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Why the Zero Draft of the UN Plastics Treaty Should Deal with Tobacco's Toxic Plastics



Key messages

1. Tobacco is a sector governed by a treaty adopted by over 180 Parties, the World Health Organization Framework Convention on Tobacco Control (WHO FCTC).
2. The tobacco industry's toxic plastics, primarily in the form of cigarette filters and disposable vapes, pose significant environmental and public health risks. These have been classified as problematic and avoidable single use plastics in a WHO FCTC Conference of Parties (COP) Decision.
3. With the gravity of the environmental impact of cigarette butts and disposable vapes and the unique regulatory measures that apply to tobacco, WHO and others have called for an immediate ban on these products.
4. While the current Revised Draft Text of the international legally binding instrument on plastic pollution, including in the marine environment (UN Plastics Treaty), remains silent on addressing tobacco-related plastics, in February 2024, the 10th session of the WHO FCTC Conference of Parties adopted a landmark decision emphasizing the need to align efforts to combat plastic pollution with tobacco control objectives.
5. The Decision identified key areas for policy coherence, such as tobacco industry liability, Extended Producer Responsibility (EPR), classification of tobacco plastics as hazardous waste, regulatory options (such as a ban on cigarette filters and vaporizers), and the protection of tobacco-related environmental policies against the commercial and vested interests of the tobacco industry.
6. The INC4 must be guided by the WHO FCTC and the COP 10 decision to ensure that the future international treaty against plastic pollution would support tobacco control efforts instead of undermining them. (See Side by Side for details on the provisions proposed)

Incorporating the suggested recommendation to address the issues of tobacco's toxic plastics presents a significant opportunity to enhance the effectiveness of the UN Plastics Treaty. Further, these recommendations can help mitigate the substantial risk of undermining tobacco control efforts by the UN Plastics Treaty

About this Brief

This brief is an updated version of the STPA's INC3 Brief: Why the Zero Draft of the UN Plastics Treaty Should Deal with Tobacco's Toxic Plastics, which adds:

- Updates based on the variation in text between the Revised Draft Text and the Zero Draft Text.
- Updates based on the Decision of the 10th session of the WHO FCTC Conference of Parties on the implementation of Article 18.
- Updates based on the Decision of the 10th session of the WHO FCTC Conference of Parties on the implementation of Article 19.
- Additional information relating to disposable vapes.
- Adds a section (Background) to respond to the fact that the Revised Draft Text of the international legally binding instrument on plastic pollution, including in the marine environment,[1] that was published ahead of INC-4[2] failed to address the issues raised by STPA regarding tobacco; despite the arguments provided during the previous negotiations and submissions/statements online.

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I. INC4 Abridged Brief

1. Background

Tobacco's toxic plastics & the WHO FCTC

The tobacco industry's toxic plastics (cigarette filters, vaporizers, and other tobacco products) are no ordinary plastics because the tobacco industry and its main product, the cigarette, kill up to half its consumers without providing a single health benefit.[3] Both the product and the producer are covered by strict, all-encompassing, evidence-based regulations across the world through the WHO FCTC.

Tobacco: Omission in the Revised Draft Text

The future instrument against plastic pollution will inevitably have to address tobacco's toxic plastics because it is one of the most common and abundant forms of plastics found on coasts/affecting marine life.[4] A global movement, Stop Tobacco Pollution Alliance (STPA), pointed out that the failure to recognize the uniqueness of the tobacco sector and align it with the WHO FCTC could potentially undermine treaty objectives of saving lives from tobacco, thereby increasing public health risks.[5] Particularly, current and standard provisions on EPR, circularity/recycling redesigning, safe alternatives, incentives, and stakeholder/private sector engagement, which may form part of the solutions in the context of plastic industries, would go against the objectives of public health if applied to the tobacco industry as these would contravene specific provisions of the WHO FCTC.

However, despite several interventions from member states throughout the past INC negotiations and the written position submitted by the WHO, the current Revised Draft of the UN Plastics Treaty published on Dec 28, 2023, ahead of INC-4 (April 2024) remains silent on tobacco. There is no mention of WHO FCTC and tobacco products/ sector.

WHO FCTC COP10 Decision relating to tobacco plastics

In February 2024, the WHO FCTC COP 10 adopted a decision on implementing WHO FCTC Article 18 (Protection of the Environment). The COP 10 Decision on Article 18 recognizes that *"plastic cigarette filters are unnecessary, avoidable and problematic, single-use plastics that are widely spread in the environment, killing microorganisms and marine life, as well as polluting oceans."* It takes into account *"the work of the Intergovernmental Negotiating Committee on Plastic Pollution (INC), the issue of microplastic pollution caused by plastic cigarette filters, ongoing global efforts in the development of standards for hazardous waste management under environmental laws,"* recalls the fact that *"the WHO FCTC has been officially referenced during the United Nations plastics treaty negotiations;"* and notes that *"WHO has recommended an immediate ban on cigarette filters and vaporizers..."*

The COP 10 Decision on Article 18, which is aimed at *"aligning the WHO FCTC work with the principles, objectives and commitments of other international agreements, ... including but not limited to the Intergovernmental Negotiating Committee on Plastic Pollution;"* serves to provide ample guidance to the INC4:

1. encourages "*Parties to **consider comprehensive regulatory options concerning filters and... related electronic devices....***"
2. urges "*Parties...to **protect tobacco-related environmental policies from the commercial and vested interests** of the tobacco industry and those working to further its interests.*"
3. invites "*Parties...to **hold the tobacco industry accountable** for the damage it causes to the environment ... and the disposal and treatment of waste resulting from their manufacture and consumption.*"
4. urges "*Parties to counter the so-called corporate social responsibility activities of the tobacco industry, and to ensure that **WHO FCTC objectives are not undermined through the industry's implementation of extended producer responsibility systems.***" (EPR)
5. to urge Parties to **coordinate their efforts to address plastic waste** of tobacco products and related electronic devices with the objectives of the WHO FCTC in relation to national policies and international treaties and fora **dealing with plastics and hazardous waste**, as appropriate.
6. requests the Secretariat "*to **examine regulatory options** regarding the prevention and management of waste generated by the tobacco industry and its products, including a **ban on plastic cigarette filters** and the management of hazardous waste from cigarettes.*" (emphasis supplied).

Another [Decision on the Implementation of Article 19](#) (Liability) was also adopted during COP10; it-

1. urges Parties to **call upon international and regional organizations** in which Parties are represented **to ensure that the work undertaken** in these international fora, including relation to the environment and regulation of business conduct, supports tobacco control and does not undermine it;
2. requests the Secretariat to participate in global fora to promote policy coherence between tobacco industry liability and the development of international law in relation to the environment, human rights, and regulation of business conduct (emphasis supplied).

These decisions, adopted by consensus by over 180 Parties to the WHO FCTC, create an impetus for the Member States to ensure that the future international instrument against plastic pollution would support tobacco control, not undermine it. As indicated in the Decisions, the key areas for policy coherence include tobacco industry liability, EPR, classification of tobacco plastics as hazardous waste, regulatory options such as a ban on cigarette filters and vaporizers, and protecting tobacco-related environment policies against the commercial and vested interests of the tobacco industry.

Box 1: Omission of tobacco/WHO FCTC in the Revised Draft Text

At the second session of the Intergovernmental Negotiating Committee (INC-2) to develop an international legally binding instrument on plastic pollution, held in Paris in June 2023, delegates tackled several key elements of the future instrument. The WHO FCTC was mentioned for the first time since the negotiations started,[6] but it was referred to only as one of the many multilateral agreements that the UN Plastics Treaty needs to be integrated with, primarily to avoid duplication.[7] For the inter-sessional work leading to the third session of the Intergovernmental Negotiating Committee (INC-3), the Zero Draft Text for the treaty was released, and the WHO submitted a position paper supporting an immediate ban on cigarette filters and disposable vapes, citing the study of the Belgian Supreme Health Council. At least 3 Parties (Singapore, Palau, Panama) and three other organizations that are part of the STPA have proposed that cigarette filters be recognized as a plastic problem. Particularly, STPA members proposed that the Draft Text should recognize the tobacco sector as unique and align the text with the WHO FCTC, including through a ban on tobacco filters.

To incorporate all input received, including at INC3, the Revised Draft Text was published on Dec 28, 2023, in preparation for INC-4, taking place from 23-29 April 2024 in Ottawa, Canada. The text was expanded to include more options for each of the provisions. Although the placeholders on Objectives, Scope, Principles, and other cross-cutting sections have been filled out, there is no mention of the synergy with WHO FCTC or the recognition of the tobacco sector.

2. Discussion

Why the Zero Draft of the UN Plastics Treaty Should Deal with Tobacco's Toxic Plastics

The cigarette kills up to half its consumers, and the cigarette filter found on almost all commercial cigarettes does not provide a single health benefit. Governments around the world address tobacco products and tobacco producers with evidence-based regulations aiming to reduce tobacco use.

The cigarette filter poses a significant threat to both human and environmental health. The dominant type of filter is made of 12,000-15,000 cellulose acetate strands. These can produce minute plastic fibers that are then inhaled and have been found in deceased smokers' lungs. While smokers believe that these plastic attachments can filter out tobacco toxins and nicotine, cigarette smoking continues to cause cancer, cardiovascular disease, and pulmonary disease despite 60 years of filtered cigarette smoking.

In fact, filtered cigarette smoking has been linked to a more aggressive form of lung cancer. The tobacco industry knows that the design of the cigarette filter is deceptive and defective, and yet continues to market this feature to attract young smokers as well as sustain smoking among already addicted smokers.

WHO FCTC provides obligations and guidance for governments to counter tobacco industry tactics with evidence-based tobacco control measures. These include, among others, advertising and sponsorship bans (including so-called corporate social responsibility efforts by tobacco companies), product regulation, taxation policies, assigning liability for harms, and preventing conflicts of interest in policy development and implementation.

Because more than 180 Parties to the WHO FCTC recognize that the tobacco product is unique in nature, i.e., it kills up to half of its users while providing no health benefit, they are subject to a set of distinct rules, and thus, tobacco would deserve a specific consideration in the Revised Draft of the UN Plastics Treaty. The draft should consider these issues:

a. Avoidable and problematic plastics

Cigarette butts comprise between 5-9% of aquatic trash. Cigarette butts continue to be the most littered item collected in urban and beach cleanups for decades, despite industry-led cleanup campaigns. Discarded cigarette butts release thousands of microplastic fibers into aquatic environments. Most smokers do not realize that filters are made of non-biodegradable plastic and that these do not protect them from the devastating effects of tobacco use. Notably, unfiltered cigarettes continue to be marketed and used, but smokers find filtered cigarettes more appealing.

b. Classification as hazardous plastic waste

Cigarette butts contain hazardous chemicals which, according to European Union (EU) Single-Use Plastics (SUPs) Directive, should lead to their classification as hazardous waste. Cigarette butts leach out chemicals such as nicotine, tobacco-specific carcinogens, and metals that pollute aquatic environments. Cigarette butt leachates have been shown in laboratory studies to be toxic to microorganisms, plants, invertebrates, and vertebrates. The leachates could kill marine life and affect reproduction in a short time. The rate of toxic contamination is high in both landfills and the aquatic environment.

c. No circularity

Due to the toxic nature of cigarette butts and the trillions discarded into the environment each year, collecting cigarette butt waste to recycle is not likely to reduce the overall burden of this waste. Removal of toxins from smoked filters is a resource/ energy-intensive process that has not been studied as to safety and efficacy. Recycling efforts are not likely scalable due to the intensity of efforts needed to collect, separate, transport, and detoxify them for use in other consumer products.

Further, changes in the cigarette filter design (e.g., leading to easier recyclability) would contravene product regulations that prevent the tobacco industry from introducing attractive design features. The tobacco industry has fraudulently marketed filters for decades and has continuously undermined bans on marketing and sponsorship, including tobacco's corporate social responsibility (CSR) activities, contravening Article 5.3 and Article 13 of the WHO FCTC. A redesigned filter marketed as eco-friendly and will likely allow smokers to discard 'biodegradable' cigarettes with less guilt.

d. No alternatives or substitutes

Substitutes for plastic cigarette filters, such as 'biodegradable' filters, will still leach out hazardous chemicals. The tobacco industry has started shifting to market 'biodegradable' filters to project a positive image and, potentially, to escape responsibility for the growing problem of tobacco product waste. However, any change in the cigarette filter design could be used to market the product as safe and to encourage uptake, including among the youth. Biodegradable filters would again confront regulatory agencies with a redesign that would not have any public health benefit; it would be used to sustain tobacco sales and contravene marketing bans (WHO FCTC Article 13).

e. Tobacco polluter, not 'stakeholder'

The tobacco industry does not positively benefit society or the global economy. It violates human rights and undermines the achievement of over a dozen of the 17 Sustainable Development Goals. Based on obligations under Article 5.3 of the WHO FCTC, Parties should not partner with the tobacco industry in considering public health or environmental policies. More than 70 countries have already banned all forms of tobacco advertising, promotion, and sponsorships (TAPS), including so-called CSR. Recognizing the tobacco industry as stakeholders or responsible producers under Extended Producer Responsibility (EPR) schemes undermines tobacco CSR restrictions and WHO FCTC Article 5.3 policies.

Box 2: Recommendations for the implementation of Article 5.3

Guidelines for the Implementation of Article 5.3 recommends Parties:-

1. **Raise awareness** about the harmful nature of tobacco products and the tobacco industry interference with Parties' tobacco control policies.
2. Establish measures to **limit interactions** with the tobacco industry and **ensure the transparency of these interactions**.
3. **Reject partnerships** and non-binding or non-enforceable agreements with the tobacco industry.
4. **Avoid conflicts of interest** for government officials and employees.

5. **Require** that **information** provided by the tobacco industry be transparent and accurate.
6. **Denormalize** and, to the extent possible, regulate **activities described as “socially responsible”** by the tobacco industry, including but not limited to activities described as “corporate social responsibility.”
7. Do not give preferential treatment to the tobacco industry.
8. **Treat the state-owned tobacco industry in the same way** as any other tobacco industry.

3. Summary of Recommendations

The Revised Draft Text should consider adding provisions that would allow for the following:

- a. Immediate banning of cigarette filters and disposable vapes.
- b. Classification of tobacco plastics as hazardous waste.
- c. Recognition of the fundamental conflict of interest between the tobacco industry and public health and protection of tobacco-related environment policies against the commercial and vested interests of the tobacco industry.
- d. Dealing with tobacco industry liability and holding it accountable for environmental harms.

Please refer to the proposed text/draft provisions in the ‘Talking Points’ (document) to accomplish this task.

In sum, the provisions of the future instrument against plastic pollution provisions should support tobacco control, not undermine it, especially in relation to EPR, circularity/ recycling redesigning, safe alternatives, incentives, and stakeholder/ private sector engagement.

II. Detailed Brief

Why the Zero Draft of the UN Plastics Treaty Should Deal with Tobacco's Toxic Plastics

1. Cigarette filters are avoidable and problematic plastics that should be banned.

The 10th session of the WHO FCTC Conference of Parties Decision [8] on Article 18 (Protection of the Environment) recognizes that *“plastic cigarette filters are unnecessary, avoidable and problematic, single-use plastics that are widely spread in the environment, killing microorganisms and marine life, as well as polluting oceans.”* It highlights the imperative for Parties to the WHO FCTC to actively engage in relevant national environmental policy development and international fora to align these efforts with the objectives of the WHO FCTC. Among others, this Decision encourages *“Parties to consider comprehensive regulatory options regarding filters in cigarettes and in other tobacco and related products, and their related electronic devices, taking into consideration their public health impacts.”* This includes considering measures such as banning cigarette filters and implementing levies or surcharges to hold the tobacco industry financially accountable rather than endorse tobacco EPR initiatives that may inadvertently promote tobacco industry CSR activities in contradiction to the goals of the WHO FCTC.

a. Deadly plastic accessory

The cigarette filter is an accessory designed to make smoking more appealing by creating the illusion that toxins are being filtered out. This gives an impression of increased safety, making the product more attractive to potential and current users.[9] Unknown to most people,[10] cigarette filters have no proven ability to make cigarettes safer[11] and have been linked to a more aggressive form of lung cancer.[12] In a small trial, smokers found unfiltered cigarettes less desirable and smoked less, and a larger trial is underway to prove the potential public health impact of a ban on filters altogether.[13]

Notably, a cigarette can function without a filter, which is also true for cigars and roll-your-own tobacco products currently in the market. In some jurisdictions, “unfiltered” cigarettes continue to be marketed.[14] Research shows that as smokers transitioned from unfiltered to filtered cigarettes, the risk for adenocarcinoma increased around 4 to 10-fold due to cigarette design (especially filter) and the corresponding smoking behavior.[15,16]

Cellulose acetate, one of the main components of cigarette butts, is considered a macro plastic that quickly breaks down into smaller fibers during use and disposal.[17] A single cigarette filter has 12,000–15,000 cellulose acetate strands and releases approximately 100 cellulose acetate fibers a day when discarded as a cigarette butt. In addition, fibers may be inhaled by smokers during use.[18] Notably, plastic fibers have been observed in deceased smokers' lungs.[19]

b. Deceptive and defective

The tobacco industry initially invested in efforts to use the filter to make cigarettes appear safer (i.e., reduce health harm) but abandoned this idea because filtering out important components, such as nicotine and flavors, would defeat its objective of making cigarettes more attractive and/or addictive.[20] The tobacco industry has continued to innovate filter designs to market the product to young people by adding flavors, capsules,[21] colors,[22] and chemicals that would allow the filter to stain when used to give the impression that toxins are filtered out.[23]

c. Ubiquitous

Based on reports analyzing litter composition in rivers and seas, cigarette butts comprise 5-9% [24],[25] of aquatic trash. Butts have also been identified as one of the most common plastic items (29%) that are floating in harbors[26] and that sink in the seabed (5.14%).[27] Notably, cigarette butts have consistently remained on top of the list of plastic items in total debris collected (33%) in beach cleanups[28],[29] as well as in municipal litter collection.[30] The tobacco industry has supported cleanups as part of its 'greenwashing' efforts (see Table 1).[31] A typical filter releases approximately 100 microfibers a day (less than 0.2 mm in size), and an estimated 0.3 million tons of cellulose acetate filters are disposed of annually across the globe.

Although there is a significant global health effort to reduce the health consequences of tobacco use,[32] cigarette production is on an upward trend,[33] and there is no evidence that the downstream efforts of cleanup, public information campaigns, or anti-littering laws have reduced the annual environmental burden of tobacco product waste.[34],[35]

Recommendations:

- Immediately ban cigarette filters (government agencies in Belgium and Netherlands have called for such a ban)
- Immediately ban disposable vapes (The UK,[36] France,[37] and Germany[38] are set to implement a total ban while Ireland[39] has restricted their sale as an environmental measure).

Box 3: Imposing an immediate ban on cigarette filters

The COP 10 Decision recalls the WHO's submission to the INC-3, which urged an immediate ban on plastics in nicotine and tobacco products. Additionally, it requests the WHO FCTC Secretariat to explore regulatory options, including a ban on plastic cigarette filters.[40] This bolsters the previous calls made by civil society groups, [41],[42] and the World Wildlife Fund (WWF)[43] for an immediate ban,[44] rather than a phase-out, on plastic cigarette filters. WWF particularly emphasized the need to classify cigarette filters in the high-risk plastics category.[45]

Despite the special provisions for tobacco products in the EU Single-Use Plastics (SUP) Directive, advocates from France,[46] and Denmark,[47] as well as government support from the Superior Health Council of Belgium[48] and a minister from the Netherlands,[49] analyzed the shortcomings of current interventions and still call for an EU-wide ban on filters.[50] Furthermore, in their submissions to the INC-3, Singapore[51] and Palau[52] have voiced support for classifying cigarettes as a problematic single use plastic under the UN Plastics Treaty.

A ban would end the decades-long fraud perpetuated by the tobacco industry to represent filters as a "harm reduction" tool;[53] this exposure and accountability could reduce the tobacco industry's ability to innovate products at the expense of human[54] and environmental health.[55] This measure would immediately remove a major source of toxic plastics from our environment.[56] Notably, it could also have a significant impact on discouraging consumption[57] since smokers smoked more filtered cigarettes than unfiltered cigarettes (due to the reduced harshness)[58] and to compensate for the nicotine requirement. Furthermore, as early as 1989, it was suggested that compensatory behavior (increasing the number of cigarettes smoked per day) to satisfy nicotine requirements after switching to filtered cigarettes is an important risk factor for lung cancer.[59] Because the tobacco industry has changed the cigarette composition as part of the shift toward filtered cigarettes,[60] it must also be held strictly liable for updating the constituents, ensuring that the cigarette will be reconstituted to offset the toxic constituents added[61] during the shift from unfiltered to filtered cigarettes.

Science has established the myriad harms caused by cigarettes. Cigarette filters are an accessory to a product that adds no value to the economy or society.[62] They represent a severe design flaw distorted to give a false sense of safety to consumers, a fraud perpetuated by the tobacco industry.[63] Delaying action, such as waiting to agree on an annexed list of plastic products to be banned (as proposed by some delegates at the INC-2[64] and INC-3[65]) or even "phasing out" filters,[66] would unnecessarily prolong the cigarette filters' adverse impacts on the health and environmental rights of people.

2. Cigarette filters should be classified as hazardous plastic waste that requires special handling, taking into account the chemicals of concern that attach to the filters.

Cigarette butts must be classified as hazardous waste due to their ecotoxicity and ease of broad contamination in waters, along with the accompanying challenges in litter abatement. The need to destroy seized cigarettes due to increased anti-smuggling efforts adds more hazardous waste to the environment. The COP10 Decision on Article 18 expressly considers “the work of the Intergovernmental Negotiating Committee on Plastic Pollution, the issue of microplastic pollution caused by plastic cigarette filters, **ongoing global efforts in the development of standards for hazardous waste management under environmental laws.**”[67] It recognizes that “plastic cigarette filters are unnecessary, avoidable and problematic, single-use plastics that are widely spread in the environment, killing microorganisms and marine life.”[68] It then urges Parties to coordinate their efforts to “address plastic waste of tobacco products and related electronic devices with the objectives of the WHO FCTC in relation **to national policies and international treaties and fora dealing with plastics and hazardous waste.**”[69]

Cigarette butt leachates include nicotine, aromatic amines, and nitrosamines [70],[71],[72]; polycyclic aromatic hydrocarbons (PAH) [73],[74]; metals [75],[76]; BTEX compounds, including benzene, toluene, ethylbenzene, o-xylene, and p-xylene;[77] and phenols.[78] Cigarette butts leach low-molecular-weight PAHs while retaining larger PAHs.[79] They also rapidly leach a range of toxic metals.[80]

Source: Beutel, M. W. , Harmon T.C., Novotny, T. E., A Review of Environmental Pollution from the Use and Disposal of Cigarettes and Electronic Cigarettes: Contaminants, Sources, and Impacts, Sustainability 2021, 13, 12994 See more in ANNEX 1.

a. Ecotoxicity

Cigarette butts contain hazardous chemicals, which, according to EU legislation, should lead to their classification as hazardous waste.[81] Cigarette butt leachates are extremely toxic[82], [83] to plants, cells, nervous systems, larvae, and genes, and have carcinogenic constituents (i.e., phytotoxic[84], cytogenic[85], neurotoxic[86], genotoxic[87], mutagenic,[88] teratogenic[89] carcinogenic[90]). This is true for a wide range of organisms, including the most resilient and tolerant forms[91] (e.g., Silverfish, clawed frogs, Catfish, snails, amoeba,[92] and shrimp[93]), increasing mortality with extended exposure, as smoked filters containing tobacco remnants are more toxic than those without.[94],[95] Even a small amount of cigarette butt leachate was sufficient to affect reproduction in the case of copepods, a key food source of fish.[96] Both the loose microfibers and chemicals in cigarette filters were found to be teratogenic[97], such that cigarette butts are recommended to be used as toxic pesticides to kill mosquito larvae.[98]

Laboratory-based studies show that cigarette butts can kill marine life in a short period of time. [99] The experiments usually lasted no more than 2-10 days before the lifeforms died. In one study, as little as five cigarette butts in a liter of water killed snails in two hours.[100]

b. Contamination

Because of cigarette butt size and the littering behavior that comes with the product design, cigarette butts are one of the most littered items that find their way into the environment.[101] The toxicity of cigarette butts suggests that the risk of contamination through leachates is high. [102] For instance, a study showed that a 1% mass of cigarette butts added to landfill waste increases its heavy metal contamination by 5%.[103] This is aggravated by the fact that cigarette butts easily absorb nano plastics.[104] The rate of contamination is also rapid; one cigarette butt can contaminate a liter of water with nicotine to levels that would be toxic to microorganisms.[105]

There is also evidence for bioaccumulation in fish[106] and shellfish[107] that may allow entry of chemicals and metals into the human food chain,[108] Accidental ingestion of cigarette butts by humans and animals has resulted in toxicity. [109]

An estimate of USD 20 billion conservatively accounts for the loss of ecosystem services annually[110] due to the plastic nature of cigarette butts and does not include costs of accelerated/ aggravated harm to the ecosystem due to the toxicity of cigarette butts.[111]

c. Litter problem

Experts looking into tobacco industry documents revealed that decades of anti-littering programs have not worked because smokers are wired to litter and are not amenable to anti-littering efforts.[112] Due to the high rate of littering, cigarette butts are not easily collected, requiring additional litter management costs,[113] such as in New York and San Francisco.[114], [115] In the absence of litter management capacity, cigarette butts remain in the environment, in the storm drains, streets, and around litter sites,[116] continuing to release toxins and microplastics to the environment, contaminating air, water, and soil.[117] This is further aggravated by the need to manage rising e-cigarette litter. [118]

An estimate of USD 1 billion accounts for the waste management of cigarette butts annually, excluding litter management which is far more substantial than waste management costs.[119]

Box 4: Disposable vapes

The WHO has been reporting on the harmful effects of e-cigarettes on human health^[120] and, highlighting the plastic litter from these products⁽ⁱ⁾, in a submission relating to the UN Plastics Treaty, ^[121] called for an immediate ban or strict restrictions of plastics in nicotine and tobacco products, including electronic delivery systems and their packaging.^[122] In the same vein, European countries like Germany^[123], Belgium^[124], France^[125], and the UK^[126] are in the process of implementing a ban on a subset of e-cigarettes, i.e., disposable vapes, due to the potential environmental impact of the single use plastics in these products.^[127] Australia also plans to ban importing, manufacturing, and supplying disposable vapes,^[128] while New Zealand has banned most disposable vapes and targeted flavors.^[129]

Disposable vapes and their harmful effect on the environment

Disposable vapes with their non-biodegradable plastic casings pose a risk to ocean creatures that might inadvertently consume the plastics, endangering aquatic ecosystems. ^[130] The growing prevalence of these single-use devices being discarded annually, with a total of 844 million vaping devices discarded each year,^[131] presents a significant threat to marine life.^[132] The nicotine e-liquid within these vapes categorizes them as acute hazardous waste according to EPA standards,^[133] making their disposal more challenging.

Countries that regulate or authorize the marketing of disposable vapes face significant environmental challenges with their disposal. For instance, the UK^[134] discards around 5 million vape units weekly which costs £200 million in cleanup and poses risks of lithium battery fires and waterway pollution.^[135] Whereas 4.5 disposable vapes are discarded per second by the US.^[136]

Incineration of seized (smuggled) cigarettes

In recent years, there has been an increased focus on international cooperation to eliminate the illicit trade of cigarettes.^[137] As law enforcement efforts ramp up to clamp down on the illicit trade of cigarettes, the volume of seized cigarettes to be destroyed is expected to increase. Destruction of seized goods, whether by incineration or landfill, in an environmentally sound manner is an ongoing struggle, more so for hazardous materials.^[138]

(i) "WHO and the Secretariat of the WHO FCTC aim to highlight the pervasive use of plastics in nicotine and tobacco products... Plastic and electronic waste (e-waste) from heated tobacco products and devices, electronic nicotine (and non-nicotine) delivery systems (including single use e-cigarettes". Source: World Health Organisation, 'Pre-session Submissions: Input on the potential areas of intersessional work to inform the work of INC-3 (following the lists compiled by the co-facilitators of the two contact groups)' (August 2023). Available at: https://resolutions.unep.org/resolutions/uploads/who_partb_28082023_1.pdf

Recommendations:

Any plastics policy must have provisions that deal with toxic plastic waste because these should deserve special handling and treatment.[139] This would entail the following actions for cigarette butts:

- Classify existing cigarette butts as a specific type of hazardous municipal waste requiring special waste management treatment.[140]
 - Isolate legacy cigarette butts and immediately treat/ process them to prevent further contamination.[141]
 - Immediately banning cigarette filters and disposable vapes would help reduce these types of plastics from entering the environment.
- Develop policies enabling early and easy recovery of the costs of harm from the tobacco industry.[142]
 - Increase tobacco taxes and other fees to pay for the special collection and treatment of current and legacy hazardous waste.[143]
 - Implement an 'Environmental tax' on the sale of tobacco products to deter consumption (e.g., a few countries such as the Gambia,[144] Chad, and Benin[145] have some form of environmental tax based on the polluter pays principle).

3. Cigarette filters cannot be part of a circular economy

Circular economy, as defined in the INC-2 additional documents, includes using secondary plastics, environmentally sound plastic scrap recycling, and driving demand for products containing higher recycled content.[146] UNEA resolution 5/14 which has been proposed as encompassing the scope of this instrument and defines a circular economy approach as a means to *"promote sustainable production and consumption of plastics through, among other things, product design and environmentally sound waste management, including through resource efficiency."*[147] The latest revised draft text further clarifies that a circular economy approach would *"enhance the [design] [circularity] of plastic products, including packaging, and improve the composition [of plastics and] plastic products."*[148] Circular economy approaches encourage the recycling and redesigning of tobacco products and provide a social responsibility function to the tobacco industry, which could undermine the WHO FCTC obligation for Parties to regulate tobacco products (including removing attractive features), to ban all forms of tobacco advertising including so-called CSR of the tobacco industry. Article 5.3 prohibits any incentives to be given to the tobacco industry, and this applies to environmental incentives because the COP10 Decision on Article 18 urges Parties to protect tobacco-related environmental policies from interference by the Tobacco Industry[149] and urges Parties to *"ensure that WHO FCTC objectives are not undermined through the industry's implementation of extended producer responsibility systems."*[150]

a. Recycling challenges

For cigarette butts, there have been various recycling efforts to produce outputs for construction, cosmetics, energy, agriculture, medical, paper, and other industries. Still, there are significant challenges in finding sustainable approaches due to the toxic nature of the material and the limitation of the goods produced.[151] Additionally, the way cigarette butts are littered has turned them into one of the most difficult items to collect for large-scale economically-viable recycling.[152]

b. Removal of toxins not guaranteed

Removing toxins from hazardous material is a very tedious, resource-intensive process.[153] Because of the numerous chemicals and heavy metals found in cigarette butts, it is a challenge to ensure that each of the toxic constituents is safely removed during the waste treatment. Pyrolysis is capital and energy-intensive.[154],[155] UV rays would not remove chemicals and metals.[156] Notably, many in the business of recycling cigarette butts do not disclose the treatment process.[157]

c. Recycling successes are not likely scalable

There appears to be some success in isolating and encapsulating the cigarette butt, depending on what is used to encapsulate it, but it is not clear if a leakage is possible in the long run.[158] There also appears to be some progress in transforming cigarette butts into carbon powder, but the process is highly resource-intensive (e.g., carbonization at 800 degrees for 2 hours in a furnace[159]). There is very little likelihood that these would be feasible or scalable in low- and middle-income countries (LMICs) where most of the cigarette butts are littered.[160]

d. Circular economy is not designed for tobacco

Notably, the industry is using the “recycling approach” and cleanup programs as a CSR strategy to diminish the implementation of WHO FCTC (see Table 1: Examples of Tobacco Industry’s CSR Activities on Clean up and Butt Collection Programs, along with Government partnerships/engagements, as reported by civil society via the Global Tobacco Industry Interference Index, 2023).[161]

Even assuming, for the sake of argument, that recycling can become safe and scalable, the tobacco industry designed cigarette filters in a manner that defrauded consumers for decades while continuously undermining bans on marketing and sponsorship, especially tobacco’s CSR activities in contravention of Articles 5.3 and 13 of the WHO FCTC. Hence, it cannot be trusted to redesign its product for circularity.

Further, there is no logical model of a circular economy for tobacco because the plastics involved are a flawed, hazardous accessory to a fundamentally lethal product designed to kill up to half its users while providing no benefit to society.[3] The policy direction is to practically ban the product and its accessories, not encourage its further use or circulation in the economy. Any changes in the cigarette filter design (e.g., leading to easier recyclability) would also contravene product regulations that prevent the industry from introducing attractive design features.

Notably, even the center that produced the most influential technical reports on circularity skipped any mention of cigarette butts in its reports,[162] even though butts are some of the top plastic items polluting the earth and marine life,[163] and the center is affiliated with tobacco industry consultants.[164]

Recommendations

The future instrument should recognize that a circular economy for the cigarette butt/ tobacco industry is not feasible. In practice:

- Existing cigarette butts should be treated as hazardous waste and isolated or encapsulated.
- Governments must prohibit the circulation of products made from recycled cigarette butts to prevent contamination.[165]
- Governments should focus their efforts on banning cigarette butts altogether instead of recycling.[166]
- The circular economy approach cannot be applied to tobacco since this would undermine the objectives and implementation of the WHO FCTC.[167] At the minimum, an exception or distinction relating to the tobacco/tobacco industry should apply to each of the mentioned sections unless a specific clause is included in relation to tobacco.

4. Cigarette butt alternatives or substitutes should not be encouraged because in no instance can they be safe for the environment or public health.

The Revised Draft Text of the UN Plastics Treaty states that one of the options for its scope “should focus on development and promotion of sustainable alternatives to replace hazardous additives;”[168] and continues to suggest options to substitute hazardous or problematic plastic waste with sustainable alternatives.[169] However, using this language in the UN Plastics Treaty without an exception for tobacco products would undermine the WHO FCTC, particularly the WHO FCTC Partial Guidelines on Articles 9 and 10, which recommends removing attractive features of cigarettes. At the same time, the Guidelines on the Implementation of Article 13 prohibit the advertising, promotion, and sponsorship of tobacco products.

Extended Producer Responsibility Schemes are utilized to minimize the plastic pollution footprint of various industries.[170] These can include a variety of methods, including using substitutes for existing plastic products; however, in the case of tobacco, there are no known safe alternatives. Instead of EPR, the WHO FCTC's Article 19 [171] asks Parties to deal with the liability of the tobacco industry, and the WHO FCTC Guidelines for the Implementation of Article 5.3 recommends denormalizing tobacco's so-called socially responsible activities, under which the EPR could fall.

a. No safe alternatives

The biodegradability of a known non-plastic alternative, cellulose filter, may degrade faster than plastics (7.5-14 years in soil)[172] but could still take longer (2.3-13 years), [173] during which toxic constituents continue to leach,[174]causing harm to the soil biosystem[175] as well as among marine invertebrates.[176] Some biodegradable filters are marketed as degrading quickly, but the decomposition studies and their constituents have not been disclosed,[177] making it impossible to verify the true extent of the environmental impact. Furthermore, smoked filters take longer to decompose[178], but some decomposition tests are performed on filters before smoking.[179],[180]

b. Replacing with alternatives could avoid industry liability

The tobacco giant Philip Morris was seen to introduce legislation on biodegradable filters in Uruguay.[181] This is viewed as part of the tobacco industry's greenwashing efforts.[182] Greenbutts, a biodegradable cigarette filter (biofilter) manufacturing company, has been approaching the industry to adopt its product.[183] The shift to an alternative that has not been proven safe could also benefit the industry not only by increasing marketing opportunities but also by allowing it to cover up its decades of deception,[184] consequently enabling the industry to avoid liability for the health and environmental harms caused by a deliberately flawed product feature.[185]

c. Biodegradable or other alternatives risk undermining tobacco regulation

Changes to the filter design could further generate misinformation that cigarettes can be safe. [186] The new feature would inevitably serve as a marketing tool, including among the youth, [187] and would undermine tobacco control measures (advertising and sponsorship bans) that are in place.[188] A redesigned filter marketed as eco-friendly will likely allow smokers to discard 'biodegradable' cigarettes with less guilt.[189]

Recommendations

Although the general proposal to address plastics pollution is to consider safe alternatives, it bears stressing that there is no such thing as a safe alternative for cigarette butts.

Even assuming, for the sake of argument, that an eco-friendly filter can be designed, there is a risk that the same will be used as a marketing tactic to increase consumption and to avoid liability—thus undermining life-saving public health measures.

The future instrument on plastic pollution should recognize that over 180 Parties to the WHO FCTC will have to enforce tobacco marketing and sponsorship bans; hence, the upcoming instrument should:

- Respect advertising bans by preventing the introduction of attractive features as mandated by Article 9/10 and Article 13 of the WHO FCTC.[190]
- Recognize efforts to hold the tobacco industry liable for its harms, including to the environment (Article 19 of the WHO FCTC).[191]
- Exclude cigarette filters and related electronic products from the regulatory measures calling for the use of “safe alternatives.”[192]
- Exclude cigarette filters from the options within the revised text, calling for using sustainable alternatives as no sustainable alternatives exist for cigarette filters.[193]
- The options adopted in the international legally binding instrument on plastic pollution related to Extended Producer Responsibility and redesign of plastic products should not undermine the provisions of WHO FCTC. They should be in accordance with the latest WHO FCTC COP decisions.

5. The Tobacco Industry should not be treated as a “stakeholder” or “responsible producer” but should be made to pay for the pollution.

While the COPI0 Decision on Article 18(ii) provides guidance on addressing tobacco-related plastic pollution through multisectoral collaboration and policy coherence, especially in specific aspects (EPR, liability, hazardous waste....), it asks Parties to **protect tobacco-related environmental policies from the commercial and vested interests of the tobacco industry and those working to further its interests**. It also urges Parties “to counter the so-called corporate social responsibility activities of the tobacco industry, and to ensure that WHO FCTC objectives are not undermined through the industry’s implementation of extended producer responsibility systems.”[194]

Extended Producer Responsibility (EPR), commonly used to tackle plastic pollution, can clash with WHO FCTC objectives when applied to the tobacco industry. Viewing tobacco companies as EPR partners is problematic due to the inability to recycle hazardous cigarette butts and the risk of promoting cigarettes to youth with eco-friendly alternatives.

(ii) The tenth session of the WHO FCTC Conference of Parties decision on Article 18 (Protection of the Environment) considered “the work of the Intergovernmental Negotiating Committee on Plastic Pollution, the issue of microplastic pollution caused by plastic cigarette filters, ongoing global efforts in the development of standards for hazardous waste management under environmental laws.”

Despite the tobacco industry's anti-littering campaigns, they fall short of reducing the environmental impact of tobacco production and consumption. This disconnect highlights the failure to align environmental policy with WHO FCTC, ignoring the unique harm caused by tobacco products and the industry's misleading practices regarding filters.[195]

Another COP 10 Decision on the Implementation of Article 19 (liability) recognizes the "*potential use of liability in protecting the environment from tobacco harms*";[196] and outlines the specific asks in the international fora, such as the INC:

- **For Parties to ensure that the work undertaken** in these international fora, including in relation to the environment and regulation of business conduct, **supports tobacco control and does not undermine it**; [197]
- **For the Secretariat to participate in global fora to promote policy coherence between tobacco industry liability and the development of international law** in relation to the environment, human rights and regulation of business conduct (emphasis supplied).

Unlike other industries, tobacco does not positively contribute to society or the global economy. Tobacco consumption results in a negative net economic outcome, costing the world USD 1.4 trillion annually.[198] Because of the nature of its business, the tobacco industry violates human rights and undermines the achievement of over a dozen of the 17 SDGs.[199] The WHO FCTC classifies the tobacco industry as a "saboteur" and a "vector" of the tobacco epidemic. According to the WHO FCTC, health policies must be protected from interference from the tobacco industry, and as guidelines for the implementation of Article 5.3 provide, Parties are recommended to "*Establish measures to limit interactions with the tobacco industry and ensure the transparency of those interactions that occur*."[200] Hence, the tobacco industry is placed in a special category that is subject to exclusions. Moreover, tobacco taxes are imposed on tobacco to compensate for its negative externalities but at levels that leave much to be desired.[201]

a. Prohibition on partnerships with the tobacco industry (health)

Article 5.3 of the WHO FCTC obliges Parties to protect public health policies from the commercial and vested interests of the tobacco industry.[202] Its guidelines state that "the tobacco industry should not be a partner in any initiative linked to setting or implementing public health policies, given that its interests are in direct conflict with the goals of public health."[203] Furthermore, the so-called socially responsible activities of the tobacco industry should be normalized.[204] As a result, the tobacco industry's efforts to support or contribute to government initiatives invite suspicion and result in rejection, especially in jurisdictions that fully comply with the WHO FCTC.[205]

b. Prohibition on the tobacco industry's so-called Socially Responsible Activities (Tobacco CSR)

So-called socially responsible activities of the tobacco industry fall under TAPS, which are mandated to be prohibited under Article 13 of the WHO FCTC.[206] Over 70 countries already banned all forms of marketing by the tobacco industry, including so-called CSR.[207] Due to the fundamental conflict between tobacco industry interests and the interests of public health, there is an inherent contradiction between socially responsible activities and the tobacco industry.[208] In other words, the tobacco industry, which uses guile and deception to produce flawed products that kill, cannot be deemed capable of being a responsible producer.[209]

The tobacco industry is highly enthusiastic about its EPR initiatives as they allow it to portray them as part of its Environmental, Social, and Governance (ESG) compliance mechanisms. Tobacco CSR activities are reported as part of their ESG compliance work to increase their appeal to investors.[210] As stated previously, the tobacco industry's CSR activities, such as cleanups and anti-litter campaigns,[211] are publicity efforts to shift public perception and engage local officials, undermining tobacco regulations. For example, Philip Morris is partnering with local authorities in Colombia[212] and Costa Rica[213] to advertise its disposal and recycling programs. At the same time, ERION Care in Italy[214] and SPAK-EKO in Slovakia[215] are consortiums set up by four tobacco companies responsible for cleaning up and recycling tobacco waste (potentially influencing policy development and implementation). These are examples of how the industry can use CSR to attain a seat at the table with policymakers. CSR activities undertaken by tobacco companies (or those working to further their interests), such as contributions to community, health, or environmental organizations, tend to improve their public image, potentially overshadowing the adverse health effects of their products.[216] (*See Table 1: Examples of Tobacco Industry's CSR Activities on Clean up and Butt Collection Programs, along with Government partnerships/ engagements, as reported by civil society via the Global Tobacco Industry Interference Index, 2023*).[217] Tobacco CSR activities reported as part of ESG compliance to improve a corporation's appeal to investors have attracted criticism.[218]

EPR schemes currently undertaken in line with plastics policies have been used by the tobacco industry to promote themselves in a positive light and to partner with governments, undermining tobacco CSR bans and conflict of interest rules in WHO FCTC Article 5.3 Guidelines.[219] EPR schemes appear to be misunderstood as part of a polluters pay principle when, in reality, the amount charged to the tobacco producer does not sufficiently internalize the externalities, and the labeling of "EPR" for the tobacco industry inadvertently acknowledges the tobacco producer as a stakeholder. [220]

c. General prohibition on engaging with the tobacco industry

The tobacco industry, along with the arms industry, has long been recognized as actors whose functions are fundamentally inconsistent with human rights, including the UN Human Rights Charter.[221] The World Health Assembly (WHA) decided that the WHO shall not engage with the tobacco and arms industries.[222] The United Nations Economic and Social Council (ECOSOC) adopted a resolution[223] urging all UN Agencies to adopt a Model Policy[224] for Agencies of the United Nations System on Preventing Tobacco Industry Interference.[225] Many other UN Agencies, such as the United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), and the United Nations Educational, Scientific and Cultural Organization (UNESCO), among others, have adopted special rules to prevent engagements and/or conflicts of interest with the tobacco industry.[226]

d. Exclusions in economic policies and trade laws

The tobacco industry is also unique from an economic relations standpoint. Countries have also decided to exclude the tobacco industry from benefitting from trade and investment provisions in economic treaties. For instance, the tobacco sector is excluded from several bilateral and regional trade agreements.[227] In the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the tobacco industry was stripped of the default benefit of seeking recourse in an investor-state dispute settlement. In the U.S., the government budget[228] and personnel[229] cannot be used to promote tobacco in foreign countries. In the UK, diplomatic officers must refrain from promoting the tobacco industry.[230]

Recommendations

A clear governance policy would benefit the future instrument by preventing conflicts of interest in implementing plastics policies. Concerning tobacco, a set of rules already exists and needs to be applied. Failure to apply these rules would undermine tobacco control measures.

Notably, policies purporting to advance human rights should not allow tobacco industry influence. According to the United Nations Commission on Human Rights (UNCHR), from a human rights policy, a conflict-of-interest policy would strengthen the plastics treaty and preserve the integrity of any policy in development. Article 5.3 of the WHO FCTC is cited as a model that can be considered.[231] The UN Agencies are guided by several instruments that proscribe engagements with the tobacco industry, including the Model Policy for UN Agencies adopted by the ECOSOC and the UN SD Group's Common Approach.

To ensure that tobacco-related policies are protected against the tobacco industry's interests, the UNEP should comply with these standards and screen the stakeholders it engages with. Hence,

- The INC and the INC Secretariat must adopt special rules to prevent the tobacco industry from being treated as a regular stakeholder.[232]
- The principle that there is a fundamental conflict of interest between the tobacco industry and public health must be reflected in the treaty since the treaty purports to have a health objective.
- Under the polluters pay principle (as opposed to EPR),[233] the tobacco industry's liability must be dealt with (including through taxation and other means to recoup costs of environmental harm).

III. Annex

Tobacco Industry's Environment "CSR"

It contains several examples from around the world of how the Tobacco Industry is using CSR activities to attain a seat at the table with policymakers, as documented in the [Global Tobacco Industry Interference \(link\)](#) from reports by civil society groups.

Country	Tobacco company	Activity	Government/local community engagement
Brazil*	Japan Tobacco International (JTI)	Collection and recycling of cigarette butts as well as installation of collectors in 10 beaches and neighborhoods of the city.	City of Florianópolis (Santa Catarina)
Bulgaria	Bulgarian Association of Tobacco Industry (BATI)	Cleaning of beaches and public spaces.	Ministry of Environment and Water (MoEW)
Colombia*	Philip Morris International (PMI)	Collection of cigarette butts.	Special Administrative Unit of Public Services of Bogota
Costa Rica*	PMI	Installing canisters in public places and butts collected were supposedly for research on disposal.	University of Costa Rica and local governments of Belén (Heredia) and Montes de Oca (San José)
Italy	PMI	Awareness campaign on the correct disposal of cigarette butts, with over 270,000 pocket butt holders distributed to smokers.	Ministry of Ecological Transition

Country	Tobacco company	Activity	Government/local community engagement
Korea*	KT&G	Cleanup campaign, along with the installation of up to 33 cigarette butt bins in 23 public facilities.	Local government of Suwon City
Mexico*	Philip Morris Mexico	A nationwide campaign for: 1) collection of cigarette butts by volunteers, 2) setting up cigarette bins in highly populated public spaces, 3) awareness campaign and piloting recycling.	Local communities
Philippines*	Philip Morris Fortune Tobacco Corp	Collection of 57,000 cigarette butts for World Clean Up Day.	Local communities
Spain*	Tobacco Bureau (Mesa del Tabaco) sponsored by PMI, BAT, JTI, Altadis, and others	Distribution of 4,500 portable ashtrays, 5,000 reusable ashtrays to clean up cigarette butts at the beach of Tarifa, as well as distribution of 5,000 paper bags for waste at the same beach.	Municipal government of Santiago de Compostela
Sweden*	Philip Morris Sweden	Greenwashing campaigns which include programs with children cleaning up cigarette butts.	Members of Parliament

Country	Tobacco company	Activity	Government/local community engagement
Switzerland	JTI, Swiss Cigarette	Environmental cleanup	Federal Office for the Environment (FOEN)
Switzerland	PMI Switzerland	Collection of 30,000 cigarette butts in the city of Lausanne.	City of Lausanne

* = Denote countries with a ban on CSR activities for the tobacco industry

Source: Mary Assunta, Global Tobacco Industry Interference Index 2023, Global Center for Good Governance in Tobacco Control (GGTC), November 2023.

Please refer to the latest [Global Tobacco Industry Interference Index](#) to learn more.

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Source: Joly F.X., Coulis, M., Comparison of cellulose vs. plastic cigarette filter decomposition under distinct disposal environments, Waste Management, Volume 72, 2018, Pages 349-353, ISSN 0956-053X, <https://doi.org/10.1016/j.wasman.2017.11.023>.

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