

TOBACCO'S THREAT TO THE ENVIRONMENT

From start to finish, the tobacco life-cycle is an overwhelmingly polluting and damaging process. Tobacco devastates the environment. It is responsible for: large-scale deforestation (1); catastrophic carbon emissions (2); loss of biodiversity, including wildlife (3); depletion of the planet's water, fossil fuel and metal resources (3); desertification, depleting soil fertility (3); exuberant emission of greenhouse gases (4); contamination of drinking water (3); emission of toxicants in the air via direct, second- and third-hand smoke (3); non-biodegradable cigarette butts (5,6); and degradation of terrestrial and aquatic ecosystems (7,8).

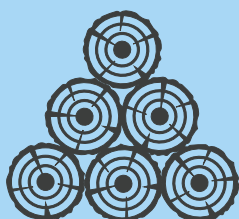
STAGES OF TOBACCO LIFE-CYCLE



ONE TREE MAKES 300 CIGARETTES (1)



84 MILLION TONNES OF CO₂ EMISSIONS from tobacco production are released into the air each year, equal to 3 million transatlantic flights (2)



NEARLY 600 MILLION TREES are cut each year to produce cigarettes (9)

6 TRILLION CIGARETTES are manufactured every year (2)

STAGE I CULTIVATION OF TOBACCO

STAGE II MANUFACTURING AND DISTRIBUTING

Tobacco smoke contains at least **70 CARCINOGENIC CHEMICALS**



that are known to cause cancer in people and animals (2)
The total economic cost of smoking is **US\$ 1436 BILLION** (10)

STAGE III CONSUMPTION

Cigarette butts are the single largest type of litter (2)



4.5 TRILLION CIGARETTE BUTTS are discarded improperly every year (11)

STAGE IV WASTE DISPOSAL

Tobacco product **waste** contains over



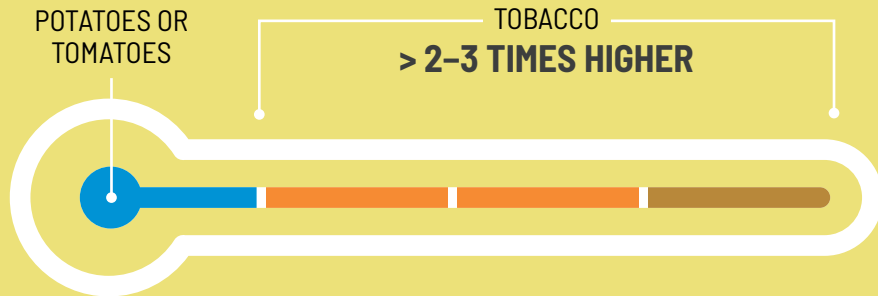
7000 TOXIC CHEMICALS, which can leach into and accumulate in the environment (3)

STAGE V "RESIDUAL" TOBACCO

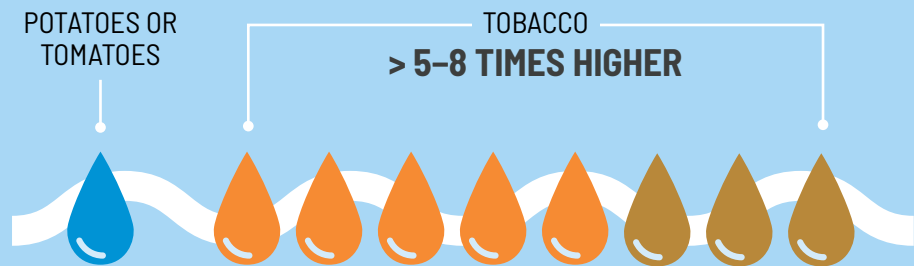
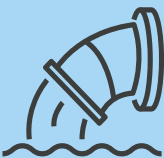
TOBACCO'S ENVIRONMENTAL IMPACT COMPARED TO THAT OF OTHER COMMODITIES

Cultivation of 1 tonne of **tobacco** versus 1 tonne of **potatoes or tomatoes** (4):

CONTRIBUTION TO CLIMATE CHANGE



CONTRIBUTION TO WATER DEPLETION



DEBUNKING A TOBACCO INDUSTRY MYTH

The tobacco industry uses tactics to so-called greenwash its reputation and build an image of itself as a sustainable and eco-friendly industry (12). These greenwashing activities are a guise perpetrated by corporations and a public diversion.

Examples of greenwashing activities (12):

- funding beach clean-ups
- marketing new products as “eco-friendly”, “natural”, “healthy” and “organic”
- funding environmental and disaster relief organizations.

Tobacco companies save a lot of money by not having to pay the full cost of the environmental impact of the tobacco cycle.

NOVEL AND EMERGING NICOTINE AND TOBACCO PRODUCTS ARE NOT ECO-FRIENDLY.

They can potentially be more environmentally harmful than conventional cigarettes (6).

More environmentally intensive manufacturing processes	Single-use products	Non-biodegradable and non-recyclable materials
Contain hazardous substances, such as heavy metals	Nicotine salts and heavy metals can leach into soil and water, or be ingested by wildlife	Generate toxic emissions that can pollute the environment

WHAT ACTION CAN BE TAKEN?



SPREAD THE WORD

Raise awareness that tobacco harms the environment. Don't fall for the tobacco industry's attempt to greenwash its products.



QUIT TOBACCO TO SAVE OUR PLANET

Protect the environment by not being a part of the destructive tobacco life-cycle that poisons our water, soil, beaches and city streets.



MAKE THE TOBACCO INDUSTRY CLEAN UP THEIR MESS

Hold the tobacco industry accountable for the environmental damage and the physical and financial costs of disposing waste.



HELP TOBACCO FARMERS SWITCH TO SUSTAINABLE CROPS

Support sustainable livelihoods to reduce the environmental impact of tobacco-growing and promote better and healthier working conditions for tobacco farmers.



SUPPORT THE IMPLEMENTATION OF COMPREHENSIVE TOBACCO-CONTROL POLICIES

Support the implementation of the WHO Framework Convention on Tobacco Control to reduce the environmental impact of tobacco.

For more information and guidance, visit:
<https://www.who.int/campaigns/world-no-tobacco-day/2022/calls-to-action>



Tackling tobacco from the perspective of promoting economically viable alternatives for tobacco workers, as well as advancing the protection of the environment, would contribute to the achievement of numerous goals of the 2030 Agenda for Sustainable Development (13):

Goal 2 (Zero hunger), Goal 3 (Good health and well-being), Goal 6 (Clean water and sanitation), Goal 8 (Decent work and economic growth), Goal 12 (Responsible consumption and production), Goal 13 (Climate action), Goal 14 (Life below water), Goal 15 (Life on land).

REFERENCES¹

1. State of the world's forests 2012. Rome: Food and Agriculture Organization of the United Nations; 2012 (<https://www.fao.org/3/i3010e/i3010e00.htm>).
2. More than 100 reasons to quit tobacco. In: World Health Organization [website]: Geneva: World Health Organization; 2022 (<https://www.who.int/news-room/spotlight/more-than-100-reasons-to-quit-tobacco>).
3. Tobacco and its environmental impact: an overview. Geneva: World Health Organization; 2017 (<https://apps.who.int/iris/handle/10665/255574>).
4. Zafeiridou M, Hopkinson NS, Voulvoulis N. Cigarette smoking: an assessment of tobacco's global environmental footprint across its entire supply chain, and policy strategies to reduce it. *Environ Sci Technol*. 2018;52(15):8087–94. doi:10.1021/acs.est.8b01533.
5. Dobaradaran S, Soleimani F, Akhbarizadeh R, Schmidt TC, Marzban M, BasirianJahromi R. Environmental fate of cigarette butts and their toxicity in aquatic organisms: a comprehensive systematic review. *Environ Res*. 2021;195:110881. doi:10.1016/j.envres.2021.110881.
6. Tobacco and the environment. Washington (DC): Truth Initiative; 2021 (https://truthinitiative.org/sites/default/files/media/files/2021/03/Truth_Environment%20FactSheet%20Update%202021_final_030821.pdf).
7. Micevska T, Warne MSJ, Pablo F, Patra R. Variation in, and causes of, toxicity of cigarette butts to a cladoceran and microtox. *Arch Environ Contam Toxicol*. 2006;50(2):205–12. doi:10.1007/s00244-004-0132-y.
8. Slaughter E, Gersberg R, Watanabe K, Rudolph J, Novotny TE. Toxicity of cigarette butts, and their chemical components, to marine and freshwater fish. *Tob Control*. 2011;20:i23–7. <http://dx.doi.org/10.1136/tc.2010.040170>.
9. World No Tobacco Day 2022. In: World Health Organization [website]: Geneva: World Health Organization; 2022 (<https://www.who.int/campaigns/world-no-tobacco-day/2022>).
10. Goodchild M, Nargis N, Tursan d'Espaignet E. Global economic cost of smoking-attributable diseases. *Tob Control*. 2018;27:58–64. doi:10.1136/tobaccocontrol-2016-053305.
11. 5 ways cigarette litter impacts the environment. In: Truth Initiative [website]. Washington (DC): Truth Initiative; 2017 (<https://truthinitiative.org/research-resources/harmful-effects-tobacco/5-ways-cigarette-litter-impacts-environment>).
12. Greenwashing. In: Tobacco tactics [website]. Bath: University of Bath; 2020 (<https://tobaccotactics.org/wiki/greenwashing/>).
13. Resolution adopted by the General Assembly on 25 September 2015. Transforming our world: the 2030 Agenda for Sustainable Development. New York (NY): United Nations; 2015 (A/RES/70/1; <https://undocs.org/en/A/RES/70/1>).

¹ All references accessed 2 May 2022.