

CONTEXT FOR FSFW 2019–21 STRATEGIC PLAN

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EXECUTIVE SUMMARY

Around the world, the 20th century saw significant progress made to reduce the prevalence of smoking. But much remains to be done: around a billion people today still smoke – many more than in 1980; 80% of smokers today live in low- and middle-income countries; and, on the current trajectory, a billion people this century will die prematurely because of smoking.

The purpose of the Foundation for a Smoke-Free World is to improve global health by ending smoking in this generation, by 2050. This means not only eliminating the use of cigarettes and other forms of combustible tobacco (and, where prevalent, unrefined smokeless tobacco preparations), but also supporting vulnerable populations affected by this change, in particular smallholding tobacco farmers.

Our theory of change for ending smoking is fundamentally one of ecosystem transformation: Smoking is widespread, engaging a large and complex ecosystem. Our theory is rooted in the WHO Framework Convention for Tobacco Control (WHO FCTC), but goes further. We recognize that coordinated action on both demand and supply sides needs to happen. But we go beyond the FCTC by also seeking to engage industry to accelerate the shift away from cigarettes towards less harmful forms of nicotine. The ecosystem is capable of transforming today because of innovations in digital consumer technologies and in products that deliver nicotine without the harmful chemicals created by burning tobacco. We believe that the fastest way to end smoking is for all stakeholders to work together to transform the smoking ecosystem building on, and going beyond, the framework set out by FCTC.

Our Foundation's role in this transformation will be to target opportunities where there are gaps in implementing FCTC and other elements of ecosystem-wide transformation. We will adhere to our robust guiding principles and draw from the factors that differentiate us from other philanthropies. Our strategic framework comprises three major areas of work across Health, Science and Technology; Agricultural Transformation; and Influencing Industry. We will also drive ecosystem-wide initiatives that cut across these three areas, for example on gender issues.

This document serves as a companion to our strategic plan, and lays out in more detail the context for our work and the determinants of our strategic framework.

THE CONTEXT FOR THE FOUNDATION'S STRATEGY

Innovation turned smoking into a major public health issue

Smoking tobacco became a major cause of death and disability starting in the early part of the 20th century. Technological innovation was responsible for enabling mass production of low-priced cigarettes, and innovations in sales and marketing stimulated demand to meet this increased supply. In the UK, for example, cigarettes accounted for less than 20% of all tobacco consumed by men at the beginning of the 20th century and 80% by the 1940s; and cigarettes have always been the main form of tobacco use by women in the UK.¹

The world has seen some progress on smoking...

Large epidemiologic studies as early as the 1940s and '50s linked cigarette smoking and lung cancer. But it took decades to establish consensus on the harms of smoking. This was due to the long time-lag between exposure and adverse health outcomes, the need to develop new research techniques to assess outcomes not uniquely attributable to smoking, and the tobacco industry's sustained and organized efforts to undermine the growing scientific consensus. The 1964 Report of the Advisory Committee to the US Surgeon General was a milestone in driving acceptance of the causal relationship between smoking and disease. It led to some early measures to curb smoking. These in turn drove early declines in smoking prevalence, particularly in high-income countries, e.g., the US (from 42% in 1965 to 25% in 1997)² and the UK (from 52% for men in 1972 to 32% in 1997).¹

The World Health Organization's Framework Convention for Tobacco Control (WHO FCTC) opened for signing in 2003 and is now legally binding in 181 ratifying countries. It is the most comprehensive effort to date to reduce tobacco use. Articles address not only reducing demand, but also supply-side issues such as illicit trade, second-order consequences such as the livelihoods of tobacco farmers, and the need for ongoing research.^{3,4}

Implementing the FCTC has focused largely on a subset of these articles to protect the public from second-hand smoke, reduce smoking initiation and encourage cessation, prevent tobacco industry marketing, and monitor progress. These are described in the MPOWER package,⁵ launched in 2008: (1) Monitor tobacco use and prevention policies; (2) protect people from tobacco smoke; (3) offer help to quit tobacco use; (4) warn about the dangers of tobacco; (5) enforce bans on tobacco advertising, promotion and partnership; and (6) raise taxes on tobacco. Currently, 4.7 billion people are covered by at least one MPOWER intervention at the national level.⁶

...but much more needs to be done

The global prevalence of smoking peaked in the 1980s and has been falling since then, from 41% to 25% for men by 2015, and from 11% to 5.4% for women by 2015.^{7,8}

This progress nonetheless masks significant challenges:

- More people now smoke: the number of people who smoke has increased from around 720 million in 1980 to approximately a billion today,⁶ as population growth has outstripped prevalence reduction everywhere except in countries with a high social development index.⁹

- The demographics have changed: Today, 80% of people who smoke live in low- and middle-income countries¹⁰ (e.g., 260 million in China, 104 million in India, 54 million in Indonesia),¹¹ many with limited ability to implement and enforce tobacco control policies. In high-income countries, smoking is increasingly concentrated in vulnerable populations and in people with lower incomes or lower educational attainment (see below).
- The gender picture has also changed: tobacco use is geographically less concentrated for women than for men. The three countries with the highest prevalence of female smoking account for 27.3% of the world's female smokers, whereas the comparable figure for men is 51.4%. More countries have achieved significant decreases in the prevalence of daily smoking among men than women. Though smoking rates remain higher in men than women globally, more countries have seen minimal changes, or even increases (as in eastern Europe), in smoking among women compared with men.⁸
- A billion lives are at risk: A billion people who use tobacco – mostly smokers – will die because of it over the course of this century. This is ten times as many as died from smoking in the 20th century. Most of these deaths will be in low- and middle-income countries, whereas most of the last century's deaths were in high-income countries.¹²

THE DETERMINANTS OF OUR STRATEGIC FRAMEWORK

The Foundation’s strategic framework describes our main areas of work and what we hope to accomplish in each. It is informed by five elements (exhibit 1):

1. Our purpose, describing our long-term goal and our contribution to the world
2. Our theory of change, laying out our beliefs about how our goal can be achieved
3. What others do, understanding the current roles and contributions of others who are working towards the same goal
4. Our guiding principles, informing and constraining our own actions
5. Our differentiators, describing the ways in which we act differently from others

Exhibit 1. The determinants of our strategic framework



OUR PURPOSE

Our purpose is to improve global health by ending smoking in this generation.

“Ending smoking” means not only eliminating the use of cigarettes and other forms of combustible tobacco, but also ensuring that vulnerable populations affected by this transformation, especially smallholding tobacco farmers, are supported to find sustainable alternative activities. We also recognize that in some countries, for example India, a significant amount of harm is caused by oral use of unrefined smokeless tobacco preparations. Helping users of these products to quit or reduce their health risks by switching to less harmful substitutes is also part of our purpose.

“In this generation” means over the next 30 years, by 2050, while recognizing that the pace of progress will vary by country, and that a small number of people may still actively choose to smoke.

OUR THEORY OF CHANGE

Smoking is not an insignificant or isolated activity. It is a widespread behavior that engages a large and complex ecosystem. Around a billion people smoke. Globally, 15 million farmers produce over \$18 billion of tobacco each year. The tobacco industry employs 100 million people around the world and generates \$800 billion in annual revenue. Governments receive \$400 billion per year from taxing tobacco products¹³.

Accelerating the end of smoking will require the entire ecosystem to transform. Individual or uncoordinated actions focused only on smokers, farmers, or the tobacco industry will not suffice. The FCTC recognized the need for coordinated action on both demand and supply sides, and included articles addressing the issues of women, vulnerable populations, and farmers' livelihoods. But true ecosystem transformation extends beyond FCTC. It engages with the tobacco industry and seeks to influence it to direct its business activities away from smoking as quickly as possible. Such industry engagement can be seen in other 'dirty' sectors which are transforming to become 'cleaner' and more sustainable, such as energy generation and transportation.

Ending smoking through ecosystem-wide transformation is possible today because of technological innovations happening in two key areas: (1) digital consumer technologies are allowing smokers and researchers to better measure and understand smoking behaviors, and to intervene to help smokers quit or smoke less; (2) miniaturizing batteries, sensors and control systems has led to the development of consumer products that deliver nicotine – which creates dependence, but does not cause the harms associated with smoking – without the 'tar' of harmful chemicals. These products can support both cessation and harm reduction strategies.

Many of the other necessary conditions for ecosystem-wide transformation are also falling into place. Most smokers, in nearly all countries, want to quit or reduce their risks. Increasingly they are demanding policies and research to help them do so. Companies, both incumbents and new entrants, have introduced reduced-risk products in some countries and seen cigarette sales decline sharply in response. Some notable governments are leading the way to harness this transformation and accelerate the decline of smoking amongst their people. Investors are taking note of these changes and adapting their investment strategies for this sector.

We believe that the fastest way to end smoking globally is for all stakeholders to work together to transform the smoking ecosystem, building on and going beyond the framework set out by FCTC.

WHAT OTHERS ARE DOING, AND WHERE THE GAPS ARE

FCTC is still the main framework for directing tobacco control activities. Today, most of the interest lies in the subset of FCTC articles covered by the MPOWER framework. It has become a major focus area for Bloomberg Philanthropies, with additional financial support from the Bill & Melinda Gates Foundation, technical support from WHO, and implementation support by a range of partners. Here, policy levers are pivotal for driving improvements and governments can act as the main agents of change and scale-up.

But to drive the ecosystem-wide transformation we advocate, we must implement all of FCTC, and also go beyond it by influencing industry. We have identified gaps in what is being done and we are eager to address these to fulfil FCTC:

Five gaps related to smoking:

- (1) *Reducing smoking-related harm in specific population segments:* Smoking by women is of growing concern. The prevalence of smoking among women is declining at a slower rate than that among men, and is even increasing in some parts of the world.⁸ Furthermore, the boy:girl smoking prevalence ratio is narrower than the men:women ratio in many countries, with some reversals.¹⁴ The consequences of this trend for women's health in 20-25 years will be significant. Smoking during pregnancy also continues to be an issue in many countries.

Smoking prevalence remains high in vulnerable populations, including indigenous peoples,^{15,16,17} people with serious mental health disorders,¹⁸ people with TB¹⁹ or HIV/AIDS,²⁰ and military personnel²¹ and veterans.²²

In high-income countries, smoking is increasingly concentrated amongst people with lower incomes or lower educational attainment. In the US, it is highest among people with a high school equivalency certificate (34%), and lowest among those with a graduate degree from university (4%);²³ smoking rates are higher among Americans making less than \$20,000 a year (26%) than those making \$20,000 a year or more (14%).²⁴ Similar observations have been made in France and Germany.²⁵

- (2) *Providing effective tools to help smokers quit:* FCTC Article 14, which is part of MPOWER, focuses on offering cessation support. However, existing products and services to help smokers quit have low effectiveness, with 6- to 12-month abstinence rates of 2-5% for behavioral interventions and 6-15% for pharmaceutical products.²⁶
- (3) *Offering harm reduction options alongside cessation:* FCTC Article 1(d) includes harm reduction in the definition of tobacco control, but this option is not covered in MPOWER. There is little research on harm reduction: over the past 10 years, there have been two orders of magnitude fewer academic publications on smoking harm reduction compared with smoking cessation.²⁷
- (4) *Expanding research and scientific collaboration:* FCTC Articles 20 & 22 focus on research and scientific cooperation. Eighty percent of smokers today live in low-and middle-income countries, but most research today is led by centers in the US and Europe.

Funding for research is also limited, particularly outside the US: Of the \$31.4 billion in development assistance for global health in 2011, only \$68 million went to tobacco control.²⁸ Among the top funders for tobacco control, the Bloomberg Tobacco Free Initiative explicitly does not fund basic research, academic studies or cessation services.²⁹ And the Bill & Melinda Gates Foundation's focus is on

preventing initiation by new smokers, decreasing overall tobacco use, and reducing exposure to second-hand smoke.³⁰

From the perspective of new researchers, a recent article focusing on high-income countries highlights two important points: 1) the shortage of academic positions related to tobacco control, and 2) the importance of seeking experience outside traditional academic settings, along with incorporating the innovative research methods that have evolved over the last decade.³¹ The picture in lower-income countries is even less positive, especially given the historic need to build institutional and human capacity for research to address non-communicable diseases (NCDs) in these countries.

- (5) *Improving public awareness of the drivers of smoking harm and of the availability of alternatives.* Article 12 focuses on increasing awareness of the risks of tobacco use and smoking, and of the benefits of cessation of tobacco use. There is little attempt to explain why smoking and tobacco use are harmful (and the respective roles of nicotine and combustion products – ‘tar’ – in particular), nor the potential role reduced-risk products may play in reducing harm to those who cannot or will not quit.

Two gaps related to tobacco farming

- (1) Provision of support for economically viable alternative activities: From FCTC Article 17 emerged a working group on Economically Sustainable Alternatives to Tobacco Growing. It made excellent recommendations about why it is necessary to transition tobacco-dependent economies. However, the FCTC is not structured to do the work needed to create economic alternatives, such as market development. As a result, very limited funds have been deployed either to help governments reduce their dependence on tobacco, or to assist farmers switching to alternative crops and activities.
- (2) Going beyond FCTC, a more multi-sectoral approach is needed for disbursing aid to tobacco-growing countries. The approach must recognize all the complexities of supporting economic development.

Two gaps related to industry

- (1) *Content regulation, disclosure regulation, and sales to and by minors:* Notwithstanding FCTC Articles 9, 10 and 16, there is currently no international, independent system for tracking performance on these issues.
- (2) Going beyond FCTC, the investor community represents a powerful change agent. It is essential to enroll investors. They may commit to transformation strategies if they receive independent data on tobacco companies’ illegal activities, their research and development focus, and their product portfolios. To do this, companies would need to be sufficiently engaged to supply relevant financial and technical data.

Exhibit 2 below illustrates these gaps.

Exhibit 2: FCTC areas of MPOWER focus and gaps

Framework Convention for Tobacco Control Selected articles		Global focus level	Where support is needed beyond MPOWER	
Part I + II Introduction & Principles	Preamble		Health, Science and Technology	
	1 – Terms		Health, Science and Technology	
	4 – Guiding Principles		Health, Science, Tech	Gender
Part III Demand Reduction	6 – Price measures	MPOWER		
	7 – Non-Price measures	MPOWER		
	8 – Protection from smoke	MPOWER		
	9 – Content regulation		Health, Science, Tech	Industry
	10 – Disclosure regulation		Industry	
	11 – Packaging regulation			
	12 – Public awareness		Health, Science, Tech	Industry
	13 – Advertising Restrictions			
Part IV + V Supply Reduction & Protect Environment	14 – Cessation support		Health, Science and Technology	
	15 – Illicit trade		Industry	
	16 – Sales to and by minors	MPOWER	Agriculture	
Part VII + VIII Science and Technology & Finances	17 – Support alternative activities			
	18 – Protection of environment			
	20 – Research and collaboration		Health, Science and Technology	
	21 – Report, share information		Health, Science, Tech	Industry
22 – Scientific, technical, legal coop.			Health, Science and Technology	

LEGEND ● MAJOR FOCUS ● PARTIAL FOCUS ● GAPS: AREAS WITH SUPPORT NEEDED BEYOND MPOWER

NOTE Current: Global focus covered by MPOWER and supported by WHO, Bloomberg Philanthropies, Campaign for Tobacco-Free Kids and others

OUR GUIDING PRINCIPLES

Six principles guide our strategic framework. They reflect our positioning within broader international frameworks for action, and determine where we focus and how we will deploy our resources:

1. We conduct work aligned with the Sustainable Development Goals and the Framework Convention for Tobacco Control.
2. We will focus our efforts in areas currently receiving less attention, on vulnerable populations, and where we can add most value.
3. We will put smokers and farmers at the heart of our work.
4. We will attract and deploy the most advanced techniques from a range of scientific disciplines and technologies.
5. We aim for impact and efficient use of our limited resources. We will choose to do work ourselves, partner or lend our support to others.
6. We will ensure all our work, both external and internal, will be informed by gender-specific perspectives.

OUR DIFFERENTIATORS

As a private philanthropy, we have comparatively more freedom in how we deploy our resources, particularly compared with public sector funders. We will use this freedom to focus on gaps in what is being done, and areas of needs that others are not well placed to cover. We can differentiate ourselves in four ways:

1. Freedom to partner: We work with any entity or constituency with relevant expertise or experience
2. Freedom to focus: We focus our resources on countries and populations with the greatest need
3. Long-term commitment: We preferentially fund research centers and global networks to lead at-scale programs
4. Commitment to capacity strengthening: We require our grantees to strengthen research capacity and implementation capacity in the countries where most smokers live.

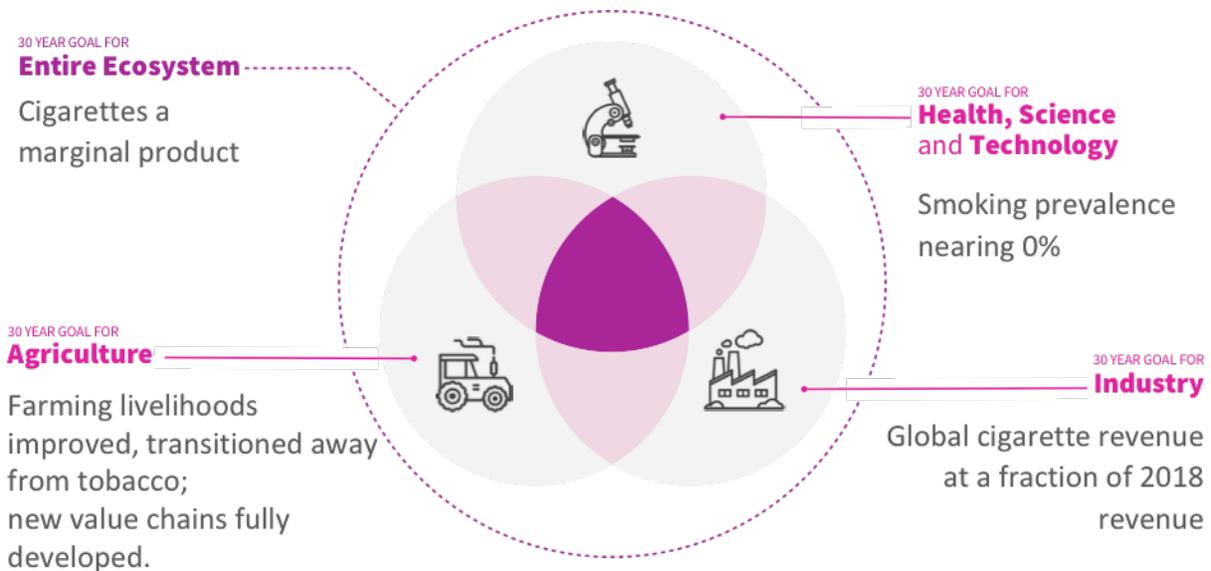
OUR STRATEGIC FRAMEWORK

The Foundation's purpose is to improve global health by ending smoking in this generation. Our theory of change for achieving this is based on ecosystem-wide transformation, building on and going beyond the FCTC. Other actors are currently focused on a subset of the activities needed to drive this transformation. We have identified major gaps in the areas related to health and science, to agriculture, and to industry.

Our strategic framework builds on this understanding, on our guiding principles, and on how we can differentiate ourselves from other philanthropies. It incorporates three main areas of work and a fourth set of overarching activities. While the stakeholders for these areas overlap significantly, each area of work will have distinct and complementary strategic objectives (exhibit 3).

1. Health, Science and Technology initiatives
2. Agricultural Transformation Initiative
3. Influencing the industry
4. Ecosystem-wide initiatives

Exhibit 3: The Foundation's strategic framework



CONTEXT DEEP-DIVES

This section provides further detail on the overall context, our theory of change for each area of work in our strategic framework, and the corresponding objectives.

HEALTH, SCIENCE AND TECHNOLOGY

The strategic objectives of this initiative are to:

- Answer key research questions around perception, products and policies
- Develop and improve access to highly effective cessation products and services
- Create country atlases covering all aspects of tobacco and nicotine use.

Context

The need to rapidly drive down death and disability from smoking is clear. There are a number of avenues to pursue:

- Likely the fastest way is helping current smokers to quit as quickly as possible: Smokers who quit before age 40 reduce their risk of excess mortality by more than 90% compared with those who continue to smoke. Even those who quit at age 50 reduce their risk by more than 50%.
- Continuing to prevent smoking initiation is extremely important. But we recognize that the main health benefits of efforts today will not appear until after 2050. Similarly, it will be important to continue to protect the public from the harms of second-hand smoke.
- Reducing harm to those who cannot quit or do not want to quit must be explored, especially in light of recent technological innovation and the rapid pace of change in this area.
- Finding ways to implement all these efforts, not just in high-income countries, but also in low- and middle-income countries where most smokers live, is critical.

Looking at these potential activities through the lens of the FCTC, it is clear that implementing MPOWER needs to accelerate, and that implementing the other key articles must receive a boost. Accelerating MPOWER's implementation is already a priority. It has become a major focus area for philanthropies worldwide, with technical support from WHO, and implementation support by a range of partners. The main levers for driving improvement are policy levers. Governments are the main agents of change and scale-up.

A century ago, innovation, in the form of mass-produced cigarettes and their marketing, drove the dramatic increase in death and disability from smoking. Today, innovation – properly harnessed – can help close the smoking-related gaps in implementing FCTC and reduce future harm from smoking. Two technological innovations are particularly relevant:

1. Tools to help people measure and change their behavior: Smartphones and consumer-oriented sensors and apps have become widely used over the past decade, including in many low- and middle-income countries. Smokers can use these tools to better measure and understand their own smoking behavior and its impact on their health, and to receive customized feedback and interventions to help them quit or smoke less. These tools can also be used at scale in low- and middle-income countries, as shown by

the Be He@lthy, Be Mobile mCessation initiative run by WHO and the International Telecommunications Union in India. They can also be used by researchers in observational and interventional studies.

2. Products that deliver nicotine with significantly less harm: Nicotine creates dependence but does not itself cause the harms associated with smoking. Most of the harm from smoking is caused by chemicals created by burning tobacco, a notion articulated as early as 1976: “People smoke for the nicotine, but they die from the tar.” Sweden’s experience with snus, a refined smokeless tobacco product, suggests that it is significantly less harmful than smoking. Miniaturizing batteries, sensors and control systems has led to consumer products developing that can deliver nicotine without the combustion of tobacco, or indeed without any tobacco. These products are not completely harmless, and more research is needed to establish their specific harm profiles. But their greatly reduced levels of toxins, and evidence from biomarkers, suggest that they should present a far lower risk than smoking. This view has led the UK Royal College of Physicians and Public Health England to support their use to help reduce smoking. Smokers can use these products either to help them transition to complete cessation, or to deliver the physiological or psychological experiences they seek with far lower exposure to the harmful substances in smoke.

It is important that these two innovation categories are both consumer products rather than medically prescribed treatments. They are readily available in many different forms and are evolving in response to consumer demand. There is great variety in the reasons why people smoke, in their smoking behaviors, in their willingness and readiness to quit, and in the type and amount of help that they need to quit. There is also increasing recognition that some smokers experience pleasure from nicotine or from the rituals of smoking, and would seek to reduce their harm rather than quit. These tools and products can help people who smoke to find the best solutions for their needs and wants; they bring new companies into the market; and they challenge incumbent tobacco companies to innovate their product portfolios beyond cigarettes.

Tobacco control to date has been driven by policy levers, with governments the change and scale-up agents. These new technologies enable people who smoke – consumers — to themselves be change agents and leverage the scale-up capacity of the private sector. The opportunity that we see is to accelerate the end of smoking-related death and disability by complementing the existing tobacco control approach with a consumer-oriented approach – appropriately regulated — to help smokers quit or switch to significantly less harmful alternatives.

In its HST work, the Foundation seeks to complement ongoing tobacco control efforts and focus on the FTC gaps in countries where most smokers live, with a smoker-oriented agenda to accelerate quitting and switching.

A consumer-focused approach to accelerating quitting or switching strives to help people who smoke to change their behavior and to engage their influencers (family and friends; physicians and other healthcare providers; media; health insurers and payors; policy-makers; and other mediators [e.g., academics, think tanks, consumer groups, and charities]) to support that change:

- The Foundation’s HST work will focus heavily on smokers to understand their needs and wants; engage them in research, product design, and policy discussions; help them quit or switch as part of a broader effort to improve their overall health; and promote solutions that are appropriate for older adults, for both men and women, and for different vulnerable populations
- The Foundation’s HST work will engage all stakeholders. We will work with scientists across academia,

government and industry. And we will support public-private partnerships.

As with all consumer-oriented approaches, the HST agenda will focus largely on the levers of consumer perceptions, product characteristics and price. For smokers to more quickly reduce their health risks by quitting or switching to the least harmful product (or combination of products) that meets their individual needs, they require:

- *Perception* and correct understanding of: the health benefits of quitting or switching; how quickly these benefits may be realized, even after many years of smoking; and which product ingredients are responsible for the dependence, the harms, and the pleasure they experience – and, in particular, the role of nicotine.
- *Products* and services that are genuinely attractive for quitting or switching. These must be highly effective (for cessation) or much less harmful (for switching). They must also meet individual smokers' unique physiological, sensory, emotional and social needs.
- *Pricing* and price differentials that encourage quitting or switching to the least harmful acceptable products, while discouraging uptake by non-smokers. (Other economic incentives, such as health insurance and life insurance premiums that are proportional to product risk can play an important role.)

To drive perceptions and pricing in ways that accelerate quitting or switching, the preliminary HST agenda includes three activities:

1. Funding research that
 - a. Answers consumers', physicians', regulators' and other stakeholders' questions across perceptions, products and pricing
 - b. Strengthens research capacity in countries where most smokers live
2. Creating funding mechanisms to stimulate innovation and bring to market
 - a. Significantly more, effective cessation products
 - b. Affordable cessation and reduced-risk products for low- and middle-income countries
3. Funding data-gathering and analytics to measure progress and to inform the actions of consumers, policymakers, researchers, other stakeholders and the Foundation itself.

AGRICULTURE TRANSFORMATION INITIATIVE

The strategic objectives of this initiative are to:

- Support globally competitive market supply and foster a bridge to market demand, including diversifying away from farming
- Foster long-term change by building local R&D capacity
- Work with policymakers to develop a national agricultural policy execution strategy.

Context

As the Foundation's work to accelerate smoking cessation and harm reduction succeeds, we will see a rapid decline in global demand for tobacco leaf. This shift in demand will have major implication for millions tobacco farmers – particularly smallholders — and their families and communities.

The seven largest tobacco producers in the world are, in decreasing levels of production: China, Brazil, India, the United

States of America, Indonesia, Zimbabwe and Malawi. Tobacco farming is the very first step in the tobacco value chain, and the deficiencies of that sector are well known. In some countries:

- Smallholder farmers are poor, frequently trapped in a vicious cycle of debt, receiving loans to pay for crop inputs, with their harvest being insufficient to cover the loan
- Smallholder farmers are an extremely vulnerable population, as reflected in their inability to access capital, qualify for financing, or have access to leading technologies that can enhance efficiency
- Smallholder farmers cannot compete globally due to inefficiencies that lead to high cost of production, lack of market access, and lack of economic incentive to diversify.

Malawi is an example of a country with great needs, highly dependent on tobacco, with a disproportionate burden of poverty and food insecurity.

Malawi is the most tobacco-dependent country in the world, despite being only the thirteenth global producer of tobacco by weight in 2016³². In 2016, tobacco — Malawi's most important cash crop — accounted for \$550 million in foreign exchange earnings for the country³³. This represented 59% of total export value as of 2016. Tobacco leaf cultivation alone, considered only the first step in the value chain, employed an estimated 451,000 people in 2016: 2.5% of the population.

The current global trends in tobacco markets, health issues, and environmental concerns have exerted significant pressure on the domestic industry, prompting the government to diversify the economy and reduce overreliance on tobacco as the largest foreign exchange earner.

According to a 2016 study, only 25% of Malawian tobacco farmers were content with the prices they received in 2014, and approximately 41% of all tobacco farmers have considered switching to alternative crops or livelihoods³⁴. Approximately 45% of all tobacco farmers in Malawi are contract farmers, but no statistically significant differences between independent and contract farmers were found in price satisfaction and desire to switch³⁵.

In addition to this, Malawi suffers from a disproportionate burden of poverty and malnutrition. As of 2011, the overall poverty rate was over 50% (and the rural poverty rate even higher, at 57%), with recent analyses suggesting that this is likely to have increased because of recent weather shocks³⁶. Furthermore, according to the most current data from the 2015-16 Malawi Demographic and Health (DHS) survey, 37% of children under 5 are stunted³⁷. As such, Malawi is a country that will be particularly vulnerable to future declines in global tobacco demand. Economic disruptions will not be felt uniformly. They will disproportionately affect socially and economically vulnerable populations, such as women, as they represent the majority of the rural poor and the agricultural labor force. From an economic perspective, a well-nourished population translates directly into lower healthcare costs and more productive citizens. In fact, cost-benefit analyses make the case quite clearly: It is estimated that investing in nutrition yields a return of \$16 for every dollar spent³⁸.

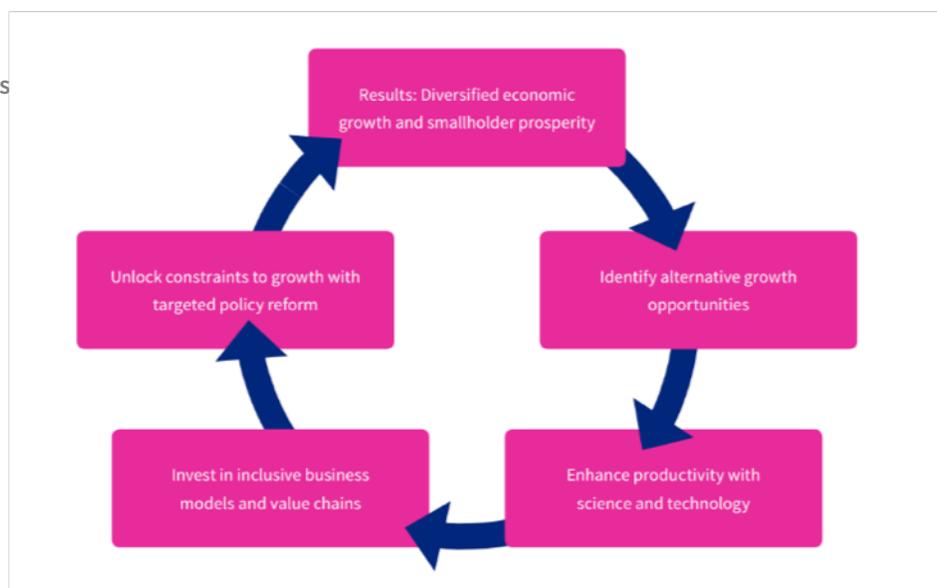
Finally, current Malawian government, non-profit, and private sector interests in the context render it a country with promising circumstances for change.

What is required is nothing short of a New Deal for the African smallholder farmer. For far too long, incremental profit sharing and value-added livelihoods have eluded African economies.

A virtuous cycle of market-driven investment, science- and technology-driven innovation, and targeted policy reform is

required, as illustrated in exhibit 4:

Exhibit 4. Virtuous



1. **Identify alternatives.** Identify innovative and profitable alternative crop and livelihood options for farmers. This will determine which crops and livelihoods are best suited for a given country or region, considering production, value chain, commercialization, and policy potential.

2. **Enhance productivity.** Develop and apply new technologies to enhance agricultural productivity, build resilience, and increase income generation for farmers. Main areas of need are seed testing, tissue cultures and lab facilities, soil testing, and land allocation/mapping.

3. **Facilitate commercialization.** Facilitate creating and applying new markets and sustainable business models to improve economic opportunity and generate income for rural communities, as well as to strengthen the economy more broadly.

4. **Strengthen policy.** Create an enabling environment for these new livelihood and business strategies through targeted policy and resilience-building action at all levels of scale. Underlying most of the priority areas of investment will be an element of policy analysis and government capacity building. This is particularly true regarding market and value-chain development, education and technology innovation.

The mission of the Foundation’s Agricultural Transformation Initiative (ATI) is to prepare smallholder tobacco farmers for an era of significantly reduced demand for tobacco, focusing first on populations with the greatest need. The ATI will use this opportunity to help establish more secure income strategies for farmers, and will seek to partner with a diverse set of stakeholders to ensure the success and sustainability of our strategy.

To achieve this, we will support efforts to develop and diversify tobacco-dominated economies, lessening their traditional reliance on the tobacco sector. This includes helping farmers to diversify into alternative crops, access markets further along the agricultural value chain, and access other economic opportunities more broadly.

Our initial programmatic focus will be on Malawi. We intend ultimately to expand into other tobacco-producing economies with a global scope. The Foundation is committed to leading the development of a New Deal for those farmers who wish to continue in agriculture, as well as to exploring and investing in creating alternate profitable opportunities.

To fulfil this ambition, the Foundation will employ a systems approach to understanding local contexts and potential points of intervention. We will also foster an environment for wider financial investment beyond the Foundation in agriculture and adjacent sectors of the economy:

1. We will identify demand-driven opportunities: For decades, donors and economic development theory has been predicated on supply and increasing agricultural productivity, not market demand. We will understand current tobacco-based business models, seek existing and potential markets for alternative crops and livelihoods to replace declining tobacco income, and in the long-term, identify and support structured agricultural value chains and adjacent industries to drive economic growth.
2. We will incubate a pipeline of external investments based on inclusive business models and value chains: Sustainable Development goal 8 aims to “Promote inclusive and sustainable economic growth, employment and decent work.” Further, sustainable economic growth will require societies to create the conditions to allow people to have quality jobs. We will ‘grow the pie’ by targeting high-value business models, co-creating business models that accrue value directly to smallholder farmers, leveraging innovative financing mechanisms to drive growth, and leveraging Foundation dollars to stimulate and pilot agricultural investments designed to achieve scale and aggregation of supply.
3. We will enhance productivity with science and technology: We will create a Centre for Agricultural Transformation that merges 21st century agricultural innovation with the scaling power of the private sector, identify game-changing inputs and technologies that can drive productivity increases and economic growth, and incentivize private sector investment with risk capital and technology transfer agreements.
4. We will unlock constraints to growth with targeted policy reforms: We will identify business model and cross-cutting constraints to growth in agriculture, trade, investment, finance, and access to capital, whilst facilitating the policy reform process through existing processes and stakeholders, and facilitating a ‘Doing Business’ task force to position Malawi as a lead reformer in SSA.
5. Finally, the ATI’s initiatives will be valuable only if the benefits include the individual farmer, impacting individual incomes, assets and consumption, and food security.

INFLUENCING INDUSTRY

The strategic objectives of this initiative are to:

- Transform the entire global tobacco industry and nicotine ecosystem by providing structured data and metrics evaluating stakeholder behaviors and progress through the Smoke-Free Index®
- Attain a high level of engagement between institutional investors and the tobacco industry, accelerating the transformation and using the Smoke-Free Index® as a facilitation tool.

Context

Many 'dirty' legacy industries are transforming their activities and products to create cleaner ones. Examples of industries undergoing transformation include: utilities shifting from coal to renewables in electricity generation; waste management companies shifting from dumping to recycling and reusing; automobile manufacturers developing electric and hybrid cars, and shifting away from relying on the combustion engine; and food companies cutting down on ingredients that threaten health. Progress will not be linear, but encouragingly trends point towards demand for business models to be aligned with the Sustainable Development Goals.

Industries undergoing a transformation have many things in common. Their constituent companies use technological innovations to transform their core businesses. They are all responding to consumer demand for better, healthier and more sustainable products.

Tobacco companies represent the archetypical 'dirty' industry. However, some of the largest tobacco industry players have explicitly committed to ending the sale of combustible cigarettes. Or, at least, to accelerating access to reduced-risk products.

Today, some tobacco companies are shifting their portfolios to more reduced-risk products, even while they continue to sell the most harmful products. They are using profits from their legacy products to cover the costs of the transformation toward these reduced-risk options.

However, tobacco companies frequently are shunned, dismissed and barred from engaging by groups that are oblivious to how sectors transform. What this means is that one of the main stakeholders in the transformation is excluded from global health discussions.

Recent market disruptions are drawing the attention of investors: In some countries, reduced-risk products are displacing combustible cigarettes at a rate never before experienced in tobacco control. In Japan, according to company reports, introducing heat-not-burn products was associated with a 24% decrease in total domestic cigarette sales from January to July 2018, compared with the same period in 2016. No other mature market has seen one-quarter of its cigarette market disappear in just two years. Similar data are now emerging from Korea.

A growing segment of the investor community is developing and applying Responsible Investment practices (RI). This includes incorporating Environmental, Social, and Governance (ESG) criteria in the investment process, engaging with investee companies, and working on policy issues. A recent trend is for investors to use the Sustainable Development Goals (SDGs) as an investment framework, helping them align their investments with sustainability objectives.

Reflecting the trend, the Sustainability Accounting Standards Board (SASB) has produced a provisional standard, and proposed changes for sustainability accounting and disclosure for the tobacco industry. The SASB develops and maintains sustainability accounting standards for more than 80 industries in 10 sectors, including the tobacco industry.

The SDGs also provide a relevant framework for transforming the tobacco industry. But success requires engaging with all those who are committed to end the use of combustibles. Senior global health leaders have started to acknowledge the importance of tobacco industry transformation and what it means for how we work with the industry to build solutions.

The tobacco industry's track record makes working together problematic. It requires the utmost transparency and scrutiny. However, meaningful change cannot happen without engaging all stakeholders.

For an industry transformation to happen, we believe the investor community to be a powerful, yet under-utilized, lever. Public company management has a fiduciary responsibility to maximize shareholder value. Therefore, investors have significant influence on management.

Companies need to establish a direct relationship between their transformation and shareholder value. They can do this by introducing a common language, platform and metrics. Quantifying transformation through clear and transparent metrics will enable companies to build a market-driven incentive system to support sustainable change. It will also contribute to meeting consumer demand for reduced-risk nicotine delivery products.

Admittedly however, state-controlled and privately-held manufacturers around the world do not respond to investor pressure in the ways that publicly traded firms do. But the traction generated by transforming all quoted players could have a significant collateral impact on those firms.

To promote this transformation of the tobacco industry, we will develop and implement the means to critically evaluate industry progress, and assess actions taken by the industry towards transformation.

The Foundation will publicly highlight comparable data from all key players – publicly traded, privately held and state-controlled – and show whether or not they are making progress toward enabling a smoke-free world.

We will report our findings from these evaluations and assessments in an annually published Smoke-Free Index[®] report. We will provide quantifiable evidence of how companies are addressing industry transformation. We will collect and compile verifiable metrics on the research and development (R&D) of reduced-harm products, shifts in companies' capital expenditures and marketing spending in support of reduced-harm products, investments aimed at phasing out cigarette production – and much more.

To do this, we will deploy a systematic approach to collecting verifiable data. We will highlight specific examples of illegal actions, or those incompatible with good corporate practices. We will report unacceptable behavior demonstrated by clearly identified actors in a specific and quantifiable manner. Our goal is to provide stakeholders with a better basis for engaging meaningfully with company management, based on the data and analyses produced by this program. We will therefore develop metrics that investors and policy makers understand, value and utilize.

The Foundation will also specifically identify FCTC guideline violations by companies, supporting this with documented evidence. We intend for our program to prompt serious discussions and action by policy makers, particularly for the state-

controlled entities that operate outside the bounds of investor influence.

Finally, we will leverage the findings from the Smoke-Free Index® and build transformation advocacy across industry stakeholders, reaching out to investors and putting in place mechanisms to issue counter marketing messages in vulnerable populations. We will hold convenings and forums to discuss industry transformation mechanisms and learnings from Smoke-Free Index® stakeholder engagement. We will support in-country partners and coordinate roles, design potential response strategies, and agree and test messages. We will also maintain a heatmap of the most impacted populations, identifying and tracking the various types of delinquent industry messages.

ECOSYSTEM-WIDE INITIATIVES

- The strategic objectives of this set of initiatives are to:
- Provide a holistic view of the actors and relationships in the ecosystem
- Integrate the Foundation’s work across HST, Agricultural Transformation, and Influencing Industry in key countries
- Broaden and strengthen the Foundation’s impact through partnerships
- Support gender-specific research and solutions in all areas of the Foundation’s work.

Context

The ecosystem around smoking is complex, with a wide range of actors. Their actions affect each other directly and indirectly, in complicated ways (e.g., less smoking improves population health but reduces government tax revenues). We need to map this ecosystem to identify the most powerful levers for reducing smoking, and to understand the second- and third-order consequences of pulling on these levers. We also need to fill in gaps in the knowledge about the nature and strength of the relationships between different elements.

This type of effort is needed at both global and country levels. The burden of smoking is distributed unequally across the world. Agricultural activity, industry activity, and R&D capacity are also distributed unevenly. The fastest way to transform a country’s smoking ecosystem and decrease smoking will therefore vary. It requires a thoughtful and coordinated country-specific approach. This coordination also extends to the Foundation’s own activities across HST, Agricultural Transformation, and Influencing Industry.

The Foundation will also work with a broad range of international partners in order to accelerate its impact. For example: organizations focused on capability strengthening in low- and middle-income country settings; innovators focused on making needed products and services accessible and affordable for low-income populations; and investors keen to drive industry transformation towards greater sustainability.

Gender issues are critical across this ecosystem, and a major driver of progress towards reaching the SDG goals. However, they have been systematically neglected, under-studied, and under-funded, limiting the development of appropriate policies and innovative products and services. As the SDGs gain momentum, there will be “...an unprecedented demand for more and better data on gender equality and on the quality of development, as well as its ‘quantity.’³⁹ The Foundation will contribute to meeting this demand, and bringing visibility to harm reduction and tobacco agriculture issues in the context of the SDGs.

The range of gender issues to consider spans all of the ecosystem and all of the Foundation’s work:

- **Health, Science and Technology:** The feminization of smoking is of particular concern, as described earlier in this document. If this trend continues, smoking could become a female dominant activity with dire consequences.⁴⁰ Second-hand smoke disproportionately affects women, with 47% of deaths related to second-hand smoke occurring in women, compared with 28% in children and 26% in men.⁴¹ There is a strong link between gender, smoking and mental health, with patterns of smoking prevalence and cessation rates varying significantly by specific mental health diagnosis. For example, according to a 2017 US study, smoking

is increasing among pregnant women with depression. (Depression is more prevalent among women than men.⁴²) As in many fields of work, women are underrepresented in tobacco control and harm reduction science. Product research and development for smoking cessation and harm reduction rarely consider the specific needs and preferences of women. For example, outcomes may be poorer for women than for men treated with nicotine replacement therapies (NRT);^{43,44} however, there is a dearth of research exploring why this may be.

- **Agriculture:** Women represent the majority of the global rural poor and agricultural workforce. For example, women represent 80% of the agricultural workforce in Malawi.⁴⁵ Despite the predominance of women in farm labor, there is a 30% agricultural productivity gap between men and women in Malawi.⁴⁶ Women's social and economic disadvantage is perpetuated by institutional discrimination and gender disparities in access to agricultural inputs, markets, credit and labor.⁴⁷ A gendered value chain analysis – a critical analytical tool that recognizes women's specific contributions⁴⁸ and identifies gender-based barriers and opportunities⁴⁹ – has never been conducted for the tobacco value chain. Women are also underrepresented in the agricultural sciences. As of 2014, only 24% of researchers working in the agricultural sciences were women, and only 17% of those in leadership positions were women in a sample of 40 sub-Saharan African countries.⁵⁰
- **Influencing Industry:** A growing body of evidence has linked gender diversity to measures of better performance, including return on invested capital (ROIC), return on equity (ROE), and ROE volatility.⁵¹ However, gender relations and the status of gender equality within the industry have not been systematically measured, analyzed or indexed. Investing with a gender lens (defined by the Global Impact Investing Network as investment portfolios that seek to intentionally and measurably address gender disparities, and examine gender dynamics to better inform investment decisions⁵²), has also not yet been brought to bear on this industry or on tobacco harm reduction as an investment strategy.

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