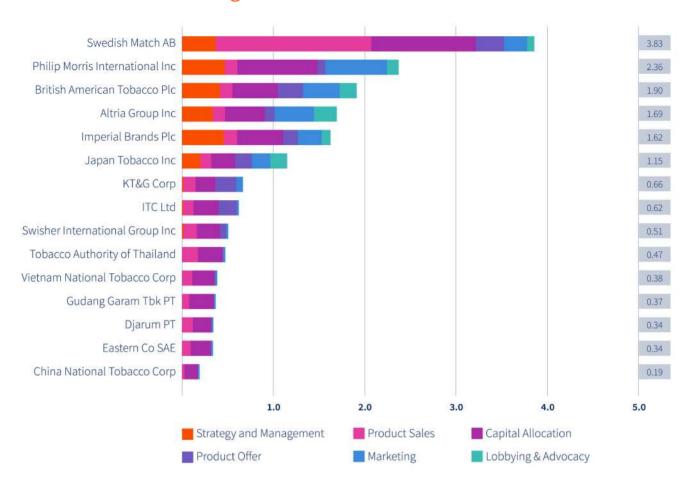
This report outlines the results of the first edition of the Tobacco Transformation Index, including overall key findings and detailed analysis of company rankings in each of its six measurement categories. It also provides individual profiles and summary results for each of the 15 companies in the index scope, which account for approximately 90% of current global tobacco product volume sales. The 2020 index also references relevant circumstances and company activities in 36 countries accounting for approximately 85% of current global sales and consumption of tobacco products. (Individual country fact sheets have been published alongside the index at tobaccotransformationindex.org.)

 $^{^{1}}$ WHO. (2019). WHO Global Report on Trends in Prevalence of Tobacco Use 2000-2025. 3rd ed. Geneva, Switzerland

 $^{{}^2\,}Euromonitor\,International.\,(n.d.).\,Euromonitor's\,Passport\,Tobacco\,Database.\,https://www.euromonitor.com/accommonitor.c$

³ Ibid.

Overall Index Ranking



Overall Key Findings

KEY FINDING 1

Harm reduction progress is extremely limited. The tobacco industry is not phasing out cigarettes or transitioning smokers to reduced-risk alternatives quickly enough.

The 15 companies assessed by the 2020 index achieved only a marginal decline in cigarette sales, from 4.9 trillion to 4.8 trillion sticks (-1.2% CAGR) globally, during the review period of 2017-2019.4 At this rate, it will take decades to eliminate smoking, meaning many more smokers will die and society will continue to bear the dire health and economic consequences of high-risk tobacco consumption.

While cessation remains the best overall course for improving the health of smokers, reduced-risk alternatives represent a crucial pathway for transitioning consumers away from high-risk products. However, in 2019, the

⁴ Estimate from Tobacco Transformation Index research.

global share of reduced-risk products accounted for only 3% in value and 2% in volume of overall tobacco and nicotine-related sales for the 15 companies in the index.⁵ This underscores how far the industry still has to go to meaningfully contribute to tobacco harm reduction.

KEY FINDING 2

A small group of companies have made public commitments to harm reduction, but none have shifted their focus enough to ensure the accelerated decline of cigarettes and other high-risk products.

Six of the 15 companies evaluated have acknowledged their role in tobacco harm reduction and made commitments to tackle the challenges of tobacco-related death and disease. However, these companies have so far failed to shift a significant share of their sales towards reduced-risk products. In 2019, only two companies achieved more than a single-digit share of total sales from reduced-risk products, while other companies offering reduced-risk products averaged only 3%.6

Top-ranked companies do appear to be shifting more financial resources towards reduced-risk products, in the form of research and development (R&D), mergers and acquisitions (M&A), and capital expenditures. However, many companies continue to invest heavily in marketing of high-risk products. Among the six companies claiming commitments to harm reduction, between 30-55% of their marketing budgets are still devoted to high-risk products.⁷

These figures show that, despite their commitments, even the highest-ranked companies have much more to do to translate their harm reduction strategies into meaningful results.

KEY FINDING 3

The majority of companies have not made any commitment to harm reduction and/or continue to set targets to increase sales of high-risk tobacco products.

Nine of the 15 companies fail to acknowledge any role in tackling the challenges of tobacco-related death and disease, and have made no explicit commitment to harm reduction. Collectively, these companies account for almost 60% of global cigarette volume sales and dominate in low- and middle-income countries, where the highest number of smokers live.8 China National Tobacco Corp (CNTC) alone sells nearly half (48.6%) of the

⁵ Ibid.

⁶ Ibid.

⁷ Ibid

⁸ Ibid

cigarettes associated with companies in the index, meaning that even modest efforts could translate into a significant reduction in overall tobacco-related harm globally.

Three of these companies – CNTC, Eastern Co SAE, Vietnam National Tobacco Corp (Vinataba) – also continue to set targets to increase sales of high-risk tobacco products. This reflects the fact that many companies remain solely focused on cigarettes and other high-risk products. Similarly, although KT&G Corp and Swisher International Group Inc have made investments in reduced-risk alternatives, their efforts to further grow their traditional high-risk tobacco businesses demonstrate that they have not yet fully embraced the goal of harm reduction or transitioning consumers away from high risk products.

The six companies at the top of the ranking are all publicly traded and therefore subject to more reporting requirements and scrutiny from investors and other stakeholders. Most also operate across multiple markets with differing regulations and other dynamics affecting industry competition and consumer preferences. Together, these factors compel higher levels of transparency and may also encourage greater responsiveness to tobacco harm reduction.

KEY FINDING 4

The highest-ranked companies in the index are mostly publicly traded multinationals, while private and stateowned companies lag behind.

In comparison, private companies do not have the same imperative to attract or retain investors, or to respond to external inquiries or pressure related to the evolution of their businesses. And state-owned companies are subject to even more unique influences. Of the six companies with some degree of state ownership in the index, five – CNTC, Tobacco Authority of Thailand (TOAT), Vinataba, ITC Ltd, and Eastern – are in the lower half of the Index rankings.

Differing ownership structures create different incentives for companies in relation to tobacco harm reduction. However, the ongoing crisis of tobacco-related death and disease demands a response from the entire industry. Private and state-owned companies in particular should be called upon to do more, and should voluntarily disclose more details to inform their stakeholders.

KFY FINDING 5

Tobacco companies are focusing most of their reduced-risk product efforts on higher-income countries, while high-risk product sales in lower-income countries continue to grow.

Companies that offer reduced-risk products are mostly focusing their efforts on selected high-medium income countries, where overall smoking rates are lower and cigarette sales are already declining. Three large multinationals – British American Tobacco Plc (BAT), Japan Tobacco Inc (JTI), and Philip Morris International Inc (PMI) – collectively offer reduced-risk products in 15 of the high-medium income countries in the index scope. However, their reduced-risk alternatives reach just three low-medium income countries.

While there may be legitimate business reasons for this discrepancy, by allowing it to persist, companies risk the impression that they are merely being opportunistic or are not truly committed to tobacco harm reduction. In order to meaningfully displace cigarettes and other high-risk products, it is essential that companies' harm reduction efforts address all markets, especially those where the largest proportion of the world's smokers live and harm reduction could have the greatest impact.

KEY FINDING 6

Better disclosure and greater overall transparency are needed.

Lack of trust in the tobacco industry's actions and motivations, and the fast-changing nature of tobacco-related science, politics, and competition, mean that transparency is essential for tobacco harm reduction to be effectively implemented and evaluated. In general, companies should be disclosing as much detail as possible concerning their relevant policies, strategies, and performance, as well as their stances on and responses to public policy and other external factors influencing the trajectory of tobacco harm reduction.

There is currently a significant lack of disclosure with only six of the 15 companies covered by the index scoring points for transparency indicators. BAT and PMI each scored 57% of the points available, Altria Group Inc reaches 50%, while Imperial Brands Plc, JTI, and Swedish Match AB each score 40%.¹⁰

¹⁰ Estimate from Tobacco Transformation Index research.

Key Findings by Category

The 2020 index evaluates companies' performance across six key areas of activity related to tobacco harm reduction.

1 Strategy and Management

- Several companies have expressed commitment to tobacco harm reduction but approaches towards high-risk products remain vague.
- Company commitments to harm reduction are supported with limited targets.
- Few companies provide adequate detail of stakeholder engagement as it relates to tobacco harm reduction.

2 Product Sales

- Cigarettes remains the dominant product category, highlighting limited progress of tobacco harm reduction to date.
- Sales of reduced-risk products are dwarfed by those of high-risk products, especially in low-medium income countries

3 Capital Allocation

- Some companies are starting to allocate financial resources away from high-risk products.
- Companies that have publicly committed to tobacco harm reduction are undermining their commitments with continued high-risk tobacco M&A.

4 Product Offer

- Companies are offering a growing variety of reduced-risk options, which may increase the potential for shifting demand away from high-risk products.
- Companies offer more reduced-risk products in high-medium income versus low-medium income countries.

5 Marketing

- Only a handful of companies establish specific marketing policies with specific practical guidelines.
- Companies with commitments to harm reduction have increased their focus on youth access prevention, but impact of these policies is not clear.
- Companies are monitoring the implementation of marketing policies even though the effectiveness of these measures is difficult to assess.
- Companies still spend a significant amount of their marketing budgets on high-risk products.

6 Lobbying & Advocacy

• A handful of companies disclose policy positions and related details, but overall transparency remains limited.

Introduction

WHO estimates there are at least 1.1 billion smokers globally and more than eight million people die from tobacco-related causes each year. ¹¹ Smoking is by far the leading cause of preventable deaths worldwide. Meanwhile, millions more suffer from preventable illness caused by smoking that severely diminishes productivity and quality of life. This illness imposes heavy burdens on health care and social systems, particularly in low- and middle-income countries, where more than 80% of current smokers reside. ¹²

Encouragingly, smoking has begun to decline gradually in many parts of the world. WHO estimates that smoking prevalence, defined as the percentage of the population that regularly smokes, has declined from 25.7% to 18.4% since 2000, and that some 60% of countries have been experiencing a decline in tobacco use since 2010.¹³

But despite these gains, overall progress remains frustratingly slow. While smoking prevalence has decreased, global population continues to grow. When taking both factors into account, the total number of smokers is virtually the same as it was 15 years ago, and it is expected to remain there until at least 2025.¹⁴

This means that even if recent gradual declines in smoking rates are maintained, it will be many more decades before smoking is effectively eliminated. As a result, hundreds of millions more smokers will die.

In both practical and moral terms, this is unacceptable. Furthermore, it is at odds with the 2030 agenda currently set forth and agreed to under the United Nations (UN) Sustainable Development Goals (SDGs), especially *Goal 3: Ensure healthy lives and promote well-being for all at all ages.*

Accelerating progress on this critical task requires deploying every available tool. This means not only continuing to strengthen and support existing tobacco control efforts but also embracing other promising means to reduce the disease and premature death stemming from smoking.

Tobacco Harm Reduction

Cessation is the best overall pathway to address the health impacts of tobacco use, but while many smokers understand the health risks and would like to quit, many refuse or struggle to do so. In light of this, some experts see value in the strategy of tobacco harm reduction.

Harm reduction broadly refers to strategies aimed at decreasing the negative effects of certain behaviors, often as an alternative or complement to trying to prevent the behaviors themselves. It has been successfully applied in contexts including drug policy (needle-exchange programs, supervised injection sites, etc.) and

¹¹ WHO. (2019). WHO Global Report on Trends in Prevalence of Tobacco Use 2000-2025. 3rd ed. Geneva, Switzerland.

¹² Janazzo, D. (2019). Global Trends in Nicotine: 2019 Update. Foundation for a Smoke-Free World. Retrieved August 17, 2020, from https://www.smokefreeworld.org/wp-content/uploads/2019/08/fsfw_global_trends_in_nicotine_designupdate.pdf

¹³ WHO. (2019). WHO Global Report on Trends in Prevalence of Tobacco Use 2000-2025. 3rd ed. Geneva, Switzerland.

¹⁴ Ibid

control of sexually transmitted diseases (condom distribution), in pursuit of both individual and societal benefits such as improved health and reduced burden on health care and/or law enforcement resources.

In the same way, tobacco harm reduction involves efforts to minimize the health consequences of nicotine consumption. In particular, by substituting traditional, high-risk tobacco products (e.g. cigarettes) with some of the growing variety of reduced-risk nicotine products available today (such as e-cigarettes, heated tobacco, and snus), and encouraging innovation to continuously reduce harm over time, it is hoped that current smokers can substantially reduce their health risks and potentially quit smoking altogether. This, in turn, can help to more rapidly reduce the burden of premature death and disease caused by tobacco use.

Industry Transformation

Realizing the potential of tobacco harm reduction at scale depends on complementary action by many parties including researchers, regulators, health authorities, and consumers. But there is also a crucial role for the industry itself.

If tobacco companies fully embrace harm reduction by voluntarily phasing out high-risk products, responsibly marketing reduced-risk alternatives, and competing to further minimize harm over time, it could lead to an accelerated transition and far more rapid gains in public health. Conversely, if tobacco companies choose to delay or fight transformation, progress could be slowed, and/or the opportunity to reduce tobacco-related harm could be lost.

Many will doubt the likelihood that tobacco companies can change, or that they won't just use harm reduction as a smokescreen or a guise to improve their reputation while continuing to profit without genuine regard for public health. However, there are several factors that suggest change is possible.

Disruption is already under way

New technologies are reducing the health risks associated with nicotine delivery compared with traditional products, especially combustible tobacco. Many smokers have adopted these reduced-risk alternatives, which are contributing to accelerated decline in smoking rates in some countries.¹⁵

Competition can accelerate transformation

Differentiating companies, even within a sector like tobacco, can be an effective tool for changing behavior. If just one actor perceives an advantage in contributing to the public good, even in its self-interest, it could play a part in influencing further change among competitors.

Other industries are changing too

Even harmful industries can change, and many are changing, by undergoing a transformation toward cleaner activities and products. Given its devastating health impact and lack of trust, the tobacco industry presents an even greater challenge than most if not all others. However, it now faces many of the same things that have

¹⁵ Gilljam, H. & Galanti, M. (2003). Role of Snus (Oral Moist Snuff) in Smoking Cessation and Smoking Education in Sweden. Addiction. Volume 98 (9): 1183-1189. doi:10.1046/j.1360-0443.2003.00379.

Hajek, P. et al. (2019). A Randomized Trial of E-Cigarettes versus Nicotine-Replacement Therapy. The New England Journal of Medicine. Volume 380 (7): 629-637. doi: 10.1056/NEJMoa1808779

McNeill, A., Brose, L., Calder, R., Bauld, L., & Robson, D. (2018). Evidence Review of e-Cigarettes and Heated Tobacco Products 2018, a Report Commissioned by Public Health England. United Kingdom:

McNeill, A., Brose, L., Calder, R., Bauld, L., & Robson, D. (2018). Evidence Review of e-Cigarettes and Heated Tobacco Products 2018, a Report Commissioned by Public Health England. United Ki Public Health England.

 $Shapiro, H.\ (2018).\ No\ Fire,\ No\ Smoke: The\ Global\ State\ of\ Tobacco\ Harm\ Reduction.\ London,\ United\ Kingdom:\ Knowledge-Action-Change.$

provoked transformation in other sectors: disruptive innovation, changing consumer preferences, societal pressure, and growing regulatory risk. With the right leverage points, a similar process could be triggered here.

Investors are interested and can bring their influence to bear

While some investors have chosen to divest from tobacco, others opt for ownership and engagement with regard to companies' plans to transform for the future. By making their interests clear, and by engaging with companies, investors can wield significant influence over management decision-making.

The Role of an Index

While the potential for industry transformation is there, it is far from assured. Not all companies perceive sufficient incentives to act on tobacco harm reduction. Others are taking cautious steps, but it is difficult for stakeholders to assess their scope or potential impact. And stakeholders are understandably suspicious of companies' true motives or intentions to follow through.

The Tobacco Transformation Index aims to address these challenges by objectively measuring tobacco companies' allocation of capital, R&D, marketing, product sales, and related policies and behaviors. Stakeholders can use this added information and insight to better understand the real and potential scope of transformation, to encourage positive steps by companies, and to hold poor performers accountable.

The Index is inspired by the example set by similar tools in the pharmaceutical, food, and seed industries, among others, which encourage greater transparency and measure companies' performance in order to bring added attention and focus to critical issues and challenges. Stakeholders are provided with a greater evidence base to inform their own work and hold companies accountable. And companies themselves are stimulated – whether by pressure from stakeholders, competition with their peers, or both – to take further action on the issue being assessed.

Over time, an index can also serve as a platform for parties to influence and debate one another about what path the target industry should take. Through stakeholder dialogues, public commentary in response to index findings, and other means, the index's methodology and impact can evolve over time, and companies can be further influenced to change.

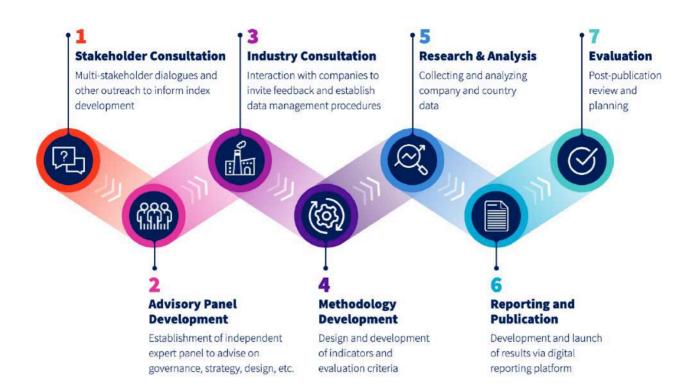
Index Development

This first edition of the Tobacco Transformation Index is the culmination of a development process that began in early 2019. It has comprised extensive consultation with international stakeholders; careful, well-documented, and transparent engagement with the tobacco industry; development and testing of the methodology; and a thorough process of compiling, verifying, and analyzing data from multiple sources. Following publication, the Foundation and Index team will undertake a systematic review to guide development of the next iteration.

For additional details and to share your feedback, visit tobaccotransformationindex.org.

Murkett, R., Rugh, M. & Ding, B. (2020). Nicotine Products Relative Risk Assessment: A Systematic Review and Meta-Analysis.

¹⁷ The relative risk assessment applied to the indicators in the following sub-categories: 2A Volume Sales of Tobacco Products; 2B Value Sales of Tobacco Products; 4A Product Portfolio (only for indicators 23 Ratio of Product Portfolio (RRPs vs HRPs) and 24 Ratio of Product Portfolio (RRPs vs HRPs) – Rate of Change).



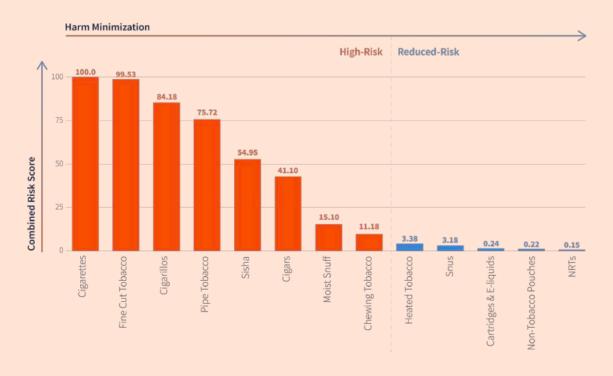
Relative Risk Assessment

The Tobacco Transformation Index seeks to accelerate tobacco harm reduction by encouraging tobacco companies to reduce the health impacts caused by tobacco use, beginning with the elimination of its highest risk products. Key to this approach is monitoring companies' activities and investments as they pertain to high-risk tobacco products versus reduced-risk alternatives.

In the absence of an established, internationally standardized classification of tobacco products based on risk, the Foundation for a Smoke-Free World commissioned a scientific literature review to identify a relative risk assessment for all products in scope. The table below summarizes a working classification for the purposes of the first edition of the Index.

The relative risk hierarchy developed is based on a systematic review of previous scientific studies of the health risk associated with nicotine products. A total of 320 studies were reviewed in detail to extract data and assess the level of risk for each product type. The products were analyzed in terms of their toxin emissions and epidemiological data, which were combined on a scale from 0 to 100 (low to high risk) to derive a combined risk score for each product. Additional details on the relative risk assessment are available in the publication "Nicotine Products Relative Risk Assessment: A Systematic Review and Metanalysis." ¹⁶

The relative risk assessment, summarized in the adjoining figure, was leveraged to effectively evaluate companies' offerings and sales of reduced-risk products, and to further compare these according to their relative risk. To do so, the relative risk by product was used as a multiplier for each company's sales and offer in the high-risk and reduced-risk categories. ¹⁷ Additional details are provided in the 2020 Index Methodology.



Source: Murkett, R., Rugh, M. & Ding, B. (2020). Nicotine Products Relative Risk Assessment: A Systematic Review and Meta-Analysis.

¹⁶ Murkett, R., Rugh, M. & Ding, B. (2020). Nicotine Products Relative Risk Assessment: A Systematic Review and Meta-Analysis.

¹⁷ The relative risk assessment applied to the indicators in the following sub-categories: 2A Volume Sales of Tobacco Products; 2B Value Sales of Tobacco Products; 4A Product Portfolio (only for indicators 23 Ratio of Product Portfolio (RRPs vs HRPs) and 24 Ratio of Product Portfolio (RRPs vs HRPs) – Rate of Change).

2020 Tobacco Transformation Index

The 2020 Tobacco Transformation Index represents the first comprehensive effort to evaluate tobacco companies' commitments and actions as they relate to tobacco harm reduction.

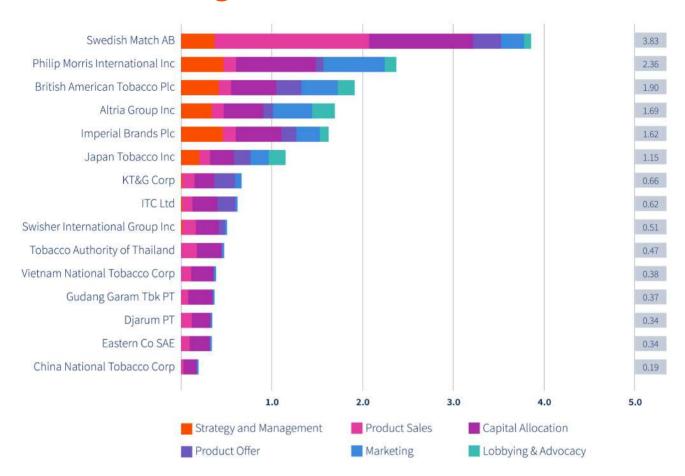
Specifically, the Index assesses tobacco companies' activities concerning:

- 1. Phasing out high-risk tobacco products;
- 2. Developing and responsibly offering reduced-risk alternatives to support current users to move away from high-risk products;
- **3.** Preventing access and marketing of such alternatives to all non-smokers and non-users of high-risk products, especially youth; and,
- 4. Ensuring consistency of tobacco harm reduction activities across all markets of operation, within regulatory guidelines.

By monitoring and critically evaluating tobacco companies' behavior, including actions that either support or impede tobacco harm reduction, the Index provides objective, transparent information to all stakeholders and incentivizes companies to act more quickly and responsibly than they otherwise would.

This chapter details the combined ranking of the 15 companies assessed by the 2020 index and key findings from the research.

Overall Ranking



Swedish Match (1st) has made a specific commitment to tobacco harm reduction which is embedded within its business strategy. Swedish Match is the only manufacturer that has reduced-risk product sales approaching half of the company's total sales. The company also allocates a large share of its capital to the development of its alternative product portfolio.

PMI's (2nd) ranking is partially attributed to its rapidly increasing ratio of investments in reduced-risk products. The company also benefits from the transparency of its harm reduction targets, marketing principles, and related violations. The continued high share of cigarettes and other high-risk products within PMI's total sales, however, prevents it from achieving a higher score.

BAT (3rd) has developed multiple reduced-risk products and allocated most of its capital and R&D away from high-risk tobacco products. Nevertheless, cigarettes remain the leading revenue generator for the company – a circumstance that was further reinforced by the acquisition of Reynolds American Inc, a large cigarette company, in 2017.

Altria (4th) and Imperial (5th) have similar overall scores in the ranking. Altria's position is supported by the disclosure of political activity through its code of conduct and detailed marketing and youth access prevention policies, but sales are almost entirely focused on high-risk products. Imperial has integrated harm reduction into its core business strategy and widened its offer of reduced-risk alternatives, but these are only made available in high-medium income countries.

JTI (6th) has introduced several reduced-risk alternatives in its product portfolio. However, it has also engaged in substantial M&A activities related to, thus increasing its sales of, high-risk products.

KT&G (7th), ITC (8th), and Swisher International (9th) are the remaining manufacturers that have brought reduced-risk products to market to date. However, their focus remains almost entirely on high-risk products and none of the companies have made any specific commitments regarding tobacco harm reduction.

TOAT (10th), Vinataba (11th), Gudang Garam Tbk PT (12th), Djarum PT (13th), Eastern (14th), and CNTC (15th) all rank at the bottom of the index, as they are neither involved in offering reduced-risk products nor have committed to harm reduction. Differences in each company's ranking are mainly attributed to differing rates of growth or decline in high-risk product sales. This is also driven by market dynamics like in the case of TOAT, which has registered a record decline in cigarette sales given tax increases and loss of market share.

Key Findings

The 2020 index demonstrates that although a small number of tobacco companies are making efforts in tobacco harm reduction, the industry has achieved very little progress toward transformation.

The highest-ranking companies are primarily large, publicly traded multinationals that have made varying commitments, policy changes, and investments related to harm reduction. However, few have achieved significant progress in reducing sales or consumption of high-risk products beyond the secular decline already occurring in many countries, and even fewer exhibit any ambition to do so.

The remaining companies – more than half of those evaluated – demonstrate little to no effort toward tobacco harm reduction. Many fail to acknowledge any responsibility to address high rates of tobacco-related disease and premature death, much less take any concrete steps to do so.

Overall, the 2020 index shows that the tobacco industry has only barely begun to act on the imperative of harm reduction and that all companies in the industry have much more to do – to demonstrate their awareness and commitment, and to ensure their policies and actions can begin to meaningfully reduce the destructive impact of tobacco use on global public health.

These and other key findings are explored in detail below.

KEY FINDING 1

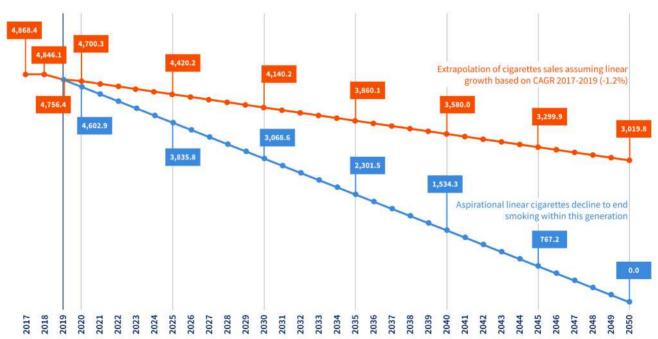
Harm reduction progress is extremely limited. The tobacco industry is not phasing out cigarettes or transitioning smokers to reduced-risk alternatives quickly enough.

Cigarettes are the most harmful tobacco products in the market and represent around 92% of current tobacco industry sales. ¹⁸ Progress in tobacco harm reduction therefore requires significant reduction of cigarette sales, which the industry is failing to achieve. The 15 companies assessed by the 2020 index achieved only a marginal decline, from 4.9 trillion to 4.8 trillion sticks (-1.2% CAGR) globally, during the review period of 2017-2019. ¹⁹ At this rate, it will take decades to materially reduce smoking rates, and as a result, many more smokers will die and society will continue to bear the dire health and economic consequences of high-risk tobacco consumption.

Moreover, while a handful of companies claim to support the goal of harm reduction and have begun to market reduced-risk alternatives, there is little evidence that they are committed to reducing high-risk product sales faster than the natural decline already occurring. Indeed, a number of companies state that they will continue selling high-risk tobacco products as long as demand exists, and that proceeds will be used to fund a future transition. But relying only on market forces to make these necessary changes will ensure that high-risk products are not phased out in this generation.

At the present rate of decline, sales of high-risk tobacco products will remain a significant global problem for decades to come.

2017-2019 Cigarettes Volume Sales Globally (Billion Sticks) and Extrapolation of Future Data Based on Linear Growth



Source: Tobacco Transformation Index based on estimations of company data derived from publicly available resources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); industry and financial databases (Passport, Orbis, and Capital IQ); interviews with industry experts.

Note: Please note that data refer only to the 15 companies in the Index scope

 $^{^{\}rm 18}$ Estimate from Tobacco Transformation Index research.

¹⁹ Ibid

* 2019-2050 CAGRs for cigarettes volume sales calculated assuming linear growth, based on historic 2017-2019 period performance.

While cessation remains the best overall course for improving the health of smokers, reduced-risk alternatives represent a crucial means for transitioning consumers away from high-risk products. However, in 2019, the global share of reduced-risk products accounted for only 3% in value and 2% in volume (per stick equivalent²⁰) of overall tobacco and nicotine-related sales for the 15 companies in the index.²¹ This underscores how far the industry still has to go to meaningfully contribute to tobacco harm reduction.

KFY FINDING 2

A small group of companies have made public commitments to harm reduction, but none have shifted their focus enough to ensure the accelerated decline of cigarettes and other high-risk products.

Six of the 15 companies evaluated have acknowledged their role in tobacco harm reduction and made commitments to tackle the challenges of tobacco-related death and disease. Altria, BAT, Imperial, JTI, and PMI currently account for 42.5% of cigarettes sold globally.²² Along with Swedish Match, these companies each have commitments and harm reduction targets which aim to transition existing high-risk product users to reduced-risk alternatives.

However, these companies have so far failed to shift a significant share of their sales toward reduced-risk products. Swedish Match, and PMI have respectively 44% and 19% of total sales from reduced-risk products in 2019, while no other company surpasses a single-digit ratio.²³

Notably, several companies have started to shift financial resources toward reduced-risk products. Six companies claiming commitments to harm reduction have allocated on average 65% of their capital expenditure and R&D budget to reduced-risk products during the reporting period. BAT, PMI, and Swedish Match allocated the majority (80-90%) of their budget to expand or build new facilities or convert cigarette facilities to this purpose.²⁴

While investments in production capacity reflect a structural shift away from high-risk products, many companies continue to invest heavily in marketing of high-risk products. Among the six companies claiming commitments to harm reduction, between 30-55% of their marketing budgets are still devoted to high-risk products.²⁵

These figures show that, despite their commitments, even the highest-ranked companies have much more to do to translate their harm reduction strategies into meaningful results.

²⁰ In order to effectively evaluate sales volume across different tobacco products, the Index team has developed a conversion methodology of the various tobacco product volumes into the cigarette stick equivalent format. Details on the per stick equivalent conversion are provided in the 2020 Tobacco Transformation Index Methodology.

²¹ Estimate from Tobacco Transformation Index research.

²² Ibid.

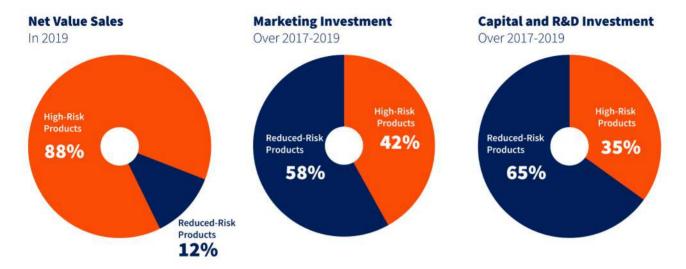
²³ Ibid.

²⁴ Ibid.

²⁵ Ibid.

A small number of companies are shifting resources towards development of reducedrisk products, but also continue to spend significant amounts on high-risk products.

Average Share of Net Value Sales, Capital and R&D Investments, and Marketing Expenditure of Reduced vs High-Risk Products for the Six Companies Claiming Commitment to Harm Reduction (Altria, BAT, Imperial, JTI, PMI, and Swedish Match)



Source: Tobacco Transformation Index estimates derived from publicly available sources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); industry and financial databases (Euromonitor International's Passport databases, Orbis, and Capital IQ); and interviews with industry experts.

KFY FINDING 3

The majority of companies have not made any commitment to harm reduction and/or continue to set targets to increase sales of high-risk tobacco products.

Nine of the 15 companies assessed fail to acknowledge any role in tackling the challenges of tobacco-related death and disease, and have made no explicit commitment to harm reduction. Collectively, these companies account for almost 60% of global cigarette volume sales and dominate in low- and middle-income countries, where the highest numbers of smokers currently live. 26 CNTC alone sells nearly half (48.6%) of the cigarettes associated with companies in the index. 27

Three of these companies – CNTC, Eastern, and Vinataba – also continue to set targets to increase sales of high-risk tobacco products. This reflects the fact that many companies remain solely focused on cigarettes and other high-risk products.

KT&G and Swisher International have made investments in reduced-risk alternatives, but their efforts to further grow their traditional high-risk tobacco businesses demonstrate that they have not yet fully embraced the goal of harm reduction or transitioning consumers away from high-risk products.

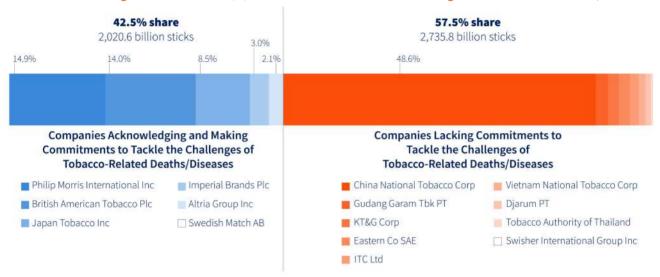
²⁶ Ibid

²⁷ Ibid

To be most effective, companies should focus on making reduced-risk alternatives available and attractive to existing smokers within an overarching harm reduction strategy that includes phasing out sales of high-risk products.

Nine of 15 companies have not made any commitment to tobacco harm reduction.

2019 Global Share of Cigarettes Volume Sales (%) and Commitments to Tackle the Challenges of Tobacco-Related Deaths/Diseases



Source: Tobacco Transformation Index assessment based on estimations of company data derived from publicly available sources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); industry and financial databases (Euromonitor International's Passport, Orbis, and Capital IQ); and interviews with industry experts as well as the review of available information coming from a company's websites, formal financial and non-financial reporting such as annual CSR or sustainability reports, as well as other documents such as press releases, codes of conduct, policies, values, guidelines, and FAQs. **Note:** Please note that data refers only to 15 companies in the index scope.

KEY FINDING 4

The highest-ranked companies in the index are mostly publicly traded multinationals, while private and state-owned companies lag behind.

Altria, BAT, Imperial, JTI, PMI, and Swedish Match are all publicly traded and therefore subject to more reporting requirements and scrutiny from investors and other stakeholders. Most also operate across multiple markets with differing regulations and other dynamics affecting industry competition and consumer preferences. Together, these factors compel higher levels of transparency and may also encourage greater responsiveness to tobacco harm reduction.

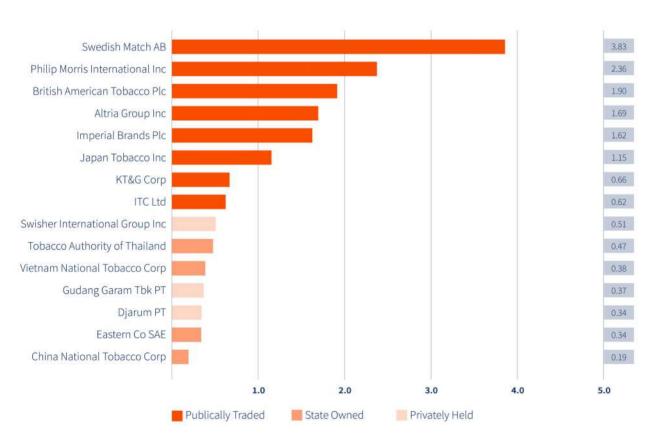
In comparison, private companies do not have the same imperative to attract or retain investors, or to respond to external inquiries or pressure related to the evolution of their businesses. Djarum, a privately held Indonesian company, has high cigarette sales in several international markets and it does not have a strategic commitment to harm reduction. And Swisher International, headquartered in the United States (US), has also not made public statements or commitments on harm reduction, despite pressure from political bodies, academics, and the press concerning the health risks of tobacco products.

State-owned companies are subject to even more unique conditions and influences. Several are national monopolies, meaning they are effectively extensions of their countries' governments. Others are publicly traded companies but with controlling interests held by governments – currently, there are 18 countries in the world whose governments own 10% or more of at least one tobacco company. Very often, these companies are driven by the imperative of contributing to national economic development, as much as or more than other priorities such as public health. Consequently, state-owned companies have so far not made any particular effort to advance tobacco harm reduction. Of the six companies with some degree of state ownership in the index, five – CNTC, TOAT, Vinataba, ITC, and Eastern – are in the lower half of the index rankings.

Differing ownership structures create different incentives for companies in relation to tobacco harm reduction. However, the ongoing crisis of tobacco-related death and disease demands a response from the entire industry. Private and state-owned companies in particular should be called upon to do more, and should voluntarily disclose more details to inform their stakeholders.

The highest-ranked companies in the index are mostly publicly traded multinationals, while private and state-owned companies lag behind.

Companies' Score and Majority Ownership



Details on ownership: Eastern Co SAE is 50.5% owned by the Egyptian Ministry of Investment; Gudang Garam Tbk PT is 75.5% owned by the Wonowidjojo Family; ITC Ltd is publicly traded but state enterprises own 24.2% of the company; Japan Tobacco Inc is publicly traded but the Government of Japan owns 33.3% of the company.

²⁸ Malan, D. and Hamilton, B. (2020). Conflicts and Contradictions: State ownership of tobacco companies and the WHO Framework Convention on Tobacco Control. Just Managing Consulting.

KEY FINDING 5

Tobacco companies are focusing most of their reduced-risk product efforts on higher-income countries, while high-risk product sales in lower-income countries continue to grow.

The bulk of high-risk tobacco use is in low-medium income countries, meaning these countries are where reduced-risk products could have the greatest impact in reducing tobacco-related harm. Unfortunately, companies currently sell the vast majority of reduced-risk products in high-medium income countries.

Overall sales of cigarettes by the companies in scope registered a 1.2% rate of annual decline in high-medium income countries between 2017 and 2019.²⁹ In that same period, sales of cigarettes in low-medium income countries increased by 1.7%.³⁰ Gudang Garam, Eastern, and ITC, which each operate in a single low-medium income market, have all registered consistent single-digit annual growth in cigarette sales. Furthermore, international companies such as KT&G and JTI have increased their cigarette sales in low-medium income countries while sales have declined in high-medium income countries. JTI in particular has made several acquisitions in Indonesia, the Philippines, and Bangladesh, to further develop its business in what it describes as a: "thriving region."³¹

Meanwhile, companies that offer reduced-risk products are mostly focusing their efforts on selected high-medium income countries, where overall smoking rates are lower and cigarette sales are already declining. Ranked companies collectively offer reduced-risk products in 15 of the high-medium income countries in the index scope. However, their reduced-risk alternatives reach just three low-medium income countries, with Kenya and Pakistan only recently added.³²

While there may be business legitimate reasons for this discrepancy, by allowing it to persist, companies risk the impression that they are merely being opportunistic or are not truly committed to tobacco harm reduction. In order to meaningfully displace cigarettes and other high-risk products, it is essential that companies' harm reduction efforts address all markets, especially those where the largest proportion of the world's smokers live and harm reduction could have the greatest impact.

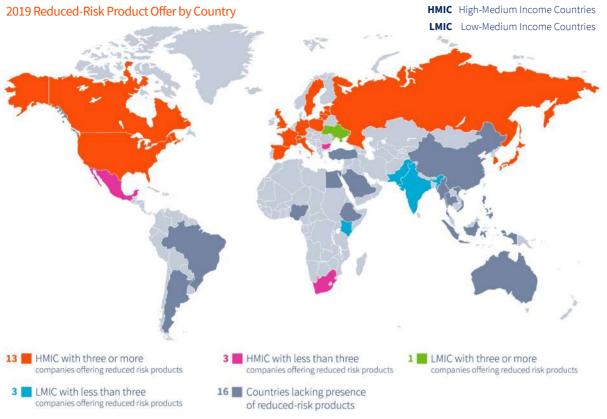
 $^{^{\}rm 29}$ Estimate from Tobacco Transformation Index research.

³⁰ Ibid

³¹ Japan Tobacco Inc. (2017). JT Group Signs Agreement to Acquire Indonesian Kretek Cigarette Company and its Distributor. Retrieved July 28, 2020, from https://www.jti.com/sites/default/files/press-releases/documents/2017/press_release_kretek_cigarette_company.pdf

 $^{^{\}rm 32}$ Estimate from Tobacco Transformation Index research.

Tobacco companies are focusing most of their reduced-risk product efforts on higher-income countries.



Source: Tobacco Transformation Index estimates derived from publicly available resources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); interviews with industry experts and in-country research.

Note: Please not that data refer only to the 36 countries in the index scope.

KEV FINDING 6

Better disclosure and greater overall transparency are needed.

Lack of trust in the tobacco industry's actions and motivations, and the fast-changing nature of tobacco-related science, politics, and competition, mean that transparency is essential for tobacco harm reduction to be effectively implemented and evaluated. In general, companies should be disclosing as much detail as possible concerning their relevant policies, strategies, and performance, as well as their stances on and responses to public policy and other external factors influencing the trajectory of tobacco harm reduction.

The 2020 index includes seven transparency indicators addressing companies' disclosure of information. BAT and PMI each earned 57% of the available score for these indicators, followed by Altria, reaching 50%.³³ Imperial, JTI, and Swedish Match each achieved 40% of the total transparency score, while the remaining nine companies scored zero.³⁴

 $^{^{\}rm 33}$ Estimate from Tobacco Transformation Index research.

³⁴ Ibid.

Marketing is an area of particular concern. Although companies' marketing activities are heavily regulated in many jurisdictions, companies are frequently accused of exploiting poor enforcement or loopholes, or using otherwise unethical means to obscure or distract from the health risks of tobacco and attract new users, for both high-risk and reduced-risk products. Unfortunately, without robust disclosure, it can be difficult for stakeholders to assess the extent to which companies are complying with regulations or other external standards. Currently, only two of the 15 companies in scope disclose information related to marketing regulatory violations.

Some companies commit to voluntary marketing codes meant to ensure a higher overall standard of performance, including in markets where regulations are less stringent. This is particularly important as new products and new marketing channels are coming online and regulations are struggling to catch up. Here again, few companies provide adequate detail for stakeholders to judge the effectiveness of such policies. Of the six companies that claim adherence to a voluntary code, only PMI discloses reported violations and details of any investigations or remediations.

Additionally, only Altria provides comprehensive details concerning lobbying and political engagement activities as they relate to tobacco harm reduction. In part, this reflects it operating exclusively in the US, where it is mandatory to file activities, although it goes beyond its obligations by publishing details on its own website. Other companies do not comprehensively disclose lobbying and political engagement activities and where they do it is for the most part in accordance with regulations of specific geographies. Again, given the deep lack of trust in the industry and the rapid evolution of policies influencing harm reduction, as well as the principles of Article 5.3 of the FCTC, such transparency is especially critical. And state-owned companies in particular must disclose more, as their relationships with governments are often that much more opaque.

Few companies provide adequate disclosure for stakeholders to monitor and evaluate their approach to harm reduction.

Summary of Companies' Disclosures Concerning Marketing and Lobbying and Advocacy



Source: Tobacco Transformation Index estimates based on the review of available information from company websites, formal financial and non-financial reporting such as annual, CSR or sustainability reports, plus policies, commitments, statements, such as those related to a company's policy commitments. These could be codes of conduct, policies, values, guidelines, FAQs and other related documents.

Index Categories

The 2020 Tobacco Transformation Index is a relative ranking of companies' activities and performance based on 35 indicators across six distinct measurement categories.

1 Strategy and Management

Assesses whether companies have made specific commitments to tobacco harm reduction and how these are embedded within their business strategies and management systems. Also assesses how stakeholder engagement is reported and incorporated into companies' strategies.

2 Product Sales

Assesses companies' historical performance in sales of high-risk tobacco products and in proportion to sales of reduced-risk alternatives, including rates of change, which provide evidence that companies are effectively phasing out high-risk products.

3 Capital Allocation

Assesses companies' performance in allocating resources away from high-risk products to reduced-risk alternatives to support the transformation of the tobacco industry.

4 Product Offer

Assesses companies' efforts to transition their product portfolios away from high-risk tobacco products and toward reduced-risk alternatives to offer users alternative to migrate away from high-risk products.

5 Marketing

Assesses how companies' marketing policies, compliance, and expenditures support a transition away from high-risk tobacco products, while also mitigating the potential for uptake of reduced-risk alternatives by non-smokers or non-users of high-risk products.

6 Lobbying and Advocacy

Assesses companies' disclosure of positions related to tobacco harm reduction, including lobbying and advocacy memberships, financial contributions, and related activities.

Strategy & Management

Context

Tobacco harm reduction is more likely to be prioritized if a company has made a well-defined commitment that is integrated with its core business strategy, with clear accountability rooted at the top of the organization. Effective strategy and management are further demonstrated by companies that set clear goals, track performance, and disclose pertinent details to all stakeholders. Robust stakeholder engagement and public reporting of its results also enhance accountability and effectiveness.

What We Assess

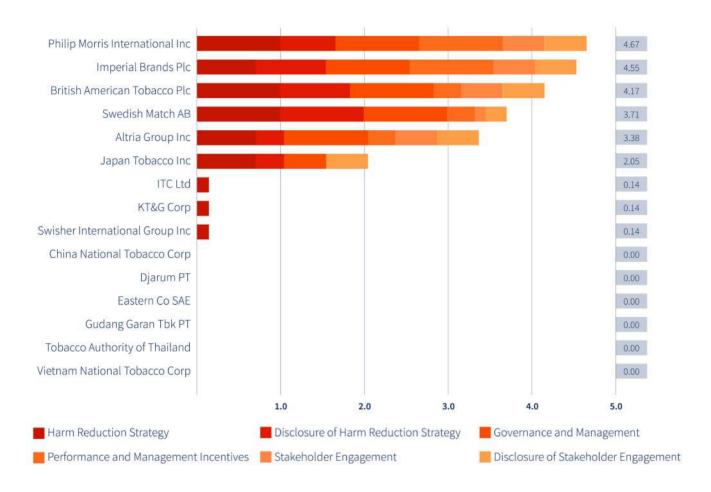
This category assesses whether the company has made a specific commitment to tobacco harm reduction and how this is embedded within its business strategy and management systems. It also assesses how stakeholder engagement is reported and incorporated into the company's strategy.

- **Harm Reduction Strategy** Commitment to phase out high-risk tobacco products and responsibly develop and offer reduced-risk alternatives.
- **Disclosure of Harm Reduction Targets and Performance** Public reporting on specific targets and performance in achieving tobacco harm reduction.
- **Governance and Management Systems** Accountability structure and governance mechanisms within the company for achieving tobacco harm reduction objectives.
- **Performance Management and Incentives** Performance incentives for achieving tobacco harm reduction objectives.
- **Stakeholder Engagement** Clear processes for selecting stakeholders and incorporating insight focused on tobacco harm reduction.
- Disclosure of Stakeholder Engagement Disclosure of stakeholder engagement activities and their outcomes.

How We Assess

The assessment is based on the review of available information coming from a company's website, their formal financial and non-financial reporting such as annual corporate social responsibility (CSR) or sustainability reports, as well as other documents such as press releases, codes of conduct, policies, values, guidelines, and frequently asked questions (FAQs).

Ranking Strategy and Management



PMI, Imperial, BAT, Altria, Swedish Match, and JTI lead the Strategy & Management category ranking, with each company acknowledging and making commitments to harm reduction.

PMI (1st) and Imperial (2nd) differentiate themselves from other companies with governance and management activities initiated at board level and executive performance incentives specifically linked to sales of reduced-risk alternatives. Additionally, PMI has set and disclosed detailed targets that are measurable and time-bound.

BAT (3rd) has prioritized governance and management of tobacco harm reduction at senior level and set measurable targets. It has supported its strategy with stakeholder engagement activities, which identify harm reduction as a crucial issue.

Swedish Match (4th) advocates actively for a world without cigarettes. The company is transparent in tracking the progress of its harm reduction strategy by setting measurable targets for sales performance. While reduced-risk products are core to its businesses, it does not break down a performance incentive structure specific to its reduced-risk portfolio. The company reports on stakeholder engagement related to sustainability issues, but does not provide specific details of engagement related to harm reduction.

Altria (5th) has made a specific commitment to tobacco harm reduction and has made it a key priority within its internal governance and management. It does not, however, set measurable targets for reducing the share of high-risk product sales within its tobacco portfolio.

JTI (6th) has committed to bringing reduced-risk products to market and has set investment targets to help build up its offerings. But these are not framed within a larger harm reduction strategy or business structure, and the company does not report regularly on its harm reduction performance.

ITC, KT&G, and Swisher International jointly occupy seventh place. They each offer reduced-risk alternatives but have not published details of any policies or commitments related to harm reduction.

The remaining six companies – CNTC, Djarum, Eastern, Gudang Garam, TOAT, and Vinataba – have not indicated that they are pursuing tobacco harm reduction in any form.

Key Findings Strategy and Management

Several companies have expressed commitment to tobacco harm reduction, but approaches towards high-risk products remain vague.

Six of the 15 companies evaluated by the index have made some form of public commitment to tobacco harm reduction. However, such commitments are often unclear as to the future role of high-risk products.

Swedish Match claims its vision is "a world without cigarettes." It initiated this position in 2014, having divested its cigarette business to Austria Tabak in 1999. It states: "The company is committed to displacing cigarettes by continuing to develop and commercialize alternative and dramatically safer sources of nicotine – which will improve public health." It is the only company that has targeted removing cigarettes from markets in the immediate term.

PMI and BAT have both made commitments that target reducing the share of sales of high-risk products in their portfolios by increasing consumer demand for reduced-risk alternatives. PMI claims that its underlying objective is to make cigarettes obsolete, stating: "PMI will be far more than a cigarette company. We want to change society and deliver a better, smoke-free future. To make our vision a reality we are transforming and staking our entire future on a line of smoke-free products."³⁷ However, the company clearly states that it will not exit the cigarette market: "as long as significant legitimate demand for combustible tobacco exists, PMI will continue to sell such products responsibly and seek to maintain our leadership position internationally." ³⁸ The reason given is that although selling its cigarette business would make the company smoke-free more quickly, it would simply shift the demand and problem elsewhere.³⁹

BAT states that its ambition is: "to increasingly transition our revenues from cigarettes to non-combustible products over time."⁴⁰ However, it has not advocated for the end of cigarettes. The company says that for the foreseeable future, it will continue to sell traditional products, and that revenue from these sales will be used to fund the further development of its reduced-risk product portfolio.

Imperial and JTI position their reduced-risk products as part of a wider portfolio to provide "choice" for smokers, but without any specific commitment to reduce or displace high-risk product sales. Imperial states: "Our focus on science and research and development underpins our commitment to create something better for

³⁵ Swedish Match AB. (2018). Annual Report 2017 – Strength Through Quality and Innovation.

³⁶ Swedish Match AB. (2020). Annual Report 2019. p. 41

³⁷ Philip Morris International Inc. (n.d.). Philip Morris International | Delivering a Smoke-Free Future. https://www.pmi.com/

³⁸ Philip Morris International Inc. (2020). 2019 Annual Report. pp. 3-4

³⁹ Philip Morris International Inc. (2020). Integrated Report 2019. p. 171.

⁴⁰ British American Tobacco Plc. (2019). Transforming Tobacco – Sustainability Report 2018.

the world's smokers. We want smokers to transition to potentially less harmful alternatives to cigarettes and have developed a portfolio of Next Generation Products (NGP) 41 that have the potential to reduce smoking-related disease." 42 JTI similarly emphasizes a focus on consumer choice, stating: "We believe products that do not involve combustion and do not produce tobacco smoke are products with the potential to reduce the risks associated with smoking. We are committed to developing and bringing to market Reduced-Risk Products that meet consumer expectations." 43

While progress has been made with a number of companies making commitments to harm reduction, it is necessary for these commitments to be more clearly linked to the goal of actively phasing-out high-risk products, in order to sharply reduce the death and disease they cause.

Company commitments to harm reduction are supported with limited targets.

Most companies with commitments to harm reduction integrate them into overall business strategy and management systems by setting targets, assigning responsibilities, and defining performance incentives.

Only four out of the six companies expressing commitment to tobacco harm reduction – BAT, JTI, PMI and Swedish Match – set specific performance targets in areas such as investment, sales, and conversion rates. None of the companies have set specific, timebound targets as to when high risk products will account for a lower percentage of their tobacco sales, than reduced-risk products. JTI sets goals around investment, targeting USD1 billion across 2018 to 2020, while BAT and PMI have targeted both sales and user conversion rates. HAT has targeted reduced-risk revenues reaching GBP5 billion by 2023-2024 and consumers of non-combustibles growing to 50 million by 2030. In comparison to BAT's total company revenue in 2019, GBP5 billion would represent 19%. PMI targets its smoke-free shipment volumes reaching 250 billion by 2025, projecting declines in its combustible products to 550 billion, making reduced-risk products 45% of its sales. This is also aligned to its global goal for 40 million adult smokers switching to its 'smoke-free' products by 2025, with 20 million of these users in non-Organization for Economic Co-operation and Development (OECD) countries.

All six companies with harm reduction strategies assign responsibility for them at a senior level. For example, BAT appointed a Director of New Categories to its management board, with end-to-end responsibility for driving growth, innovation, brand building, and consumer insights for reduced-risk products. For laddition, the majority claim to have structures set up to prioritize the development of reduced-risk products. For example, since 2017 PMI has realigned its operating segments by grouping 'smoke-free' products and related ecosystem development, as well as scientific substantiation, under a new Science & Innovation function. 51 BAT took the step of changing its reduced-risk business from being a separate entity to integrating it into its existing

⁴¹ Terminology used by Imperial Brands for products that fall into the novel category of tobacco products, including snus, e-vapor and heated tobacco products as well as non-tobacco nicotine pouches.

⁴² Imperial Brands Plc. (2019). Annual Report and Accounts 2019. p. 19.

⁴³ Japan Tobacco Inc. (n.d.). Japan Tobacco International – a Global Tobacco Company. https://www.jti.com/

⁴⁴ Japan Tobacco Inc. (n.d.). Reduced-Risk Products: How Do They Fit into the Future of JTI? Retrieved August 13, 2020, from https://www.jti.com/news-views/reduced-risk-products-how-do-they-fit-future-jti

 $^{^{\}rm 45}$ British American Tobacco Plc. (2020). Annual Report and Form 20-F 2019. pp. 4-10.

⁴⁶ Ibid

⁴⁷ Terminology used by PMI to refer to its three recued-risk products heated tobacco, cartridges and e-liquids.

⁴⁸ Philip Morris International Inc. (2020). Integrated Report 2019. p. 30.

⁴⁹ Ibid.

 $^{^{50}}$ British American Tobacco Plc. (n.d.). British American Tobacco. https://www.bat.com/ $\,$

⁵¹ Philip Morris International Inc. (2018). Annual Report 2017. p. 4.

geographic operations, under the pretext that it facilitates it becoming core to its operations and utilizing the company's full resources.⁵²

A number of companies reference reduced-risk product performance being part of remuneration incentive evaluations for senior leaders, but only PMI and Imperial state a specific percentage (20%) that is applied to reduced-risk products.⁵³ Despite this, incentives also remain linked to sales of high-risk tobacco products, which is at odds with tobacco harm reduction.

Establishing firm, time-bound targets to cease sales of high-risk products and responsibly offering reduced-risk alternatives signals a deeper commitment and a higher likelihood of performance that will contribute to tobacco harm reduction. However, most of the companies in the index do not currently demonstrate this level of ambition.

Few companies provide adequate detail of stakeholder engagement as it relates to tobacco harm reduction.

Only five companies – PMI, Imperial, BAT, Altria, and JTI – make an explicit commitment to stakeholder engagement to inform harm reduction strategy. Although, even for these companies, disclosure of the nature and content of engagements can be improved.

Disclosure of stakeholder engagement activities is provided by PMI, Imperial, BAT, Altria, Swedish Match, and JTI, taking a variety of forms. For example, Imperial publishes the observations and recommendations of an independent panel of stakeholders who reviewed Imperial's sustainability strategies and actions. One of their key recommendations was to focus on harm reduction and that there was significant work to be done to transition significant numbers of consumers to less harmful products.⁵⁴ BAT publishes a biennial Harm Reduction report which details some of its stakeholder engagement activities. For example, it highlights efforts to collaborate with national and international standards bodies to develop new quality and safety standards for vapor products.⁵⁵

Several companies note the use of stakeholder engagement to inform materiality assessment processes, which in many cases identify harm reduction as a key issue. PMI, for example, highlights "Product Health Impacts" as the most important topic for stakeholders consulted for its materiality assessment.⁵⁶

Companies also increasingly provide platforms for engagement with the scientific community in relation to the development of reduced-risk products. For example, PMI launched its sbv IMPROVER platform in 2011, which was designed to enable independent scientific experts to review and validate PMI's scientific methods and conclusions. It is accompanied by another website that provides an overview of the company's scientific results and research, and another one which allows all relevant stakeholders to share and explore toxicity assessment data produced in relation to reduced-risk products. JTI also began publishing its research findings in 2017.

56 Ibid.

 $^{^{52}}$ British American Tobacco Plc. (2018). Annual Report and Form 20-F 2017. p. 13.

⁵³ Imperial Brands Plc. (2019). Annual Report and Accounts 2019. p. 76. Philip Morris International Inc. (2020). 2020 Proxy Statement and Notice of Annual Meeting of Shareholders. p. 37.

⁵⁴ Imperial Brands Plc. (2019). Imperial Brands Stakeholder Panel Statement 2019. p. 6.

⁵⁵ British American Tobacco Plc. (2018). Harm Reduction Focus Report 2018. Retrieved July 27, 2020, from https://www.bat.com/group/sites/UK_9D9KCY.nsf/vwPagesWebLive/D0964UGU/\$file/Harm_Reduction_Focus_Report_2018.pdf

The remaining nine companies do not disclose if or how they engage with stakeholders concerning tobacco harm reduction. ITC and KT&G do highlight stakeholder engagement, but this centers on wider sustainability issues instead of a clear harm reduction agenda.

Transparent stakeholder engagement is critical to the development of a multi-faceted tobacco harm reduction strategy that considers the impact on a wide range of relevant stakeholders beyond a company's shareholders. Several companies have made commitments to and/or disclose details related to such engagement, but these details are not comprehensive.

ADDITIONAL ANALYSIS BOX

Companies previously introduced sustainable tobacco farming programs to support farmer livelihoods, but are now increasingly framing them in terms of industry transformation.

In recent years, tobacco companies have faced increasing pressure to address economic hardships and difficult working conditions faced by many of the world's tobacco leaf farmers. In response, several companies have introduced or contributed to programs to improve the sustainability of tobacco farming, including enhancing farmer livelihoods.

For example, Altria, BAT, Imperial, JTI, and Swedish Match have joined an industry-wide initiative called the Sustainable Tobacco Program (STP). Founded in 2016, the STP sets standards to which its members' suppliers must conform, which are evaluated through a combination of self and third-party assessments. The criteria of the program include the pillars of Crop, Environment, People, Facilities, and Governance. There are several sub-topics of the assessment that include farmer livelihoods, including economic viability and farm profitability.

More recently, some companies have acknowledged that declining cigarette sales and efforts to transition smokers to reduced-risk alternatives will further reduce demand for tobacco leaf, which could put tobacco farmers under even greater stress. For example, BAT and PMI are emphasizing their efforts to assist farmers in finding other income sources. PMI states: "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."57 Supporting programs are also carried out under the auspices of its living income and living wage initiatives, where it targets 100% of contracted farmers supplying tobacco to PMI making a living income by 2025 and 100% of tobacco farmworkers paid at least the minimum legal wage by 2022. ⁵⁸

⁵⁷ Philip Morris International Inc. (2020). Integrated Report 2019. p. 111.

⁵⁸ Ibid. p. 108.

 $^{^{59}}$ British American Tobacco Plc. (2020). Annual Report and Form 20-F 2019. p. 31.

⁶⁰ British American Tobacco Plc. (2017). Sustainable Agriculture and Farmer Livelihoods Focus Report 2017. p. 7.

BAT highlights its programs offering training and advice to help farmers diversify their crops, stating that 92% of its contracted farmers grew crops other than tobacco in 2019.⁵⁹ This was initially aimed at increasing food security and income, but the company also now recognizes the potential link to industry transformation, stating in 2017: "We've always encouraged this crop diversification... If, at some stage in the future, we do find there is an impact on the overall demand for tobacco leaf, we have an established approach for working with impacted farmers to support a smooth transition into alternative agricultural livelihoods." ⁶⁰

Recognizing the importance of addressing supply chain impacts due to industry transformation, and the potential that these could create systemic barriers to harm reduction in some parts of the world, initial drafts of the index methodology included indicators focused on supply chain transition. These were ultimately excluded due to challenges with how to apply them consistently to all companies. However, the Index team will continue to evaluate the feasibility of including such indicators in the future and welcomes stakeholder feedback on how to make them most effective.

In addition, the Foundation for a Smoke-Free World through its Agriculture and Livelihoods strategy is dedicating resources outside the index to partner with agricultural, rural development, and experts to identify and develop alternative livelihoods for smallholder tobacco farmers starting in Malawi.

Product Sales

Context

Product sales strike at the heart of the index, as the level of harm is directly related to the type and volume of products that a company sells. The index therefore seeks evidence that companies are phasing out, as rapidly as possible and across all markets, sales of cigarettes and other high-risk products, and displacing them through sales of appropriate reduced-risk alternatives. Reducing dependence on revenues from high-risk products also demonstrates progress in tobacco harm reduction.

What We Assess

This category assesses the company's historical performance in its sales of high-risk tobacco products and reduced-risk alternatives, including rates of change.

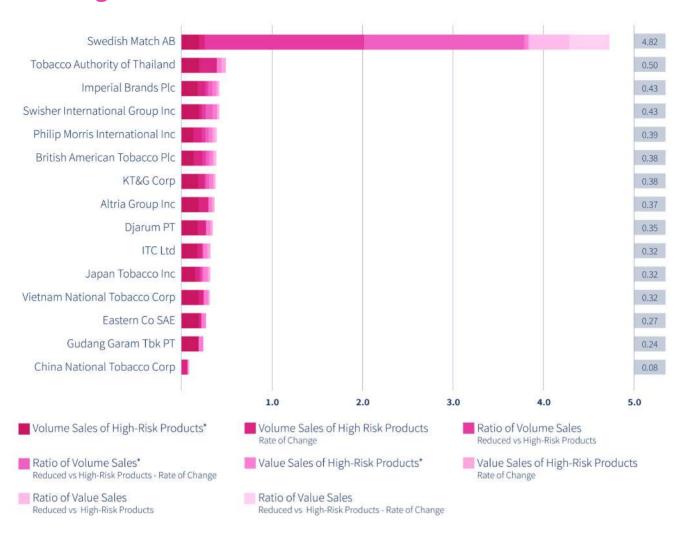
- **Volume and Value Sales of High-Risk Products** Volume and value sales of high-risk tobacco products (last financial year: 2019). Lower sales of high-risk products have a positive impact on tobacco harm reduction.
- Volume and Value Sales of High-Risk Products Rate of Change Evolution in volume and value sales of high-risk tobacco products (last three financial years: 2017, 2018, 2019). A negative rate of change has a positive impact on tobacco harm reduction.
- Ratio of Volume and Value Sales (Reduced vs High-Risk Products) Ratio of volume and value sales of reduced-risk alternatives to high-risk tobacco products (last financial year: 2019).
- Ratio of Volume and Value Sales (Reduced vs High-Risk Products) Rate of Change Evolution of the ratio of volume and value sales of reduced-risk alternatives to high-risk tobacco products (last three financial years: 2017, 2018, 2019).

Scoring for the indicators above is adjusted by the relative risk level of high-risk and reduced-risk products sold; conversion of the various product volumes into a cigarette stick equivalent; and consistency of performance by market for companies operating across low-medium and high-medium income countries.

How We Assess

The assessment is based on estimations of company data derived from publicly available sources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); industry and financial databases (Euromonitor International's Passport, Orbis, and Capital IQ); and interviews with industry experts.

Ranking Product Sales



Note: * Performance indicators calculated as negative indicators - indicators are of type "lower is better". For example, a higher "Volume Sales of High-Risk Products" clearly has a negative impact on tobacco harm reduction.

Swedish Match (1st) is the only manufacturer with a substantial score in the Product Sales category, given the share of reduced-risk products in the company's sales mix. This performance reflects its focus on snus, particularly in Scandinavia, and increasing sales of non-tobacco nicotine pouches in the US and multiple European markets. The company still has a strong presence in the high-risk category between smokeless and combustible products.

The position of TOAT (2nd) is due to its limited and substantially declined sales of high-risk products. Tax increases and loss of cigarette market share in Thailand have affected its position in the Product Sales ranking. However, the company does not offer reduced-risk products.

Imperial (3rd) and Swisher International (3rd) have identical scores. Swisher International's rank is influenced by its lack of cigarette sales, the most harmful tobacco product, and the growing, albeit small, ratio of reduced-risk products. Imperial's reduced-risk sales are mainly derived from cartridges, which account for a growing share in the company's total sales mix and are considered less harmful compared to other categories. Both companies only sell reduced-risk products in high-middle income markets, impeding their ability to attain higher scores.

PMI (5th) maintains a large share of high-risk products in its overall sales mix due to its international dominance in cigarettes, notwithstanding the rapid growth of its sales of heated tobacco. This limits PMI's position in the ranking.

BAT (6th) and KT&G (6th) have the same Product Sales score. Both shifted their sales balances further toward reduced-risk products. BAT registered an above average decline in cigarette volume and introduced new reduced-risk alternatives during the review period. KT&G's score is linked to its increasing heated tobacco sales, despite selling this product only in South Korea while the company still relied on cigarettes for its international sales through 2019.

Altria's (8th) rank mainly reflects declining sales of cigarettes in the US and a low ratio of reduced-risk versus high-risk sales. The company only started to sell heated tobacco in 2019 and had to stop selling cartridges as part of the investment in JUUL Labs Inc announced in 2018.

Despite only selling high-risk products, Djarum (9th) has a higher rank than other high-risk only companies due to volume sales declines between 2017 and 2019.

ITC (10th) and JTI (10th) have both registered sales in reduced-risk products. ITC has modest sales of nicotine replacement therapy (NRT) products in India, while JTI has grown its international presence in cartridges and heated tobacco products. However, both manufacturers increased their cigarette sales, causing a negative impact on their Product Sales score. Vinataba (10th) does not participate in reduced-risk categories and has also increased its cigarette sales since 2017.

The remaining companies scored even lower due to their exclusive focus on high-risk product sales. In particular, Eastern (13th), Gudang Garam (14th), and CNTC (15th) all registered notable sales growth in cigarettes between 2017 and 2019. And the sheer size of CNTC's volume sales further contributes to its position at the bottom of the index.

Key Findings Product Sales

Cigarettes remains the dominant product category, highlighting limited progress of tobacco harm reduction to date.

In 2019, cigarettes accounted for 94.6% (USD261.1 billion) in value and 94.4% (4.8 trillion sticks) in volume of high-risk product sales for the companies in the index. 61 Between 2017 and 2019, global cigarette volume sales declined from 4.9 trillion to 4.8 trillion sticks (-1.2% CAGR) for the 15 tobacco companies in scope. 62 This level of change is unlikely to result in a meaningful public health gain, nor will it lead to an end to smoking within this generation.

About half of all cigarettes volume sales are attributed to a single manufacturer, CNTC. Beyond CNTC, the four biggest international players - PMI, BAT, JTI, and Imperial - account for a further 40.4% of total cigarettes volume sales in 2019.63 Cigarettes volume sales of BAT (-4.5% CAGR) and PMI (-3.7% CAGR) are declining faster than the index average -1.2%.64 Conversely, JTI and CNTC have registered a positive CAGR in cigarette volume

⁶¹ Estimate from Tobacco Transformation Index research

sales of 1.6% and 0.3%, respectively.65 Other companies that primarily operate in their domestic markets – Eastern, Gudang Garam, ITC and Vinataba – have similarly increased their sales of cigarettes, registering consistent single digit year-on-year volume growth.

The conflicting dynamics of cigarettes sales between high-medium and low-medium income countries further limits progress toward tobacco harm reduction. The top 15 manufacturers have registered a 1.2% rate of volume decline for cigarettes in high-medium income countries, while in low-medium income countries there is a 1.7% growth.66 International companies that have increased their cigarettes sales in low-medium income countries the most are KT&G (26.1% CAGR) and JTI (16.9% CAGR), yet both had declining cigarettes sales in high-medium income countries.67 Furthermore, Eastern, Gudang Garam, ITC, and Vinataba – companies that each operate in a single low-medium income market – have all grown their cigarette sales. In high-medium income countries, the most notable declines in cigarettes were registered by TOAT, which contracted by 19.6% CAGR due to domestic tax hikes and loss of market share, followed by Altria's 6.6% decrease, a reflection of the shrinking cigarette market in the US.68

Companies committed to tobacco harm reduction will have to proactively limit and ultimately stop the sales of cigarettes altogether by offering consumers reduced-risk alternatives, rather than counting on the natural decline of the category. So far, no company has taken this path.

Sales of reduced-risk products are dwarfed by those of high-risk products, especially in low-medium income countries.

During the last three years, reduced-risk products have increased as a proportion of total tobacco sales. However, their share in 2019 was 3% of value and 2% of volume sales, reflecting a clear need for stronger action by companies to support harm reduction.⁶⁹ This need is even greater for low-medium income countries as companies have almost exclusively focused on transitioning high-risk sales to reduced-risk sales in high-medium income countries, where cigarette sales have been falling for many years already.

Swedish Match is the only company to derive close to half of its sales from reduced-risk products. However, it still maintains significant sales in high-risk products, particularly cigars, chewing tobacco, and moist snuff in the US. The top five international players – PMI, BAT, JTI, Imperial, and KT&G – are all actively selling reduced-risk products, but the majority of their revenues are from high-risk products. Nearly a fifth of PMI's revenue and 5% of KT&G's revenues are currently from reduced-risk products, driven by heated tobacco sales. 70 BAT's reduced-risk alternatives also comprise around 5% of its revenues, due in part to snus, cartridges, and non-tobacco nicotine pouches, which occupy the lower end of the risk spectrum. 71 Imperial and JTI are the remaining manufacturers with notable sales from reduced-risk products, at 3%. 72 The share of reduced-risk product sales is even lower when analyzing volume data in per stick equivalents, particularly for PMI (8%) and KT&G (2%). 73

⁶⁵ Ibid.

⁶⁶ Ibid

⁶⁷ Ibid.

⁶⁸ Ibid.

⁶⁹ Ibid. 70 Ibid

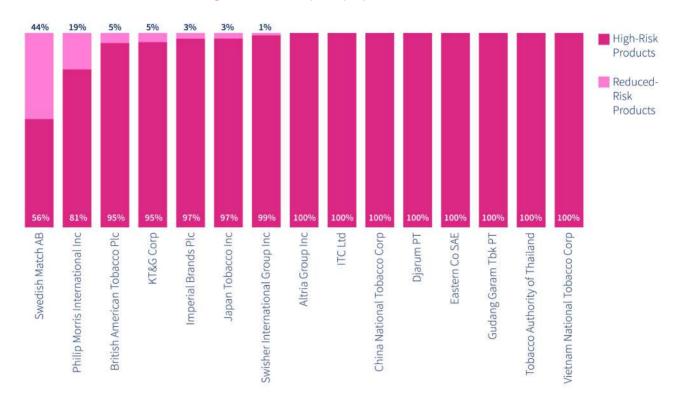
⁷⁰ Ibid 71 Ibid.

⁷² Ibid.

⁷² IDIO.

The tobacco industry has so far contributed little to tobacco harm reduction as a high majority of companies' sales remains focused on high-risk products.

2019 Net Value Sales of Reduced vs High-Risk Products by Company (%)



Source: Tobacco Transformation Index based on estimations of company data derived from publicly available resources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); industry and financial databases (Passport, Orbis, and Capital IQ); interviews with industry experts.

Note: Net Value Sales refer to gross sales minus applicable sales returns, allowances, and discounts. Gross sales do not include cost of goods sold, operating expenses, excise tax expenses or other charges.

Please note that despite selling reduced-risk products, the percentage for Altria and ITC is lower than 0.5%

Sales of reduced-risk alternatives are currently focused almost exclusively in high-medium income countries, where steps toward industry transformation are manifested in a slow build in reduced-risk product sales – from 2.3% in 2017 to 3.5% in 2019 in net value sales and from 1.5% in 2017 to 2.2% in 2019 in per stick equivalent volume sales. ⁷⁴ In low-medium income countries, reduced-risk product sales account for less than 1% in both value and per stick equivalent volume terms at the end of 2019. ⁷⁵ Companies such as Imperial, KT&G and Swisher International, which already offer reduced-risk products, have not extended these sales into low-medium income markets, where their sales of high-risk products dominate.

Companies will need to focus on reversing the sales ratio of reduced-risk versus high-risk products in order to support current smokers in a shift away from high-risk categories. The index encourages companies to take part in the industry's transformation not only in high-medium income countries as they currently do, but in low-medium income ones as well, where the majority of the world's smokers live. This transformation must accelerate the transition to the least harmful reduced-risk categories.

⁷⁴ Ibid

⁷⁵ Ibid.

Uneven regulation of reduced-risk products influences companies' opportunities for tobacco harm reduction, but that shouldn't let companies off the hook.

Building the acceptance of reduced-risk products in global regulatory regimes is necessary to further enable tobacco harm reduction. Currently, there are several markets where one or more alternative categories are either banned from sale or not marketed due to gaps in regulations.

Snus is banned in many high-medium income countries, including Australia, Russia, Turkey, and all European Union (EU) member states apart from Sweden, which obtained an exemption when joining the bloc in 1995. Outside of the EU, Switzerland lifted its ban on snus in 2019, motivated by the low risk level associated with the product, signaling the changing attitudes towards the product in some parts of the world. In the US, Swedish Match was the first company to be granted Modified Risk Tobacco Product (MRTP) designations for snus by the US Food and Drug Administration (FDA).⁷⁶

Heated tobacco is also banned in some parts of the world. The index countries that are affected by such prohibitions include Australia, Brazil, China, Ethiopia, India, Thailand, and Turkey. However, the US Food and Drug Administration (FDA) approved the marketing of PMI's IQOS as a Modified Exposure Product in 2020, which could influence other countries' regulation of the product. This is only the second product ever to be authorized to make a modified exposure claim by the agency, after snus.

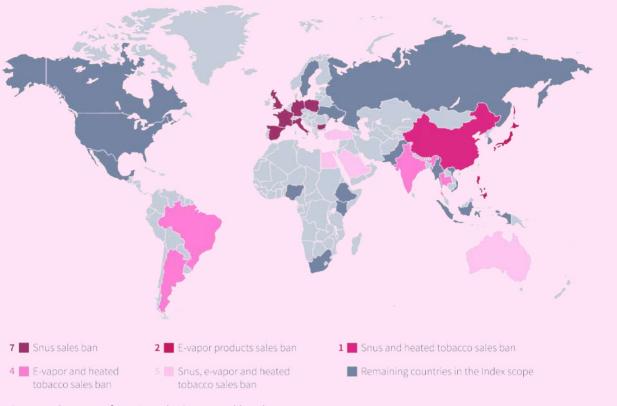
There are also notable differences in the regulation of e-vapour products (e-liquids and cartridges). For example, e-vapour products are banned in a large part of the Americas, including in Argentina, Brazil, and Mexico, as well as in Thailand and Turkey. Other countries, such as Australia and Japan, prohibit only the sale of nicotine-containing e-liquids and cartridges, rather than the devices that use them. India introduced a ban on production, import, and sale of e-vapour products in 2019. In contrast, other countries are gradually loosening restrictions on cartridges and e-liquids. In Saudi Arabia, the government recently allowed the sale of these products with certain flavors only.

The index recognizes that the context in which companies operate varies significantly from country to country and that this affects individual companies' strategies, performance, and ultimate pathways to industry transformation. However, this should not limit the industry in pursuing tobacco harm reduction strategies on a global scale. No countries ban all reduced-risk alternatives, which suggests that companies still have an opportunity to responsibly develop and offer reduced-risk products that are permitted for sale.

⁷⁶ FDA. (2019). FDA grants first-ever modified risk orders to eight smokeless tobacco products. Retrieved July 30, 2020, from https://www.fda.gov/news-events/press-announcements/fda-grants-first-ever-modified-risk-orders-eight-smokeless-tobacco-products

Various reduced-risk product categories allow companies to increase sales from reduced-risk alternatives across all countries, even though an uneven regulatory landscape limits tobacco harm reduction strategies.





Source: Tobacco Transformation Index Country Dashboard.

Note: Please note that data refer only to the 36 countries in the Index scope.

Please note that e-vapor products refer to cartridges and e-liquids ban with nicotine (not nicotine free).

Capital Allocation

Context

How a company allocates capital – to R&D, infrastructure, and M&A – demonstrates where it hopes to operate in the future. In particular, the degree to which it invests in reduced-risk products versus high-risk products signals the extent to which it anticipates a future shaped by tobacco harm reduction, even though the outcomes and effectiveness of these investments are uncertain. Company investments outside the tobacco industry are considered out of scope of the index.

What We Assess

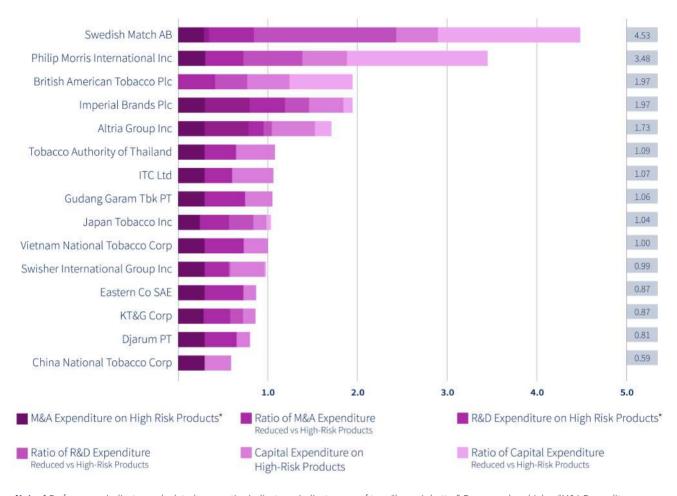
This category assesses the company's performance in allocating resources away from high-risk products and toward reduced-risk alternatives.

- M&A Expenditure on High-Risk Products M&A expenditure related to high-risk products over the last three years as a share of net sales (last three financial years: 2017, 2018, 2019). Lower share of high-risk M&A investments on net sales has a positive impact on tobacco harm reduction.
- Ratio of M&A Expenditure (Reduced vs High-Risk Products) Ratio of M&A expenditure on reduced-risk alternatives to high-risk products over the last three years (last three financial years: 2017, 2018, 2019).
- **R&D Expenditure on High-Risk Products** R&D expenditure related to high-risk products as a share of net sales (excluding expenditure related to legal compliance requirements; last three financial years: 2017, 2018, 2019). Lower share of high-risk R&D investments on net sales has a positive impact on tobacco harm reduction.
- Ratio of R&D Expenditure (Reduced vs High-Risk Products) Ratio of R&D expenditure on reduced-risk alternatives to high-risk products over the last three years (excluding expenditure related to legal compliance requirements; last three financial years: 2017, 2018, 2019).
- Capital Expenditure on High-Risk Products Capital expenditure related to high-risk products as a share of net sales (last three financial years: 2017, 2018, 2019). Lower share of high-risk capital investments on net sales has a positive impact on tobacco harm reduction.
- Ratio of Capital Expenditure (Reduced vs High-Risk Products) Ratio of capital expenditure on reduced-risk alternatives to high-risk products over the last three years (last three financial years: 2017, 2018, 2019).

How We Assess

The assessment is based on an estimation of company data derived from publicly available resources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); industry and financial databases (Euromonitor International's Passport, Orbis, and Capital IQ); and interviews with industry experts.

Ranking Capital Allocation



Note: * Performance indicators calculated as negative indicators - indicators are of type "lower is better". For example, a higher "M&A Expenditure on High-Risk Products" clearly has a negative impact on tobacco harm reduction.

Swedish Match (1st) is the highest scoring manufacturer in the Capital Allocation category. In 2019, the company spent more than 90% of its capital expenditure budget on reduced-risk products and predominantly invested in reduced-risk R&D activities. To Swedish Match's acquisitions of oral tobacco players in Scandinavia further added to the company's position in snus and non-tobacco nicotine pouches, increasing the company's score.

PMI's (2nd) rank is mainly due to a substantial share of reduced-risk products in the company's capital and R&D expenditures. In 2019, PMI's reduced-risk R&D costs accounted for 98% of its R&D budget, and its share of capital expenditure on reduced-risk products was higher than all other ranked companies.⁷⁸

BAT (3rd) and Imperial (3rd) have the same score. BAT has a high ratio of reduced-risk products in the company's capital and R&D expenditures. However, the 2017 acquisition of Reynolds American Inc, a large tobacco company, for GBP41.8 billion negatively impacted BAT's score in this category.⁷⁹ Like BAT, Imperial has a higher ratio of reduced-risk products in the company's R&D expenditure than other lower ranked companies. Also contributing to Imperial's score are its M&A activities related to cartridges and e-liquids.

⁷⁷ Swedish Match AB. (2020). Annual Report 2019. p. 42.

 $^{^{78}}$ Philip Morris International Inc. (2020), 2019 Annual Report. p. 3.

⁷⁹ British American Tobacco Plc. (2018). Annual Report and Form 20-F 2017.

Altria (5th) had substantial M&A activities during the period, having acquired a 35% equity stake in JUUL Labs for USD12.8 billion.⁸⁰ The company later wrote-down two-thirds of the value of this investment. Furthermore, Altria trails behind the top three ranked companies in capital and R&D expenditure.

TOAT (6th), ITC (7th), Gudang Garam (8th), JTI (9th), Vinataba (10th), and Swisher International (11th) are all closely ranked in the middle of the index. JTI has started to invest more in reduced-risk products but is still primarily focused on supporting growth in high-risk categories. The company made five high-risk tobacco M&A transactions resulting in a lower total score in comparison to other international players.

Eastern (12th), KT&G (12th), Djarum (14th), and CNTC (15th) are at the bottom of the ranking. KT&G increased investments in reduced-risk products, but still invests significant resources to support its international highrisk products business. The remaining companies' rank is primarily due to a lack of investment in reduced-risk alternatives and high expenditure relative to net sales in high-risk products.

Key Findings Capital Allocation

Companies that have stated some degree of commitment to harm reduction are starting to allocate financial resources away from high-risk products.

Several of the largest tobacco manufacturers have allocated significant financial resources to different harm reduction strategies either focused on organic growth or acquisitions of reduced-risk products.

Between 2017 and 2019, M&A expenditure accounted for about two-thirds of the total capital allocation in reduced-risk products.⁸¹ The largest contribution came from Altria's minority investment in JUUL Labs, an evapor company, which was motivated by the company's goal: "to prepare for a future where adult smokers overwhelmingly choose non-combustible products over cigarettes".⁸² Another key activity, primarily realized as a high-risk investment, was BAT's acquisition of the remainder of Reynolds' shares. According to the company, the deal was made to create a: "stronger, global tobacco and Next Generation Products company".⁸³ Prior to the deal, Reynolds had presence in cartridges as well as offered NRT gums in the US.

Excluding the two highest value deals, most companies that committed to harm reduction have chosen to follow a strategy of organic growth. PMI, Swedish Match, and BAT invested the biggest shares of their R&D and capital expenditure budgets in reduced-risk products. During the review period, PMI spent more than USD1.0 billion building new plants, expanding capacity or converting existing cigarette factories into heated tobacco-oriented plants in Italy, Greece, Romania, Switzerland, and Russia. BAT also invested millions of pounds in increasing heated tobacco production, restructuring factories, and building innovation hubs around the world. Swedish Match has invested in property, plant and equipment related to snus and non-tobacco nicotine pouches for a total of SEK1265 million since 2017.85

The growing commitment towards harm reduction is shifting companies' resources away from high-risk products to reduced-risk alternatives. Although not a guarantee for success on its own, long-term investment

and Altria Group Inc. (n.d.). Altria Makes \$12.8 Billion Minority Investment in JUUL to Accelerate Harm Reduction and Drive Growth. Retrieved July 30, 2020, from http://investor.altria.com/file/Index? KeyFile=396169695

⁸¹ Estimate from Tobacco Transformation Index research.

⁸² Altria Group Inc. (n.d.). Altria Makes \$12.8 Billion Minority Investment in JUUL to Accelerate Harm Reduction and Drive Growth. Retrieved July 30, 2020, from http://investor.altria.com/file/Index? KeyFile=396169695

⁸³ British American Tobacco Plc. (2017). BAT Completes Acquisition of Reynolds. Retrieved July 28, 2020, from https://www.bat.com/group/sites/UK__9D9KCY.nsf/vwPagesWebLive/DOAPKCXS

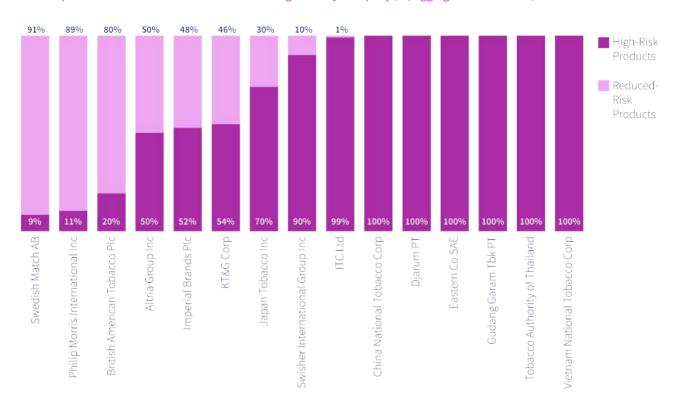
⁸⁴ Estimate from Tobacco Transformation Index research.

⁸⁵ Swedish Match AB. (2020). Annual Report 2019.

in R&D, infrastructure, and M&A activity in reduced-risk product alternatives over high-risk products may help companies in the transition process. Companies should focus on increasing the ratio of reduced-risk products in their R&D and capital expenditures so they can provide high-quality reduced-risk alternatives, increase distribution and support smokers to switch away from cigarettes.

Companies committing to tobacco harm reduction are allocating resources to finance investments in reduced-risk product alternatives, but total share remains low.





Source: Tobacco Transformation Index estimates derived from publicly available resources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); industry and financial databases (Passport, Orbis, and Capital IQ); interviews with industry experts.

Note: Capital Expenditure includes but is not limited to funds used by a company to acquire, upgrade and maintain physical assets such as properties, buildings, plants, equipment and intangible assets such as technology, soft ware as well as developing networks including contract manufacturers.

Companies that have publicly committed to tobacco harm reduction are undermining their commitments with continued high-risk tobacco M&A.

During the 3-year analysis period, six companies closed 11 deals related to high-risk products, with transactions ranging in size from USD27 million to nearly USD50 billion. 86 While BAT is responsible for the highest value deal, JTI was the most active company, having made five purchases in various parts of the world.

In 2017, JTI made several substantial acquisitions, including PT Karyadibya Mahardhika and PT Surya Mustika Nusantara in Indonesia, Mighty Corporation in the Philippines, and purchasing an additional 30% share in National Tobacco Enterprise Share Company in Ethiopia.⁸⁷ In 2018, JTI acquired Donskoy Tabak DT in Russia

⁸⁶ Estimate from Tobacco Transformation Index research

⁸⁷ Japan Tobacco Inc. (2017). JT Becomes Majority Shareholder of Ethiopia's NTE. Retrieved July 30, 2020, from https://www.jti.com/sites/default/files/press-releases/documents/2017/jt_becomes_majority_shareholder_of_ethiopias_nte.pdf

Japan Tobacco Inc. (2017). JT Group Signs Agreement to Acquire Indonesian Kretek Cigarette Company and its Distributor. Retrieved July 28, 2020, from https://www.jti.com/sites/default/files/press-releases/documents/2017/press_release_kretek_cigarette_company.pdf

Japan Tobacco Inc. (2017). JT Signs Agreement to Acquire Assets of Tobacco Company in the Philippines. Retrieved July 28, 2020, from https://www.jt.com/media/news/2017/pdf/20170822_02.pdf

as well as Akij Group in Bangladesh.88 These activities were part of the company's efforts to accelerate its high-risk product expansion in low-middle income countries.

BAT's takeover of Reynolds American Inc in the US is by far the biggest deal in the review period. In 2016, Reynolds's cigarettes volume sales accounted for a third of the US market or 79 billion sticks. In addition, the company's high-risk product offer included moist snuff, where it also held around a third of the US market.⁸⁹

The remaining high-risk purchases were all undertaken by companies that are also active in reduced-risk products – Altria, KT&G, PMI, and Swedish Match. For example, Altria took over Sherman Group Holding LLC to strengthen its position in cigars even though the company announced plans to sell the business in 2020. Swedish Match expanded its capabilities in chewing tobacco by taking over House of Oliver Twist A/S in Scandinavia.

As industry players continue to acquire high-risk businesses to strengthen their position in the total tobacco industry, this will undermine any harm reduction objectives. The index encourages companies to stop spending funds on high-risk motivated M&As and shift their resources toward reduced-risk alternatives.

SE Japan Tobacco Inc. (2018). JT Group Acquires Russia's Donskoy Tabak. Retrieved July 28, 2020, from https://www.jti.com/sites/default/files/press-releases/documents/2018/JT-Group-Acquires-Russias-Donskoy-Tabak.pdf

Japan Tobacco Inc. (2018). JT Group Agrees to Acquire Tobacco Business of Akij Group in Bangladesh. Retrieved July 28, 2020, from https://www.jti.com/sites/default/files/press-releases/documents/2018/JT-group-agrees-to-acquire-tobacco-business-of-akij-group-in-Bangladesh.pdf

⁹³ Reynolds American Inc. (n.d.). Form 10-K 2016. Retrieved August 31, 2020, from https://www.annualreports.com/HostedData/AnnualReports/PDF/NYSE_rai_2016.pdf

Companies publicly committing to tobacco harm reduction have conducted M&A operations in the high-risk space, which undermines the reliability and seriousness of their commitments.

2017-2019 Mergers and Acquisitions in High-Risk Products

	Target Company	Geography	Main Business Activity	Year	Deal Value (USD MN)	Stake (%)
Altria Group Inc	Sherman Group Holdings LLC	USA	Cigarettes and Cigars	2017	Undisclosed	100%
British American Tobacco Plc	Reynolds American Inc	USA	Cigarettes	2017	57,733.0	100%*
	Brascuba Cigarrillos SA	Cuba, Brazil	Cigarettes	2019	26.7	-
Japan Tobacco Inc	Mighty Corp	Philippines	Cigarettes	2017	936.0	100%
	T. Karyadibya Mahardhika	Indonesia	Kretek	2017	677.0	100%
	National Tobacco Enterprise SC	Ethiopia	Cigarettes	2017	944.0	70%
	Donskoy Tabak	Russia	Cigarettes	2018	1.600.0	100%
	United Dhaka Tobacco Co	Bangladesh	Cigarettes	2018	1,470.0	100%
KT&G Corp	PT Trisakti Purworsari Makmur	Indonesia	Cigarettes	2017	45.0	100%
Philip Morris International Inc	Tabacalera Costarricense SA	Costa Rica	Cigarettes	2018	95.0	49%
Swedish Match AB	House of Oliver Twist A/S	Denmark	Chewing Tobacco	2018	35.2	100%

Source: Company's financial reporting, official press releases, review of publicly available information.

Note: Please note that data refer only to the 15 companies in the Index scope.

Note: M&A includes total value of deals closed in the acquisitions of manufacturing companies only (acquisitions of distributors or retailers are excluded).

^{*}BAT acquired the remaining 57.8% of Reynolds American Inc the company did not already owned.

Some companies have opted diversify their portfolios beyond tobacco, but this has limited effects on advancing tobacco harm reduction.

Several tobacco companies have diversified their businesses away from tobacco. For example:

- Altria expanded into wine in 2009, purchasing Ste. Michelle Wine Estates as part of its US Tobacco Co purchase and has also completed acquisitions in the cannabis industry.
- ITC has expanded to become a multi-industry conglomerate following its vision to put "*Nation First*" and "be an engine of growth for the national economy." ⁹⁰This strategy has been supported by expansion in fast-moving consumer goods (FMCG) industries, including the launch of its Packaged Foods (2001) and Personal Care (2005) businesses and creation of ITC Infotech India Ltd, an offshore outsourcing company providing outsourced IT solutions.
- KT&G has invested in a wide variety of industries outside of tobacco. It currently operates subsidiaries in real estate, foods, cosmetic, pharmaceuticals, and medicines.
- Djarum has made investments in industries such as banking, e-commerce, and online travel.
- Gudang Garam invested in the aviation industry with the establishment of Surya Air in 2010, and in infrastructure, through the construction of Kediri Airport in 2020.

While moves like these might create certain societal benefits and/or reduce the tobacco-related harm that a company is directly responsible for, if the underlying demand for high-risk products is not directly addressed, existing customers may simply migrate to high-risk products offered by other companies or via illicit channels. This activity is therefore not included in the index scoring because it fails to meaningfully contribute to industry transformation and harm reduction.

 $^{^{\}rm 90}$ ITC Ltd. (2019). Report and Accounts 2019. p. 5.

4

Product Offer

Context

The types of products companies choose to offer and the prices they sell them for are two key factors that shape the landscape consumers face as they consider tobacco products with varying degrees of risk. Reducing high-risk tobacco products on offer and refraining from pricing strategies that encourage sales of these products are critical to support tobacco harm reduction. The responsible introduction of affordable reduced-risk alternatives could help adult smokers transition away from high-risk tobacco products and potentially quit altogether. These efforts should be applied across low-medium and high-medium income countries where a company operates, within local regulatory guidelines.

What We Assess

This category assesses the company's commitment to shifting consumers away from high-risk tobacco products and responsibly offering current smokers reduced-risk alternatives. This is accomplished by measuring the presence of reduced-risk alternatives relative to high-risk products in company's product portfolios and the affordability of reduced-risk alternatives to high-risk products.

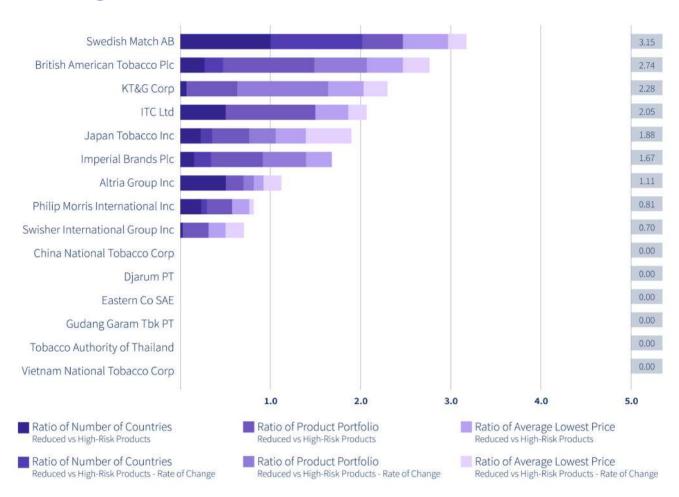
- Ratio of Number of Countries (Reduced vs High-Risk Products) Ratio of number of countries where reduced-risk product categories are offered to the number of countries where high-risk product categories are offered (last financial year: 2019).
- Ratio of Number of Countries (Reduced vs High-Risk Products) Rate of Change Ratio of M&A expenditure on reduced-risk alternatives to high-risk products over the last three years (last three financial years: 2017, 2018, 2019).
- Ratio of Product Portfolio (Reduced vs High-Risk Products) Ratio of number of reduced-risk product categories to high-risk product categories in global product portfolio (last financial year: 2019).
- Ratio of Product Portfolio (Reduced vs High-Risk Products) Rate of Change Evolution of ratio of number of reduced-risk product categories to high-risk product categories in global product portfolio (last three financial years: 2017, 2018, 2019).
- Ratio of Average Lowest Price (Reduced vs High-Risk Products) Average of comparison between lowest retail price of reduced-risk alternatives with that of high-risk products across all countries of operation under review (last financial year: 2019).
- Ratio of Average Lowest Price (Reduced vs High-Risk Products) Rate of Change Evolution of average of comparison between lowest retail price of reduced-risk alternatives to high-risk products across all countries of operation under review (last three financial years: 2017, 2018, 2019).

Scoring for the indicators above has been adjusted by the relative risk level of each high-risk and reduced-risk product and consistency of performance by market for companies operating across low-medium and high-medium income countries.

How We Assess

The assessment is based on an estimation of company data derived from publicly available resources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); interviews with industry experts; and in-country research including capturing product information such as prices from in-store visits.

Ranking Product Offer



There are two distinct blocks in the Product Offer ranking. Those at the top have already included reduced-risk products in their portfolios, while those at the bottom have not. The high-risk product offer of most manufacturers did not decrease substantially over the review period; companies' positions were primarily driven by changes in reduced-risk alternatives.

Swedish Match (1st) is the leader in the Product Offer category. It sells a large proportion of reduced-risk products compared to high-risk products in the markets where it operates. In addition, its overall portfolio includes multiple reduced-risk products (e.g. snus and non-tobacco nicotine pouches, which are relatively low on the risk spectrum) and notably does not include cigarettes, though it still markets other high-risk products such as chewing tobacco, cigars, and cigarillos.

BAT (2nd) achieved its score in part because of the geographic expansion of its reduced-risk product range to markets such as Canada, Switzerland, Mexico, Pakistan, and Kenya. However, the biggest component of its

score comes from the changing balance in its overall product portfolio. BAT recently introduced non-tobacco nicotine pouches and is the only manufacturer to offer options in all reduced-risk categories.

KT&G's (3rd) rank is achieved through the recent transformation of its portfolio which affected the company's ratio of reduced-risk versus high-risk products. Between 2017 and 2019, KT&G added heated tobacco and cartridges against the presence of cigarettes only.

ITC (4th) gains points from its reduced-risk offer in NRT versus cigarettes and cigars in high-risk products. However, the 2019 e-cigarette ban in India forced the company to reduce the number of reduced-risk alternatives offered.

JTI's (5th) and Imperial's (6th) ranks are due to each company offering a higher number of reduced-risk relative to high-risk products. The companies put substantial efforts into the international expansion of cartridges between 2017 and 2019. For example, Imperial carried out multi-market launches in countries such as Russia, Germany, and Japan among others, while JTI introduced cartridges in Canada, Poland, Spain, Switzerland, and Ukraine. However, both manufacturers have extensive high-risk product offers which ultimately limit their scores.

Altria (7th) gains points related to its product offer in three reduced-risk product categories, two of which were recently introduced – non-tobacco nicotine pouches and heated tobacco. However, Altria is present in six high-risk product categories, including cigarettes, the most harmful product in the risk spectrum.

PMI (8th) ranks lower in relation to major competitors in part due to the wide availability of multiple high-risk products across a higher number of markets compared to its reduced-risk alternatives. The higher relative price of the company's reduced-risk products, notably heated tobacco, compared to its high-risk offer, also affects PMI's score in this category.

Swisher International (9th) is ranked last among the companies that offer reduced-risk products. The company is active in cartridges in the US only but still operates in several high-risk categories internationally.

CNTC (10th), Djarum (10th), Eastern (10th), Gudang Garam (10th), TOAT (10th), and Vinataba (10th) jointly share the last place as their focus remains solely on high-risk products.

Key Findings Product Offer

Companies are offering a growing variety of reduced-risk options, which may increase the potential for shifting demand away from high-risk products.

In 2019, nine of 15 companies offered at least one reduced-risk option in their portfolios. Companies are offering various reduced-risk alternatives which provide existing high-risk product users with a wider offer of reduced-risk alternatives and accelerate harm reduction.

PMI is an example of a company that started with a single-product focus but is now expanding across other reduced-risk categories. Although sales of its flagship heated tobacco product, IQOS, have been strong – first launched in 2014, the product expanded to 52 markets by 2019⁹¹ – the company has acknowledged that delivering a 'smoke-free future' requires "a portfolio approach that addresses a range of adult smoker

⁹¹ Philip Morris International Inc. (2020). 2019 Annual Report.

preferences and occasions in order to maximize full switching."92 Therefore, PMI is developing additional reduced-risk products such as cartridges.

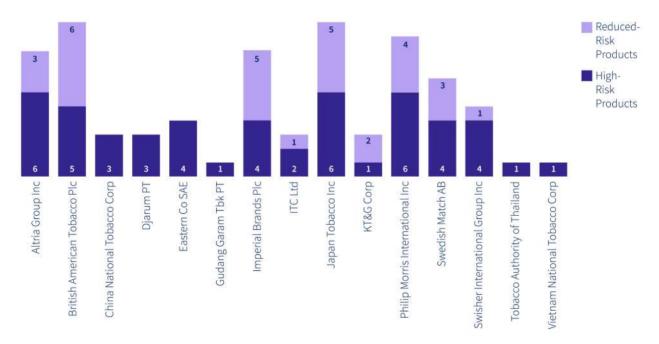
BAT's belief in a "multi-category future" is supported by its simultaneous engagement in all reduced-risk categories. 93 BAT offers seven different reduced-risk alternatives – cartridges, e-liquids, heated tobacco, snus, non-tobacco nicotine pouches, and NRT products, which have different levels of risk associated with their consumption. It appears that the company is focused on providing different products for different use cases. 94

The other manufacturers have product portfolio strategies that fall between these two approaches. Several companies have well-established offers in at least two categories. For example, Imperial and JTI are expanding in cartridges, while also participating in snus and non-tobacco nicotine pouches. KT&G is active in heated tobacco and recently added cartridges to its product offer, while Swedish Match expanded its snus and non-tobacco nicotine pouches. Six companies offer products in the three most popular reduced-risk categories, heated tobacco, cartridges, and snus.

Offering a wider variety of reduced-risk products supports to bacco harm reduction by providing more alternatives to high-risk product users. Reduced-risk options need to appeal to different high-risk product consumer types in order to achieve significant public health gains.

Companies are starting to have several reduced-risk products in their portfolio.

2019 Number of Reduced and High-Risk Products in Each Company's Portfolio



Source: Tobacco Transformation Index estimates derived from publicly available resources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); interviews with industry experts and in-country research

⁹² Ibid. p. 2.

gs British American Tobacco Plc. (2020). Step Changing New Categories. Retrieved July 27, 2020, from https://www.bat.com/group/sites/UK_9ZTFCM.nsf/vwPagesWebLive/DOBMTGMW/\$FILE/4.0_Step_Changing_New_Categories.pdf?

⁹⁴ Ibid. Slides 12-13.

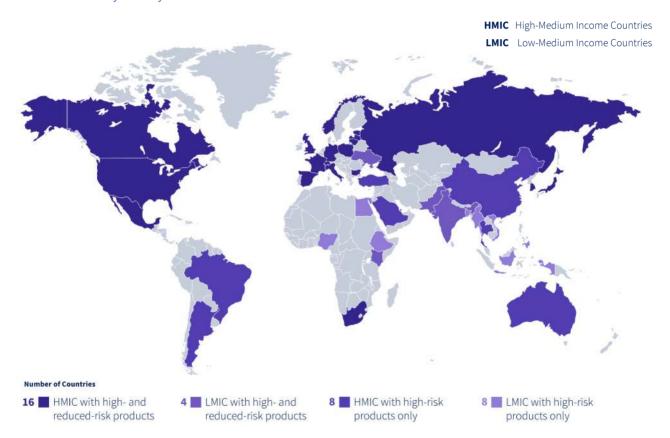
Companies offer more reduced-risk products in high-medium income versus low-medium income countries.

In 2019, consumers in 20 of the 36 countries covered by the index had access to at least one reduced-risk product. 95 However, manufacturers have focused their attention on high-medium income countries. In most low-medium income countries, reduced-risk products continue to be unavailable, which limits meaningful progress in tobacco harm reduction.

Several companies that sell high-risk products in both high-medium and low-medium income countries offer reduced-risk products, but have not always expanded them to the latter. Four companies (BAT, Imperial, JTI, and PMI) collectively offer high-risk tobacco products in more than 25 out of the 36 countries in the index scope, but their reduced-risk offer reaches around half of these countries, only three of which are low-medium income ones. 96 Other companies such as Imperial, KT&G, and Swisher International currently focus their reduced-risk efforts in high-medium income countries only.

Over half of the countries in the Index have companies offering reduced-risk alternatives but majority of the LMICs have no reduced-risk alternatives offer yet.

2019 Product Offer by Country



Source: Tobacco Transformation Index estimates derived from publicly available resources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); interviews with industry experts and in-country research

A combination of policies, technology, and consumer preferences might affect companies' decisions to expand their reduced-risk offer in low-medium income countries. However, these factors should not limit global tobacco harm reduction activities as other reduced-risk product categories can be offered. For example, BAT introduced non-tobacco nicotine pouches in Kenya and Pakistan in 2019.

⁹⁵ Estimate from Tobacco Transformation Index research

⁹⁶ Ibid

Growing the geographic coverage of reduced-risk portfolios is critical to achieve tobacco harm reduction globally. All 36 countries in the index scope allow sales of at least one reduced-risk alternative. This suggests that companies have the opportunity to responsibly develop and offer reduced-risk products that are permitted for sale both in high and low-medium income countries.

ADDITIONAL ANALYSIS BOX

Pricing of reduced-risk alternatives does not always provide smokers an economic incentive to transition away from cigarettes.

High relative prices can often represent a barrier for cigarette users attempting to switch to reducedrisk alternatives, even though tax burdens for these products are significantly lower compared to cigarettes.

Using the per stick equivalent conversion, cigars and cigarillos have the highest average retail prices, followed by cigarettes, while fine cut tobacco and Western-style pipe tobacco are considerably less expensive. ⁹⁷ For reduced-risk products, non-tobacco nicotine pouches and heated tobacco are the costliest alternatives on average, cartridges are in the middle, while snus and e-liquids are the least expensive.

Moving away from cigarettes does not necessarily result in consumers saving money. Analyzing average price and consumption across 12 markets covered both by Euromonitor International's Nicotine Survey and the index, the estimated yearly expenditure on cigarettes is often lower than that on the two most established reduced-risk alternatives – cartridges and heated tobacco.

While switching to cartridges could bring significant financial savings to consumers in six markets – Canada, France, Germany, Poland, the United Kingdom (UK), and the US – in Russia and Ukraine switching to cartridges will be more expensive for consumers. Regarding heated tobacco, in four markets – Italy, Japan, Russia, and South Korea – there is practically no difference, while in Poland, Ukraine and the US, heated tobacco is more expensive than cigarettes. It is also important to consider that necessary hardware for consuming heated tobacco and cartridges often represents a notable upfront switching cost.

'Saving money' might be another reason for consumers to transition to reduced-risk alternatives if they are unable to quit consumption of high-risk products. Although the index recognizes that products have different cost structures and tax regimes, companies are expected to develop pricing strategies that do not limit current users from transitioning away from high-risk products.

⁹⁷ Tobacco Transformation Index. (2020). 2020 Index Methodology.

Heated tobacco can be more expensive than cigarettes in many markets making it harder for consumers to switch.

2019 Average Consumer Spending per Product in Selected Market (USD per annum)

	Cigarettes	Cartridge	Heated Tobacco
Canada	1,998	871	1,733
France	1,795	570	1,142
Germany	1,493	636	1,453
Italy	974	695	974
Poland	654	299	723
Japan	1,078	1,067	1,078
Russia	489	582	489
South Korea	782	704	782
Spain	889	677	857
Ukraine	319	328	358
UK	1,408	421	1,317
USA	1,801	933	1,961

HIGHER SPENDING LOWER SPENDING

Source: Euromonitor International's Nicotine Survey 2019 stats for annual cigarette consumption per smoker per market; Tobacco Transformation Index stick equivalent conversion rates for cartridges, heated tobacco; Tobacco Transformation Index price per stick data estimates.

Marketing

Context

Tobacco companies rely heavily on marketing activity. Tobacco harm reduction requires companies to develop and implement responsible marketing practices which should include a focus on preventing any tobacco product uptake by non-smokers, clear health risk communication, and avoidance of misleading advertising. The disclosure of any breaches of such a policy reinforces transparency. As part of a harm reduction trajectory, it is expected that expenditures on marketing of high-risk products will contract over time, both in absolute terms and in proportion to expenditures on marketing of reduced-risk products.

What We Assess

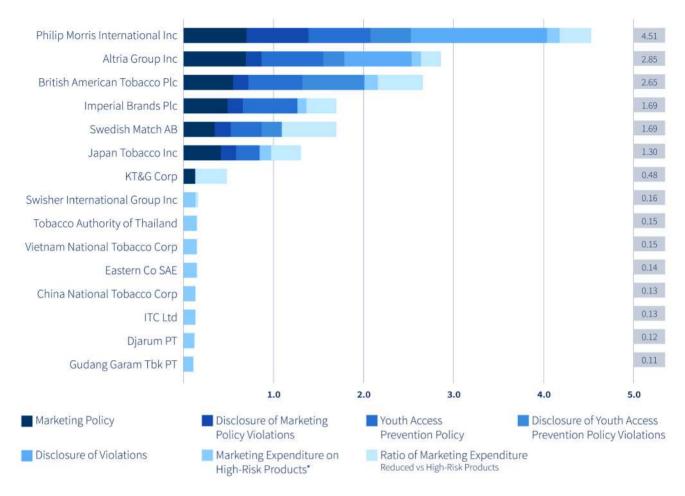
This category assesses how the company's marketing policy, compliance and expenditure support a transition away from high-risk tobacco products, while also mitigating the potential for uptake of reduced-risk alternatives by non-smokers or non-users of high-risk products.

- Marketing Policy Presence, content, and robustness of internal marketing policy.
- **Disclosure of Marketing Policy Violations** Publication of reported fines, violations, and established breaches of the company's marketing policy.
- Youth Access Prevention Policy Presence, content, and robustness of youth (and other vulnerable segments of the population) access prevention policy.
- **Disclosure of Youth Access Prevention Policy Violations –** Publication of reported violations and established breaches of the youth access prevention policy.
- **Disclosure of Violations** Disclosure of cases of violation of any applicable law for tobacco control associated with marketing, labeling, and advertising.
- Marketing Expenditure on High-Risk Products Marketing spend (including discounting) on high-risk products as a share of net sales (last three financial years: 2017, 2018, 2019). This indicator is calculated as a negative indicator "lower is better". Lower share of high-risk marketing expenditure on net sales has a positive impact on tobacco harm reduction.
- Ratio of Marketing Expenditure (Reduced vs High-Risk Products) Ratio of marketing spend (including discounting) on reduced-risk alternatives to high-risk tobacco products (last three financial years: 2017, 2018, 2019).

How We Assess

The commitment and transparency assessments are based on available information from company websites; formal financial and non-financial reporting such as annual, CSR, or sustainability reports. These could be codes of conduct, policies, values, guidelines, FAQs, and other related documents. The performance assessment is based on an estimation of company data derived from publicly available resources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); industry and financial databases (Euromonitor International's Passport, Orbis, and Capital IQ); and interviews with industry experts.

Ranking Marketing



Note: * Performance indicators calculated as negative indicators - indicators are of type "lower is better". For example, a higher "Marketing Expenditure on High-Risk Products" clearly has a negative impact on tobacco harm reduction.

Altria, BAT, Imperial, JTI, PMI, and Swedish Match lead the rankings as they have each established voluntary marketing policies. The difference between these six companies is based on the level of granularity within their policies, and any supplementary monitoring and disclosure mechanisms. The marketing expenditure of these companies is also weighted more heavily toward reduced-risk products.

PMI (1st) has detailed marketing principles and differentiates itself from the majority of other companies through the processes it has in place for monitoring and reporting violations against internal guidelines and legal requirements, providing details of remediation to specific violations.

Altria (2nd) provides detailed marketing and youth access prevention practices, which apply across marketing channels and are supported by training. The company also differentiates itself from others by disclosing the number of legal violations.

BAT (3rd) has a separate youth access prevention policy and is transparent in monitoring and disclosing its own internal violations. It verifies adherence to the youth access prevention code through external audits.

Imperial (4th) defines a detailed marketing policy, with specific details on its application to different channels and practices to prevent youth uptake. It also discloses policy violations and has taken steps to bolster its youth access monitoring practices.

Swedish Match (4th) includes a marketing section, including its 'Under 18 No Nicotine' principle and its monitoring procedures in its overall code of conduct. It also has the highest share of marketing spend on reduced-risk products.

JTI (6th) has a marketing policy that includes details on youth access prevention. Monitoring procedures are defined as part of its code of conduct and it publishes the number of violations in its sustainability report.

The other nine companies aim only to comply with legal requirements. They do not supplement this with their own voluntary policies and therefore do not score points in most of the category's indicators. The ranking differentiation between these nine companies is generated by the relative share of marketing expenditure on reduced-risk products. KT&G's (7th) recent development of reduced-risk products and accompanying marketing spend on them elevates its position above the remaining nine companies. Swisher International (8th) also reports marketing expenditure on reduced-risk products, but at lower levels than KT&G.

Key Findings Marketing

Only a handful of companies establish specific marketing policies with specific practical guidelines.

Companies are required by law to comply with certain marketing standards. To date, six companies have taken this further by implementing their own supplementary policies but the level of granularity varies significantly from company to company.

The six top-ranked companies in the index, Altria, BAT, Imperial, JTI, PMI, and Swedish Match have marketing policies outlining the principles under which they operate. Of these six, Altria, Imperial, JTI, and PMI include specific, practical guidelines within their policies. Imperial's 'International Marketing Standard' is an example of a policy that goes into specifics, providing tactical details on marketing in channels such as print, outdoor advertising, radio, television and cinema.

The introduction and growth of reduced-risk products has encouraged companies to reevaluate their marketing principles. Altria, BAT, Imperial, JTI, and PMI have adapted marketing policies to apply to all products. PMI is building a new marketing code combining its previous code, which was geared towards combustible products, with its Good Conversion Practices (GCP) guide, which was for smoke-free products.⁹⁸

Detailed marketing principles and practices are necessary to demonstrate a genuine commitment to harm reduction. Principles and practices should be stricter and more specific compared to what is required by law. This is particularly important in jurisdictions where enforcement is not as stringent.

Companies with commitments to harm reduction have increased their focus on youth access prevention, but the impact of these policies is not clear.

Companies such as Altria, BAT, Imperial, JTI, PMI, and Swedish Match have created programs focused on age verification, in conjunction with retailers and through social media channels.

Several companies have also begun funding and working with external bodies to ensure age verification compliance. We Card is a US-based, cross-industry age verification program that was created with Altria, BAT,

⁹⁸ Philip Morris International Inc. (2019). Responsible Marketing Practices at PMI. p. 13.

Imperial, and JTI as supporting members.⁹⁹ Other similar initiatives include the Responsible Tobacco Retailing (RTR) program in the UK, which was set up by Imperial, JTI and PMI, and Altria's Assurance of Voluntary Compliance program. Evidence of age verification initiatives is more often seen in high-medium income countries, with limited activity visible in low-medium income countries where youth uptake is higher.

Altria, BAT, and PMI each outline detailed policies and practices for the use of social media and online marketing, in order to address growing concern over youth consumption of reduced-risk products. Altria claims to educate high-risk users on reduced-risk products through social media but has procedures in place to ensure it does so responsibly. PMI has defined protocols when it opens an account on a social media platform stating that the platform must have "its own native age-gating technology" and audience measurement data must "show that the audience is at least 75% adult." 100 Furthermore, if a platform has self-declared age data, PMI will employ a third party to verify this. BAT also restricts the products for which it uses social media, stating: "We never use open social media to promote our cigarette brands; however, where legally allowed, we use social media to communicate regarding our new category products to support adult smokers who are looking for alternatives to smoking." 101 It further stipulates that it will only use social media partners that have a majority adult following and that it uses analytic tools to support this.

Companies are starting to respond to the growing concern over youth consumption of reduced-risk products. They need to limit the target audience of these products to smoking adults only, and ensure that this can be verified. Applying different technologies and leveraging third parties is critical to prevent uptake of any nicotine or tobacco product by youth and avoid potential unintended consequences of reduced-risk alternatives.

Companies are monitoring the implementation of marketing policies even though the effectiveness of these measures is difficult to assess.

The six highest-ranked companies are increasingly focusing on monitoring the application of marketing policies and principles. To support this, they are defining internal procedures, ensuring a senior level of authority for marketing compliance, mandating training, and utilizing technology to enhance monitoring capabilities.

Imperial's US-based subsidiary, Fontem, has looked to bolster its monitoring procedures. In a letter to the FDA, it stated it is strengthening its youth access prevention by: "creating new high-level compliance and regulatory positions, appointing new compliance and product integrity officers, and engaging third-party monitoring to address potential youth access concerns immediately." The company appointed a Youth Access Prevention Officer to work with the FDA and will: "set up a systematic monitoring, reporting and action plan related to any unauthorized sales of blu¹⁰³ products." products." 104

BAT takes preventative measures stating that: "All marketing materials must be formally reviewed and approved by the local Legal & External Affairs (LEX) function. Our Marketing teams and external agencies receive regular

⁹⁹ We Card. (n.d.). WeCard Web Center. https://www.wecard.org/

Listed supporting members are: Altria Client Services; ITG Brands; Logic Technology Development; R.J. Reynolds Tobacco Co; JTI USA; JUUL Labs; and NJOY.

¹⁰⁰ Philip Morris International Inc. (2019). Responsible Marketing Practices at PMI. p. 6.

¹⁰¹ British American Tobacco Plc. (n.d.). British American Tobacco. https://www.bat.com/

¹⁰² Fontem Ventures. (2019). Re: Docket No. FDA-2019-D-0661 (84 Fed. Reg. 9345, March 14, 2019) – Comments on "Modifications to Compliance Policy for Certain Deemed Tobacco Products; Draft Guidance for Industry". Retrieved August 23, 2020, from https://d321lb3n3abatl.cloudfront.net/app/uploads/2019/05/01141405/Comment-of-Fontem-US-Inc.-FDA-2019-D-0661.pdf. p. 1.

 $^{^{\}mbox{\tiny 103}}$ Blu it is the name of Imperial's brand of cartridges.

¹⁰⁴ Ibid. p. 9.

training to effectively apply our approach." ¹⁰⁵ In addition to this, the company ensures seniority of review stating: "adherence is monitored through internal audit procedures and overseen by the Group's Regional Audit and CSR Committees (RACCs) and by the Main Board Audit Committee annually." ¹⁰⁶ For any instance of non-compliance, the company indicates that immediate measures are taken to address them.

For some companies, the number of violations reported has increased, which companies explain as being the result of better practices and reporting, rather than a reflection of the situation worsening.

In 2019, BAT reported five cases of non-compliance in relation to its international marketing principles, which were identified through internal procedures and external reports and allegations. ¹⁰⁷ In addition, its subsidiaries reported a total of approximately GBP1.37 million in fines or settlements associated with incidents of non-compliance with laws relating to marketing, labeling or advertising. ¹⁰⁸ It is notable that in 2018, BAT had no cases of non-compliance and the company regards the five instances in 2019 as evidence that its procedures and controls are strengthening. ¹⁰⁹ However, the fact that external reports and allegations contributed to the company's reported non-compliance cases implies there may be limitations to its monitoring processes.

In 2019, PMI publicly disclosed for the first-time numbers of reported Marketing Code and GCP violations. ¹¹⁰ It revealed that seven cases of misconduct were substantiated in 2018 and 12 in the first three quarters of 2019. The report notes: "Three of the cases involved supplying a device used with our smoke-free products to a minor as a result of failure to verify age, and one involved sending promotional communications to a minor as a result of failure to verify age. The employee who failed to verify the consumer's age in each instance was terminated."¹¹¹ The company's Integrated Report 2019 updated the number of violations for the whole of 2019 to 42. ¹¹² Similar to BAT, PMI attributes the increase to improved monitoring procedures, but this calls into question whether additional violations continue to escape notice, and therefore if further improvements to monitoring are still required. Stakeholders must also wonder about the performance of other companies that do not have comparable monitoring mechanisms in place.

Companies still spend a significant amount of their marketing budgets on high-risk products.

Tobacco companies invest significant resources in marketing. The 3-year total marketing expenditure of the 15 companies covered by the index is USD23 billion.¹¹³ Nearly two-thirds of this amount is allocated to high-risk products.¹¹⁴

Only six companies in the index invest a higher percentage of their marketing budgets in reduced-risk products, namely: BAT, Imperial, JTI, KT&G, PMI, and Swedish Match. Swedish Match marketing expenditure on reduced-risk products was largely driven by the country-wide rollout of non-tobacco nicotine pouches in the US in 2019. PMI has created IQOS online stores in multiple markets to support the growth of its heated tobacco brand. Conversely, all of these companies continue to invest significant amounts of marketing funds in high-

 $^{^{\}rm 105}$ British American Tobacco Plc. (2020). ESG Report 2019. p. 52.

¹⁰⁶ Ibid. 107 Ibid.

¹⁰⁸ Ibid.

¹⁰⁸ Ibid. 109 Ibid. p. 53.

¹¹⁰ Philip Morris International Inc. (2019). Responsible Marketing Practices at PMI.

¹¹¹ Ibid. p. 10.

¹¹² Philip Morris International Inc. (2020). Integrated Report 2019.

 $^{^{\}rm 113}$ Estimate from Tobacco Transformation Index research.

¹¹⁴ Ibio

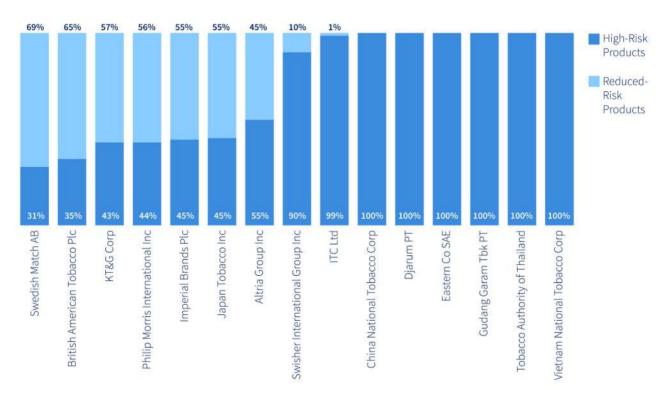
risk products. Swedish Match support its traditional US cigar business with marketing funds and expects to: "increase its investments in marketing, distribution and sales efforts in both existing and new markets."¹¹⁵ KT&G partially attributes the growth of its international business in traditional high-risk tobacco categories to "aggressive marketing campaigns against multinational corporations."¹¹⁶

Marketing activities vary greatly between countries and categories due in part to regulatory differences. While investments in television and media promotions are prohibited, there are still wide variations in point of sale advertising, display promotions, and other communications activities for reduced-risk products specifically. Overall, the legal framework in low-medium income countries, where companies sell almost exclusively high-risk products, is less stringent compared to high-medium income countries.

While the index acknowledges that certain marketing costs are incurred purely for regulatory purposes, it encourages companies not to allocate additional marketing spend to high-risk products. Marketing resources should shift to reduced-risk alternatives to support the transition of existing smokers to reduced-risk alternatives.

Tobacco companies spend a significant share of their marketing budgets on high-risk products which encourages consumption and undermines the progress of harm reduction.





Source: Tobacco Transformation Index estimates derived from publicly available resources (including company financial and sustainability reports, quarterly and half-year updates, press releases, investor briefings, and company presentations); industry and financial databases (Passport, Orbis, and Capital IQ); interviews with industry experts

Note: Marketing Expenditure includes but is not limited to funds invested in programs such as advertising, trade promotions, consumer engagements

¹¹⁵ Swedish Match AB. (2020). Annual Report 2019. p. 72.116 KT&G Corp. (2019). KT&G Report 2018. p. 15.

Lobbying and Advocacy

Context

Public policy engagement is important in shaping an environment that is supportive of effective tobacco harm reduction. However, given the tobacco industry's significant trust deficit, it is essential for companies to disclose their activities and resources used for lobbying and advocacy, and ensure transparency of all engagement with state actors.

What We Assess

This category assesses a company's disclosure of positions related to industry transformation, as well as lobbying and advocacy memberships, financial contributions, and related activities.

- Disclosure of Policy Positions Disclosure of policy positions related to industry transformation
- Disclosure of Lobbying and Advocacy Activities Disclosure of lobbying and advocacy memberships, financial contributions, and activities

How We Assess

The assessment is based on the review of available information from company websites, their formal financial and non-financial reporting such as annual, CSR or sustainability reports, plus statements, such as those related to policy commitments. These could be codes of conduct, policies, values, guidelines, FAQs, and other related documents. Certain companies allocate sections on their corporate websites to documenting interactions with regulators and policy positions, including regulatory filings.

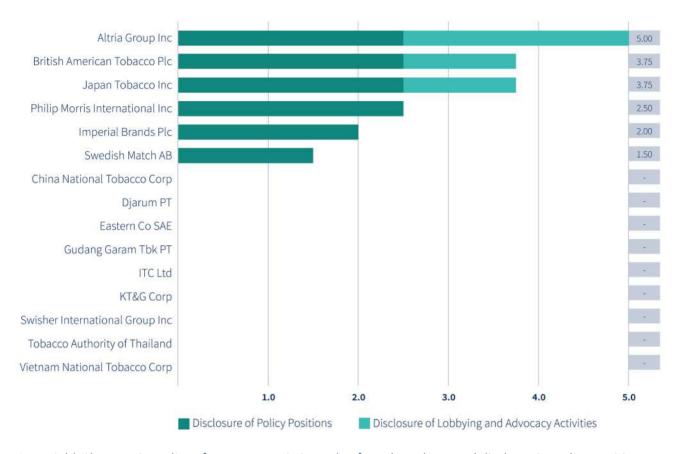
Ranking Lobbying & Advocacy

Six companies – Altria, BAT, Imperial, JTI, PMI, and Swedish Match – score points within the Lobbying and Advocacy category, as all disclose their main policy positions in relation to tobacco harm reduction. However, disclosure on lobbying activity remains limited.

Altria (1st) leads the rankings in the Lobbying and Advocacy category, disclosing its policies of engagement in terms of political activity and lobbying through its code of conduct. The details of the issues it pursues are clearly published on its corporate website. Altria's performance also reflects the fact that it only operates in the US, which has more stringent lobbying disclosure requirements than other countries.

BAT (2nd) and JTI (2nd) jointly occupy second place in the rankings. Both have policies which apply to engagement – for example, BAT's 'Standards of Business Conduct 2020' includes a section on lobbying and engagement as well as political contributions. Additionally, they both disclose policy positions and provide details of their key policy submissions.

PMI's (4th) 'Guidebook for Success' sets the standards for company and employee practices in terms of antibribery and lobbying regulations worldwide. It additionally clarifies the need for this to apply to third parties and discloses its main policy positions, but publishes limited details of its filings and submissions to regulators.



Imperial (5th) covers its policy of engagement in its code of conduct about and discloses its policy positions, but not the specifics of its lobbying activities.

Swedish Match (6th) is clear on its main policy positions and commits to proactively engaging with policymakers on harm reduction. It does not, however, have clear protocols in place for disclosing specific details of activities.

The other nine companies do not disclose either clear policies or details of political and lobbying engagements. This is particularly opaque for state-owned companies, where the interrelationship between them and government departments is not clear.

Key Findings Lobbying & Advocacy

A handful of companies disclose policy positions and related details, but overall transparency remains limited.

The highest-ranked companies make their policy positions relatively clear, but there is a lack of detailed disclosure on how they engage with policymakers and to what extent companies might offer conflicting policy advice through third parties. Countries have different legal requirements and this often influences how companies disclose political engagement activities, rather than them proactively doing so.

On its corporate website, BAT publishes links to specific policy areas, documenting its positions. Similarly, JTI publishes a webpage titled 'Our views on regulations', where it documents its positions by topic. It also

discloses regulatory submissions by geography in chronological order, along with the scientific reports it used to support them.

Several companies list the third parties and associations that they work with, but do not highlight the specifics of these organizations' interactions with government officials, nor for the most part their own direct activities. Legislation around this varies by geography, with the US and EU having more stringent regulations such as filing disclosures with the US Senate Lobbying Database or EU Transparency Register. While companies file their relevant activities in these regions, the majority do not disclose this on their own platforms, nor do they comprehensively reference their activities in other geographies.

Altria, a company operating exclusively in the US, reveals relatively detailed information on its corporate website. On its website, it publishes a repository of all policy-related interactions, including political contributions and memberships, as well as overall company policies for managing interactions. It also includes several policy positions. While it is it mandatory for it to file these activities with federal and state agencies and have them featured on those agencies' websites, Altria voluntarily includes its filings on its own website to make the information more easily accessible.

Companies should be more transparent about how their positions are communicated to policymakers and to what extent they might offer conflicting policy advice through third parties, including in countries where disclosure requirements are not as stringent.

Company Profiles

1.69 (out of 5)

Altria Group Inc

Company Overview

Altria operates exclusively in the US, where it is the largest cigarette manufacturer, selling over 100 billion sticks in 2019. Although the company's cigarette volume sales declined by 12.7% between 2017 and 2019, the company is still reliant on high-risk product categories – cigarettes, cigars, and pipe tobacco – for 90% of total tobacco value sales in 2019.¹¹⁷ Altria has made significant investments in reduced-risk products, notably its 35% stake in JUUL Labs.¹¹⁸ However, the company later wrote-down two-thirds of the value of its investment citing the intensifying regulatory scrutiny surrounding vaping in the US and internationally. Its reduced-risk performance is supported by sales of Swedish-style snus and, more recently, non-tobacco nicotine pouches, and heated tobacco after FDA authorizations granted in 2019.

Stance on Harm Reduction

Altria articulates its commitment to harm reduction through a 10-year vision stating that it wants "to responsibly lead the transition of adult smokers to a non-combustible future." 119 To support this, it advocates the importance of stakeholder and regulator engagement. However, it has not set or reported on specific, measurable, or timebound targets tied to harm reduction, nor a public commitment to phase out high-risk products.

Notable Performance



Strategy and Management

Altria has made a specific commitment to tobacco harm reduction and has taken steps to embed it in its management systems.



Product Sales

Altria's ratio of reduced-risk versus high-risk product is almost negligible.



Capital Allocation

Altria committed USD12.8 billion to purchase a 35% stake in JUUL Labs in 2018.



Product Offer

Altria offers twice as many high-risk as reduced-risk products.



Marketing

Altria has detailed voluntary marketing and youth access prevention practices, which apply across marketing channels and are supported by training.



Lobbying and Advocacy

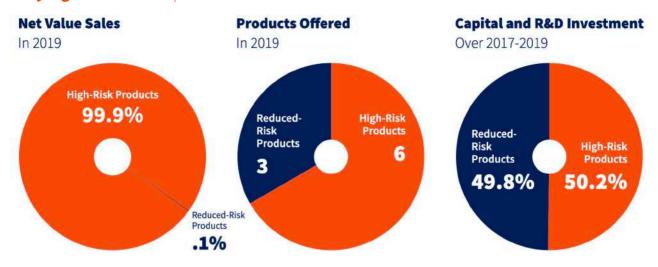
Altria's policy positions and lobbying activities are clearly published on its corporate website.

¹¹⁷ Altria Group Inc. (2020), 2019 Annual Report

¹¹⁸ Altria Group Inc. (n.d.). Altria Makes \$12.8 Billion Minority Investment in JUUL to Accelerate Harm Reduction and Drive Growth. Retrieved July 30, 2020, from http://investor.altria.com/file/Index? KeyFile=396169695

 $^{^{119}}$ Altria Group Inc. (2020). 2019 Corporate Responsibility Progress Report. p. 17.

Key Figures Altria Group Inc.



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country Altria Group Inc.



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

Note: Please note that data refer only to the 36 countries in the Index scope.

3(out of 15)

Company Overview

BAT is one of the leading tobacco manufacturers with sales in over 180 markets around the world. While cigarette volume sales declined by 9.4% between 2017 and 2019, the company continues to earn 88.9% of its revenues from high-risk product sales. ¹²⁰ BAT offers the widest range of reduced-risk products in the industry, with brands in each product category recognized in the index scope. Most of the company's reduced-risk products, including cartridges and heated tobacco, have registered double-digit growth, albeit starting from a relatively lower base. ¹²¹ BAT increasingly directs R&D and capital expenditures to developing reduced-risk products but nonetheless closed the biggest high-risk product motivated M&A deal in 2017, acquiring the remaining shares in Reynolds for GBP41.8 billion. ¹²²

Stance on Harm Reduction

BAT states its objective is "to build 'A Better Tomorrow' by reducing the health impact of our business through offering a greater choice of enjoyable and less risky products for our consumers. Our ambition is to increasingly transition our revenues from cigarettes to non-combustible products over time." This is supported with two key targets: "increasing our consumers of non-combustible products to 50 million by 2030," and to "achieve at least GBP5 billion from New Categories revenue in 2023/2024." However, BAT does not commit to phase out high-risk products. Instead, it continues to position them at the core of its business, arguing that revenue from continued sales will help fund development of reduced-risk alternatives.

Notable Performance Results



Strategy and Management

BAT has made a specific commitment to tobacco harm reduction supported by timebound targets to grow reduced-risk product customers and revenues.



Product Sales

BAT has started to shift its sales balance toward reduced-risk products, but the overall percentage remains limited to 5% of total net value sales. 125



Capital Allocation

BAT's capital expenditure and R&D investments are heavily concentrated on supporting reduced-risk product development, but the company's purchase of Reynolds American Inc also underscores its continuing focus on high-risk products.



Product Offer

BAT is expanding its offer of reduced-risk products and reaching multiple international markets, including those in low-medium income countries such as Kenya and Pakistan.



Marketing

BAT has a separate youth access prevention policy and is transparent in monitoring and disclosing its own internal violations. It also uses external auditors to assess its compliance with the policy.



Lobbying and Advocacy

BAT's code of conduct includes specific guidance for public policy engagement and lobbying. The company also details its policy positions.

¹²⁰ British American Tobacco Plc. (2020). Annual Report and Form 20-F 2019.

¹²² British American Tobacco Plc. (2018). Annual Report and Form 20-F 2017.

¹²³ British American Tobacco Plc. (2020). Sustainability Strategy Report 2019.

¹²⁴ Ibid. pp. 3-11

¹²⁵ Estimate from Tobacco Transformation Index Research.

Key Figures British American Tobacco Plc



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country British American Tobacco Plc



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

Note: Please note that data refer only to the 36 countries in the Index scope.

State Owned

China National Tobacco Corp

Company Overview

CNTC is the world's largest tobacco manufacturer, focusing on its home market of China. The company's cigarette volume sales exceed two trillion sticks per year. 126 CNTC is also active in cigars. It is noted that CNTC has engaged in heated tobacco products for export but no substantive presence was registered between 2017 and 2019. 127 The company continues to make significant capital investments in high-risk product manufacturing facilities. During the review period 2017-2019, CNTC's capital expenditure was focused on upgrading manufacturing, warehousing, and logistics. 128

Stance on Harm Reduction

CNTC has not established a harm reduction policy or commitment. At the 2017 National Tobacco Working Conference, the general manager of CNTC, Chengxing Ling, stated: "In 2017, it is necessary to create new advantages in international competition for new types of tobacco products. We will closely follow the policies, technologies and market developments of new types of tobacco products globally and conduct in-depth product research and development of major new types of tobacco products." CNTC claims to be cooperating with the government in reaching the target of reducing the smoking rate for people over 15 years old to 20% by 2030.130 However, the increase of its annual cigarette sales targets in 2018 implied an opposite position.131

Notable Performance Results



Strategy and Management

CNTC has stated no commitment to tobacco harm reduction and does not prioritize a transition to reduced-risk products.



Product Sales

CNTC is the largest cigarette manufacturer in the world and it registered volume sales growth in cigarettes during the review period.



Capital Allocation

CNTC allocates financial resources mainly to the development of high-risk products in China.



Product Offer

CNTC offers only high-risk tobacco products, predominantly cigarettes.



Marketing

CNTC does not offer a marketing policy outside of conforming to Chinese laws and regulations.



Lobbying and Advocacy

As a state-controlled company, CNTC has close interactions with the government and regulators. However, it does not disclose how this relationship is managed, or the details of any dialogue.

¹²⁶ Ibid

¹²⁷ ECigintelligence. (2018). China Tobacco Launches New HnB System on South Korean market. Retrieved September 8, 2020, from https://ecigintelligence.com/china-tobacco-launches-new-hnb-system-on-south-korean-market/

¹²⁸ TobaccoChina Online. (2020). Innovation Enables Smart Logistics for the Tobacco Industry. Tobacco Asia.

¹²⁹ China National Tobacco Corp. (n.d.). China Tobacco. http://www.tobacco.gov.cn/

¹³⁰ Ibid.

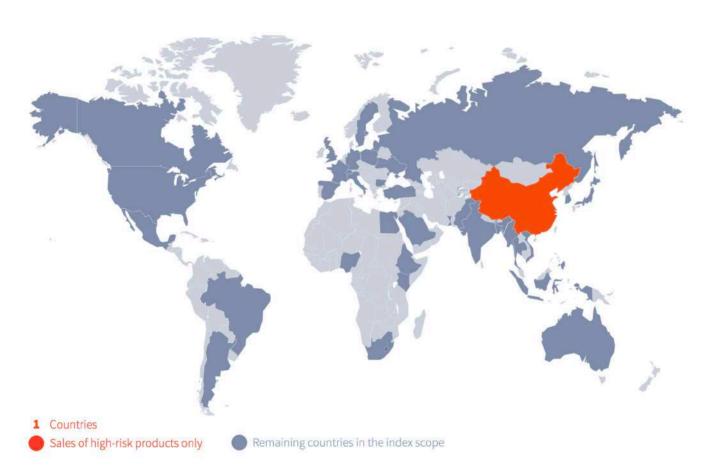
 $^{^{\}rm 131}$ Estimate from Tobacco Transformation Index research

Key Figures China National Tobacco Corp



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country China National Tobacco Corp



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

Note: Please note that data refer only to the 36 countries in the Index scope.

Privately Held

Djarum PT

Company Overview

Djarum is a privately held company. It is the third largest cigarette manufacturer in Indonesia with offerings in cigarettes, cigars, and cigarillos. It has international presence in Asia, Europe, and the Americas. Kretek cigarettes are its main revenue generator.

Stance on Harm Reduction

The company does not have any strategic commitment to harm reduction, nor does it sell reduced-risk products. To address the negative long-term prospects of the tobacco industry, the company is diversifying and investing in other sectors, notably online banking and retailing. However, this activity has no bearing on tobacco harm reduction and is therefore not considered by the index.

Notable Performance Results



Strategy and Management

Djarum has no harm reduction commitment and does not prioritize a transition to reduced-risk products.



Product Sales

Djarum sells only high-risk products. It registered a volume sales decline between 2017 and 2019, mainly driven by market dynamics rather than the company's strategies.



Capital Allocation

Djarum does not invest in the development of reduced-risk products.



Product Offer

Djarum's product offer is solely focused on cigarettes, cigars, and cigarillos.



Marketing

Djarum does not offer a marketing policy outside of conforming to laws and regulations.



Lobbying and Advocacy

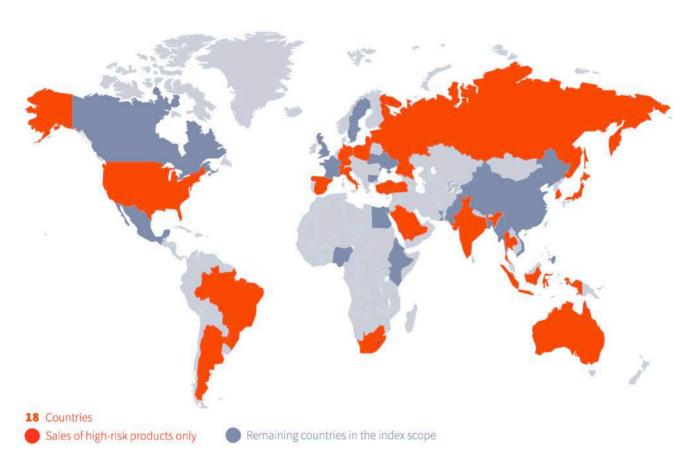
Djarum does not disclose any details of political engagement policies.

Key Figures Djarum PT



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country Djarum PT



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

Note: Please note that data refer only to the 36 countries in the Index scope.

State Owned

Eastern Co SAE

Company Overview

Eastern is a 51% state-owned company and the leading manufacturer of cigarettes and other tobacco products in Egypt.¹³³ The company's product offer is limited to high-risk products only and focuses on cigarettes, cigars, cigarillos, and Middle-Eastern style water pipe tobacco. Eastern generates the majority of its revenue from cigarette sales in Egypt.

Stance on Harm Reduction

Eastern does not sell reduced-risk products nor does it commit to tobacco harm reduction. It has not given any indication that it will change its position, particularly as it announced plans to increase production by one billion cigarettes in 2018-2019.¹³⁴

Notable Performance Results



Strategy and Management

Eastern has no harm reduction commitment and does not prioritize a transition to reduced-risk products.



Product Sales

Eastern registered a notable sales growth in cigarettes between 2017 and 2019, confirming its sales focus on high-risk tobacco products only.



Capital Allocation

Eastern focuses all investment activities to support high-risk products.



Product Offer

Eastern offers only high-risk tobacco products, mainly cigarettes and shisha.



Marketing

Eastern does not offer a marketing policy outside of conforming to laws and regulations.



Lobbying and Advocacy

Eastern is 51% state-owned and therefore likely has close interaction with the government and regulators, but it does not disclose how this relationship is managed or the details of any dialogue.

 $^{^{\}rm 132}$ Eastern Co SAE is 50.5% owned by the Egyptian Ministry of Investment.

¹³³ Markets Insider. (n.d.). Eastern Tobacco Stock. https://markets.businessinsider.com/stocks/eastern_tobacco-stock

 $^{^{134}\,\}mbox{Estimate}$ from Tobacco Transformation Index research.

 $^{^{135}\,}Markets\,Insider.\,(n.d.).\,Eastern\,Tobacco\,Stock.\,https://markets.businessinsider.com/stocks/eastern_tobacco-stock.\,https://markets.businessinsider.com/stocks/eastern_tobacco-stock.\,https://markets.businessinsider.com/stocks/eastern_tobacco-stock.\,https://markets.businessinsider.com/stocks/eastern_tobacco-stock.\,https://markets.businessinsider.com/stocks/eastern_tobacco-stock.\,https://markets.businessinsider.com/stocks/eastern_tobacco-stock.\,https://markets.businessinsider.com/stocks/eastern_tobacco-stock.\,https://markets.businessinsider.com/stocks/eastern_tobacco-stock.\,https://markets.businessinsider.com/stocks/eastern_tobacco-stocks/eastern_tobacco$

Key Figures Eastern Co SAE



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country Eastern Co SAE



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

Privately Held

Gudang Garam Tbk PT

Company Overview

Gudang Garam is a leading manufacturer of kretek cigarettes focused on the Indonesian market. The company's product offer is entirely high-risk-oriented with no presence in reduced-risk alternatives between 2017 and 2019. Gudang Garam's capital expenditure is centered on routine maintenance and replacement of equipment while new product developments are related to kretek cigarettes, with new brand variant launches in 2019.¹³⁷

Stance on Harm Reduction

Gudang Garam neither sells reduced-risk products nor has a commitment to harm reduction. As yet, Gudang Garam has given no indication that it will enter the reduced-risk market, stating that it is "too early to draw conclusions on the potential of this category, and Gudang Garam will continue to monitor the situation." There is no indication that the monitoring is focused on health concerns as opposed to commercial objectives.

Notable Performance Results



Strategy and Management

Gudang Garam has no harm reduction commitment and does not prioritize a transition to reduced-risk products.



Product Sales

Gudang Garam sells only high-risk tobacco products and registered an increase in cigarette sales between 2017 and 2019.



Capital Allocation

Gudang Garam's investments are 100% related to high-risk products.



Product Offer

Gudang Garam's product portfolio is comprised of cigarettes only.



Marketing

Gudang Garam does not offer a marketing policy outside of conforming to laws and regulations.



Lobbying and Advocacy

Gudang Garam does not disclose any details of political engagement policies.

¹³⁶ Gudang Garam Tbk PT is 75.5% owned by the Wonowidjojo Family.

¹³⁷ PT Gudang Garam Tbk. (2020). Annual Report 2019.

¹³⁸ PT Gudang Garam Tbk. (2019). Gudang Garam Public Expose 2019; Gudang Garam Delivers Sound Sales and Earnings Growth during the First Half of the Year.

PT Gudang Garam Tbk. (2020). Annual Report 2019.

Key Figures Gudang Garam Tbk PT



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country Gudang Garam Tbk PT



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

Publicly Traded

RANK

Imperial Brands Plc

Company Overview

Imperial Brands has sales in both high-risk and reduced-risk products. It is one of the largest international companies, operating in 160 markets around the world. The company's 2019 net sales of GBP8 billion were generated primarily by high-risk products, particularly cigarettes. Although sales of reduced-risk products increased by 49% on a yearly basis, they still accounted for GBP285 million in 2019, or only around 3% of the company's totals. Imperial's reduced-risk portfolio is centered on cartridges in the US, Japan, and Europe, heated tobacco in Japan, and snus and non-tobacco nicotine pouches in Europe. In the company's capital allocation has started to shift toward reduced-risk products, especially in R&D. It has also completed a series of reduced-risk-focused M&A investments.

Stance on Harm Reduction

Imperial Brands states its commitment to tobacco harm reduction as follows: "Our focus on transitioning adult smokers to potentially less harmful alternatives to cigarettes is aligned to our purpose: to create something better for the world's smokers."¹⁴² However, it doesn't commit to phase out high-risk products, and its strategy of 'Tobacco Maximisation', which focuses on driving growth from high-risk products, remains one of Imperial's three core objectives. It states: "Tobacco will be our core business for many years to come, generating the funds to invest in NGP."¹⁴³

Notable Performance Results



Strategy and Management

Imperial has made a commitment to tobacco harm reduction. It also discloses the specific percentage of performance incentives for senior leaders that are linked to harm reduction.



Product Sales

Imperial's reduced-risk sales account for a growing share of the company's sales balance and are mainly focused on cartridges, one of the less harmful reduced-risk alternatives.



Capital Allocation

The majority of Imperial's R&D investments were devoted reduced-risk products during the review period. The company also acquired several reduced-risk product companies.



Product Offer

Between 2017 and 2019, Imperial carried out multi-market launches of its cartridges in countries such as Russia, Germany, and Japan, but failed to offer the product in any low-medium income countries in the scope of the index.



Marketing

Imperial Brands has a comprehensive marketing policy, with specific details on its application to different channels and on youth prevention. The company also monitors and makes disclosures on internal violations.



Lobbying and Advocacy

Imperial's code of conduct includes specific policies concerning political engagement. It also publishes its policy positions on its website and in its annual and sustainability reports.

¹³⁹ Imperial Brands Plc. (2019). Annual Report and Accounts 2019.

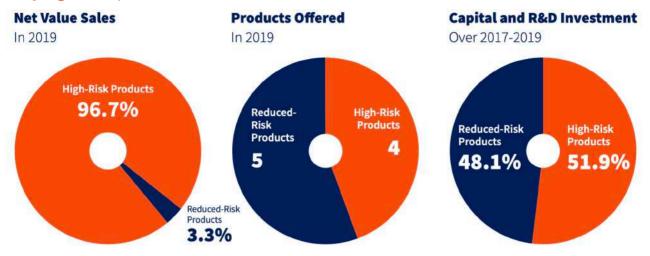
¹⁴⁰ Ibid

¹⁴¹ Ibid.

¹⁴² Ibid. p. 8

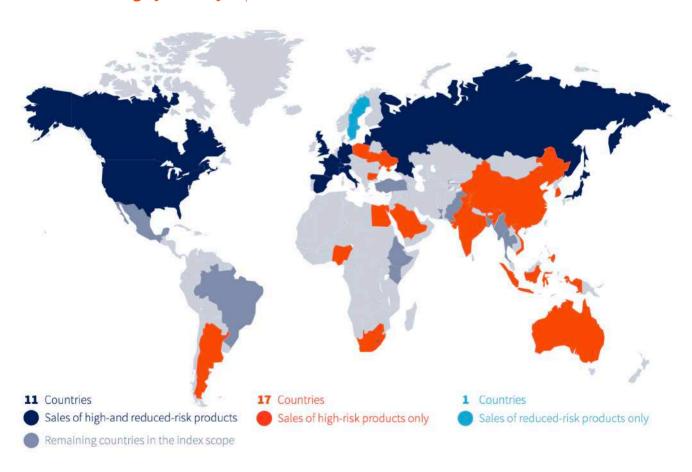
 $^{^{143}}$ Imperial Brands Plc. (2018). From Tobacco to Something Better, Our Approach to Next Generation Products. p. 17.

Key Figures Imperial Brands Plc



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country Imperial Brands Plc



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

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Company Overview

ITC began as a tobacco company but has evolved into a conglomerate operating in multiple industries. Tobacco division sales, which now account for less than half of the total company revenue, are almost entirely due to cigarettes in India, with a small presence in cigars as well. Between 2017 and 2019, the company was active in two reduced-risk categories – NRT and cartridges. However, the ban on e-cigarettes in India effectively reduced the company's offer in tobacco alternatives to NRT only. The company has made substantial investments in high-risk products, particularly in order to modernize and digitize cigarette manufacturing facilities and achieve higher levels of productivity. 146

Stance on Harm Reduction

In 2019, ITC's tobacco-related earnings declined to less than 50%.¹⁴⁷ This performance was mainly due to its diversification into other industries and high tax rates on tobacco, rather than a reflection of tobacco harm reduction policy. Furthermore, the company continues to highlight innovation and the release **of** new high-risk product variants and has mounted a challenge to regulations mandating graphic health warnings on tobacco packaging.

Notable Performance Results



Strategy and Management

ITC has no harm reduction commitment, but offers one reduced-risk product (NRT).



Product Sales

ITC's sales are almost exclusively focused on cigarettes and cigars, even though a small share of total sales is linked to NRT products.



Capital Allocation

The vast majority of ITC's investments support high-risk products, and cigarettes in particular.



Product Offer

NRT is the only reduced-risk product offered by ITC, while its portfolio is dominated by cigarette brands.



Marketing

ITC does not offer a detailed tobacco-focused marketing policy outside of conforming to laws and regulations.



Lobbying and Advocacy

ITC, in which the government owns a 24% stake, does not disclose details of political engagement policies.¹³⁹

 $^{^{144}\,}ITC$ Ltd is publicly traded but state enterprises own 24.2% of the company

 $^{^{\}rm 145}$ ITC Ltd. (2019). Report and Accounts 2019.

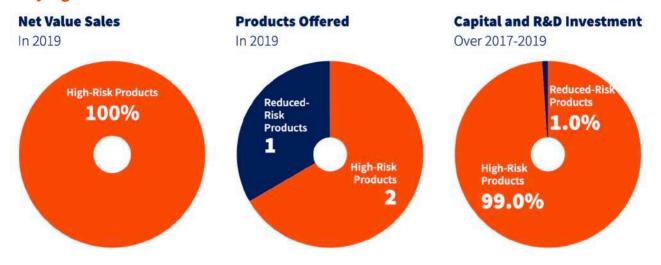
¹⁴⁶ Ibid.

¹⁴⁷ Ibi

¹⁴⁸ Nair, R. & Chandna, H. (2019). Govt Has Banned Vapes, but Owns 28% of ITC – India's Biggest Cigarette Maker. *The Print*.

Southeast Asia Tobacco Control Alliance (SEATCA). (2019). Asian State-Owned Tobacco Enterprises Challenges & Opportunities in Implementing WHO FCTC Article 5.3.

Key Figures ITC Ltd



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country ITC Ltd



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

¹⁴⁹ Japan Tobacco Inc is publicly traded but the Government of Japan owns 33.3% of the company.

6 (out of 15)

FINAL SCORE

Company Overview

A third of JTI is owned by the Japanese government. The company operates in over 70 countries and sells high-risk products in more than 130 markets. ¹⁵¹ Between 2017 and 2019, five substantial high-risk-related acquisitions have resulted in growth in the company's cigarette volume sales. As a result, cigarettes remain the exclusive revenue generator for the company, with market-leading positions in countries such as the UK and Russia. The company has also expanded its portfolio in reduced-risk categories, recently adding non-tobacco nicotine pouches alongside cartridges and heated tobacco. This was supported by an increasing share of R&D investments focused on reduced-risk products.

Stance on Harm Reduction

JTI has a commitment to harm reduction, but it is focused only on offering choices for consumers, without a clear aim to phase out high-risk products. It states: "We are committed to developing and bringing to market Reduced-Risk Products that meet consumer expectations." The company has set a target to invest USD1 billion in R&D of reduced-risk products between 2018 and 2020. However, it provides only limited disclosure on its performance against this objective. 153

Notable Performance Results



Strategy and Management

JTI has made a commitment to tobacco harm reduction as part of providing consumer choice and has set investment targets to support reduced-risk product development.



Product Sales

JTI has grown its sales of cartridges and heated tobacco, while also registering an increase in its cigarette sales.



Capital Allocation

JTI acquired five high-risk companies, expanding its presence in high-risk products mainly in low-medium income countries.



Product Offer

JTI offers the largest portfolio of high-risk products, but the geographic reach of its reduced-risk product has increased.



Marketing

JTI has an internal marketing policy including measures for youth access prevention, and it monitors and discloses violations.



Lobbying and Advocacy

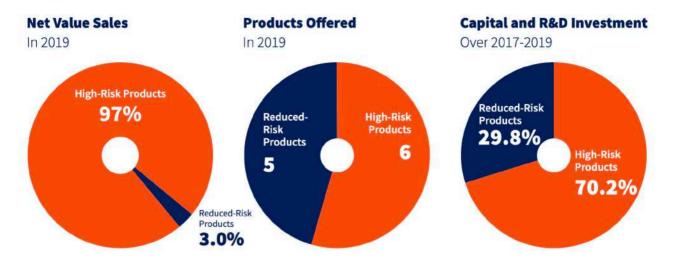
JTI publishes details of its policy positions with separate headings for each on its website and links to relevant submissions.

 $^{^{\}rm 150}$ Japan Tobacco Inc is publicly traded but the Government of Japan owns 33.3% of the company.

¹⁵¹ Japan Tobacco Inc. (2020). Integrated Report 2019.

¹⁵² Japan Tobacco Inc. (n.d.). Japan Tobacco International – a Global Tobacco Company. https://www.jti.com/

Key Figures Japan Tobacco Inc



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country Japan Tobacco Inc



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

Publicly Traded

KT&G Corp

Company Overview

KT&G is the dominant tobacco manufacturer in South Korea. The company is also present internationally through its cigarette portfolio in Africa, the Americas, Asia-Pacific, the Middle East, and Russia. ¹⁵⁴ Between 2017 and 2019, KT&G entered two reduced-risk categories – heated tobacco and cartridges. While these products were only available in South Korea in 2019, in 2020 the company signed an agreement with PMI for the international distribution of its reduced-risk products internationally. As a result, the first reduced-risk KT&G products were exported to Russia. The company's investment activities support both high-risk and reduced-risk product development.

Stance on Harm Reduction

KT&G has not made an explicit commitment to harm reduction and has no intention to phase out cigarettes. KT&G introduced reduced-risk alternatives in 2017 within its home market, but its motivation appears to be purely commercial. It has emphasized the importance of the reduced-risk business, although in conjunction with high-risk products.

Notable Performance Results



Strategy and Management

KT&G has no harm reduction commitment but has grown sales of reduced-risk products rapidly since offering heated tobacco in 2017.



Product Sales

KT&G has registered rapid growth in its heated tobacco sales in South Korea while maintaining its sales from cigarettes in international markets



Capital Allocation

KT&G's investments are split between expanding reduced-risk products in South Korea and consolidating high-risk products in international markets.



Product Offer

Between 2017 and 2019, KT&G added heated tobacco and cartridges to a previous portfolio of cigarettes only.



Marketing

KT&G does not offer a detailed marketing policy outside of conforming to laws and regulations.

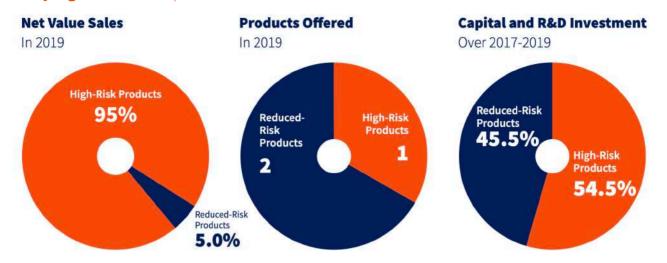


Lobbying and Advocacy

 $\mbox{KT\&G}$ does not disclose details of engagement policies with regard to to bacco harm reduction

¹⁵⁴ KT&G Corp. (2019). KT&G Report 2018.

Key Figures KT&G Corp



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country KT&G Corp



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

Publicly Traded

Company Overview

PMI is the largest tobacco manufacturer outside of China, with products available in over 180 markets. In addition, the company is the largest player in heated tobacco, with sales in 52 markets by the end of 2019. PMI's reduced-risk portfolio includes cartridges as well, but the product is only available in a limited number of markets. The company's capital allocation ratio has rapidly shifted toward the company's reduced-risk products. Significant investments were made in building up heated tobacco manufacturing capacity while R&D expenditure supports the development of three new reduced-risk product platforms in cartridges, heated tobacco, and nicotine salts.

Stance on Harm Reduction

PMI's commitment to tobacco harm reduction states: "We're devoted to innovative smoke-free products, and we want to lead the way in making cigarettes history." ¹⁵⁶ This is supported by performance targets for reduced-risk products to account for 45% of volume shipments by 2025. ¹⁵⁷ However, the company also states: "For as long as significant legitimate demand for combustible tobacco exists, PMI will continue to sell such products responsibly and seek to maintain our leadership position internationally." ¹⁵⁸

Notable Performance Results



Strategy and Management

PMI has made a commitment to tobacco harm reduction, sets timebound targets for the growth of reduced-risk and the reduction of high-risk products, and specifies how senior leadership performance incentives are dependent on harm reduction performance.



Product Sales

PMI maintains its position as the second largest cigarette manufacturer worldwide and its sales balance is still heavily weighted towards cigarettes despite rapid sales growth in heated tobacco.



Capital Allocation

PMI's capital expenditure and R&D investments are currently almost entirely focused on supporting the company's reduced-risk products.



Product Offer

Even with the international reach of its heated tobacco products, PMI's portfolio is still dominated by high-risk products which have a much lower price point compared to its reduced-risk offer.



Marketing

PMI has established detailed marketing principles and publicly reports violations against both internal guidelines and regulations.



Lobbying and Advocacy

PMI discloses its main policy positions and has a code of conduct regarding anti-bribery and lobbying regulations worldwide. However, it does not publish details of all its public policy interactions.

¹⁵⁵ Philip Morris International Inc. (2020), 2019 Annual Report.

¹⁵⁶ Philip Morris International Inc. (n.d.). Philip Morris International | Delivering a Smoke-Free Future. https://www.pmi.com/

¹⁵⁷ Philip Morris International Inc. (2020). Integrated Report 2019. p. 30.

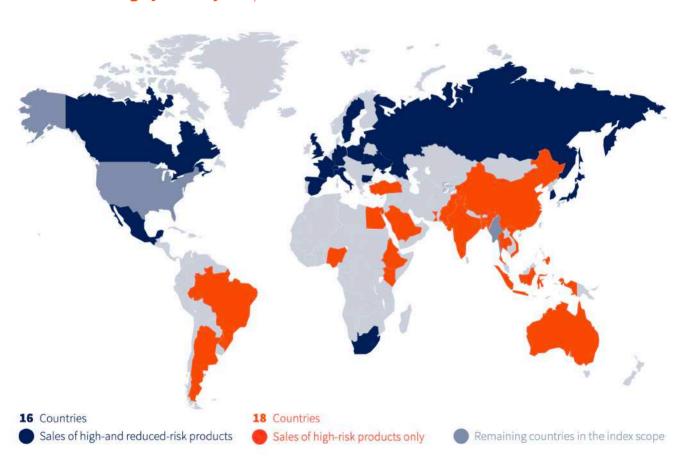
¹⁵⁸ Ibid. pp. 3-4.

Key Figures Philip Morris International Inc



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country Philip Morris International Inc



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

Publicly Traded

Swedish Match AB

Company Overview

Swedish Match is an international tobacco manufacturer focused on Europe and North America. Its reduced-risk portfolio consists of snus and non-tobacco nicotine pouches and it registers the highest share of reduced-risk versus high-risk product sales among all manufacturers covered by the index. The company also sells high-risk products, including chewing tobacco, moist snuff, and cigars/cigarillos, which are offered in the US only. Unlike other companies, it does not sell cigarettes. In 2019, the company's 'smokefree' to ategories generated 83.1% of total revenue, however these include chewing tobacco and moist snuff which are classified as high-risk product by the index. The company's capital allocation is almost entirely invested in reduced-risk products. Between 2017 and 2019, the company acquired two reduced-risk companies and a chewing tobacco producer in Scandinavia.

Stance on Harm Reduction

Swedish Match articulates it commitment by stating: "Swedish Match's vision is a world without cigarettes. The company is committed to displacing cigarettes by continuing to develop and commercialize alternative and dramatically safer sources of nicotine – which will improve public health." ¹⁶¹ This position was adopted in 2014 and follows the 1999 divestment of its cigarettes business, although it remains active in the high-risk product categories of cigars, cigarillos, and chewing tobacco. Its aim is to further increase the proportion of sales it generates from smoke-free products, and the company publishes its performance of this figure in its annual report.

Notable Performance Results



Strategy and Management

Swedish Match has a commitment to harm reduction and to phase out high-risk products, setting a goal for a world without cigarettes. The company also reports on the year-on-year percentage of its sales and expenditure that high-risk products account for.



Product Sales

Swedish Match is the only tobacco company that has almost half of its sales generated from reduced-risk products.



Capital Allocation

Swedish Match's investments are almost entirely dedicated to reduced-risk products.



Product Offer

Swedish Match's product portfolio includes less harmful reduced-risk categories such as snus and non-tobacco nicotine pouches, which are offered in all the countries of operation.



Marketing

Swedish Match's marketing policy and monitoring procedures are outlined in its overall code of conduct.



Lobbying and Advocacy

Swedish Match is transparent in disclosing on its main policy positions and commits to proactively engaging with policymakers on harm reduction.

¹⁵⁹ Swedish Match uses this terminology to refer to the aggregation of its snus, moist snuff, chewing tobacco and non-tobacco nicotine pouches.

¹⁶⁰ Swedish Match AB. (2020). Annual Report 2019.

¹⁶¹ Ibid. p. 41

Key Figures Swedish Match AB



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country Swedish Match AB



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

RANK

Swisher International Group Inc

Company Overview

Swisher International is a US manufacturer of a range of high-risk products, predominantly cigars and cigarillos, which are exported around the world and generate the vast majority of the company's revenue. Swisher International also offers reduced-risk alternatives, particularly cartridges, which are only available in the US. Between 2017 and 2019, the ratio of the company's capital and R&D expenditure was dominated by activities related to high-risk product lines. These included investments related to production, logistics, technology upgrades, and extending salesforces for both domestic and export markets.¹⁶²

Stance on Harm Reduction

Although it sells a range of reduced-risk products, the company has not made any public commitment to tobacco harm reduction.

Notable Performance Results



Strategy and Management

Swisher International has no harm reduction commitment, but has limited sales in reduced-risk products.



Product Sales

Swisher International is one of the two companies in the index that does not sell cigarettes and registers a growing, albeit small, reduced-risk share of total sales.



Capital Allocation

Swisher International's investments are almost entirely focused on the company's cigars and cigarillos, although an emerging portfolio of cartridges takes a minority share of R&D and capital expenditure.



Product Offer

Swisher International only offers cartridges in the US, while its cigars and cigarillos are sold in a number of international markets.



Marketing

Swisher International does not offer a marketing policy outside of conforming to laws and regulations.

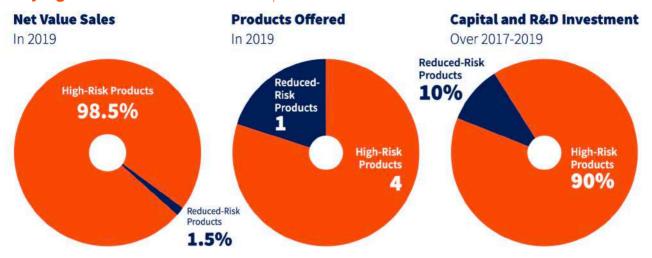


Lobbying and Advocacy

Swisher International does not directly disclose details of political engagement policies.

 $^{^{162}}$ Tobacco Business. (2019). For the People: An Interview with Swisher International's John Miller, Part 1.

Key Figures Swisher International Group Inc



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country Swisher International Group Inc



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

State Owned

Company Overview

TOAT is the sole domestic manufacturer of tobacco products in Thailand. The company lost its official monopoly status in 2018 but remains a 100% state-owned enterprise. Between 2017 and 2019, TOAT's expenditure was directed at launching new products, machinery, manufacturing technology, and buildings to support its cigarette brands. 164

Stance on Harm Reduction

TOAT has not made a public commitment to tobacco harm reduction, nor does it sell reduced-risk products, many of which are banned by the Thai government. Overall, its public statements are supportive of government regulation and the ban on reduced-risk products, with the managing director of TOAT stating in an interview for Tobacco Asia: "The government is concerned that e-smoking and heat-not-burn devices are encouraging consumers – especially young people – to take up the nicotine habit. We don't want to promote that." 165

Notable Performance Results



Strategy and Management

TOAT has no harm reduction commitment and does not prioritize a transition to reduced-risk products.



Product Sales

TOAT has registered the largest sales decline in cigarettes but this was only driven by a reduction in market share and tax increases in Thailand.



Capital Allocation

TOAT does not invest in reduced-risk products.



Product Offer

TOAT offers only cigarettes in Thailand.



Marketing

TOAT has a limited marketing policy that only conforms to relevant laws and regulations.



Lobbying and Advocacy

As a state-controlled company, TOAT likely has close interaction with the government and regulators. However, it does not disclose how this relationship is managed, or the details of any dialogue.

¹⁶³ Southeast Asia Tobacco Control Alliance (SEATCA). (2019). Asian State-Owned Tobacco Enterprises Challenges & Opportunities in Implementing WHO FCTC Article 5.3.

¹⁶⁴ Tobacco Authority of Thailand. (2018). Annual Report 2017.

Tobacco Authority of Thailand. (2019). Annual Report 2018.

Tobacco Authority of Thailand. (2020). Annual Report 2019.

¹⁶⁵ Schmid, T. (2018). Thailand Tobacco Monopoly: Bravely Soldiering On. Tobacco Asia.

Key Figures Tobacco Authority of Thailand



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country Tobacco Authority of Thailand



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

State Owned

Vietnam National Tobacco Corp

Company Overview

Vinataba is a manufacturer in control of the production and distribution of tobacco in Vietnam. The company sells only cigarettes and does not currently offer reduced-risk alternatives. During the review period, Vinataba invested in internal restructuring aimed at improving manufacturing, distribution efficiency, and the integration of high-risk production capacity across its subsidiaries. ¹⁶⁶

Stance on Harm Reduction

Vinataba does not state any commitment to tobacco harm reduction and does not sell reduced-risk products. The company has increased its targets for cigarette sales over the last three years – 2017: 3,533 million packs, 2018: 3,809 million packs, 2019: 4,068 million packs.

Notable Performance Results



Strategy and Management

Vinataba has no harm reduction commitment and does not prioritize a transition to reduced-risk products.



Product Sales

Vinataba does not sell reduced-risk products and has increased its cigarette sales since 2017.



Capital Allocation

Vinataba's investments are 100% high-risk-related.



Product Offer

Vinataba only offers cigarettes in Vietnam.



Marketing

Vinataba does not offer a marketing policy outside of conforming to laws and regulations.



Lobbying and Advocacy

As a state-controlled company, Vinataba likely has close interaction with the government and regulators. However, it does not disclose how this relationship is managed, or the details of any dialogue.

¹⁶⁶ Vietnam National Tobacco Corp. (2020). The Third Vietnam Tobacco Corporation Congress.

 $^{{}^{167}\,\}text{Vietnam\,National\,Tobacco\,Corp.\,(n.d.)}.\,\text{Vietnam\,National\,Tobacco\,Corporation} - \text{Vinataba.\,http://www.vinataba.com.vn/}$

Key Figures Vietnam National Tobacco Corpsmen



Source: Tobacco Transformation Index estimates based on triangulation of publicly available data, identification and consultation of a range of noncompany sources of information (eg. Databases such as Euromonitor International's Passport, Orbis, Capital IQ), interviews with industry experts and incountry research.

Product Offering by Country Vietnam National Tobacco Corp



Source: Tobacco Transformation Index estimates based on review of company's websites, formal financial and non-financial reporting, interviews with industry experts and in-country research.

Appendix

Index Scope

This section provides details on the companies, countries, and products in the scope of the 2020 Tobacco Transformation Index. Additional details are available in the 2020 Index Methodology report.

Company Scope

Company	Country	Ownership	Cigarette Volume Sales 2019 (mn sticks)
Altria Group Inc	US	Publicly traded	104,553.4
British American Tobacco Plc	UK	Publicly traded	669,155.3
China National Tobacco Corp	China	State owned	2,311,433.3
Djarum PT	Indonesia	Privately held	38,395.8
Eastern Co SAE	Egypt	State owned	79,294.6
Gudang Garam Tbk PT	Indonesia	Privately held	87,178.3
Imperial Brands Plc	UK	Publicly traded	219,006.9
ITC Ltd	India	Publicly traded	66,554.0
Japan Tobacco Inc	Japan	Publicly traded	475,886.2
KT&G Corp	South Korea	Publicly traded	80,856.8
Philip Morris International Inc	Switzerland	Publicly traded	706,260.2
Swedish Match AB	Sweden	Publicly traded	-
Swisher International Group Inc	US	Privately held	-
Tobacco Authority of Thailand	Thailand	State owned	17,840.6
Vietnam National Tobacco Corp	Vietnam	State owned	47,412.1

Source: Data estimates from Euromonitor International Passport's Tobacco database.

Note: 'Ownership' refers to the company's majority ownership. Eastern Co SAE is 50.5% owned by the Egyptian Ministry of Investment; Gudang Garam Tbk PT is 75.5% owned by the Wonowidjojo Family; ITC Ltd is publicly traded but state enterprises own 24.2% of the company; Japan Tobacco Inc is publicly traded but the Government of Japan owns 33.3% of the company.

Country Scope

Country	Туре	Cigarettes Volume Sales 2018 (mn sticks)	Retail Cigarettes Volume Sales 2018 (mn sticks)	Illicit Cigarettes Volume Sales 2018 (mn sticks)	Reported No. of Smokers 2018 ('000)
Argentina	HMIC	39,765.6	34,820.4	4,945.2	7,324.3
Australia	НМІС	14,488.1	12,951.8	1,536.2	2,650.8
Bangladesh	LMIC	94,235.7	91,572.9	2,662.9	n/a
Brazil	HMIC	104,183.0	48,291.7	55,891.2	18,244.7
Bulgaria	HMIC	11,915.2	11,228.1	687.1	1,872.4
Canada	НМІС	34,372.8	27,301.5	7,071.3	4,474.0
China	HMIC	2,466,115.3	2,368,760.3	97,355.0	305,866.6
Egypt	LMIC	100,683.8	96,251.9	4,431.9	17,510.2
Ethiopia	LMIC	8,776.0	6,222.8	2,553.2	n/a
France	HMIC	49,697.0	40,277.4	9,419.6	13,348.2
Germany	HMIC	82,186.0	75,226.1	6,959.9	14,871.5
India	LMIC	108,960.3	82,504.2	26,456.1	58,030.7
Indonesia	LMIC	331,556.1	307,094.1	24,461.9	65,790.9
Italy	HMIC	73,236.9	68,618.2	4,618.8	10,697.2
Japan	HMIC	132,739.3	132,685.0	54.3	18,804.1
Kenya	LMIC	8,136.1	7,301.9	834.3	10,697.2
Mexico	HMIC	35,870.5	29,827.6	6,043.0	15,916.4
Myanmar	LMIC	9,267.1	9,248.0	19.0	n/a
Nigeria	LMIC	22,083.3	17,171.2	4,912.0	10,603.8

Pakistan	LMIC	79,126.4	51,986.9	27,139.4	25,156.4
Philippines	LMIC	72,930.0	64,402.8	8,527.2	15,560.1
Poland	НМІС	47,742.0	42,897.5	4,844.5	7,446.4
Russia	HMIC	258,519.9	236,519.9	22,000.0	38,533.1
Saudi Arabia	НМІС	24,641.0	22,679.0	1,962.0	7,104.6
Singapore	HMIC	2,803.3	2,701.0	102.2	592.1
South Africa	НМІС	22,520.7	16,939.8	5,581.0	7,120.7
South Korea	HMIC	63,990.6	63,350.3	640.3	8,577.6
Spain	НМІС	52,752.9	47,820.5	4,932.4	8,351.8
Sweden	HMIC	5,940.0	5,640.0	300.0	827.9
Switzerland	НМІС	9,740.3	9,209.9	530.4	1,785.6
Thailand	HMIC	41,516.3	39,311.8	2,204.5	11,904.5
Turkey	НМІС	128,405.5	118,541.7	9,863.7	16,055.7
UK	НМІС	34,470.1	30,095.7	4,374.4	7,293.7
Ukraine	LMIC	63,641.7	60,881.7	2,760.0	7,058.7
USA	НМІС	250,468.1	240,888.3	9,579.8	33,952.8
Vietnam	LMIC	98,039.0	80,865.8	17,173.2	15,088.2

Source: Data estimates from Euromonitor International Passport's Tobacco database.

Notes: (1) Smoking population refers to the number of adult smokers aged 18 years and over – i.e., people who currently use any nicotine product (smoking and/or smokeless tobacco) on a daily or non-daily basis.

(2) Low-medium (LMICs) and high-medium income countries (HMICs) are identified based on classifications from the World Bank. Different income groups are identified using gross national income (GNI) per capita, in US dollars, converted from local currency using the World Bank Atlas method. Estimates of GNI are obtained from economists in World Bank country units, and the size of the population is estimated by World Bank demographers from a variety of sources, including the UN's biennial World Population Prospects. In particular, the World Bank currently divides economies into four income groupings: low, lower-middle, upper-middle, and high. For the scope of the index, two main income groups have been identified: LMIC: GNI per capita of USD12,376 or less; and HMIC: GNI per capita of USD12,376 or more.

Product Scope

Product	Туре	Definitions	Per Stick Conversion
High-Risk Products			
Chewing Tobacco	Smokeless Tobacco	Chewing tobacco consists primarily of two types of product: Asian-style and US-style available in those specific geographic areas; and other chewing tobacco available in all other markets.	1 gram = 0.7 cigarettes
Cigarettes	Combustible Tobacco	The definition of cigarettes for the purposes of the index is duty-paid, machine-manufactured whitestick products. This product category also includes hand-rolled kretek cigarettes present in Indonesia and other brands of cigarettes that do not use white paper. However, it excludes non-machine-manufactured products such as bidis/beedis (India) and papirosy (Russia), and other smoking products made with tobacco but that either do not resemble cigarettes as recognized in the US or Europe, or those that are not machine-manufactured.	
Cigarillos	Combustible Tobacco	Cigarillos are defined as miniature cigars, with a ring gauge of <29. Ring gauge is usually listed under a brand as Length/Ring and is a number indicating the circumference of the cigar's cross section and is enumerated in sixty-fourths of an inch (64/64 = 1 inch). Length does not matter as much in determining cigarillo vs cigars as some cigarillos can be quite long. However, six inches is the maximum length a cigarillo tends to be.	1 unit = 5.4 cigarettes
Cigars	Combustible Tobacco	Cigars are made of tobacco wrapped in leaf as opposed to paper. The product varies considerably in terms of price, quality, and size. Different terms are used to describe the various types of cigar depending on the country. Cigars generally consist of three sections: the filler, the binder, and the wrapper. Cigars are defined as having ring gauges of 30 or more.	1 unit = 8.1 cigarettes
Fine Cut Tobacco	Combustible Tobacco	Fine Cut tobacco is usually sold in plastic or foil pouches, metal tins or plastic tubs. It can also be flavored.	1 gram = 2.0 cigarettes
Moist Snuff	Smokeless Tobacco	Moist Snuff is either loose or pre-portioned in miniature sized 'teabag' pouches that are placed on the gum and sucked on. Moist snuff is distinguished from Snus by its processing: Moist snuff is fermented; compared to snus which is pasteurized (heat-treated).	1 gram = 1.4 cigarettes
Pipe Tobacco	Combustible Tobacco	Western-style pipe tobacco includes cut tobacco sold in packaged format for smoking in pipes and available in pouches, tins, and cans.	1 gram = 3.2 cigarettes

Product	Туре	Definitions	Per Stick Conversion
Shisha	Combustible Tobacco	Middle Eastern-style water pipe tobacco is also known as 'shisha', 'hookah' or 'nakhla'. Shisha tobacco is also referred to as molasses tobacco and is moist and sweetly flavored – often with fruit.	1 gram = 0.3 cigarettes
Reduced-Risk Products			
Cartridges	Vapor Products	This product category consists entirely of the sales of pre-filled pods or capsules for use with a non-cigal-like closed system device. Currently, these are universally proprietary in nature (pods are useable exclusively with a single specific hardware device).	1 ml = 13 cigarettes
E-liquids	Vapor Products	E-liquids include nicotine and non-nicotine bottled e-liquids which are decanted by the consumer into a tank for heating and inhalation. E-liquids can have different nicotine levels and flavors.	1 ml = 13 cigarettes
Heated Tobacco	Vapor Products	Heat-not-burn devices include products, generally manufactured by major tobacco companies, which allow the consumer to heat rather than combust a tobacco product. Heated tobacco is the consumable element of heat-not-burn devices, which comes in the form of pods or in specially designated cigarette sticks.	1 unit = 1 cigarette
Non-Tobacco Nicotine Pouches	Smokeless Tobacco	Non-tobacco nicotine pouches are manufactured in a similar way to snus using ingredients such as filler, flavors, stabilizers, and nicotine but do not contain tobacco.	1 unit = 1 cigarette
NRT Products	NRT Products	Nicotine-based products such as gum, lozenges, patches, and inhalators used to aid smoking cessation. It also includes nicotine-based products sold as capsules, micro-tabs, or sprays.	1 unit = 10 cigarettes (patches) 1 unit = 1 cigarette (non patches)
Snus	Smokeless Tobacco	Snus is either loose or pre-portioned in miniature sized 'teabag' pouches that are placed on the gum and sucked on. Snus is distinguished from Moist snuff by its processing: Snus is pasteurized (heattreated); compared to moist snuff which is fermented.	1 gram = 1.4 cigarettes

Sources: Euromonitor International Passport's Tobacco and Consumer Health databases, and the National Cancer Institute's Dictionary of Cancer Terms.

Indicators and Weights

The table below summarizes individual indicators and their relative weights in the 2020 index. Additional details are available in the 2020 Index Methodology.

#	Indicator	Rationale	Weight
1	Strategy & Management		10%
1A	Vision and Management Systems		80%
1A.1	Harm Reduction Strategy	A clear commitment and comprehensive strategy signal that tobacco harm reduction is a strategic priority for the company.	25%
1A.2	Disclosure of Harm Reduction Targets and Performance	Transparent reporting of harm reduction targets and performance enables company accountability and enhances visibility for all stakeholders.	25%
1A.3	Governance and Management Systems	Senior-level accountability and integration of tobacco harm reduction into a company's management system increases the likelihood that related strategy(ies) will be prioritized and effectively implemented.	25%
1A.4	Performance Management and Incentives	Monetary or other incentives encourage senior decision-makers to appropriately prioritize and ensure the company's harm reduction objectives are met.	25%
1B	Stakeholder Engagement		20%
1B.1	Stakeholder Engagement	Robust stakeholder engagement enhances accountability and ensures the company is fully aware of the potential impact of its policies and plans.	50%
1B.2	Disclosure of Stakeholder Engagement	Effective disclosure further enhances accountability and enables stakeholders to evaluate the robustness and influence of engagement activities.	50%
2	Product Sales		35%
2A	Volume Sales of Tobacco Products		80%
2A.1	Volume Sales of High-Risk Products	Lower volume sales of high-risk products (relative to other companies) reflect less contribution to ongoing tobacco-related harm.	5%
2A.2	Volume Sales of High-Risk Products – Rate of Change	Declining volume sales of high-risk products (relative to other companies) reflect a decreasing contribution to ongoing tobacco-related harm.	5%

2A.3	Ratio of Volume Sales (Reduced vs High-Risk Products)	A higher ratio of volume sales of reduced-risk products to high-risk products (relative to other companies) reflects a greater degree of transformation, as well as potential progress in transitioning consumers away from high-risk products.	45%
2A.4	Ratio of Volume Sales (Reduced vs High-Risk Products) – Rate of Change	A higher rate of change away from high-risk products (relative to other companies) reflects greater progress toward transformation, as well as potential progress in transitioning consumers away from high-risk products.	45%
2B	Value Sales of Tobacco Products		20%
2B.1	Value Sales of High-Risk Products	Lower value sales of high-risk products (relative to other companies) reflect less dependence on revenues from high-risk products.	5%
2B.2	Value Sales of High-Risk Products – Rate of Change	Declining value sales of high-risk products (relative to other companies) reflect decreasing dependence on revenues from high-risk products, as well as potential progress in transitioning consumers away from high-risk products.	5%
2B.3	Ratio of Value Sales (Reduced vs High-Risk Products)	A higher ratio of value sales of reduced-risk products versus high-risk products (relative to other companies) reflects a greater degree of transformation, as well as potential progress in transitioning consumers from high-risk products to reduced-risk alternatives.	45%
2B.4	Ratio of Value Sales (Reduced vs High-Risk Products) – Rate of Change	A higher rate of change away from high-risk products (relative to other companies) reflects greater progress toward transformation, as well as potential progress in transitioning consumers from high-risk products to reduced-risk alternatives.	45%
3	Capital Allocation		25%
3A	Capital Allocation		100%
3A.1	M&A Expenditure on High-Risk Products	A higher level of M&A expenditure related to high-risk products (relative to other companies) implies the company is investing in developing the market for high-risk products, undermining tobacco harm reduction.	6%
3A.2	Ratio of M&A Expenditure (Reduced vs High-Risk Products)	A higher ratio of M&A expenditure related to reduced-risk versus high-risk products (relative to other companies) indicates a potential structural shift supporting tobacco harm reduction.	10%

3A.3	R&D Expenditure on High-Risk Products	A higher level of R&D expenditure related to high- risk products (relative to other companies) implies the company is investing in developing the market for high-risk products, undermining harm reduction.	10%
3A.4	Ratio of R&D Expenditure (Reduced vs High-Risk Products)	A higher ratio of R&D expenditure related to reduced-risk versus high-risk products indicates a potential structural shift supporting tobacco harm reduction.	32%
3A.5	Capital Expenditure on High-Risk Products	A higher level of capital expenditure related to high-risk products (compared to other companies) implies the company is investing in developing the market for high-risk products, undermining harm reduction.	10%
3A.6	Ratio of Capital Expenditure (Reduced vs High-Risk Products)	A higher ratio of capital expenditure related to reduced-risk versus high-risk products (compared to other companies) indicates a potential structural shift supporting tobacco harm reduction.	32%
4	Product Offer		10%
4A	Product Portfolio		80%
4A.1	Ratio of Number of Countries (Reduced vs High-Risk Products)	A higher ratio of countries where reduced-risk products are offered (relative to other companies) reflects greater progress in making reduced-risk alternatives available across all markets where the company operates.	25%
4A.2	Ratio of Number of Countries (Reduced vs High-Risk Products) – Rate of Change	Increasing the ratio of countries where reduced- risk products are offered (relative to other companies) reflects greater progress in making reduced-risk alternatives available across all markets where the company operates.	25%
4A.3	Ratio of Product Portfolio (Reduced vs High-Risk Products)	A larger portfolio of reduced-risk compared to high-risk products (relative to other companies) reflects greater progress toward transformation and increases the available options for consumers to migrate away from high-risk tobacco products.	25%
4A.4	Ratio of Product Portfolio (Reduced vs High-Risk Products) – Rate of Change	Increasing the ratio of reduced-risk products compared to high-risk products (relative to other companies) reflects greater progress toward transformation.	25%
4B	Pricing		20%
4B.1	Ratio of Average Lowest Price (Reduced vs High-Risk Products)	A lower ratio of average lowest price between reduced-risk and high-risk products (relative to other companies) decreases the potential for price to be a barrier to consumers transitioning to reduced-risk alternatives.	50%

4B.2	Ratio of Average Lowest Price (Reduced vs High-Risk Products) – Rate of Change	A declining ratio of average lowest price between reduced-risk and high-risk products (relative to other companies) reflects greater progress in improving accessibility of reduced- risk alternatives, in order to support consumers in transitioning away from high-risk products.	50%
5	Marketing		15%
5A	Marketing Policy		55%
5A.1	Marketing Policy	A robust internal marketing policy with a focus on health-risk communication, non-misleading advertising, and preventing new user adoption helps address regulatory gaps and ensure the company responsibly contributes to tobacco harm reduction.	25%
5A.2	Disclosure of Marketing Policy Violations	Disclosure of reported violations of the company's marketing policy and any actions taken in response enhances accountability.	25%
5A.3	Youth Access Prevention Policy	Effective youth access prevention policies help reduce the risk of new adoption of any tobacco or nicotine products by young people.	25%
5A.4	Disclosure of Youth Access Prevention Policy Violations	Disclosure of reported violations of the company's youth access prevention policy and any actions taken in response enhances accountability.	25%
5B	Marketing Compliance		30%
5B.1	Disclosure of Violations	Public disclosure of marketing regulatory violations demonstrates accountability and may help prevent future violations.	100%
5C	Marketing Expenditure		15%
5C.1	Marketing Expenditure on High- Risk Products	A higher level of marketing expenditure related to high-risk products (compared to other companies) reflects greater focus on encouraging consumption of high-risk products, undermining harm reduction.	20%
5C.2	Ratio of Marketing Expenditure (Reduced vs High-Risk Products)	A higher ratio of marketing spend related to reduced-risk products versus high-risk products (compared to other companies) reflects greater focus tobacco harm reduction.	80%
6	Lobbying & Advocacy		5%
6A	Lobbying & Advocacy		100%
6A.1	Disclosure of Policy Positions	Disclosure of policy positions enhances accountability and increases stakeholders' knowledge and insight about the company's approach to tobacco harm reduction.	50%

6A.2	Disclosure of Lobbying and Advocacy Activities	Transparency in political engagement allows scrutiny of whether the company's public stances and engagement activities align, and how the company seeks to influence policies related to tobacco harm reduction.	50%
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Abbreviations

BAT - British American Tobacco Plc

CAGR - Compound annual growth rate

CNTC - China National Tobacco Corp

CSR - Corporate Social Responsibility

ESG - Environmental, social, and governance

EU - European Union

FAQ - Frequently asked questions

FCTC - Framework Convention on Tobacco Control

FDA - US Food and Drug Administration

FMCG - Fast-moving consumer goods

GCP - Good Conversion Practices

GNI - Gross national income

HMIC - High-medium income country

JTI - Japan Tobacco Inc

LEX - Legal & External Affairs

LMIC – Low-medium income country

M&A - Mergers and acquisitions

NGP - Next Generation Products

NRT - Nicotine replacement therapy

OECD – Organization for Economic Co-operation and Development

PMI - Philip Morris International Inc

PMTA - Premarket Tobacco Product Applications

R&D - Research and development

RTR - Responsible Tobacco Retailing

TOAT - Tobacco Authority of Thailand

SDGs - Sustainable Development Goals

STP - Sustainable Tobacco Program

UK - United Kingdom

UN - United Nations

US - United States

Vinataba - Vietnam National Tobacco Corp

WHO - World Health Organization

Definitions

Capital Expenditure – Includes but is not limited to funds used by a company to acquire, upgrade and maintain physical assets such as properties, buildings, plants, equipment, and intangible assets such as technology, soft ware as well as developing networks including contract manufacturers.

Environmental, Social, and Governance (ESG) – A set of factors that measure the sustainability and/or societal impact of an investment in a company. ESG factors are typically tied with long-term performance.

Foundation for a Smoke-Free World – An independent, non-profit organization created in 2017 with the mission to end smoking within this generation.

Framework Convention on Tobacco Control (FCTC) – The first global treaty negotiated by the WHO focused on a regulatory strategy to address tobacco addiction through demand reduction and supply issues.

High-Medium Income Country (HMIC) – As defined by the World Bank (as of July 1, 2019), a country with a national income per person (GNI per capita) of USD12,376 or more in 2018.

High-Risk Products – Combustible or non-combustible nicotine products, which include chewing tobacco, cigarettes, cigarillos, cigars, fine cut tobacco, moist snuff, pipe tobacco, and shisha.

Low-Medium Income Country (LMIC) – As defined by the World Bank (as of July 1, 2019), a country with a national income per person (GNI per capita) of up to USD12,375 in 2018.

Marketing Expenditure – Includes but is not limited to funds invested in programs such as advertising, trade promotions, and consumer engagements.

Mergers & Acquisitions (M&A) Investment – Total value of deals closed in the acquisitions of manufacturing companies only (acquisitions of distributors or retailers are excluded).

Net Value Sales – Gross sales minus applicable sales returns, allowances, and discounts. Gross sales do not include cost of goods sold, operating expenses, excise tax expenses or other charges.

Next Generation Products (NGP) – Terminology used by Imperial Brands for products that fall into the novel category of tobacco products, including snus, e-vapor and heated tobacco products as well as non-tobacco nicotine pouches.

Reduced-Risk Products – Nicotine products that are considered to be less harmful than combustible cigarettes and/or other traditional products. Products that are potentially reduced-risk include vapor products (cartridges, e-liquids, and heated tobacco), non-tobacco nicotine pouches, NRT products, and snus.

Research & Development (R&D) Investment – Includes but is not limited to the funds used by a company associated with research and development of a company's goods or services (R&D spend on testing is also included).

Smoke-Free Products – Terminology used by PMI to refer to its three reduced-risk products – heated tobacco, cartridges, and e-liquids. Swedish Match uses a similar terminology to refer to the aggregation of its snus, moist snuff, chewing tobacco, and non-tobacco nicotine pouches.

Smoking Prevalence – Defined by the WHO as the percentage of persons aged 15 years and older who smoke tobacco currently.

Sustainable Development Goals (SDGs) – The 17 goals that make up the United Nations 2030 Agenda for Sustainable Development. The Tobacco Transformation Index aims to contribute to SDG 3 (Good Health and Well-Being) and SDG 9 (Industry, Innovation, and Infrastructure).

World Health Organization (WHO) – The agency of the UN hat directs international health and leads partners in global health responses.

Reference List

AlmasryeAlyoum. (2018). Eastern Company Plans to Increase Production to 1bn Cigarette Annually.

Altria Group Inc. (n.d.). Altria Makes \$12.8 Billion Minority Investment in JUUL to Accelerate Harm Reduction and Drive Growth. Retrieved July 30, 2020, from http://investor.altria.com/file/Index?KeyFile=396169695

Altria Group Inc. (2020). 2019 Annual Report.

Altria Group Inc. (2020). 2019 Corporate Responsibility Progress Report.

British American Tobacco Plc. (n.d.). British American Tobacco. https://www.bat.com/

British American Tobacco Plc. (2017). BAT Completes Acquisition of Reynolds. Retrieved July 28, 2020, from https://www.bat.com/group/sites/UK_9D9KCY.nsf/vwPagesWebLive/DOAPKCXS

British American Tobacco Plc. (2018). Annual Report and Form 20-F 2017.

British American Tobacco Plc. (2018). Harm Reduction Focus Report 2018. Retrieved July 27, 2020, from https://www.bat.com/group/sites/UK__9D9KCY.nsf/vwPagesWebLive/D0964UGU/\$file/Harm_Reduction_Focus_Report_2018.pdf

British American Tobacco Plc. (2019). Transforming Tobacco – Sustainability Report 2018.

British American Tobacco Plc. (2020). Annual Report and Form 20-F 2019.

British American Tobacco Plc. (2020). ESG Report 2019.

British American Tobacco Plc. (2020). Sustainability Strategy Report 2019.

British American Tobacco Plc. (2020). Step Changing New Categories. Retrieved July 27, 2020, from https://www.bat.com/group/sites/UK_9ZTFCM.nsf/vwPagesWebLive/DOBMTGMW/\$FILE/4.0_Step_Changing_New_Categories.pdf?openelement

China National Tobacco Corp. (n.d.). China Tobacco. http://www.tobacco.gov.cn/

ECigIntelligence. (2018). China Tobacco Launches New HnB System on South Korean market. Retrieved July 30, 2020, from https://ecigintelligence.com/china-tobacco-launches-new-hnb-system-on-south-korean-market/

Euromonitor International. (n.d.). Euromonitor's Passport Tobacco and Consumer Health Databases. https://www.euromonitor.com

FDA. (2019). FDA grants first-ever modified risk orders to eight smokeless tobacco products. Retrieved July 30, 2020, from https://www.fda.gov/news-events/press-announcements/fda-grants-first-ever-modified-risk-orders-eight-smokeless-tobacco-products

Fontem Ventures. (2019). Re: Docket No. FDA-2019-D-0661 (84 Fed. Reg. 9345, March 14, 2019) – Comments on "Modifications to Compliance Policy for Certain Deemed Tobacco Products; Draft Guidance for Industry". Retrieved August 23, 2020, from https://d321lb3n3abatl.cloudfront.net/app/uploads/2019/05/01141405/Comment-of-Fontem-US-Inc.-FDA-2019-D-0661.pdf

Gilljam, H. & Galanti, M. (2003). Role of Snus (Oral Moist Snuff) in Smoking Cessation and Smoking Reduction in Sweden. Addiction. Volume 98 (9): 1183-1189. doi:10.1046/j.1360-0443.2003.00379

Hajek, P. et al. (2019). A Randomized Trial of E-Cigarettes versus Nicotine-Replacement Therapy. The New England Journal of Medicine. Volume 380 (7): 629-637. doi: 10.1056/NEJMoa1808779

Imperial Brands Plc. (2018). From Tobacco to Something Better, Our Approach to Next Generation Products.

Imperial Brands Plc. (2019). Annual Report and Accounts 2019.

Imperial Brands Plc. (2019). Imperial Brands Stakeholder Panel Statement 2019.

ITC Ltd. (2019). Report and Accounts 2019.

Janazzo, D. (2019). Global Trends in Nicotine: 2019 Update. Foundation for a Smoke-Free World. Retrieved August 17, 2020, from https://www.smokefreeworld.org/wp-content/uploads/2019/08/fsfw_global_trends_in_nicotine_designupdate.pdf

Japan Tobacco Inc. (n.d.). Japan Tobacco International – a Global Tobacco Company. https://www.jti.com/

Japan Tobacco Inc. (n.d.). Reduced-Risk Products: How Do They Fit into the Future of JTI? Retrieved August 13, 2020, from https://www.jti.com/news-views/reduced-risk-products-how-do-they-fit-future-jti

Japan Tobacco Inc. (2017). JT Becomes Majority Shareholder of Ethiopia's NTE. Retrieved July 30, 2020, from https://www.jti.com/sites/default/files/press-releases/documents/2017/jt_becomes_majority_shareholder_of_ethiopias_nte.pdf

Japan Tobacco Inc. (2017). JT Group Signs Agreement to Acquire Indonesian Kretek Cigarette Company and its Distributor. Retrieved July 28, 2020, from https://www.jti.com/sites/default/files/press-releases/documents/2017/press_release_kretek_cigarette_company.pdf

Japan Tobacco Inc. (2017). JT Signs Agreement to Acquire Assets of Tobacco Company in the Philippines. Retrieved July 28, 2020, from https://www.jt.com/media/news/2017/pdf/20170822_02.pdf

Japan Tobacco Inc. (2018). JT Group Acquires Russia's Donskoy Tabak. Retrieved July 28, 2020, from https://www.jti.com/sites/default/files/press-releases/documents/2018/JT-Group-Acquires-Russias-Donskoy-Tabak.pdf

Japan Tobacco Inc. (2018). JT Group Agrees to Acquire Tobacco Business of Akij Group in Bangladesh. Retrieved July 28, 2020, from https://www.jti.com/sites/default/files/press-releases/documents/2018/JT-group-agrees-to-acquire-tobacco-business-of-akij-group-in-Bangladesh.pdf

Japan Tobacco Inc. (2020). Integrated Report 2019.

KT&G Corp. (2019). KT&G Report 2018.

KT&G Corp. (2020). FY2019 4O Consolidated Financial Statements.

Malan, D. & Hamilton, B. (2020). Conflicts and Contradictions: State ownership of tobacco companies and the WHO Framework Convention on Tobacco Control. Just Managing Consulting.

Markets Insider. (n.d.). Eastern Tobacco Stock. https://markets.businessinsider.com/stocks/eastern_tobacco-stock

McNeill, A., Brose, L., Calder, R., Bauld, L., & Robson, D. (2018). Evidence Review of e-Cigarettes and Heated Tobacco Products 2018, a Report Commissioned by Public Health England. United Kingdom: Public Health England.

Nair, R. & Chandna, H. (2019). Govt Has Banned Vapes, but Owns 28% of ITC - India's Biggest Cigarette Maker. The Print.

Philip Morris International Inc. (n.d.). Philip Morris International | Delivering a Smoke-Free Future. https://www.pmi.com/

Philip Morris International Inc. (2018). Annual Report 2017.

Philip Morris International Inc. (2019). Responsible Marketing Practices at PMI.

Philip Morris International Inc. (2020). 2019 Annual Report.

Philip Morris International Inc. (2020). 2020 Proxy Statement and Notice of Annual Meeting of Shareholders.

Philip Morris International Inc. (2020). Integrated Report 2019.

PT Gudang Garam Tbk. (2019). Gudang Garam Public Expose 2019; Gudang Garam Delivers Sound Sales and Earnings Growth during the First Half of the Year.

PT Gudang Garam Tbk. (2020). Annual Report 2019.

Reynolds American Inc. (n.d.). Form 10-K 2016. Retrieved August 31, 2020, from https://www.annualreports.com/HostedData/AnnualReports/PDF/NYSE_rai_2016.pdf

Schmid, T. (2018). Thailand Tobacco Monopoly: Bravely Soldiering On. Tobacco Asia.

Shapiro, H. (2018). No Fire, No Smoke: The Global State of Tobacco Harm Reduction. London, United Kingdom: Knowledge-Action-Change.

Southeast Asia Tobacco Control Alliance (SEATCA). (2019). Asian State-Owned Tobacco Enterprises Challenges & Opportunities in Implementing WHO FCTC Article 5.3.

Swedish Match AB. (2018). Annual Report 2017 – Strength Through Quality and Innovation.

Swedish Match AB. (2020). Annual Report 2019.

Tobacco Authority of Thailand. (2018). Annual Report 2017.

Tobacco Authority of Thailand. (2019). Annual Report 2018.

Tobacco Authority of Thailand. (2020). Annual Report 2019.

Tobacco Business. (2019). For the People: An Interview with Swisher International's John Miller, Part 1.

Tobacco Transformation Index. (2020). 2020 Index Methodology.

TobaccoChina Online. (2020). Innovation Enables Smart Logistics for the Tobacco Industry. Tobacco Asia.

Vietnam National Tobacco Corp. (n.d.). Vietnam National Tobacco Corporation – Vinataba. http://www.vinataba.com.vn/

Vietnam National Tobacco Corp. (2020). The Third Vietnam Tobacco Corporation Congress.

We Card. (n.d.). WeCard Web Center. https://www.wecard.org/

WHO. (2019). WHO Global Report on Trends in Prevalence of Tobacco Use 2000-2025. 3rd ed. Geneva, Switzerland.

List of Sources

Abrams, D. et al. (2018). Harm Minimization and Tobacco Control: Reframing Societal Views of Nicotine Use to Rapidly Save Lives. Annual Review of Public Health. 2018 April 1. Volume 39: 193-213. doi: 10.1146/annurey-publ

Access to Medicine Index. (2018). Access to Medicine Index 2018.

Access to Medicine Index. (2018). Access to Medicine Index 2018 – Methodology 2017.

Access to Nutrition Index. (2013). Access to Nutrition Index – Investor Statement.

Access to Nutrition Index. (2018). Access to Nutrition Index - Global Index 2018.

Access to Nutrition Index. (2018). Global Index 2018 - Corporate Profile Methodology.

Access to Seeds Index. (2018). Methodology for the Access to Seeds Index 2019.

Alborsaanews.com. (2019). The Eastern Tobacco Company Signs New Manufacturing Contracts with International Companies within 3

. Almalnews.com. (2020). الشرقية للدخان- عقود التصنيع المشترك - ت / Co-Manufacturing Contracts Support Foreign Investment.

Altria Group Inc. (n.d.). Altria and Philip Morris International End Merger Discussions; Altria Provides Statement on JUUL Leadership Change; Tightens 2019 Full-year Earnings Guidance. Retrieved July 29, 2020, from http://investor.altria.com/file/Index? KeyFile=399843894

Altria Group Inc. (n.d.). Code of Conduct.

Altria Group Inc. (n.d.). The Official Altria Group Website. https://www.altria.com/

Altria Group Inc. (2017). 2016 Corporate Responsibility Progress Report.

Altria Group Inc. (2017). Altria's Standards for Compliance & Integrity.

Altria Group Inc. (2018). 2017 Annual Report.

Altria Group Inc. (2018). 2017 Corporate Responsibility Progress Report.

Altria Group Inc. (2018). Standards for Underage Tobacco Prevention.

Altria Group Inc. (2019). 2018 Annual Report.

Altria Group Inc. (2019). 2018 Corporate Responsibility Progress Report.

Altria Group Inc. (2019). ALCS Comments to Graphic Health Warnings; Reopening of Comment Period.

Altria Group Inc. (2019). Altria Reports 2018 Fourth-Quarter and Full-Year Results; Provides 2019 Full-Year Earnings Guidance.

Altria Group Inc. (2019). Altria Reports 2019 Third-Quarter and Nine-Months Results; Announces New 2020 – 2022 Adjusted Diluted EPS Growth Objective to Advance Strategic Business Platform.

Altria Group Inc. (2019). Altria's Response to Senate Letter. Retrieved August 13, 2020, from https://www.altria.com/-/media/Project/Altria/Altria/about-altria/federal-regulation-of-tobacco/regulatory-filings/documents/Altria-Response-to-October-1-2019-Senate-Letter.pdf

Altria Group Inc. (2019). Howard Willard, Chairman & CEO, Altria Group Inc Remarks at Global Tobacco & Nicotine Forum Wednesday, Sept. 25. Retrieved August 13, 2020, from https://www.altria.com/-/media/Project/Altria/Altria/harm-reduction/our-approach-to-harm-reduction/Howard-Willard-Remarks-at-Global-Tobacco--Nicotine-Forum-0925-19a.pdf

Altria Group Inc. (2019). Notice of Annual Meeting of Shareholders and Proxy Statement.

Altria Group Inc. (2020). Notice of Annual Meeting of Shareholders and Proxy Statement.

American Cancer Society Inc. (2018). The Tobacco Atlas.

Arab Finance. (2020). Eastern SAE Tobacco Signs 2 Joint Manufacturing Agreements.

Arabeya Online. (2019). Eastern Company Initiation of Coverage 2018. Retrieved August 10, 2020, from http://www.arabeyaonline.com/wp-content/uploads/2019/03/Eastern-Tobacco-Company-EAST.CA_Initiation-Of-Coverage-Report.pdf

Aravind, I. (2017). Should Government Stop Investing in Tobacco Companies via its Insurance Firms? The Economic Times.

Asma, S. et al. (2015). The Global Adult Tobacco Survey (GATS). CDC Foundation. United Kingdom: Myriad Editions.

ASEAN & WHO. (2016). Southeast Asia - Tobacco Industry Interference Index.

Bhan, S. (2018). Achieving Rs 1 lakh crore in FMCG Continues to be ITC's Aspiration, Says Sanjiv Puri. CNBC TV18.

Boston Consulting Group (BCG). (2019). Innovation is the Only Way to Win the SDG Race.

British American Tobacco Plc. (n.d.). BAT Vietnam. http://www.batvietnam.com/

British American Tobacco Plc. (n.d.). British American Tobacco Science. https://www.bat-science.com/

British American Tobacco Plc. (2016). Corporate Behaviour Sustainability Focus Report 2016.

British American Tobacco Plc. (2017). BAT Korea expands its Sacheon factory to support the growth of Tobacco Heating Product glo™. Retrieved August 13, 2020, from https://www.bat.com/group/sites/UK_9D9KCY.nsf/vwPagesWebLive/DOAMXLG3

British American Tobacco Plc. (2017). Geographic Expansion of glo™ Continues with Launch in Russia. Retrieved July 27, 2020, from https://www.bat.com/group/sites/UK_9D9KCY.nsf/vwPagesWebLive/DOASAEHC

British American Tobacco Plc. (2017). Independent Auditor's Report.

British American Tobacco Plc. (2017). Sustainable Agriculture and Farmer Livelihoods Focus Report 2017.

British American Tobacco Plc. (2018). BAT to Invest €800 million in its Romanian Factory by 2022 to Support the European Expansion of glo. Retrieved July 27, 2020, from https://www.bat.com/group/sites/UK_9D9KCY.nsf/vwPagesWebLive/DOAZJL24

British American Tobacco Plc. (2018). Innovative Choices, Responsible Growth - 2018 Harm Reduction Focus Report.

British American Tobacco Plc. (2018). International Marketing Principles.

British American Tobacco Plc. (2018). Science & Technology Report 2017/18.

British American Tobacco Plc. (2018). Transforming Tobacco - Performance Summary 2017.

British American Tobacco Plc. (2019). Transforming Tobacco - Annual Report and Form 20-F 2018.

British American Tobacco Plc. (2020). Our Standards of Business Conduct 2020. Retrieved August 11, 2020, from https://www.bat.com/group/sites/UK__9D9KCY.nsf/vwPagesWebLive/DOB3HL23/\$file/BAT_Standards_of_Business_Conduct-2020.pdf

Bialous, S. (2019). Impact of Implementation of the WHO FCTC on the Tobacco Industry's Behavior. Tobacco Control. 2019 January, Volume 28 (Suppl 2): s94-s96. doi: 10.1136/tobaccocontrol-2018-054808

Business Standards. (2019). Ban on Sale of e-Cigarettes Implies Prohibition on Usage Also, Says Govt.

Business Wire. (2018). Altria Makes \$12.8 Billion Minority Investment in JUUL to Accelerate Harm Reduction and Drive Growth.

Business Wire. (2019). Altria Enters Growing Oral Nicotine Products Category with on! Pouch Product.

Centre For Environmental Science & Engineering (CESE), Indian Institute of Technology. (2006). Development of Composite Sustainability Performance Index for Steel Industry.

Cha, S. (2019). South Korea Warns of 'Serious Risk' from Vaping, Considers Sales Ban. Reuters.

Chapman, S. (2014). Advocacy in Action: Extreme Corporate Makeover Interruptus: Denormalizing Tobacco Industry Corporate Schmoozing. Tobacco Control. 2004 Dec, Volume 13(4): 445-447. doi: 10.1136/tc.2004.010025

China Tobacco International (HK). (2018). China Tobacco International (Hong Kong) Prospectus.

Cigar Aficionado Online. (2017). John Miller Named President of Swisher International.

Collishaw, N. (2019). This Should Change Everything: Using the Toxic Profile of Heat-Not-Burn Products as a Performance Standard to Phase Out Combustible Cigarettes. Tobacco Control. 2019 April, Volume 28: 245-248. Published Online First 21 July 2018. doi:10.1136/tobaccocontrol-2017-054219

Convenience Store News. (2018). Altria restructures, forms two separate divisions to focus on core tobacco & innovative tobacco products.

DailyNewsEgypt.com. (2020). Eastern Company Operates New Machine with 8,200 Cigarette Stick/Minute.

Deutsche Asset Management. (2017). Tobacco's Investment Returns and Societal Costs.

Djarum PT. (n.d.). Djarum – Semangat Kemajuan. https://www.djarum.com/

Drew Estate. (2014). Swisher International Announces Purchase Agreement to Acquire Drew Estate.

Drope, J. et al. (2019). The Tobacco Atlas. 6th ed. Atlanta, US: American Cancer Society Inc and Vital Strategies.

Duprey, R. (2019). Altria Flexes Its Pricing Muscle with a Third Increase This Year. The Motley Fool.

E-Alternative Solutions. (n.d.). EAS. https://ealternativesolutions.com/

Eastern Co SAE. (n.d.). The Eastern Company. http://www.easternegypt.com/

Eastern Co SAE. (2017). Statement of Financial Position as at 30 June 2017, according to the resolutions of the Ordinary General Assembly convened on Sunday October 1, 2017.

Eastern Co SAE. (2018). Statement of Financial Position as at 30 June 2018, according to the Resolutions of the Ordinary General Assembly convened on Sunday September 30, 2018.

Eastern Co SAE. (2019). Investor Presentation.

Eastern Co SAE. (2019). Key Indicators for Present FY Business Results.

Eastern Co SAE. (2019). Sales Volume & Value.

Eastern Co SAE. (2019). Statement of Financial Position as at 31 March 2019.

Eastern Egypt. (2020). 2nd Annual North Africa investor Conference.

Egypt Today. (2017). Eastern Company Issues New Cigarette Prices.

Enterprise. (2018). JTI Launches "CAMEL" as a Part of its Long-term Business Strategy in Egypt.

Enterprise. (2019). Eastern Renews Contracts with BAT, Mansour to Jointly Produce Cigarettes in Egypt.

Euromonitor International. (2019). Euromonitor International's Nicotine Survey 2019.

European Commission. (n.d.). Transparency Register. https://ec.europa.eu/transparencyregister/public/homePage.do?locale=en#en

Family Business Magazine. (2017). Altria acquires Nat Sherman.

Farahat, A. (2018). Top 10 Best-Selling Cigarette Brands in Egypt. Daily News Egypt.

Framework Convention Alliance (FCA). (n.d.). FCA: 2020 Strategy.

FCA. (n.d.). FCA Working Together Brochure.

FCA. (n.d.). MindMap WHO.

FCA. (2012). WHO Framework Convention on Tobacco Control (FCTC) Reporting Arrangements. Fifth Session of the Conference of the Parties to the WHO FCTC, 12-17 November 2012, Seoul, South Korea.

FCTC. (n.d.). WHO FCTC – Guidelines for Implementation of Article 13. [ebook]. Retrieved August 10, 2020, from https://www.who.int/fctc/guidelines/article_13.pdf?ua=1

FCTC. (2003). WHO Framework Convention on Tobacco Control. Switzerland: WHO Document Production Services.

FCTC. (2013). Best Practices in Implementation of Article 13 of the WHO FCTC Case Study: Kenya. [ebook]. Retrieved August 10, 2020, from https://www.who.int/fctc/publications/final_kenya_art13_national_4.pd

FCTC. (2013). WHO FCTC Indicator Compendium for the Global Strategy. 1st ed. [ebook]. Retrieved August 10, 2020, from http://www.who.int/fctc/reporting/who_fctc_indicator_compendium_first_edition.pdf

FCTC. (2013). WHO FCTC – Guidelines for Implementation. [ebook]. Retrieved August 10, 2020, from https://www.who.int/fctc/treaty_instruments/adopted/guidel_2011/en/

FCTC. (2018). Global Progress Report on Implementation of the WHO FCTC. Switzerland: WHO Document Production Services.

Financial Times. (2018). Altria Creates New 'Core', 'Innovative' Tobacco Units.

Financial Times. (2020). Imperial Brands Sells Premium Cigar Business for £1bn.

 $Fontem\ Ventures.\ (n.d.).\ Fontem\ Ventures.\ http://www.fontemventures.com/$

Fontem Ventures. (2018). Imperial Brands Response to FDA Youth Access Prevention Statement.

Foundation for a Smoke-Free World. (2019). The Tobacco Epidemic in India. Retrieved August 11, 2020, from https://www.smokefreeworld.org/tobacco-epidemic-india/

Global Data. (2016). Tobacco Company Profile - ITC.

Global Reporting Initiative (GRI), Oxfam Novib. (2015). Informing Decisions, Driving Change – The Role of Data in a Sustainable Future. Retrieved August 10, 2020, from https://www.globalreporting.org/resourcelibrary/Informing-decisions,-driving-change-The-role-of-data-in-a-sustainable-future.pdf

Global Sustainability Standards Board (GSSB). (n.d.). GRI Standards.

Groh, A, Liechtenstein, H., Lieser, K & Biesinger, M. (2016). The Venture Capital and Private Equity Country Attractiveness Index – 2016 Annual.

Grenisia, O. & Rianto, S. (2019). Generasi Ketiga dan Gurita Bisnis Grup Djarum. Infographik.

Imperial Brands Plc. (n.d.). GRI Content Index.

Imperial Brands Plc. (n.d.). Imperial Brands PLC. https://www.imperialbrandsplc.com/index.html

Imperial Brands Plc. (n.d.). Imperial Brands Science. https://imperialbrandsscience.com/

Imperial Brands Plc. (2014). International Marketing Standard – Imperial Brands. Retrieved August 13, 2020, from https://www.imperialbrandsplc.com/content/dam/imperial-brands/corporate/responsibility/responsible-with-products/2014_International_Marketing_Standard.pdf

Imperial Brands Plc. (2016). Our Code of Conduct. Retrieved August 13, 2020, from https://www.imperialbrandsplc.com/content/dam/imperial-brands/corporate/responsibility/code-of-conduct/160217_code_of_conduct_english.pdf

Imperial Brands Plc. (2017). Annual Report and Accounts 2017.

Imperial Brands Plc. (2017). Sustainability Report 2017, Growing Our Business Responsibly.

Imperial Brands Plc. (2018). Annual Report and Accounts 2018.

Imperial Brands Plc. (2018). E-Vapour Products. Marketing Standard. Retrieved August 13, 2020, from https://www.imperialbrandsplc.com/content/dam/imperial-brands/corporate/sustainability/sustainability-documents/e-vapour-products.pdf.downloadasset.pdf

Imperial Brands Plc. (2018). Preliminary Results 2018.

Imperial Brands Plc. (2019). Addressing Youth Access in Germany. Retrieved August 17, 2020, from https://www.imperialbrandsplc.com/sustainability/case-studies/behaving-responsibly-people-and-operations/addressing-youth-access-in-germany.html

Imperial Brands Plc. (2019). Building blu. Retrieved July 27, 2020, from https://www.imperialbrandsplc.com/content/dam/imperialbrands/corporate/investors/presentations/investor-day/2018/2018.09.25%20Buildingblu.pdf.downloadasset.pdf

Imperial Brands Plc. (2019). Imperial Brands PLC Diversifies Next Generation Product Portfolio to Provide Further Options for Future Growth. Retrieved August 17, 2020, from https://www.imperialbrandsplc.com/media/key-announcements/2019/imperial-brandsplc-diversifies-next-generation-product-portfoli.html

Imperial Brands Plc. (2019). Preliminary Results for the Year Ended 30 September 2019. Retrieved August 13, 2020, from Imperial Brands. From Tobacco to Something Better – Our Approach to Next Generation Products

https://www.imperialbrandsplc.com/media/key-announcements/2019/preliminary-results-for-the-year-ended-30-september-2019.html

India Broadcasting Foundation. (n.d.). The Advertising Standards Council of India (ASCI). Retrieved August 14, 2020, from https://www.ibfindia.com/advertising-standards-council-india-asci

Institute for Engagement & Negotiation. (2019). Civil Dialogue on Tobacco, Nicotine, and Alternative Products Harm Reduction. US: University of Virginia.

ITC Ltd. (n.d.). ITC Portal. https://www.itcportal.com/

ITC Ltd. (n.d.). ITC Corporate Presentation. Retrieved August 13, 2020, from https://www.itcportal.com/about-itc/shareholder-value/ITC-Corporate-Presentation.pdf

ITC Ltd. (2017). Report and Accounts 2017.

ITC Ltd. (2017). Report and Accounts of the Subsidiary Companies 2017.

ITC Ltd. (2017). We're Investing in Non-Tobacco Sectors to Create a New ITC: Puri.

ITC Ltd. (2018). Baareh Mahine Hariyali Multiplying Farmer Incomes Case Study: Uttar Pradesh.

ITC Ltd. (2018). Integrated Report 2017-2018.

ITC Ltd. (2018). Report and Accounts 2018.

ITC Ltd. (2019). Integrated Report 2018-2019.

Jacksonville Business Journal. (2017). End of an Era at Swisher International.

Japan Tobacco. (n.d.). Japan Tobacco. https://www.jt.com/

Japan Tobacco Inc. (n.d.). JT Science. https://www.jt-science.com

Japan Tobacco Inc. (n.d.). Our Global Marketing Tobacco Principles. Retrieved July 14, 2020, from https://www.jt.com/sustainability/governance_compliance/policies/pdf/Our_Global_Tobacco_Marketing_Principles.pd

Japan Tobacco Inc. (n.d.). Reduced-Risk Products: An Ever-Evolving Global Demand. Retrieved August 18, 2020, from https://www.jti.com/news-views/reduced-risk-products-ever-evolving-global-demand

Japan Tobacco Inc. (2018). JT Group Sustainability Report FY2017.

Japan Tobacco Inc. (2018). JTI Expands its Business and Investments in the Egyptian Market.

Japan Tobacco Inc. (2019). Annual Report FY2018.

Japan Tobacco Inc. (2020). 2019 Earnings Report. Retrieved July 27, 2020, from https://www.jt.com/investors/results/forecast/pdf/2019/Full_Year/20200206_10.pdf

Japan Tobacco Inc. (2020). JTI Ranks among Top 100 for European Patent Applications. Retrieved August 11, 2020, from https://www.jti.com/sites/default/files/press-releases/documents/2020/jti-ranks-among-top-100-for-european-patent-applications.pdf

Jennings, K. (2019). Big Tobacco's Push for Big Vape. Politico. Retrieved August 11, 2020, from https://www.politico.eu/article/big-tobacco-bankrolls-petition-influence-eu-vaping-rules/

JP Morgan. (2008). JPM The Proof of the Pudding.

Kompas.com. (2019). Dilanda Polemik Audisi Bulu Tangkis, Intip Gurita Bisnis Grup Diarum.

KT&G Corp. (n.d.). KT&G. https://en.ktng.com/

KT&G Corp. (2018). KT&G Report 2017.

KT&G Corp. (2019). Earnings Release Q4 2019.

KT&G Corp. (2020). Interim Financial Statements, Q1, 2020.

Kumar, A. (n.d.). Sales and Distribution Channel of ITC. Academia.

La Nación. (2018). Filial de Philip Morris adquiere 100% de la Tabacalera Costarricense y dejará de producir cigarrillos en Costa Rica.

LaVito, A. (2019). Altria Takes Stake in Swiss Tobacco Company Burger Sohne's Global Businesses for \$372 Million as Cigarette Sales Shrink. CNBC.

Layak, S. (2018). ITC Explains How It Plans to Diversify Business Through FMCG Bold Play. The Economic Times.

Lui, K. (2007). Evaluating Environmental Sustainability: An Integration of Multiple-Criteria Decision-Making and Fuzzy Logic. Environmental Management. 2017 June. Volume 39 (5): 721-36. doi: 10.1007/s00267-005-0395-8

Maeil Business Newspaper (MBN). (2019). 냄새 잡았더니 판매량 `쑥`...`에쎄 체인지 히말라야` 돌풍.

Malone, R. (2016). The Race to a Tobacco Endgame. Tobacco Control. 2016 November. Volume 25 (6): 607-608. doi: 10.1136/tobaccocontrol-2016-053466

Maloney, J. (2020). Altria Takes \$4.1 Billion Charge on Juul Investment. The Wall Street Journal.

 ${\sf Malviya}, {\sf S.~(2019)}. \ {\sf From~a~Cigarette~Addict}, \ {\sf ITC~Turns~into~a~Social~Smoker}. \ {\sf The~Economic~Times}.$

Mitra, S. (2017). ITC Looks to Accelerate Growth in Non-Cigarette Businesses. LiveMint.

MK MBN. (2020). Cigarette industry Mixed Reaction to Government Announcement "Recommendation to Stop Using Liquid E-Cigarettes".

Moitra, S. (2017). Cigarette Growth Halves, FMCG Key for ITC. DNA India.

MPOWER. (n.d.). Enforce Bans on Tobacco Advertising, Promotion and Sponsorship.

MPOWER. (n.d.). Monitor Tobacco Use and Prevention Policies.

MPOWER. (n.d.). Offer Help to Quit Tobacco Use.

MPOWER. (n.d.). Protect People from Tobacco Smoke.

MPOWER. (n.d.). Raise Taxes on Tobacco.

MPOWER. (n.d.). Warn about the Dangers of Tobacco.

Mubasher. (2017). Eastern Co, BAT to Launch New Product in December.

Muller, B. (2018). Swisher International to Lay Off Up to 90 Employees. News4Jax.

Murkett, R., Rugh, M. & Ding, B. (2020). Nicotine Products Relative Risk Assessment: A Systematic Review and Meta-Analysis.

NAEEM. (2019). Eastern Company – Still Attractive due to Several Catalysts.

National Academies of Sciences, Engineering, and Medicine. (2018). Public Health Consequences of E-Cigarettes. Washington DC, US: The National Academies Press. https://doi.org/10.17226/24952.

National Library of Medicine. (n.d.). National Cancer Institute's Dictionary of Cancer Terms. https://www.cancer.gov/publications/dictionaries/cancer-terms

National People's Congress. (2016). Charity law of the People's Republic of China. Retrieved August 11, 2020, from http://www.npc.gov.cn/zgrdw/npc/dbdhhy/12_4/2016-03/21/content_1985714.htm

Newsprime (Prime Economy). (2019). "냄새에 민감한 사람들" 냄새저감 소비 트렌드로 부상

Nutt, D. J. et al. (2014). Estimating the Harms of Nicotine-Containing Products Using the MCDA Approach. Eur. Addict. Res. 2014 April. Volume 20 (5): 218-225. doi: 10.1159/000360220

Ocampo, L., Clark, E. and Promentilla, M. (2016). Computing Sustainable Manufacturing Index with Fuzzy Analytic Hierarchy Process. International Journal of Sustainable Engineering. 2016 February. Volume 9: 305-314. doi: 10.1080/19397038.2016.1144828

Oriental Tobacco News. (2018). 2018 China Tobacco Control Compliance Progress Report.

Pan American Health Organization & WHO. (n.d.). Compendium of Indicators for Monitoring Regional and Global Noncommunicable Disease Response in the Americas. Retrieved August 11, 2020, from https://www.paho.org/en/documents/compendium-indicators-monitoring-regional-and-global-ncds-response-americas

Philip Morris International Inc. (n.d.). Marketing Standards.

Philip Morris International Inc. (n.d.). Overview of Marketing Principles for Combustible Products.

Philip Morris International Inc. (n.d.). Overview of Principles for Engagement.

Philip Morris International Inc. (n.d.). Philip Morris Misr LLC. https://www.pmi.com/markets/egypt/en

Philip Morris International Inc. (n.d.). Product Innovation and Regulatory Affairs Committee Charter.

Philip Morris International Inc. (2014). Philip Morris International to Invest up to €500 Million in Reduced-Risk Product Manufacturing Facility in Italy. Retrieved July 27, 2020, from https://www.pmi.com/media-center/press-releases/press-details/?newsId=11706

Philip Morris International Inc. (2017). 2017 Proxy Statement and Notice of Annual Meeting of Shareholders to be held on Wednesday, May 3, 2017.

Philip Morris International Inc. (2017). Philip Morris International Announces €300 Million Investment in Smoke-Free Product Manufacturing Facility in Greece.

Philip Morris International Inc. (2017). Philip Morris International Doubles Investment in Heated Tobacco Unit Facility in Italy. Another Step Towards a Smoke-Free Future. Retrieved July 27, 2020, from https://www.pmi.com/media-center/press-releases/press-details/?newsld=12196

Philip Morris International Inc. (2017). Philip Morris International to Build Smoke-Free Product Facility in Germany. Retrieved July 27, 2020, from https://www.pmi.com/media-center/press-releases/press-details/?newsId=12191

Philip Morris International Inc. (2018). 2018 Proxy Statement.

Philip Morris International Inc. (2018). Sustainability Report 2017.

Philip Morris International Inc. (2019). Guidebook for Success. Retrieved August 11, 2020, from https://www.pmi.com/resources/docs/default-source/our_company/code-of-conduct/english_code_of_conduct_external_online_180116.pdf?sfvrsn=f5c386b5_8

Philip Morris International Inc. (2019). Investor Information October 2019.

Philip Morris International Inc. (2019). Sustainability Report 2018.

Philip Morris International Inc. (2019). 2018 Annual Report.

Philip Morris International Inc. (2020). 2019 Fourth-Quarter & Full-Year Results.

Philip Morris International Inc. (2020). 2019 Sustainability Materiality Report.

Philip Morris International Inc. (2020). Consumer Relationships and Regulation Committee Charter.

Philip Morris International Inc. (2020). Corporate Governance Guidelines.

Philip Morris International Inc. (2020). Philip Morris International Inc. Announces Agreement with KT&G to Accelerate the Achievement of a Smoke-Free Future. Retrieved August 14, 2020, from https://www.pmi.com/media-center/press-releases/press-release-details/? newsId=21786

PR Newswire. (2017). Swedish Match Acquires V2 Tobacco.

PR Newswire. (2018). Swedish Match Has Today Signed an Agreement to Acquire a Majority Share in Gotlands Snus AB.

PT Gudang Garam Tbk (n.d.). Gudang Garam. https://www.gudanggaramtbk.com

PT Gudang Garam Tbk. (2018). Annual Report 2017.

PT Gudang Garam Tbk. (2019). Annual Report 2018.

PT Gudang Garam Tbk. (2020). Annual Report 2019.

Responsible Mining Index. (2018). RMI Responsible Mining Index 2018 – Scoring Framework.

Reuters. (n.d.). Eastern Company SAE.

Reuters. (2017). BRIEF-Egypt's Eastern Co Signs Deal with Al Mansour International Distribution Co.

Reuters. (2019). Egypt's Top Cigarette Maker Raises Prices.

Reuters. (2020). Imperial Brands to Sell Premium Cigar Business for \$1.33 bln.

RobecoSAM. (2019). The Sustainability Yearbook 2019.

Rossel. J. (2020). KT&G Prepares to Join the World's Premier League of Tobacco Companies. Tobacco Reporter.

Russell, M. (1976). Low-Tar Medium-Nicotine Cigarettes: A New Approach to Safer Smoking. Br Med J. 1976 June 12. Volume 1 (6023): 1430-1433. doi: 10.1136/bmj.1.6023.1430

S&P Capital IQ. (n.d.). Capital IQ. https://www.capitaliq.com/

S&P Dow Jones. (2019). Dow Jones Sustainability Diversified Indices – Index Methodology. Retrieved August 10, 2020, from https://www.spglobal.com/spdji/en/documents/methodologies/methodology-dj-sustainability-diversified-indices.pdf? force_download=true

S&P Global. (2020). SAM Corporate Sustainability Assessment (CSA) Weights Overview 2020.

Saaty, T. (1980). The Analytic Hierarchy Process. US: McGraw-Hill.

Saaty, T. (1996). Multi-Criteria Decision Making. The Analytic Hierarchy Process. Pittsburgh, US: University of Pittsburgh Press.

Saaty, T. (2000). Fundamentals of Decision Making and Priority Theory. 2nd ed. Pittsburgh, US: RWS Publications.

Scandinavian Tobacco Group A/S. (2018). Annual Report 2017.

Shemi, H. (2019). Bos Djarum Sebut Bisnis Rokok Bisa Punah, Kenapa? IDN Times.

Sheth, P. (2019). ITC Steps Up Focus on Non-Cigarette FMCG for Next Leg of Growth.

Somvanshi, K. (2017). How Serious is the Threat of Regulations for Tobacco Industry? The Economic Times.

Somvanshi, K. (2018). Ban on e-Cigarettes May Actually Benefit ITC. The Economic Times.

State Administration for Market Regulation (SAMR). (n.d.). State Administration for Market Regulation. http://gkml.samr.gov.cn/

State Administration for Market Regulation (SAMR). (2015). Advertising Law of the People's Republic of China (Amended in 2015). Retrieved August 10, 2020, from http://www.samr.gov.cn/zt/bjsp/zcfg/201907/t20190702_303132.html

State Administration for Market Regulation (SAMR). (2018). Advertising law of the People's Republic of China (Amended in 2018). Retrieved August 10, 2020, from http://gkml.samr.gov.cn/nsjg/ggjgs/201902/t20190220_290934.html

Sulutdaily. (2019). Djarum Janji Beli Cengkeh Petani Sulut Rp 85 Ribu per Kilogram.

Sustainability Accounting Standards Board (SASB). (2018). Tobacco Sustainability Accounting Standard.

 $Sustainable\ Development.\ (n.d.).\ Convention\ on\ Tobacco\ Control\ -\ Contributions\ to\ the\ 2030\ Agenda.$

Swedish Match AB. (n.d.). Code of Conduct.

Swedish Match AB. (n.d.). Swedish Match. https://www.swedishmatch.com/

Swedish Match AB. (2017). Group Principles of Communication.

Swedish Match AB. (2017). Sale of Shares in Scandinavian Tobacco Group A/S.

Swedish Match AB. (2019). Annual Report 2018 – Making Strides Toward our Vision.

Swisher International Group Inc. (n.d.). Swisher International Tobacco Products. https://swisher.com/

Tandon, S. & Patwa, P. (2019). Sanjiv Puri Steps into Deveshwar's Shoes at ITC. LiveMint.

Thai Tobacco Monopoly. (2017). Annual Report 2017 - Thailand Tobacco Monopoly, Ministry of Finance.

Thai Tobacco Monopoly. (2018). Annual Report 2018 – Thailand Tobacco Monopoly, Ministry of Finance.

Thai Tobacco Monopoly. (2019). Annual Report 2019 - Thailand Tobacco Monopoly, Ministry of Finance.

The Chinese Central Government. (n.d.). The Chinese Central Government's Official Web Portal. http://www.gov.cn/xinwen/

The Economic Times. (2019). ITC Hikes Prices of Bristol, Flake Excel and Capstan.

The insider stories. (2018). Indonesia's Gudang Garam Prepares USD 709 million to build Kediri Airport.

The Tobacco Manufacturers' Association (TMA). (n.d.). The TMA. http://the-tma.org.uk/

ThinkTank Research Center for Health Development. (2017). Tobacco Control in China: A Civil Society Perspective 2017. Retrieved August 10, 2020, from http://www.catcprc.org.cn/index.aspx? menuid=22&type=articleinfo&lanmuid=139&infoid=11380&language=cn

ThinkTank Research Center for Health Development. (2018). Tobacco Control in China: A Civil Society Perspective 2018. Retrieved August 10, 2020, from http://www.catcprc.org.cn/index.aspx? menuid=22&type=articleinfo&lanmuid=139&infoid=11369&language=cn

Tobacco Asia. (2019). Foreign HNB Products: Running Afoul of China's Tobacco Monopoly.

Tobacco Authority of Thailand. (n.d.). Tobacco Authority of Thailand. https://www.thaitobacco.or.th

Tobacco Business. (2019). For the People: An Interview with Swisher International's John Miller, Part 2.

Tobacco Control Fund of the Ministry of Health Vietnam, Health Bridge Vietnam, and the World Health Organization Country Office in Vietnam. (2018). Tobacco Taxes in Vietnam. Retrieved August 12, 2020, from https://apps.who.int/iris/rest/bitstreams/1148386/retrieve

Tobacco Control Laws. (2013). Vietnam, Joint Circular No. 05/2013/TTLT-BYT-BCT Guiding the Labeling, Printing of Health Warnings on Tobacco Packages. Retrieved August 12, 2020, from https://www.tobaccocontrollaws.org/files/live/Viet%20Nam/Viet%20Nam%20-%20PL%20Circular.pdf

Tobacco Control Laws. (2019). Main Policies, Sales of E-Cigarettes.

Tobacco Industry Watch. (2017). Indonesia: Tobacco Companies Spend Big \$\$ on Advertising.

Tobacco Industry Watch. (2017). Indonesia: Tobacco Industry Merges Retailer Incentives with Brand Promotions.

Tobacco Reporter. (2016). Eastern Wants Tobacco Grown in Egypt.

Tobacco Reporter. (2020). KT&G Start Exports to Russia Under PMI Deal.

Hogg, S., Hill, S. & Collin, J. (2016). State-ownership of Tobacco Industry: a 'Fundamental Conflict of Interest' or a 'Tremendous Opportunity' for Tobacco Control? Tobacco Control. 2016 June. Volume 25: 367-372. doi: 10.1136/tobaccocontrol-2014-052114

UK Department of Health. (2017). Towards a Smokefree Generation – A Tobacco Control Plan for England. [ebook]. Retrieved August 10, 2020, from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/630217/ Towards_a_Smoke_free_Generation_-_A_Tobacco_Control_Plan_for_England_2017-2022__2.pdf

UN. (2017). Work of the Statistical Commission Pertaining to the 2030 Agenda for Sustainable Development. Retrieved August 10, 2020, from http://ggim.un.org/documents/A_RES_71_313.pdf

UN. (2019). The Sustainable Development Goals Report.

UN Global Compact. (2019). Progress Report.

US Senate. (n.d.). Lobbying Database, LDA Reports. https://www.senate.gov/legislative/Public_Disclosure/LDA_reports.htm

V2 Tobacco. (2017). Swedish Match Acquires V2 Tobacco.

Van de Kerk, G, & Manuel, A. (2008). A Comprehensive Index for a Sustainable Society. Ecological Economics. 2008 June. Volume 66 (2-3): 228-242. doi: 10.1016/j.ecolecon.2008.01.029

Vietnam National Tobacco Corp. (n.d.). Thang Long Tobacco Co. https://thanglongtabac.com.vn/

Vietnam National Tobacco Corp. (2018). Annual Report 2017.

Vietnam National Tobacco Corp. (2019). Annual Report 2018.

Vietnam's Ministry of Industry and Trade. (n.d.). Web Portal Ministry of Industry and Trade. https://www.moit.gov.vn/web/web-portal-ministry-of-industry-and-trade/home

Wood, J. (2019). Tobacco is Harming Far More Than Just Our Health. Retrieved August 10, 2020, from https://www.weforum.org/agenda/2018/10/tobacco-harming-the-planet-not-just-health-study-says/

Worker's Daily. (2018). China Tobacco Development Report 2017.

World Bank Group. (2018). World Bank Group's Tobacco Control. Retrieved August 8, 2020, from https://www.worldbank.org/en/topic/tobacco

World Benchmarking Alliance. (2018). Corporate Human Rights Benchmark – 2018 Key Findings.

World Benchmarking Alliance. (2018). Corporate Human Rights Benchmark Methodology 2018.

World Benchmarking Alliance. (2018). Seafood Stewardship Index – Draft methodology | Online Public Consultation.

World Health Assembly. (n.d.). Guidelines WHO Framework Convention on Tobacco Control Article 5.3. Retrieved August 8, 2020, from https://www.who.int/fctc/guidelines/article_5_3.pdf?ua=1

WHO. (n.d.). Global and Regional Overview of Cigarette Prices and Taxation. Retrieved August 8, 2020, from https://www.who.int/tobacco/economics/1globalregionaloverview.pdf

WHO. (2004). Tobacco Industry and Corporate Responsibility. An Inherent Contradiction.

WHO. (2009). Tobacco Industry Interference with Tobacco Control. [ebook]. Retrieved August 8, 2020, from https://apps.who.int/iris/bitstream/handle/10665/83128/9789241597340_eng.pdf?sequence=1

WHO. (2017). SDG: Access to Medicine Indicator. Retrieved August 8, 2020, from https://www.who.int/medicines/areas/policy/SDG_Options_IPCjune23.pdf?ua=1

WHO. (2019). WHO Report on the Global Tobacco Epidemic 2019. [ebook]. Retrieved August 10, 2020, from https://apps.who.int/iris/bitstream/handle/10665/326043/9789241516204-eng.pdf?ua=1

WHO Africa. (n.d.). Enforcement of and Compliance with Tobacco Control Legislation – A Guide for the WHO African Region. [ebook]. Republic of Congo: WHO Regional Office for Africa. Retrieved August 8, 2020, from https://www.afro.who.int/sites/default/files/2017-06/enforcement-of-and-compliance-with-tobacco-control-legislation---a-guide-forthe-african-region.pdf

Youm7. (2019). Estimated Value Sales of Cigarettes in Egypt is EGP14bn in One Year



The Tobacco Transformation Index is a tool to accelerate the necessary transformation of the global tobacco industry for the benefit of public health. By monitoring and critically evaluating tobacco companies' behavior, including actions that either support or impede tobacco harm reduction, the Index provides objective, transparent information to all stakeholders and incentivizes companies to act more quickly and responsibly than they otherwise would.

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