### WHAT MINISTRIES OF ENVIRONMENT NEED TO KNOW Tobacco control

Ministries of environment can take important first steps to advance tobacco control:

- Advance laws, policies, regulations and other measures to combat the environmental harms of tobacco, for example, extended producer responsibility regulations that make tobacco producers accountable for post-consumption waste and elimination of single-use filters.
- Ensure the ministry's participation in multisectoral planning and coordination for tobacco control, including the prevention of industry interference in policymaking.<sup>31</sup>
- Strengthen independent data collection on the impacts of growing tobacco and raise awareness on the harms of the tobacco product 'life cycle'.
- Require transparent and accurate information from the tobacco industry.
- Campaign for and support the elimination of tobacco farming subsidies and other investment incentives for the tobacco sector, exploring instead how to advance sustainable food systems and other sustainable alternatives.
- Campaign for and support economically viable alternatives for tobacco workers, growers, and as the case may be, individual sellers as called for by WHO FCTC Articles 17 and 18.

In line with the Convention Secretariat's <u>Global Strategy to Accelerate Tobacco Control 2025</u> and <u>UNDP's Strategic Plan 2022-2025</u> and <u>HIV, Health and Development Strategy (2022-2025)</u>, these briefs emphasise the importance of a coordinated, multisectoral whole-of-government approach to tobacco control, empowering Parties to work across sectors to achieve policy coherence.

#### References

- United Nations Department of Economic and Social Affairs. Goal 3: Ensure healthy lives and promote well-being for all at all ages. Available at: <a href="https://sdgs.un.org/goals/goal3">https://sdgs.un.org/goals/goal3</a>.
- 2 Secretariat of the WHO FCTC (2021). The WHO Framework Convention on Tobacco Control: an overview. Available at: <a href="https://fctc.who.int/publications/m/item/the-who-framework-convention-on-tobacco-control-an-overview">https://fctc.who.int/publications/m/item/the-who-framework-convention-on-tobacco-control-an-overview</a>
- 3 WHO FCTC. WHO Framework Convention on Tobacco Control Parties. Available at: <a href="https://fctc.who.int/who-fctc/overview/parties">https://fctc.who.int/who-fctc/overview/parties</a>.
- 4 UNDP and Secretariat of the WHO FCTC (2017). The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development.
- 5 Goodchild M., Nargis N., Tursan d'Espaignet E. (2018). Global economic cost of smoking-attributable diseases. Tobacco Control 2018; 27:58-64.
- 6 WHO (2022). Tobacco: Poisoning Our Planet. Available at: <a href="https://www.who.int/publications/i/item/9789240051287">https://www.who.int/publications/i/item/9789240051287</a>.
- 7 WHO Regional Office for South-East Asia (2017). Tobacco control for sustainable development. Available at: <a href="https://apps.who.int/">https://apps.who.int/</a> iris/handle/10665/255509.
- 8 WHO (2017). Tobacco and its environmental impact: an overview.
- 9 Zafeiridou M., Hopkinson NS., Voulvoulis N. (2018). Cigarette smoking: an assessment of tobacco's global environmental footprint across its entire supply chain, and policy strategies to reduce it.

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- 10 United States Environmental Protection Agency, "Greenhouse Gas Equivalencies Calculator." Available at: <a href="https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results">https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results</a> (accessed June 14, 2022).
- 11 WHO (2021). Tobacco. Available at: <a href="https://www.who.int/news-room/fact-sheets/detail/tobacco">https://www.who.int/news-room/fact-sheets/detail/tobacco</a>.
- 12 Kadir M.M., McClure E.M., Goudar S.S., Garces A.L., Moore J., Onyamboko M., ... & Global Network Tobacco Study Group. (2010). Exposure of pregnant women to indoor air pollution: a study from nine low and middle income countries. Acta obstetricia et gynecologica Scandinavica, 89(4), 540–548.
- 13 Passey M.E., Longman J.M., Robinson J., et al. (2016). Smoke-free homes: what are the barriers, motivators and enablers? A qualitative systematic review and thematic synthesis. BMJ Open, 6, e010260.
- 14 Sharma T., & Khapre M. (2021). Exposure of second hand smoke in women and children: A narrative review. Journal of Family Medicine and Primary Care, 10(5), 1804.
- 15 Turner M.C. et al. (2017). "Interactions between cigarette smoking and ambient PM 2.5 for cardiovascular mortality," Environ. Res., vol. 154, pp. 304–310.
- 16 Turner M.C. et al. (2014). "Interactions between cigarette smoking and fine particulate matter in the risk of lung cancer mortality in cancer prevention study II." Am. J. Epidemiol., vol. 180, no. 12, pp. 1145–149.
- 17 WHO Framework Convention on Tobacco Control (2013). Policy options and Recommendations: Articles 17 and 18. Available at: <a href="https://fctc.who.int/publications/m/item/policy-options-and-recommendations-on-economically-sustainable-alternatives-to-tobacco-growing">https://fctc.who.int/publications/m/item/policy-options-and-recommendations-on-economically-sustainable-alternatives-to-tobacco-growing</a>.
- 18 WHO (2022). Tobacco: Poisoning Our Planet. Available at: <a href="https://www.who.int/publications/i/item/9789240051287">https://www.who.int/publications/i/item/9789240051287</a>.
- 19 Novotny T.E., Bialous S.A., Lindsay B., et al. (2015). The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption. Bulletin of the WHO, 93(12), 887–880.
- 20 WHO (2017). Tobacco and its environmental impact: an overview.
- 21 WHO Framework Convention on Tobacco Control (2022). UNEP, Secretariat of the WHO FCTC partner to combat microplastics in cigarettes. Available at: <a href="https://fctc.who.int/newsroom/news/item/01-02-2022-unep-secretariat-of-the-who-fctc-partner-to-combat-microplastics-in-cigarettes">https://fctc.who.int/newsroom/news/item/01-02-2022-unep-secretariat-of-the-who-fctc-partner-to-combat-microplastics-in-cigarettes</a>.
- 22 WHO Framework Convention on Tobacco Control (2022). Tobacco and the environment. Available at: <a href="https://fctc.who.int/newsroom/spotlight/environment">https://fctc.who.int/newsroom/spotlight/environment</a>.
- 23 WHO Framework Convention on Tobacco Control (2022). UNEP, Secretariat of the WHO FCTC partner to combat microplastics in cigarettes. Available at: <a href="https://fctc.who.int/newsroom/news/item/01-02-2022-unep-secretariat-of-the-who-fctc-partner-to-combat-microplastics-in-cigarettes">https://fctc.who.int/newsroom/news/item/01-02-2022-unep-secretariat-of-the-who-fctc-partner-to-combat-microplastics-in-cigarettes</a>.
- 24 Slaughter E., Gersberg R.M., Watanabe K., et al. (2011). Toxicity of cigarette butts, and their chemical components, to marine and freshwater fish. Tob. Control, 20 Suppl 1, i25-9.
- 25 WHO Framework Convention on Tobacco Control (2022). UNEP, Secretariat of the WHO FCTC partner to combat microplastics in cigarettes. Available at: <a href="https://fctc.who.int/newsroom/news/item/01-02-2022-unep-secretariat-of-the-who-fctc-partner-to-combat-microplastics-in-cigarettes">https://fctc.who.int/newsroom/news/item/01-02-2022-unep-secretariat-of-the-who-fctc-partner-to-combat-microplastics-in-cigarettes</a>.
- 26 Zafeiridou M., Hopkinson N.S., Voulvoulis N. (2018). Cigarette smoking: an assessment of tobacco's global environmental footprint across its entire supply chain, and policy strategies to reduce it
- 27 Ibid.
- 28 Armstrong LE, Johnson EC. (2018) Water Intake, Water Balance, and the Elusive Daily Water Requirement, Nutrients. 10(12):1928. doi:10.3390/nu10121928.
- 29 WHO FCTC. UNEP, Secretariat of the WHO FCTC partner to combat microplastics in cigarettes. Available at: <a href="https://fctc.who.int/newsroom/news/item/01-02-2022-unep-secretariat-of-the-who-fctc-partner-to-combat-microplastics-in-cigarettes.">https://fctc.who.int/newsroom/news/item/01-02-2022-unep-secretariat-of-the-who-fctc-partner-to-combat-microplastics-in-cigarettes.</a>
- 30 WHO. WHO raises alarm on tobacco industry environmental impact. Available at: <a href="https://www.who.int/news/item/31-05-2022-who-raises-alarm-on-tobacco-industry-environmental-impact">https://www.who.int/news/item/31-05-2022-who-raises-alarm-on-tobacco-industry-environmental-impact</a>.
- 31 For full guidelines, see Secretariat of the WHO FCTC, Guidelines for implementation of Article 5.3 of the WHO Framework Convention on Tobacco Control on the protection of public health policies with respect to tobacco control from commercial and other vested interests of the tobacco industry.

This brief was produced in collaboration with the Secretariat of the WHO Framework Convention on Tobacco Control.





## **Tobacco Control**

What Ministries of Environment Need to Know

### **Key Points**

- The entire 'life cycle' of tobacco products is wrought with environmental damage.
- Tobacco threatens access to clean water and threatens the sustainability of oceans, seas and marine resources.
- 3 Tobacco control protects the environment and economy.
- 4 Ministries of environment can take important first steps to advance tobacco control and and accelerate progress towards the Sustainable Development Goals (SDGs).

Sustainable Development Goal 3 (SDG 3) aims 'to ensure healthy lives and promote well-being for all at all ages'. One of the means of achieving this goal is to strengthen implementation of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) in all countries, as appropriate (Target 3.a).

The WHO FCTC is a legally binding treaty that reaffirms the right to health.<sup>2</sup> It was developed in response to the tobacco epidemic and currently has 183 Parties, covering more than 90 percent of the global population.<sup>3</sup>

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## 1. The entire 'life cycle' of tobacco products is wrought with environmental damage.

## THE DEADLY CONSEQUENCES OF TOBACCO AND WHY GOVERNMENT SECTORS MUST WORK TOGETHER TO IMPLEMENT THE WHO FCTC

The social, economic and environmental impacts of tobacco consumption and production are staggering. Without adequate investment in tobacco control, it is estimated that up to 1 billion people could die from tobacco-related diseases during this century alone.4 Smoking-attributable diseases cost the global economy over a trillion US dollars annually, due to medical expenses and lost productivity.5 The environmental impacts, due to plastic pollution, deforestation and soil degradation from tobacco growing, as well as water and soil pollution from pesticide use and cigarette littering, are of growing concern. Levels of tobacco consumption and production in society are determined largely by policies beyond the health sector. This means that the development consequences of tobacco are largely avoidable through better policy coherence and common strategies that deliver shared gains for all sectors involved, accelerating progress against multiple SDGs.

From cultivation to post-consumption waste, tobacco causes environmental damage across the life cycle. In each step of the process, further damage to the environment is imposed. Lowand middle-income countries (LMICs) bear the brunt of this environmental impact.

Tobacco farming causes up to 5 percent of deforestation in developing tobacco-growing countries.<sup>6</sup> Consequently, approximately 200,000 hectares of land, equivalent to around half of the size of Cabo Verde, is cleared for tobacco agriculture and curing yearly.<sup>7</sup> Growing and curing tobacco also increases greenhouse and toxic gas emissions (e.g., carbon dioxide and methane) and contributes to global warming, land degradation and irreversible biodiversity loss.<sup>8</sup>

Tobacco adds nearly 84 million tons (Mt) of carbon dioxide to the atmosphere each year. Of this, 44.7 Mt are attributed to curing, 20.8 Mt to cultivation and 15.7 Mt to manufacturing.<sup>9</sup> This is equivalent to the greenhouse gas emissions of more than 15.6 million gasoline-powered vehicles driven for one year.<sup>10</sup>

Tobacco smoke is a major source of indoor air pollution. Secondhand smoke kills 1.2 million people each year. Children and women, including pregnant women, are the main victims of secondhand smoke, and suffer from the significant health consequences caused by tobacco smoke. Additionally, they often face difficulties in negotiating smoke-free spaces in line with their right to health. Those exposed to the toxins and fine particulate matter found in cigarette smoke are at higher risk of mortality from exposure to other sources of air pollution and vice versa.

#### **WHO FCTC ARTICLE 18**

Under Article 18 of the WHO FCTC, Parties are mandated to have "due regard to the protection of the environment and the health of persons in relation to the environment in respect of tobacco cultivation and manufacture within their respective territories." Following the policy options and recommendations on Articles 17 and 18, to protect the environment from the negative impacts of tobacco growing, Parties can implement initiatives to monitor deforestation and soil and water contamination from pesticides, implement educational programmes on the negative environmental impacts of tobacco production, and implement measures to prevent or recover areas damaged by tobacco production in line with national laws on environmental protection. Article 18 also addresses the health impacts and social issues of tobacco production in addition to the environmental harms. As such, Parties should include a baseline analysis of the prevalence of tobacco productionattributable health consequences such as green tobacco sickness to monitor impact.<sup>17</sup>



# 2. Tobacco threatens access to safe clean water and threatens the sustainability of oceans, seas and marine resources.

Tobacco causes significant pollution to water sources, threatening access to clean water as well as the sustainability of oceans, seas and marine resources. The tobacco industry produced 55 Mt of wastewater in 2014.<sup>18</sup> The chemicals in fertilizers used to promote growth of tobacco crops pollute nearby waterways, with yet unquantified implications for the quality of drinking water,<sup>19</sup> and cause widespread environmental erosion.<sup>20</sup>

## Cigarette butts are the most littered waste item worldwide (4.5 trillion annually).<sup>21, 22</sup>

Cigarette butts release microplastics, heavy metals and other chemicals when improperly discarded, polluting the world's oceans and coasts and disturbing the ecosystem.<sup>23</sup> The hazardous chemicals from cigarette butts can cause severe harm when ingested, threatening not only aquatic life and marine life, including marine and freshwater fish,<sup>24</sup> birds, plants, reptiles and mammals, but also human health when these contaminated species enter the food chain.<sup>25</sup>

**Tobacco also depletes vast amounts of precious** water. One cigarette requires about 3.7 liters of water over its life cycle.<sup>26</sup> Each year, 22 billion tonnes of water are used for the global production of tobacco, approximately 3.5 times the water volume of Lake Chad or equivalent to around 15 million Olympic-sized swimming pools.<sup>27</sup> Tobacco production requires more water than other crops — to eight times the water tomatoes and potatoes need. For every kilogram of tobacco not grown and consumed, the potable water needs of a human for a whole year could be realized instead.<sup>28</sup>

## UN ENVIRONMENT PROGRAMME (UNEP) AND WHO FCTC CLEAN SEAS CAMPAIGN

Recognizing the impact full implementation the WHO FCTC can have on reducing toxic waste in oceans and seas, UNEP and the Secretariat of the WHO FCTC have partnered together to raise awareness and drive action. The Clean Seas Campaign raises awareness on the environmental and health impacts caused by tobacco and microplastics pollution.<sup>29</sup>

## 3. Tobacco control protects the environment and the economy.

Tobacco control measures encourage countries and individual farmers to shift from tobacco production toward activities that are friendlier to people and planet; call on responsible use and disposal that does not harm others or the environment; protect people from the health impacts of secondhand smoke; and support tobacco users to quit and non-users to never start, reducing the overall environmental toll of tobacco. By implementing the WHO FCTC in full to address the overarching need to reduce tobacco use, countries will in turn lessen tobacco-related waste and tobacco-attributable environmental damage.

Country	Cost of TPW	Proportion of waste from tobacco products
Jordan	US\$57 million	42%
China	US\$2 billion	28%
Germany	US\$235 million	26%
South Africa	US\$117 million	24%
Brazil	US\$203 million	15%
India	US\$766 million	9.60%

Policies and programmes that hold the tobacco industry responsible for its environmental impact, for example, through Extended Producer Responsibility and Product Stewardship programmes, can enhance achievement of environmental SDGs while shifting the costs of clean up from governments and taxpayers to the industry.

# 4. Ministries of environment can take important first steps to advance tobacco control and accelerate progress towards the SDGs.

Ministries of environment have a critical role to play, working with ministries of health, trade and industry, labour, agriculture, finance and others to protect the environment from the negative impacts of tobacco.