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# The Hidden Plastic Crisis of Tobacco

Can one Smoke Without Polluting?

AT Research Series



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16th May 2025

Applied Research Project Group 2 Organisation: AT Schweiz

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"Tobacco products are the most littered item on the planet, containing over 7000 toxic chemicals, which leech into our environment when discarded. Roughly 4.5 trillion cigarette filters pollute our oceans, rivers, city sidewalks, parks, soil and beaches every year."<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> World Health Organization. WHO Raises Alarm on Tobacco Industry Environmental Impact. Press release, May 31, 2022.

# 1. Executive Summary

Despite being the leading source of non-biodegradable waste, cigarette filters have been largely overlooked in global plastic policy discussions. Accounting for over 4.5 trillion littered items annually, they are among the most commonly discarded plastics worldwide posing significant risks to marine and terrestrial ecosystems. This research examined the environmental impact of cigarette filters, focusing on their role in plastic pollution. While tobacco control has traditionally been framed as a public health issue, there is growing recognition of its environmental dimensions - particularly as evidence mounts regarding the ecological harms caused by cigarette filters and tobacco production more broadly. Tobacco, once considered mainly a public health issue, is now increasingly framed as a major environmental threat, especially due to cigarette filters, e-cigarettes, and packaging waste. This shift has been driven in part by coordinated efforts from international organisations, NGOs, and advocacy coalitions that have worked to reframe tobacco as not only a health threat but also a major environmental pollutant. The scope of tobacco-related advocacy has thus expanded, linking it to global efforts to reduce plastic pollution and promote environmental justice.

Drawing on expert interviews and document analysis, the study examines the tobacco industry's influence on international negotiations, especially in the context of the UN Plastics Treaty. A key theme emerging from interviews was the indirect yet strategic nature of tobacco industry influence, often exerted through front groups, filter recycling programmes such as those led by TerraCycle, and corporate partnerships including Philip Morris International's "Our World is Not an Ashtray". This public messaging campaign is an example of greenwashing tactics that shift responsibility to consumers and post-consumption waste management, deflecting attention from upstream production and regulatory solutions.

Additional findings highlight: (1) a significant general lack of awareness among negotiators that cigarette filters are made of plastic, thus limiting their inclusion in treaty discussions; (2) the progressive weakening of treaty language across negotiation rounds, including the complete removal of filters from an annex of plastic products slated for immediate phase out; (3) pronounced divides between High Ambition Coalition nations that advocate for life cycle regulation and plastic and oil-producing states that resist production restrictions; and (4) persistent transparency concerns within the treaty process, particularly around industry affiliation disclosure and FCTC Article 5.3's weak application.

The paper recommends banning plastic cigarette filters, incorporating Extended Producer Responsibility (EPR) schemes targeting tobacco companies, and enhancing transparency within treaty negotiations to reduce industry interference and promote environmentally just policy outcomes.

# 2. Key Terms and Definitions

Understanding the environmental impact of tobacco products and the policy surrounding them requires clear definitions of key concepts. For the reader's convenience, this section provides concise explanations of the main terms used throughout the report. These include essential concepts such as *cigarette filters, tobacco-related plastic pollution, greenwashing,* and *Extended Producer Responsibility (EPR),* as well as institutional frameworks like the *WHO Framework Convention on Tobacco Control (FCTC)* and the *UN Plastic Treaty.* By establishing consistent terminology, the report ensures clarity and accessibility for academic and non-specialist audiences engaging with this topic. Definitions are drawn from literature, international agency reports, and civil society analyses.

#### **Cigarette Filters**

Cigarette filters are small, cellulose acetate-based components attached to the end of manufactured cigarettes, designed to mislead the public to a false perception that they trap toxic chemicals during smoking.<sup>2</sup> While originally introduced to reduce smokers' exposure to harmful chemicals, evidence shows that filters do not effectively reduce toxicity or health risks. Instead, they create a false perception of safety, encouraging continued smoking while causing widespread environmental harm through toxic and persistent plastic waste.<sup>3</sup>

#### Heated Tobacco Products (HTPs)

Heated Tobacco Products (HTPs) are devices that heat processed tobacco sticks to generate an inhalable aerosol, often marketed as reduced-risk alternatives to cigarettes. Despite claims, studies indicate that pyrolysis occurs, and harmful emissions are still produced. These products also contribute to plastic and electronic waste due to their complex design and plastic components.<sup>4</sup>

#### **Tobacco-Related Plastic Pollution**

Tobacco-related plastic pollution refers to the environmental contamination arising across the entire life cycle of tobacco products. This includes plastic waste from cigarette filters, packaging materials, and newer products such as heated tobacco products.

<sup>&</sup>lt;sup>2</sup> Thomas E. Novotny, K. Lum, E. Smith, V. Wang, and R. Barnes, "Cigarette Butts and the Case for an Environmental Policy on Hazardous Cigarette Waste," *International Journal of Environmental Research and Public Health* 6, no. 5 (2009): 1691-1705.

<sup>&</sup>lt;sup>3</sup> Francesc Belzagui, Valeria Buscio, Carmen Gutiérrez-Bouzán, and Mireia Vilaseca, "Cigarette Butts as a Microfiber Source with a Microplastic Level of Concern," *Science of The Total Environment* 786 (2021): 147463.

<sup>&</sup>lt;sup>4</sup> Swiss Association for Tobacco Control. *Heated Tobacco Products (HTP)*. Bern, 2025.

#### Greenwashing

Greenwashing is the practice where companies falsely market their products or operations as environmentally friendly to improve public perception without implementing genuinely sustainable practices.<sup>5</sup> In the tobacco sector, companies such as Philip Morris International (PMI) and British American Tobacco (BAT) have used greenwashing to promote their harmreduction narratives and eco-friendly branding while continuing to produce environmentally damaging products.<sup>6</sup> <sup>7</sup>

#### Extended Producer Responsibility (EPR)

EPR is a policy approach assigning producers financial and/or physical responsibility for the treatment and disposal of post-consumer products. In the context of tobacco, EPR frameworks aim to hold tobacco manufacturers accountable for filter waste and other tobacco product-related pollution.

#### **Single-Use Plastics**

Single-use plastics are disposable plastic items designed for one-time use before being discarded. Cigarette filters fall under this category, along with straws, bags, and cutlery. Their widespread presence in the environment has led to global efforts to reduce and ban such products.<sup>8</sup>

#### WHO (World Health Organization)

The World Health Organization (WHO) is the United Nations agency responsible for international public health. In response to the global tobacco epidemic, the WHO established the Framework Convention on Tobacco Control (FCTC) in 2003, which has since been ratified by 182 countries.<sup>9</sup>

#### WHO FCTC (Framework Convention on Tobacco Control)

<sup>&</sup>lt;sup>5</sup> Natural Resources Defense Council. *What Is Greenwashing?* NRDC, May 2023.

<sup>&</sup>lt;sup>6</sup> Timothy Dewhirst, "Greenwashing Through Anti-Litter Campaigns: Co-Optation of Harm Reduction by Big Tobacco," *Tobacco Control* 29, no. 3 (2020): 243-245.

<sup>&</sup>lt;sup>7</sup> Frank Houghton, "Greenwashing Tobacco–Attempts to Eco-Label a Killer Product," *Journal of Environmental Health* 86, no. 3 (2023): 34-37.

<sup>&</sup>lt;sup>8</sup> Gaëlle Haut, Single-Use Plastics Directive Implementation Assessment Report: Tobacco-Related Products, European Environmental Agency, 2024, p.44.

<sup>&</sup>lt;sup>9</sup> World Health Organization. *First-Ever WHO Treaty Marks 20 Years of Saving Millions of Lives Worldwide*. Press release, February 25, 2025.

The WHO Framework Convention on Tobacco Control (FCTC) is a legally binding treaty aiming to reduce tobacco consumption and protect public health. Article 18 of the FCTC specifically addresses the environmental impacts of tobacco, calling on Parties to prevent harm caused by tobacco cultivation and consumption.<sup>10</sup>

## International Legally Binding Instrument on Plastic Pollution, including in the Marine Environment

The International Legally Binding Instrument on Plastic Pollution, including in the Marine *Environment*, hereafter referred to as the "UN Plastic Treaty" or simply "the treaty" in this paper, is a global agreement currently under negotiation. It aims to establish legally enforceable obligations to combat the threat of plastic pollution by improving waste management, promoting recycling, and, most importantly, curbing pollution at its source through regulatory action on plastic production and design.<sup>11</sup>

#### INC (Intergovernmental Negotiating Committee)

The Intergovernmental Negotiating Committee (INC) is the UN-led body responsible for drafting the terms of the global plastics treaty. The INC brings together representatives from governments, international organisations, and civil society to develop consensus-based solutions for ending plastic pollution.<sup>12</sup>

#### **UNEP (United Nations Environment Programme)**

The United Nations Environment Programme (UNEP) is a global organisation that coordinates the UN's environmental efforts and supports the development of international environmental policies. UNEP is a key actor in promoting global cooperation to address plastic pollution, including coordinating discussions on the UN Plastic Treaty and supporting its implementation.<sup>13</sup>

<sup>&</sup>lt;sup>10</sup> World Health Organization, WHO Framework Convention on Tobacco Control, Article 18 (Geneva: WHO, 2003).

<sup>&</sup>lt;sup>11</sup> United Nations Environment Programme, Historic Day in the Campaign to Beat Plastic Pollution: Nations Commit to Develop a Legally Binding Treaty (March 2, 2022).

<sup>&</sup>lt;sup>12</sup> United Nations Environment Programme, Intergovernmental Negotiating Committee to Develop an International Legally Binding Instrument on Plastic Pollution, accessed April 12, 2025.

<sup>&</sup>lt;sup>13</sup> United Nations Environment Programme, UNEP, accessed March 15, 2025

# 3. Introduction

Everyone is clear about the horrific implications of smoking cigarettes on human health, but what about the environmental repercussions? Throughout this research project, we have sought to understand the toll of tobacco on our planet and, more specifically, the ecological impact of cigarette filters. Among the many environmental harms caused by the tobacco industry – an estimated cost to the earth of "600 million trees, 200,000 hectares of land, 22 billion tons of water, and 84 million tons of CO2"<sup>14</sup> – cigarette filters are exceptionally problematic.

Cigarette filters are made primarily of cellulose acetate, a non-biodegradable plastic, and were designed to give the false impression that they absorb harmful chemicals generated during smoking.<sup>15</sup> Once discarded, these filters take years to degrade and slowly break down into microplastics, leaching toxic chemicals that contaminate soil, rivers, and oceans and contribute to the broader plastic crisis.<sup>16</sup> Despite this, cigarette filters have received relatively little public attention in global plastic policy discussions in the past decades, notwithstanding the increasing recognition of microplastics as a threat to ecosystems, human health, and biodiversity.

There is an obvious disconnect between the grave environmental harm and the inattention of policy, which raises important questions about the forces shaping global plastic governance. This project subsequently homes in on the tobacco industry's role in shaping narratives surrounding plastic pollution and its involvement in the *International Legally Binding Instrument on Plastic Pollution, including in the Marine Environment* – referred to more generally and throughout this paper as the UN Plastic Treaty. Filters, made from plastic fibres, are among the most discarded items worldwide.<sup>17</sup> Yet treaty drafts rarely name them directly, often excluding them from binding provisions. Experts suggest this reflects both political hesitation and subtle industry influence.

<sup>&</sup>lt;sup>14</sup> World Health Organization, WHO Raises Alarm on Tobacco Industry Environmental Impact, press release, May 31, 2022.

<sup>&</sup>lt;sup>15</sup> Thomas E. Novotny et al., "Cigarette Butts and the Case for an Environmental Policy on Hazardous Cigarette Waste," *International Journal of Environmental Research and Public Health* 6, no. 4 (2009): 1691-1705.

<sup>&</sup>lt;sup>16</sup> Sanas Javadian et al., "Perspectives on Tobacco Product Waste: A Survey of Framework Convention Alliance Members' Knowledge, Attitudes, and Beliefs," *International Journal of Environmental Research and Public Health* 12, no. 8 (2015): 8283-8291.

<sup>&</sup>lt;sup>17</sup> Interview with a senior academic and public health expert affiliated with a tobacco pollution research organisation. Conducted in January 2025.

Tobacco companies promote downstream solutions like recycling partnerships and cleanup efforts, which create a public image of responsibility without addressing upstream production. These tactics shift focus away from regulatory accountability.

Experts also noted that advocates working on tobacco-related waste have limited access to the treaty process, leaving critical pollution sources underrepresented in negotiations. For the treaty to be effective, it must address pollution at its source and include specific language targeting high-impact products like cigarette filters.

By tracing this influence, we can better understand why filter pollution has remained on the sidelines of key international debates. By examining greenwashing tactics used by the tobacco industry, its use of Corporate Social Responsibility (CSR) measures to deflect criticism, and its proficiency in shifting responsibility onto consumers, we aim to understand how tobacco-related plastic pollution has been addressed or overlooked during the treaty negotiations. Our findings culminate in policy recommendations that seek to effectively address filter pollution, supported by insights from interviews with key experts in global health, environmental governance, and tobacco control.

# 4. Methodology

Our research methodology combined expert insights with qualitative analysis of primary and secondary data sources. Given the limited existing scholarship on the intersection of tobacco control and international plastic regulation, we adopted a multi-method qualitative approach. This enabled a grounded and contextual understanding of how cigarette filters, the most pervasive form of single-use plastic pollution,<sup>18</sup> are being addressed, contested, or overlooked in the ongoing negotiations for a global plastics treaty under the United Nations Environment Programme (UNEP).

## 4.1 Expert Interviews

To obtain real-time and insider perspectives on the treaty process and the broader implications of tobacco-related plastic waste, we conducted semi-structured interviews with seven carefully selected experts. These individuals were identified based on their deep expertise and direct involvement in public health policy, environmental governance, international law, and tobacco control. Several of the informants participated in or closely monitored the fifth session of the Intergovernmental Negotiating Committee (INC-5), held in Busan, South Korea, in December 2024.

Interviews were conducted remotely between December 2024 and February 2025, and each session was recorded with the informed consent of participants. Due to the political sensitivity of the treaty negotiations and the institutional affiliations of several experts, most requested anonymity. Their contributions have therefore been anonymised and, where appropriate, paraphrased to preserve both their confidentiality and analytical value. These interviews offered critical insight into the strategies of the tobacco industry, regulatory blind spots, and the shifting language of the treaty text across negotiation rounds.

## 4.2 Analysis of the Data Collected

All interviews were transcribed and analysed using reflexive thematic analysis. We developed a coding framework iteratively, combining inductive and theory-driven approaches to identify recurring patterns and latent themes. This approach facilitated the mapping of key issues across interviews and allowed for systematic triangulation with a broad set of documentary evidence.

<sup>&</sup>lt;sup>18</sup> United Nations Environment Programme, From Pollution to Solution: A Global Assessment of Marine Litter and Plastic Pollution (Nairobi: UNEP, 2021).

To support the qualitative analysis, we drew on supplementary sources including draft treaty texts and annexes from INC-1 through INC-5, WHO Framework Convention on Tobacco Control (FCTC) guidance documents, and public statements by advocacy and civil society organisations such as the Stop Tobacco Pollution Alliance (STPA), the Global Center for Good Governance in Tobacco Control (GGTC), and Break Free from Plastic.<sup>19 20</sup> We also reviewed relevant industry publications, including PMI's reports, as well as grey literature, UN press releases, and coverage from international media outlets. This triangulation was used to corroborate expert insights, track developments in treaty language over time, and compare formal policy discussions with publicly available positions and commentary.

The qualitative approach focused on examining how language and framing were used throughout the treaty process. As part of this, treaty drafts were systematically compared to document shifts in terminology, scope, and policy emphasis. Specific attention was given to the evolution of language around product categories, regulatory measures, and implementation language. Public and institutional documents were reviewed alongside interview data to identify consistencies or discrepancies in how issues were presented across different platforms.

In addition to multilateral documents and international sources, we collected material from national and subnational contexts to provide further context for the policy environment. This included regulatory proposals and enacted measures from selected jurisdictions, as well as campaign materials and awareness efforts initiated by non-governmental actors. These sources were used to inform the thematic structure of our analysis and to situate the interview data within a broader regulatory and discursive landscape.

<sup>&</sup>lt;sup>19</sup> Action on Smoking and Health (ASH), "The Stop Tobacco Pollution Alliance (STPA)," ASH.

<sup>&</sup>lt;sup>20</sup> African Tobacco Control Alliance (ATCA), "Making Tobacco Polluters Pay: Stop Tobacco Pollution Alliance (STPA) Campaign Launches in The New York Times," March 14, 2023.

# 5. Findings

Our interviews revealed six key recurring concepts in regulating the tobacco industry's environmental impact, with valuable insights into the INC-5 negotiation dynamics, transparency concerns, and the potential the treaty holds in strengthening tobacco control.

## 5.1 Negotiation Dynamics and The Tobacco Industry's Role

#### Lack of Understanding

A key issue raised was the limited understanding among negotiators that cigarette filters are in fact made of plastic. If policymakers are unaware that cigarette filters are made of plastic, they cannot recognise filters' relevance to treaty negotiations, nor advocate for their regulation. In addition, as noted by a recognised leader in tobacco control, many participants are preoccupied with other major plastic pollution concerns - leaving cigarette filters neglected in the wider conversation.<sup>21</sup>

Experts in the field have emphasised the importance of education and coalition-building as critical strategies for advancing this issue.

#### **Diverging National Interests**

The contrasting national positions can be broadly split into two camps:

1. **High Ambition Coalition** (EU, Canada, Australia, Mexico, Panama, Latin American nations, etc.)

These countries support stronger plastic production regulations and a robust and comprehensive lifecycle coverage to curb plastic pollution. Latin American countries, particularly Panama and Mexico have been active in their advocacy for tighter regulations and filter bans, seeking to address the environmental harm caused by cigarette waste.<sup>22</sup> Their position underscores a broader divide between nations prioritising environmental action and those driven by economic self-preservation.<sup>23</sup>

<sup>&</sup>lt;sup>21</sup> Interview with the Executive Director of a tobacco control advocacy organisation. Conducted in January 2025.

<sup>&</sup>lt;sup>22</sup> World Health Organization, *Framework Convention on Tobacco Control (FCTC): Progress and Future Challenges* (Geneva: WHO, 2023).

<sup>&</sup>lt;sup>23</sup> Latin American and Caribbean Group (GRULAC), "Joint Declaration on Single-Use Plastics," United Nations Environment Programme, 2023.

#### 2. Plastic and Tobacco-Producing Nations (India, China, Gulf States)

Economic interests of these nations drive resistance to production limits, prioritising plastic production as essential for economic growth and backing a waste management focus, not regulatory reform, due to economic reliance on fossil fuels and plastic production, particularly as global energy transitions threaten existing revenue streams.<sup>24</sup> Whilst China and India acknowledge waste concerns, they emphasise equilibrium of environmental action efforts with developmental priorities.<sup>25</sup>

The broader negotiations remain complicated by the economic pressures faced by countries with tobacco industries that would be directly impacted by any significant ban or production limit on cigarette filters.

#### **Small States vs Major Economies**

Our key informants also noted stark divergences between small island states, such as New Zealand and Pacific Island states, which have been more receptive to tobacco control integration in treaty discussions, compared with tobacco-producing nations such as China and the U.S who, naturally, oppose stricter tobacco control regulation.<sup>26</sup>

#### **Procedural Hurdles and Consensus Delays**

These marked polarised interests, split between countries with rigid standpoints, one of ambitious environmental goals, and on the other hand, one of great economic concern, reflect the complexity of aligning national interests. Delays have been seen due to consensus-based decision making which has allowed diluted draft texts.

#### Shifting Language in Treaty Drafts

An expert in tobacco control policy suggested that early negotiations (INC-2 and INC-3) honed in on filters as plastic waste and their phase-out was called for. Discussions in Busan, however, had regressed to mentioning "cigarette filters made of plastic", omitting broader definitions and weakening the potential for enforcement.

<sup>&</sup>lt;sup>24</sup> INC Secretariat, "Meeting Notes and Country Statements from INC-4," United Nations Environment Programme, 2023.

<sup>&</sup>lt;sup>25</sup> Interview with a tobacco control specialist. Conducted in January 2025.

<sup>&</sup>lt;sup>26</sup> Interview with two senior figures in tobacco control and public health. Conducted in January 2025.

Eventually, filters were entirely excluded from Annex B, which identifies products for immediate elimination. There was talk of "appropriate measures" being taken regarding filters, however there is a clear equivocation in this respect, and this distinctly allows for looser regulations.<sup>27</sup>

#### Switzerland's Dual Stance

Despite the progressive environmental stance of the European Union, EU nations have not aggressively championed the push for a filter ban, likely due to a desire to deter any conflict. Switzerland has presented a particularly contradictory stance. Despite hosting major tobacco companies, such as PMI, Switzerland maintains a neutral position in the negotiations, supporting a UN paper calling for plastic bans but simultaneously allowing tobacco companies to lead voluntary cleanup programmes domestically. This dual approach raises concerns about the effectiveness of these voluntary programmes, as they are funded and promoted by the tobacco industry rather than driven by independent, regulatory-driven efforts.

#### 5.2 Tobacco Industry Strategies and Greenwashing

#### **Indirect Lobbying**

The tobacco industry has taken a subtle but calculated approach in shaping the UN Plastic Treaty. While not overtly present in negotiations, tobacco-affiliated organisations such as the TerraCycle Foundation have participated as observers.<sup>28</sup> These groups position themselves to avoid classification as plastic producers, despite cigarette filters containing plastic.

Rather than direct lobbying, influence is channelled through front groups, Chambers of Commerce, and supplier companies, allowing the tobacco industry to maintain a low profile. During INC-5, for instance, the China National Tobacco Corporation (CNTC) appeared within China's delegation – highlighting a discreet but deliberate presence. This strategy mirrors a broader pattern: tobacco companies leveraging more powerful allies in the oil and plastics sectors to resist production bans on filters.<sup>29</sup>

#### Promotion of Ineffective 'Solutions'

<sup>&</sup>lt;sup>27</sup> Interview with a senior coordinator at a national smoke-free advocacy alliance. Conducted in February 2025.

<sup>&</sup>lt;sup>28</sup> World Health Organization, *Tobacco and the Environment: Exposure and Impact* (Geneva: WHO, 2022).

<sup>&</sup>lt;sup>29</sup> Stop Tobacco Pollution Alliance, "Tobacco Industry Participation in INC-5," 2023.

Compared to their aggressive engagement in tobacco-specific regulation, such as under the WHO FCTC, tobacco companies have been more restrained in the plastic treaty arena. However, their use of greenwashing remains evident. A key tactic has been promoting recycling initiatives for cigarette filters – despite substantial evidence that these schemes are ineffective at scale.<sup>30</sup>

By casting filter waste as a matter of post-consumer disposal rather than production, the industry diverts attention from upstream regulation. Eco-friendly filters, marketed as biodegradable or 'sustainable' alternatives, also help the industry maintain its market share while sidestepping outright bans on plastic-based products. These measures allow the industry to appear environmentally responsible without making meaningful structural changes.

The 2022 *Post-Consumer Tobacco Waste* report released by PMI championed circularity and corporate responsibility. However, this rhetoric supports voluntary clean-up programmes over regulatory restrictions – an approach widely criticised by experts as inadequate.<sup>31</sup>

#### Framing and Filter Greenwashing

Tobacco companies frame filter waste as a problem of individual responsibility and local waste management systems, downplaying their role as producers of single-use plastics. While promoting recycling partnerships, such as those involving TerraCycle, they avoid acknowledging that cellulose acetate, the main component of cigarette filters, is a persistent plastic pollutant.<sup>32</sup>

These programmes are often funded and marked by the industry itself, raising questions about their legitimacy and efficacy. Experts argue that such campaigns serve more as public relations tools than actual solutions to plastic pollution.<sup>33</sup>

## 5.3 Transparency and Accountability in the Treaty Process

<sup>&</sup>lt;sup>30</sup> Interview with a tobacco control specialist. Conducted in January 2025.

<sup>&</sup>lt;sup>31</sup> Philip Morris International, Post-Consumer Tobacco Waste Report (PMI, 2022).

<sup>&</sup>lt;sup>32</sup> Thomas E. Novotny et al., "Cigarette Butts and the Case for an Environmental Policy on Hazardous Cigarette Waste," International Journal of Environmental Research and Public Health 6, no. 5 (2009): 1691-1705.

<sup>&</sup>lt;sup>33</sup> Euromonitor International, "Tobacco Companies and ESG: The New Frontier of Corporate Image," 2022.

#### Weak Application of FCTC Article 5.3

Another overarching sentiment among interviewees is that there are clear and persistent transparency concerns, and that the UNEP Plastic Treaty lacks vigorous conflict-of-interest protections enshrined in the WHO FCTC Article 5.3.

#### **UNEP's Flexible Approach**

Key informants also highlighted how industry participation and a lack of transparency during negotiations have undermined both the credibility and potential effectiveness of the treaty. UNEP takes a more flexible approach to the UN treaties compared with the strict provisions of FCTC Article 5.3, and UNEP allows industry actors' participation in negotiations. There are known affiliations between industry-linked individuals and participating organisations, though these are not publicly documented and thus cannot be officially confirmed due to diplomatic sensitivities.<sup>34</sup> UNEP's weak transparency safeguards, and in some instances, the formal endorsement of corporate partnerships, have made the Plastic Treaty particularly vulnerable to industry influence.<sup>35</sup> Article 5.3 clearly prohibits industry interference in policymaking, however this is not widely known amongst many participants and this greatly limited the treaty negotiations on an environmental front.

#### Limited Public Oversight

Closed door sessions during INC-5 were prevalent and raised additional concern among civil society organisations. These private meetings restricted observer access and obscured the extent of industry influence further.<sup>36</sup> Such lack of transparency directly undermines the credibility and inclusiveness of the negotiation process.

Notably, the China National Tobacco Corporation (CNTC) was present within China's official delegation, despite the WHO FCTC guidelines prohibiting tobacco industry participation in such negotiations.<sup>37</sup> This inclusion exemplifies the tobacco industry participation in such negotiations, through indirect influence, leveraging governmental representation to circumvent direct engagement restrictions. It also reflects a broader trend of regulatory capture, where industry actors embed themselves in state delegations to shape outcomes in their favour.

 <sup>&</sup>lt;sup>34</sup> Interview with the executive director of a global tobacco control organisation. Conducted in January 2025.
<sup>35</sup>Ibid.

<sup>&</sup>lt;sup>36</sup> Interview with a senior coordinator at a national smoke-free advocacy alliance. Conducted in February 2025.

<sup>&</sup>lt;sup>37</sup> Interview with an expert in public health and tobacco control. Conducted in January 2025.

Civil society organisations, including Corporate Accountability International, have documented instances where tobacco industry representatives infiltrated meetings under the guise of public observers, highlighting the challenges in enforcing transparency and adherence to FCTC Article 5.3.<sup>38</sup> These incidents point to persistent enforcement gaps and a pressing need for stricter observer accreditation processes and independent oversight mechanisms. Without robust safeguards, international treaty processes risk being co-opted by the very industries they aim to regulate.

#### **Observer Affiliation Disclosure Gaps**

Despite UNEP's introduction of some required measures to track industry influence, such as industry-affiliated delegates and representatives disclosing their industry affiliations, enforcement remains weak.<sup>39</sup> This leads to loopholes for tobacco industry influence and organisations are able to register their connections under broader umbrella organisations (e.g., American Chemistry Council), and thus tracing actual ties to tobacco or plastics industry actors is complicated.<sup>40</sup>

#### 5.4 Public Awareness and Civil Society Advocacy

#### Shifting Tobacco from a Health to an Environmental Issue

Public and civil society advocacy has played a vital role in elevating the environmental impacts of tobacco to the global policy stage. Tobacco, once considered mainly a public health issue, is now increasingly framed as a major environmental threat, especially due to cigarette filters, e-cigarettes, and packaging waste. This shift has been driven by coordinated efforts from international organisations, NGOs, and advocacy coalitions. For instance, the WHO 2022 World No Tobacco Day was a pivotal moment in bringing public awareness to the environmental harms caused by tobacco across its entire lifecycle. It highlighted that tobacco farming uses 22 billion tonnes of water annually, contributes to

<sup>&</sup>lt;sup>38</sup> National Center for Biotechnology Information (NCBI), "Tobacco Industry and the FCTC," NCBI Bookshelf.

<sup>&</sup>lt;sup>39</sup> Interview with a public health expert and tobacco control advocate. Conducted in January 2025.

<sup>&</sup>lt;sup>40</sup> Interview with an expert in public health and tobacco control. Conducted in January 2025.

5% of global deforestation, and produces 84 megatons of  $CO_2$  – equivalent to the emissions of 280,000 rocket launches. It countered the tendency of "tobacco exceptionalism", where tobacco issues are treated separately from other global policy concerns. Instead, advocates have emphasised the need to integrate tobacco into the fight against plastic pollution, thus gaining more widespread support for policy changes that would impact both public health and the environment.<sup>41</sup>

#### **Civil Society Leadership and Advocacy Efforts**

NGOs like Break Free From Plastic and the Stop Tobacco Pollution Alliance (STPA) have been instrumental in pushing for the inclusion of tobacco waste in international environmental policies, with STPA advocating for cigarette filters to be recognised as hazardous plastics in the UN's treaty discussions. Action on Smoking and Health US (ASH) has also played a crucial role, advocating for cigarette filters to be added to Annex B of the treaty draft, which targets problematic plastics. Civil society groups have further raised awareness through grassroots campaigns, such as displaying cigarette butts during treaty negotiations in Paris to highlight the scale of tobacco pollution.

#### **Emerging National Policies and Legal Precedents**

At the local level, some jurisdictions have already taken action. In 2024, Santa Cruz County in California became the first jurisdiction to ban the sale of filtered cigarettes, citing both environmental and health concerns.<sup>42</sup> This policy has inspired reviews in other regions, such as Belgium and the Netherlands, signalling a growing interest in regulating tobacco-related plastics. Additionally, countries like France have enacted EPR regulations that require tobacco companies to cover the costs of cigarette waste cleanup. In France, the estimated cost of this cleanup is €100 million annually, which places the financial responsibility squarely on the tobacco industry.<sup>43</sup>

#### **Challenges for LMICs and Global Equity Concerns**

Despite growing momentum, significant challenges persist. Public awareness campaigns remain underfunded in many low and middle-income countries (LMICs), which are often major

<sup>&</sup>lt;sup>41</sup> World Health Organization, *Tobacco and Its Environmental Impact: An Overview* (Geneva: WHO, 2022).

<sup>&</sup>lt;sup>42</sup> "Santa Cruz Becomes First U.S. City to Ban Sale of Filtered Cigarettes," Santa Cruz Sentinel, January 10, 2024.

<sup>&</sup>lt;sup>43</sup> "Putting the Focus on Butt Recovery." *Tobacco Asia*, 2023.

producers of tobacco whilst also bearing the brunt of tobacco waste. While resource constraints are a factor, it is equally crucial to support LMICs in leading their own advocacy and enforcement strategies. Empowering these countries with equitable funding access and meaningful participation will be essential in achieving lasting public health and environmental outcomes.

Internationally, the increased recognition of tobacco's environmental impact has helped strengthen the push for policy changes that tackle tobacco-related plastic waste. As more countries move to regulate tobacco-related plastics and demand stronger industry accountability, Advocates emphasise the need for the global community to recognise tobacco waste as a critical environmental issue. They argue that without acknowledging cigarette filters as hazardous, non-essential plastics, progress in addressing tobacco-related pollution will remain limited, underscoring the urgency of integrating this concern into a comprehensive international treaty on plastic waste.

## 5.5 The UN Plastic Treaty's Potential for Tobacco Control

#### **Operationalising FCTC Article 18**

The ongoing negotiation of the UN Plastics Treaty presents a rare and strategic opportunity to strengthen tobacco control through environmental governance. At its core, the treaty aims to curb plastic pollution throughout the life cycle of plastic products - a goal that aligns naturally with WHO FCTC Article 18, which acknowledges the environmental damage caused by tobacco cultivation, manufacturing, and waste. However, the FCTC lacks enforcement mechanisms, making the plastics treaty a valuable complement.<sup>44</sup>

#### Production-Level Regulation vs. Downstream Focus

Key actors in tobacco control have worked to ensure the treaty includes specific provisions targeting cigarette filters, vapes, and plastic packaging. They argue that the treaty should not only include tobacco waste within its scope but also classify filters as non-essential, hazardous single-use plastics, making them eligible for phase-out or restriction under international law.<sup>45</sup>

#### **Recognising Cigarette Filters as Problematic Plastics**

<sup>&</sup>lt;sup>44</sup> Conference of the Parties to the WHO Framework Convention on Tobacco Control, "FCTC/COP10(14): Implementation of Article 18 of the WHO FCTC," decision adopted at the tenth session (resumed), Panama City, Panama, February 10, 2024.

<sup>&</sup>lt;sup>45</sup> Interview with an expert in public health and tobacco control. Conducted in January 2025.

Classifying cigarette filters as problematic plastics will be a key test of the UN Plastics Treaty's seriousness in tackling tobacco-related pollution. Placing them under a mere monitoring mechanism risks rendering regulation symbolic and non-binding. Experts emphasize the need for an upstream approach. Addressing only disposal shifts responsibility to consumers and municipalities while enabling tobacco industry greenwashing. Instead, the treaty should regulate production and design by banning filters entirely and rejecting ineffective solutions like biodegradable alternatives.

#### **Cross-Treaty Synergies**

Inter-treaty collaboration is another area of critical potential. The hope is for the FCTC and the UN Plastic Treaty to operate in parallel, where formal coordination would amplify the impact of both agreements. This could take the form of shared reporting systems, joint implementation campaigns, or integrated references in national legal frameworks.<sup>46</sup> The WHO has already submitted recommendations to the Intergovernmental Negotiating Committee, calling for a ban on cigarette filters and vaporisers – arguing that they are unnecessary, environmentally harmful, and misleadingly marketed as health innovations.

#### Linking to SDGs and Human Rights

Finally, by framing tobacco filters as a climate and human rights issue, the treaty can attract broader political support. This framing connects tobacco pollution to other UN priorities such as climate action (SDG 13), clean water (SDG 6), and life below water (SDG 14), reinforcing the need for bold global action.<sup>47</sup>

While the treaty remains under negotiation, its potential is clear. If adopted with strong, enforceable language, it could significantly strengthen global tobacco control by regulating key sources of pollution and holding the tobacco industry accountable for environmental harm. Advocacy groups see this as a precious opportunity to merge health and environmental governance under a common agenda.

## 5.6 Key Takeaways

#### Negotiation Challenges in UN Plastics Treaty:

<sup>&</sup>lt;sup>46</sup> Interview with an expert in tobacco control. Conducted in January 2025.

<sup>&</sup>lt;sup>47</sup> Conference of the Parties to the WHO Framework Convention on Tobacco Control. (2024, February 10).

- Key informant interviews reveal persistent challenges in balancing environmental goals, public health, and economic interests.
- Ambiguity surrounding cigarette filters and knowledge gaps among negotiators have led to inconsistent treatment of filter pollution in treaty discussions.

#### **Diverging National Interests:**

- High Ambition Coalition countries (e.g., Panama, Mexico, EU members) advocate for stronger lifecycle plastic regulation.
- Plastic and tobacco-producing nations (e.g., China, India, Gulf states) prioritise industrial interests, resisting limitations on production.
- These opposing views have caused delays, invalidated drafts, and diluted proposals to phase out cigarette filters.

#### **Tobacco Industry Influence:**

- The tobacco industry's influence has been evident through greenwashing campaigns, voluntary recycling initiatives, and strategic observer participation.
- These tactics have diverted attention from regulatory reform and delayed necessary accountability measures.

#### Lack of Conflict-of-Interest Protections:

- The UNEP treaty framework lacks conflict-of-interest protections, unlike WHO FCTC Article 5.3.
- Absence of stronger safeguards and the involvement of industry-affiliated actors in treaty discussions undermine the negotiation process.
- Concerns about closed-door sessions and inadequate affiliation disclosure have raised alarms among public health experts and civil society organisations.

#### NGO Advocacy and Public Awareness:

- STPA, ASH, and other NGOs have been successful in raising awareness about tobacco's environmental impact.
- Grassroots activism and global campaigns have helped shift the tobacco issue from a health-focused debate to one incorporated within broader environmental governance.

#### Potential of the UN Plastic Treaty:

- The UN Plastics Treaty offers significant potential to align environmental sustainability with global tobacco control.
- Without strong regulatory language, accountability structures, and opposition to industry interference, meaningful reform is unlikely, leading to a weaker treaty outcome.

# 5.7 Visual Mapping



Figure 1: Visual Mapping of Research on Tobacco-Related Plastic Pollution<sup>48</sup> See Annex A for high-resolution mapping

## Description

This visual map illustrates the interconnected landscape of tobacco-related plastic pollution through nine key themes: filters, greenwashing, lobbying, negotiation dynamics, transparency and accountability, advocacy efforts, the UN Plastics Treaty, and the tension between environmental and economic interests. At the centre lies tobacco plastic waste, primarily cigarette filters, surrounded by thematic nodes that explore how industry tactics (e.g., lobbying and greenwashing) influence policy outcomes, how negotiations unfold at the global level, and how advocates push for transparency, accountability, and bold regulatory measures.

<sup>&</sup>lt;sup>48</sup> Figure 1: Mapping of Tobacco-related Plastic Pollution. Created by authors using Canva, May 2025.

The map captures the complex push-and-pull between public health, environmental protection, and industry-driven economic narratives.

# 6. Limitations

Our research encountered several limitations, particularly around access and participation. Despite targeted outreach, individuals affiliated with the tobacco industry either declined to engage or did not respond to interview requests. This reflects a broader pattern of non-cooperation by industry actors when subjected to scrutiny over their environmental impact. As a result, we were unable to include direct perspectives from within the industry and instead relied on public statements, corporate reports, and third-party analyses to interpret their influence.

Additionally, while our expert interviews offered critical insights, several participants requested anonymity due to concerns about professional risk or institutional sensitivities - particularly those affiliated with international organisations or involved in treaty negotiations. Some informants expressed concern about being perceived as speaking on behalf of their institutions or jeopardising their role in ongoing discussion. To preserve confidentiality, all contributions were anonymised and, where necessary, paraphrased. While this safeguarded participants, it also limited our ability to attribute or contextualise some perspectives in greater depth.

Another key limitation concerns the timing of our research and the phased development. While the literature review was completed before INC-5 (Busan, 2024), and our interview data preceded INC-5.2 (August 2025, Geneva), we acknowledge developments in treaty language and stakeholder positioning will likely continue to evolve. Nevertheless, the evolving nature of the negotiations has offered us an opportunity to examine how and why cigarette filters have been inconsistently addressed throughout the treaty process. Despite these challenges, we consider the insights we infer to offer a pointed contribution to the surrounding discussions around tobacco control, plastic pollution, and global environmental governance.

# 7. Best Practices Internationally

Case studies from New Zealand, France and England show different efforts to reduce tobacco littering.

#### New Zealand's Bold Tobacco Ban and Environmental Focus

New Zealand has taken a pioneering approach to tobacco control, aiming to become the first country in the world to completely phase out tobacco sales by 2025. In 2021, the government, led by Prime Minister Jacinda Ardern's Labour Party, announced its ambitious plan to reduce smoking prevalence to near zero. This bold policy is partly driven by the environmental harm caused by cigarette butts, which are made of non-biodegradable plastic filters.<sup>49</sup> The decision to phase out tobacco sales is viewed as a progressive step toward both reducing smoking-related health issues and addressing the environmental consequences of tobacco consumption.

New Zealand's tobacco ban received support from public health experts and environmental groups, seen as a significant move for public health and environmental protection. The proposal aimed to reduce tobacco consumption while addressing the pollution caused by cigarette filters in both public spaces and natural environments. This policy aligns with global health goals, particularly the WHO FCTC, balancing public health priorities with environmental sustainability.

#### France's Efforts to Combat Tobacco Littering

France has long been at the forefront of tobacco control in Europe, with comprehensive laws regulating tobacco advertising, public smoking, and cigarette packaging. While New Zealand has taken the step of phasing out tobacco sales, France's focus has been on reducing tobacco littering through stricter environmental policies and raising public awareness about the dangers of tobacco waste.

One of France's primary strategies for tackling tobacco littering has been the introduction of fines for individuals who dispose of cigarette butts improperly.<sup>50</sup> The country has invested in

<sup>&</sup>lt;sup>49</sup> Ministry of Health. (2024). *Smokefree Aotearoa* 2025. New Zealand Government.

<sup>&</sup>lt;sup>50</sup> French Ministry of Environment, "France Implements Fines for Tobacco Littering," 2022.

creating designated bins for cigarette butts in urban centres, parks, and other public spaces.<sup>51</sup> These bins are specifically designed to encourage smokers to dispose of their cigarettes responsibly, reducing the amount of tobacco waste in public areas. Additionally, France has launched public awareness campaigns that emphasise the environmental harm caused by cigarette filters, which are often mistaken for biodegradable waste.<sup>52</sup>



Figure 2: A cigarette disposal bin in a Paris park, one of 52 public spaces where smoking has been banned.<sup>53</sup>

Alongside these measures, France has also implemented programmes to recycle cigarette butts. Some cities have partnered with private companies to collect and process cigarette waste, turning it into useful products such as construction materials or clothing.<sup>54</sup>

#### England's Comprehensive Tobacco Control and Litter Prevention

England has a long history of tobacco control, with significant progress made in reducing smoking rates over the past few decades. Since the implementation of public smoking bans

<sup>&</sup>lt;sup>51</sup> Paris Property Group, "Paris City Hall Has Banned Tobacco Use in 52 of Its Parks and Gardens," *Paris Property Group*, June 8, 2019.

<sup>&</sup>lt;sup>52</sup> "Mohajerani, A., Bakaric, J., & Jeffrey-Bailey, T. (2015). *Recycling cigarette butts in lightweight fired clay bricks*. ResearchGate.

<sup>&</sup>lt;sup>53</sup> Paris Property Group, "Paris City Hall Has Banned Tobacco Use in 52 of Its Parks and Gardens," *Paris Property Group*, June 8, 2019.

<sup>&</sup>lt;sup>54</sup> BBN Times, "Tchaomegot: From Cigarette Butts to Jackets," *BBN Times*, accessed April 5, 2025.

in 2007, England has continued to enact strong tobacco control measures, including plain packaging laws (which were introduced in 2016) and increasing tobacco taxes. In addition to these measures, the country has focused on tackling tobacco littering through both regulatory and educational approaches.

One of the key components of England's strategy which was introduced to reduce tobacco littering has been the welcoming of penalties for littering, including for cigarette butts. Fines for cigarette littering typically range from £65 to £150, with some areas, like Royal Greenwich, increasing penalties to £200. The maximum fine for littering under the Environmental Protection Act 1990 is up to £2,500, with a potential criminal record for serious offenders.<sup>55</sup> Local councils across the country have the authority to issue fines to individuals caught littering in public spaces. Public awareness campaigns have also played a key role in educating the public about the environmental consequences of cigarette waste and encouraging smokers to use designated disposal bins.

In addition to these measures, England has invested in creating tobacco waste recycling programmes. Various initiatives have been launched to recycle cigarette butts into materials such as road surfaces or composting products.<sup>56</sup> These programmes aim to reduce the environmental impact of tobacco waste while also offering innovative solutions for repurposing discarded butts.

#### Comparative Analysis: Approaches, Challenges, and Outcomes

New Zealand, France, and England have made significant progress in addressing tobacco litter, but their approaches vary in ambition and focus. New Zealand's radical tobacco ban aims to eliminate both smoking and tobacco waste, offering a long-term solution, though it faces challenges from industry lobbying and economic pressures. In contrast, France and England focus on regulating tobacco litter through fines, public education, and recycling programmes, while also implementing broader tobacco control measures like smoking bans. While each country has made strides, the success of their efforts will depend on continued political will and the ability to balance public health, environmental goals, and economic pressures, a critical consideration for future policy recommendations.

<sup>&</sup>lt;sup>55</sup> UK Government Department for Environment, Food & Rural Affairs, "England's Tobacco Littering Penalties and Public Education Campaigns," 2021.

<sup>&</sup>lt;sup>56</sup> Recycling Today. (2014, September). *Collection news: Innovative recycling programs for cigarette butts in England*. Recycling Today.

# 8. Policy Recommendations

Based on our extensive research and expert consultations, we mapped out our policy recommendations using a multi-pronged approach. The proposed endorsements focus on addressing a multitude of perspectives, including environmental harm, public health consequences (and the reality of plastic pollution as a global health concern), industry accountability, and governance transparency, all in alignment with the WHO FCTC.

Whilst we devise specific policies, we uphold that no one recommendation should be viewed in isolation from another. All recommendations embody an expansive tobacco control strategy, where, if all aspects are put into effect, they offer a holistic approach that protects and promotes public health, whilst simultaneously integrating environmental considerations.

The following recommendations are not the basis of a single fixed solution, and we recognise that nations have different capacities, interests, and starting points, and thus there is no shortterm or one-size-fits-all response. Adaptability and contextual flexibility are paramount. The recommendations are deemed as guidelines.

National concerns across countries are unaligned; hence, states with resilient tobacco control legislation may adapt more expeditiously to progressive environmental policies, for instance, filters bans or Tobacco-Free Generation (TFG) Laws, whilst others may need to focus on reinforcing their EPR and transparency mechanisms before implementing absolute restrictions.

Ultimately, full implementation of the WHO FCTC is critical, and change must occur at multiple levels and in phased, realistic steps to build functionable, long-term solutions.

Our key recommendations fall under the following categories:

#### 1. Environmental Protection and Product Regulation

#### a. Ban the Sale of Cigarette Filters

Implement nationwide bans on cigarette filters, supported by research showing their environmental damage and harmful long-term effects on ecosystems.

#### b. Classify Cigarette Filters as Hazardous Waste

Reclassify cigarette filters as hazardous waste under national and international regulations, requiring tobacco companies to bear responsibility for disposal. Implement EPR schemes to fund collection and recycling.

#### c. Prohibit Greenwashing

Enforce legislation against false environmental claims in tobacco marketing, mandating that companies provide verifiable evidence of sustainability efforts. Introduce a global certification standard for genuinely sustainable tobacco products.

#### 2. Industry Accountability

Require tobacco companies to conduct full life-cycle assessments of their products, publicly disclose their environmental impact, and fund cleanup initiatives. Introduce legal consequences for non-compliance with environmental standards.

#### 3. Legislative and Structural Measures

Push for international treaties to manage tobacco waste and enforce product design regulations that prioritise sustainability. Introduce tax policies that discourage the use of harmful filters while incentivising the development of environmentally friendly alternatives.

#### 4. Transparency and UN Treaty Governance Measures

Establish independent auditing systems for tobacco companies to ensure transparency in environmental claims. Strengthen the WHO FCTC framework to include provisions for tobacco product waste management and accountability.

## 8.1 Environmental Protection and Product Regulation

#### a. Ban the Sale of Cigarette Filters

Filtered cigarettes offer no health benefit. Filters were introduced, not as a genuine safety measure, but as a marketing tool, an 'accessory' designed to persuade governments and the public that the tobacco industry was taking steps to make cigarettes safer for human

consumption.<sup>57 58</sup> In reality, filters have long served as a greenwashing tactic, an object used to create the illusion of harm reduction while broadening public misconceptions.

All our key informants underscored and supported a full ban on cigarette filters, citing their contribution to severe plastic and chemical pollution and also the false narrative they sustain. A decisive ban on filtered cigarettes would represent a critical step forward in the alignment of tobacco control with environmental protection.

While some research has explored solutions to biodegrade different plastic types, such as fungi capable of breaking down complex polymers, innovations remain limited in scalability and long-term effectiveness.<sup>59 60</sup> As such, technological solutions cannot replace policy action at this stage.

Advocates stress that the global community needs to treat tobacco waste as an urgent environmental issue. They argue that a robust international treaty on plastic waste must recognize cigarette filters as hazardous, non-essential plastics to ensure that meaningful progress is made. This recognition is vital not only for protecting ecosystems but also for closing regulatory loopholes that the tobacco industry exploits to maintain the marketability of harmful products under a facade of environmental responsibility. Addressing filters explicitly within treaty text would prevent their continued exclusion from plastic bans and establish global consensus on their status as unnecessary and damaging pollutants.

#### b. Classify Cigarette Filters as Hazardous Waste

Cigarette filters should be formally classified hazardous waste. This classification reflects their content of toxic substances and would trigger more stringent regulations on collection, disposal, and producer responsibility, while underscoring the perilous environmental and consequent health threats posed by filter litter.

This clear shift will harmonise filter-related waste with general waste management legislation thus strengthening enforcement targeting cleanup obligations and prohibitions. This

<sup>&</sup>lt;sup>57</sup> Shannon Gravely et al., "Opposition to Banning Cigarette Filters and the Belief That Removing Filters Makes Cigarettes Much More Harmful among Adults Who Smoke: Findings from the 2022 International Tobacco Control Four Country Smoking and Vaping Survey," *Nicotine and Tobacco Research* (2024).

<sup>&</sup>lt;sup>58</sup> AT Schweiz, "Green Coat, Same Stain: Tobacco Multinationals Paint Their Activities as Environmentally Conscious. The Truth: Their Business is Toxic to the Core," September 2024.

<sup>&</sup>lt;sup>59</sup> Munuru Srikanth, T. S. R. S. Sandeep, Kuvala Sucharitha, and Sudhakar Godi, "Biodegradation of Plastic Polymers by Fungi: A Brief Review," *Environmental Challenges* 5 (2021): 100235.

<sup>&</sup>lt;sup>60</sup> Sabreen S. Ibrahim, Danny Ionescu, and Hans-Peter Grossart, "Tapping into Fungal Potential: Biodegradation of Plastic and Rubber by Potent Fungi," *Science of The Total Environment* 846 (2022): 157467.

classification must also be supported by a clear rejection of unproven or misleading alternatives, which continue to hinder effective policy development.

Side note: While not the primary focus of our research, it is important to recognise the irrefutable emergence of HTPs contribution to plastic and electronic waste. These products should also be considered within plastic regulation frameworks, especially concerning their classification as single-use plastics and also as hazardous electronic waste where applicable.

#### c. Prohibit Greenwashing

In conjunction with compelling classification, policymakers must also avert attempts to endorse and legitimise ineffective proposals the industry promotes.

There may be a growing push to promote so-called 'innovative solutions' such as biodegradable filters or voluntary cigarette filter recycling schemes. However, these approaches should not be considered valid ecological strategies, and our key informants consistently underscored the ineffectiveness of such measures. Despite being presented as sustainable alternatives to solving this ubiquitous issue, these technologies serve largely as greenwashing methods that distract from effective regulation and inhibit progress.

Whilst there is ongoing research into the extent of filter-related pollution, it is patently evident that chemical leaching and microplastic contamination are both extreme and pervasive, with microplastics now detected across ecosystems and in the food chain.<sup>61 62</sup>

Recycling cigarette filters on the other side is equally futile, and used filters release hazardous substances during processing, and there is currently no scalable and safe way to recycle them. Recycling rates also remain significantly low, and the ecological impact is perpetuated even in controlled systems.<sup>63</sup>

Although some stakeholders may call for additional scientific evidence to maintain that biodegradable filters are an environmentally soluble answer to strengthen regulatory actions, policymakers should not allow such technologies to dictate momentum and disrupt regulatory

<sup>&</sup>lt;sup>61</sup> Cecilia Curtis et al., "Harm to Marine and Land Ecosystems: Tobacco Industry Responsibility for Butts: A Model Tobacco Waste Act," *Tobacco Control* 26, no. 1 (2017): 113-117.

<sup>&</sup>lt;sup>62</sup> Róisín Nash et al., "Deep Sea Microplastic Pollution Extends Out to Sediments in the Northeast Atlantic Ocean Margins," *Environmental Science & Technology* 57, no. 1 (2023): 201-213.

<sup>&</sup>lt;sup>63</sup> "Tobacco Waste Is an 'Ecotoxic Bomb' for the Planet," *Le Monde*, August 10, 2023.

direction. We urge that these deceptive measures be rejected within international and national frameworks, as they delay essential advancements for environmental protection.

## 8.2 Industry Accountability

#### Implement EPR Without Industry Interference

The tobacco industry must be held financially responsible for the environmental degradation they generate and, as such, must pay for waste management. We recommend an enforceable EPR system be implemented for all tobacco-related plastic waste, including cigarette filters and ceaselessly emerging HTPs. Through this policy amendment, the industry, not the individual consumer, will bear the costs of waste management, clean-up, and disposal.

It is crucial that EPR models be devised and regulated without industry interference, and as seen throughout the UN Plastic Treaty negotiations (unquestionably at INC-5) direct or indirect industry influence has unceasingly worked to dilute policy objectives and deflecting responsibility. If the industry is allowed to oversee or enforce these frameworks it would undermine the stability and entirely contradict the principles of the WHO FCTC's Article 5.3.

EPR for tobacco products must be incorporated into the UN Plastic Treaty outcomes, with rigid safeguarding so that the industry is not able to conflate financial responsibility with leverage for policies.

## 8.3 Legislative and Structural Measures

#### Tobacco-Free Generation (TFG) Laws

A longer-term solution we push is adopting Tobacco Free Generation (TFG) laws where the sale of tobacco products is banned for individuals born after a specific year. The aim is not to restrict those who are already tobacco consumers but to inhibit the uptake in younger

generations so that consumption gradually diminishes. A "simple yet profound concept",<sup>64</sup> this phased approach offers a sustainable route towards a future free of tobacco and subsequent filters, upholding public health and environmental goals.

As highlighted in Section 7, this has been attempted in the U.K. and New Zealand but in both instances, the legislation was reversed due to new governments coming into power. The initial success of these cases exemplifies the potential for the TFG model for effective positive development.

We suggest that this be considered as national policy laws supported under the UN Plastic Treaty, given the significance of tobacco-related plastic pollution.

## 8.4 Transparency and UN Treaty Governance Measures

To ensure the success of the UN treaty on plastic pollution, it is essential to protect negotiations from industry influence. One key measure highlighted by interviewees is to incorporate conflict-of-interest provisions similar to FCTC Article 5.3, which would safeguard the treaty process from commercial interests. This should include prohibiting industry-linked organisations from observer status and requiring delegates to publicly disclose any conflicts of interest.

Additionally, an independent oversight body should be established to monitor industry presence and influence during treaty sessions, ensuring impartial decision-making. Transparency can be further enhanced by creating a UNEP registry to record and disclose industry lobbying activities, event sponsorships, and financial connections. Requiring industry representatives to wear badges is another step to identify potential conflicts of interest.

While key solutions are outlined, additional measures are necessary to strengthen these safeguards. For example, implementing stricter transparency rules and prohibiting industry-linked organisations from observer status will limit undue influence. Furthermore, creating a framework for independent oversight to track lobbying in real time would enhance accountability. Finally, replacing consensus-based decision-making with qualified majority voting for procedural matters would prevent industry-aligned states from obstructing

<sup>&</sup>lt;sup>64</sup> Howard Koh and Michael Fiore, *The Tobacco Endgame Begins, Health Affairs Forefront,* 2024, quoted in Jonathan Berrick, "Guidance for Introducing the Tobacco-Free Generation Policy," *The International Journal of Health Planning and Management* (2025).

essential environmental actions. These steps will ensure the treaty remains focused on the public good, free from corporate interference.

# 9. Conclusion

The findings highlight the critical need to address cigarette filters' environmental impact and to challenge the prevailing narratives that have allowed them to evade regulation. Filters remain overlooked in plastic pollution discussions, despite their significant ecological harm. There has also been an important and growing shift in framing tobacco as an environmental threat, moving beyond its categorisation as a public health issue. This shift in relation to cigarette filters, e-cigarettes, and tobacco product packaging, has been driven by coordinated efforts from international organisations, NGOs, and advocacy coalitions.

Our expert interviews revealed six themes that highlight the complexities of integrating tobacco waste into international negotiations, particularly within the UN Plastic Treaty.

First, the tobacco industry's influence remains a significant barrier to regulation, often shifting responsibility to consumers or municipalities through greenwashing tactics such as recycling partnerships and the promotion of biodegradable alternatives. These efforts obscure the real issue: the production of plastic filters. For meaningful progress, the UN Plastic Treaty must regulate cigarette filters at the production level, not just focus on post-consumer disposal.

Our findings also point to gaps in knowledge among negotiators, with many unaware that cigarette filters are made of plastic, which complicates their inclusion in the treaty. Increased education and advocacy are necessary to raise awareness among policymakers about the role of filters in plastic pollution. Furthermore, divergent national interests are causing delays and compromises in negotiations. While some countries advocate for strong, binding

regulations, others, particularly tobacco- and plastic-producing nations, resist such measures due to economic concerns.

To address these challenges, it is essential for the UN Plastic Treaty to adopt specific language targeting cigarette filters as problematic plastics, and for the treaty to avoid allowing industry-driven voluntary solutions that lack real regulatory impact. Advocates should continue pushing for stronger regulatory frameworks, including a phase-out of filters and a rejection of ineffective alternatives, such as biodegradable filters.

In conclusion, the UN Plastic Treaty presents a strategic opportunity to tackle tobacco-related environmental pollution more effectively. However, for it to be truly impactful, it must include enforceable regulations that target tobacco waste at its source and resist the influence of the tobacco industry. Only through these measures can the treaty fulfil its potential to curb plastic pollution and strengthen global tobacco control.

# 10. Bibliography

Action on Smoking and Health (ASH). (n.d.). *The Stop Tobacco Pollution Alliance (STPA)*. <u>https://ash.org/stpa/</u>

Action on Smoking and Health (ASH). (2022). The global tobacco industry and its environmental impact. https://ash.org.uk/tobacco-industry/global-impact-of-tobacco

AT Schweiz. (2023). *Global Tobacco Industry Interference Index 2023*. <u>https://www.at-schweiz.ch/en/advocacy/tobacco-industry/global-tobacco-industry-interference-index/global-tobacco-industry-interference-index-2023/</u>

AT Schweiz. (2024). Green Coat, Same Stain: Tobacco multinationals paint their activities as environmentally conscious. The truth: Their business is toxic to the core. https://www.at-schweiz.ch/documents/989/Greenwashing\_Brief\_EN\_Final.pdf

AT Schweiz. (n.d.). *When the industry washes greener than green*. Retrieved April 14, 2025, from <u>https://www.at-schweiz.ch/en/knowledge/sustainability/plastics-tobacco/greenwashing/</u>

BBN Times. "Tchaomegot: From Cigarette Butts to Jackets." *BBN Times*. Accessed April 5, 2025. <u>https://www.bbntimes.com/environment/tchaomegot-from-cigarette-butts-to-jackets</u>.

Belzagui, F., Buscio, V., Gutiérrez-Bouzán, C., & Vilaseca, M. (2021). Cigarette butts as a microfiber source with a microplastic level of concern. *Science of the Total Environment*, 762, 144165. <u>https://doi.org/10.1016/j.scitotenv.2020.144165</u>

Conference of the Parties to the WHO FCTC. (2024, February 10). FCTC/COP10(14): Implementation of Article 18 of the WHO FCTC. Panama City, Panama.

Curtis, C., Novotny, T. E., Lee, K., Freiberg, M., & McLaughlin, I. (2017). Harm to marine and land ecosystems: Tobacco industry responsibility for butts: A model tobacco waste act. *Tobacco Control*, 26(1), 113-117.

Dewhirst, T. (2020). Greenwashing through anti-litter campaigns: Co-optation of harm reduction by Big Tobacco. *Tobacco Control*, 29(3), 241-246.

Earth Day Organization. (n.d.). *Greenwashing: How industries lie to you*. Accessed November 7, 2024. <u>https://www.earthday.org/greenwashing-how-industries-lie-to-you/</u>

Environmental Protection Agency (EPA). Sustainability and the Report on the Environment (ROE). <u>https://www.epa.gov/report-environment/sustainability-and-roe</u>

Euromonitor International. (2022). *Tobacco companies and ESG: The new frontier of corporate image*. <u>https://www.euromonitor.com</u>

French Ministry of Environment. "France Implements Fines for Tobacco Littering." 2022.

Global Alliance for Incinerator Alternatives (GAIA). (2023). Plastic waste and the role of tobacco in global pollution.

Gravely, S., Novotny, T. E., Cummings, K. M., et al. (2024). Opposition to banning cigarette filters and the belief that removing filters makes cigarettes much more harmful among adults who smoke. *Nicotine and Tobacco Research*, ntae270.

Haut, G. (2024). Single-use plastics directive implementation assessment report: Tobacco-related products. European Environmental Agency, p.44. <u>https://seas-at-risk.org/publications/single-use-plastics-directive-implementation-assessment-report-tobacco-related-products/</u>

Hendlin, Y. H., & Bialous, S. A. (2020). The environmental externalities of tobacco manufacturing: A review of tobacco industry reporting. *Ambio*, 49(1), 17–34. <u>https://doi.org/10.1007/s13280-019-01148-3</u>

High Ambition Coalition for Nature and People. (n.d.). https://www.hacfornatureandpeople.org/

Houghton, F. (2023). Greenwashing tobacco–Attempts to eco-label a killer product. *Journal of Environmental Health*, 86(3), 34-40.

Houghton, F., Harker, C. B., & Heitkamp, D. P. (2023). 'Greenwashing' tobacco products through ecological and social/equity labelling: A potential threat to tobacco control. *Global Public Health*, 18(2), 215-230.

Ibrahim, Sabreen S., Danny Ionescu, and Hans-Peter Grossart. "Tapping into Fungal Potential: Biodegradation of Plastic and Rubber by Potent Fungi." *Science of The Total Environment* 846 (2022): 157467.

https://www.sciencedirect.com/science/article/pii/S0048969724033357

INC Secretariat. (2023). *Meeting notes and country statements from INC-4*. United Nations Environment Programme. <u>https://www.unep.org/inc-plastic-pollution/session-4/statements#Opening</u>

International Chamber of Commerce (ICC). (2021). *Lobbying on global plastic policies: Trends and impact*. <u>https://www.iccwbo.org/lobbying-global-plastic-policies</u>

International Chamber of Commerce (ICC). "Environment." *ICC*. <u>https://iccwbo.org/global-insights/sustainability-and-climate-action/environment/#:~:text=ICC%20recognises%20and%20supports%20the.pollution%20by%202024 %20%E2%80%93%20effectively%20the.</u>

Koh, Howard, and Michael Fiore. *The Tobacco Endgame Begins*. *Health Affairs Forefront*, 2024. Quoted in: Berrick, Jonathan. "Guidance for Introducing the Tobacco-Free Generation Policy." *The International Journal of Health Planning and Management* (2025). <u>https://doi.org/10.1002/hpm.3693</u>.

Latin American and Caribbean Group (GRULAC). (2023). *Joint declaration on single-use plastics*. United Nations Environment Programme. <u>https://www.unep.org</u>

Making Tobacco Polluters Pay: STPA Campaign Launches in the New York Times. (2023, March 14). *African Tobacco Control Alliance (ATCA)*. <u>https://atca-africa.org/making-tobacco-polluters-pay-stop-tobacco-pollution-alliance-stpa-campaign-launches-in-the-new-york-times/</u>

Moran, M. B., Gorin, A., Fisher, J. D., & Wright, A. (2024). Greenwashed cigarette ad text and imagery produce inaccurate harm, addictiveness, and nicotine content perceptions. *Nicotine and Tobacco Research*, <u>https://doi.org/10.1093/ntr/ntae200</u>

Nash, R., Fletcher, E. G., & Johnson, R. (2023). Deep sea microplastic pollution extends out to sediments in the Northeast Atlantic Ocean margins. *Environmental Science & Technology*, 57(1), 201–213. <u>https://doi.org/10.1021/acs.est.2c05926</u>

National Center for Biotechnology Information (NCBI). "Tobacco Industry and the FCTC." *NCBI* Bookshelf. <u>https://www.ncbi.nlm.nih.gov/books/NBK53012/</u>

National Oceanic and Atmospheric Administration (NOAA). (2020, March 10). *Picking up 52 million plastic cigarette butts on beaches*. <u>https://response.restoration.noaa.gov/about/media/picking-52-million-plastic-cigarette-butts-beaches.html</u>

Natural Resources Defense Council (NRDC). (2023). *What is greenwashing*? Accessed November 7, 2024. <u>https://www.nrdc.org/stories/what-greenwashing</u>

Ministry of Health. (2024). *Smokefree Aotearoa* 2025. New Zealand Government. <u>https://www.health.govt.nz/strategies-initiatives/programmes-and-initiatives/smokefree-2025</u>

Novotny, T. E., Lum, K., Smith, E., Wang, V., & Barnes, R. (2009). Cigarette butts and the case for an environmental policy on hazardous cigarette waste. *International Journal of Environmental Research and Public Health*, 6(5), 1691-1705. <u>https://doi.org/10.3390/ijerph6051691</u>

Ocean Conservancy. (2023). *Charting a course to plastic-free beaches*. ICC Charter REDUCE Report. <u>https://oceanconservancy.org/wp-content/uploads/2023/06/ICCCharter-REDUCE-Report-2023-TFSOceanConservancy.pdf</u>

Paris Property Group. "Paris City Hall Has Banned Tobacco Use in 52 of Its Parks and Gardens." *Paris Property Group*, 8 June 2019. <u>https://parispropertygroup.com/blog/2019/paris-city-hall-has-banned-tobacco-use-in-52-of-its-parks-and-gardens/</u>

Philip Morris International (PMI). (n.d.). *Our World Is Not an Ashtray*. <u>https://www.worldnoashtray.com/en/</u>

Philip Morris International (PMI). (n.d.). *Press releases overview*. Accessed November 7, 2024. <u>https://www.pmi.com/investor-relations/press-releases-and-events/press-releases-overview/press-release-details?newsId=22656</u> Philip Morris International (PMI). (2022). Post-consumer tobacco waste report. <u>https://www.pmi.com/resources/docs/default-source/post-consumer-waste/pmi\_post-consumer-waste-fact-sheet\_digital.pdf</u>

"Putting the Focus on Butt Recovery." *Tobacco Asia*, 2023, <u>www.tobaccoasia.com/features/putting-the-focus-on-butt-</u>

<u>recovery/#:~:text=This%20year%2C%20France's%20government%20announced,approximately%20€1</u> 00%20million%20annually.

Qualitative research in policy and environmental sciences. (2021). *Journal of Environmental Policy Analysis*, 22(4), 456-478. <u>https://www.sciencedirect.com/journal/environmental-science-and-policy</u>

Rainey, J. (2018). Plastic straw ban? Cigarette butts are the single greatest source of ocean trash. *NBC News*. <u>https://www.nbcnews.com/news/us-news/plastic-straw-ban-cigarette-butts-are-single-greatest-source-ocean-n903661</u>

Mohajerani, A., Bakaric, J., & Jeffrey-Bailey, T. (2015). *Recycling cigarette butts in lightweight fired clay bricks*. ResearchGate. <u>https://www.researchgate.net/publication/279577246\_Recycling\_cigarette\_butts\_in\_lightweight\_fired\_clay\_bricks</u>

Recycling Today. (2014, September). *Collection news: Innovative recycling programs for cigarette butts in England*. Recycling Today. <u>https://www.recyclingtoday.com/article/rt0914-collection-news/</u>

Santa Cruz Becomes First U.S. City to Ban Sale of Filtered Cigarettes. (2024, January 10). *Santa Cruz Sentinel*. <u>https://www.santacruzsentinel.com/2024/10/08/time-to-be-bold-first-of-its-kind-filtered-cigarette-ban-gets-nod-from-santa-cruz-county-supervisors/</u>

Srikanth, Munuru, T. S. R. S. Sandeep, Kuvala Sucharitha, and Sudhakar Godi. "Biodegradation of Plastic Polymers by Fungi: A Brief Review." *Environmental Challenges* 5 (2021): 100235.

Stop Tobacco Pollution Alliance. (2023). *Tobacco industry participation in INC-5*. <u>https://stpa.ggtc.world/stpa-position-paper-for-inc-5-summary/</u>

Sy, D. (2024). Advancing environmental protection at COP10: Implications for tobacco's toxic plastics and extended producer responsibility. *Tobacco Control*. <u>https://blogs.bmj.com/tc/2024/04/14/advancing-environmental-protection-at-cop10-implications-for-tobaccos-toxic-plastics-and-extended-producer-responsibility/</u>

Sy, D. (2023). Tobacco industry accountability for marine pollution: Country and global estimates. *Tobacco Control*. <u>https://doi.org/10.1136/tc-2022-057795</u>

Tobacco Waste is an 'Ecotoxic Bomb' for the Planet. (2023, August 10). *Le Monde*. <u>https://www.lemonde.fr/en/environment/article/2023/08/10/tobacco-waste-is-an-ecotoxic-bomb-for-the-planet\_6088198\_114.html</u>

TerraCycle. (n.d.). *Tobacco waste and cigarette recycling*. <u>https://www.terracycle.com/en-US/brigades/cigarette-waste-recycling</u>

UK Government Department for Environment, Food & Rural Affairs. "England's Tobacco Littering Penalties and Public Education Campaigns." 2021.

World Health Organization (WHO). *Tobacco and Its Environmental Impact: An Overview*. Geneva: WHO, 2022. <u>https://www.who.int/publications/i/item/9789241512497</u>