

# ENVIRONMENTAL SMOKESCREENS OF INDIA'S CIGARETTE INDUSTRY

An analysis of ESG reports (2018-2024)

## A Policy Brief

# Executive Summary

India produces over 100 billion cigarettes annually, consumed by 33 million smokers. While the health risks of smoking are well documented, the environmental consequences remain underreported. Tobacco cultivation, cigarette manufacturing, and disposal inflict severe ecological damage, including deforestation, water depletion and contamination, soil degradation, carbon emissions, and toxic waste generation. Despite claims of sustainability, India's leading cigarette manufacturer—ITC Ltd. (which commands 79% of India's legal and organized cigarette market.), Godfrey Phillips India Ltd. (GPIL, which holds 11% market share, manufactures premium brand Marlboro under license from Philip Morris International (PMI).), and VST Industries (controls 7.7% of the market, with British American Tobacco Plc. as a key stakeholder) — fail to provide transparent and comprehensive environmental impact data.

This policy brief underscores the urgent need for regulatory interventions, enhanced sustainability reporting, and stricter compliance to mitigate the industry's extensive environmental footprint. The detailed report is available at: [www.react.net.in/bigtobacco-greenwashing-in-india/](http://www.react.net.in/bigtobacco-greenwashing-in-india/)

# The Environmental Impact of Cigarette Manufacturing

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## 1. Resource-Intensive Tobacco Cultivation

Tobacco farming depletes arable land, water, and soil nutrients, exacerbating environmental stress in already resource-scarce regions. Tobacco cultivation takes place in fragile tropical soils and often involves displacing forests and grasslands. To grow crops, there is excessive use of agrochemicals, including pesticides and fertilisers, contributes to soil degradation and water pollution. Thus tobacco cultivation is also extremely detrimental for local biodiversity. Furthermore, tobacco curing—a critical stage in production—relies heavily on firewood or biomass, leading to deforestation and increased carbon emissions. There is currently no disclosure on the source of fuelwood or biomass used for curing.

## 2. Carbon Footprint and Emissions

The cigarette industry is a significant contributor to carbon emissions. Tobacco cultivation, processing, manufacturing, packaging, and distribution generate vast amounts of greenhouse gases (GHGs). Several chemical inputs are added to make cigarettes which add up to their carbon burden. India's cigarette companies, ITC, GIL, and VST, report reductions in emissions but lack transparency regarding Scope 3 emissions, which include transportation, supply chain emissions, and consumer disposal of cigarette waste. Full carbon accounting is currently absent because of the limited scope of the product and process lifecycle assessment.

## 3. Water Usage and Pollution

The cigarette industry consumes vast amounts of water across the value chain, from tobacco cultivation to manufacturing. While companies claim reductions in water usage, reporting inconsistencies and the absence of detailed breakdowns hinder accurate assessment. Wastewater from processing plants often contains harmful chemicals, further contaminating local water sources.

## 4. Non-Biodegradable Waste and Littering

Cigarette butts, composed of cellulose acetate, are the most littered item worldwide, taking years to degrade. India lacks an effective waste management system for cigarette-related pollution. While companies claim commitments to Extended Producer Responsibility (EPR), specific targets and execution strategies remain vague.

## 5. Fire Hazards, Soil, Water and Land Degradation

Improper disposal of cigarette butts has been linked to wildfires and urban fires, causing loss of biodiversity and human settlements. Additionally, the chemicals in cigarettes leach into the soil and water, further impacting agricultural productivity and land stability.

# Key Findings

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## 1. Gaps in Extended Producer Responsibility (EPR)

India's cigarette companies primarily focus on packaging waste management through plastic neutrality programs. However, cigarette butts—the most hazardous waste component—are not addressed, leaving a significant regulatory gap. The regulatory gaps include, declared reduction of use of virgin plastic at source, reduction of plastics, foil, paper, board, energy in the supplier chain, takeback of products, and manage post-consumer waste (see Box 1)

## 2. Limited Carbon Reduction Efforts

Unlike global peers investing in carbon credit mechanisms and renewable energy, India's cigarette companies lack clear roadmaps for reducing emissions, with limited participation in Clean Development Mechanism (CDM) projects. ITC is the only company with a clear carbon mitigation plan (please see the full report), although it relies on traditional methods such as afforestation for carbon capture. GPI and VST have made limited efforts in sequestering their carbon emissions.

## 3. Inadequate Life Cycle Assessments (LCA)

Sustainability reports from ITC, GPIL, and VST fail to comprehensively evaluate environmental impacts across the entire tobacco supply chain, omitting crucial data on land use, emissions, and post-consumer waste. Compared to other Indian companies, and their international peers (cigarette and tobacco companies), the performance of India's tobacco companies lags behind complying with benchmarks on water, air, material and energy intensity and other metrics.

## 4. Deficient Transparency and Reporting Standards

Although companies claim to align with Global Reporting Initiative (GRI) and other frameworks (Integrated Reporting Framework (IRF), TCFD recommendations, ISAE 3000, ISO 14001, Science Based Targets Network (SBTN), cigarette company sustainability claims (energy-, carbon-, water-, resource- neutrality) often lack specificity to their segment, making third-party independent verification difficult. Third-party verification whose data is publicly shared is mandated by validation and certification companies. These are not readily made available by these companies.

## Strengthening Regulations on Cigarette Butt Disposal: CPCB Guidelines, November 2022

In India, around 113 billion cigarette sticks were made in 2021-22, and over 100 billion cigarette butts were thrown into the environment. Since each cigarette butt weighs about 0.17 grams, this adds up to nearly 17 million kg of tobacco waste every year. The waste from bidis is even higher because legal cigarettes make up approximately 10% of all tobacco products in the country. A report by an expert committee under the Department of Chemicals & Petrochemicals has identified cigarette butts as a harmful type of single-use plastic. These butts have little use but cause serious environmental damage.

In a case filed by Doctors For You (O.A No. 433/2015), the National Green Tribunal (NGT) directed the Central Pollution Control Board (CPCB) on 9 September 2020 to create guidelines for disposing of cigarette and bidi butts. In compliance with direction by the NGT, CPCB issued Guidelines for the Disposal of Cigarette/Bidi Butts on November 1, 2022. The guidelines mandate a multi-stakeholder approach to mitigate environmental and health risks. Cigarette manufacturers must now actively create public awareness of the hazards of littering cigarette butts and provide timely, regular data on associated risks throughout their distribution network. The guidelines direct local authorities to strictly prohibit cigarette butt littering by enforcing fines and integrating relevant provisions into local bye-laws. Additionally, smokers must segregate cigarette butts with dry waste, with disposal instructions mandated on every cigarette packet. The CPCB puts the onus on companies to explore mechanisms to manage cigarette butts effectively, assessing whether single-use cigarette filters should be classified under banned Single-Use Plastics (SUPs) or regulated through Extended Producer Responsibility (EPR) under the Plastic Waste Management Rules.

A collaborative approach is recommended to phase out single-use filters, reducing post-consumption waste. The guidelines also propose levies on cigarette manufacturers to fund clean-up operations, public awareness campaigns, and waste reduction efforts. Going forward, cigarette companies must explore collection and disposal mechanisms for spent cigarette butts, ensuring greater environmental accountability.

Source: Central Pollution Control Board. (2022, November 1). Guidelines for disposal of cigarette/bidi butts. Central Pollution Control Board. <https://cpcb.nic.in/uploads/MSW/cigarette-bidi-butts.pdf>

## Company-Level Analysis

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### ITC Limited

- Reports 50% renewable energy usage and significant plastic neutrality initiatives.
- Sustainability reports aggregate FMCG product data, making it difficult to assess cigarette-specific environmental impacts.
- Acquired a controlling stake in VST Industries, consolidating its market dominance.
- ITC has achieved plastic neutrality since FY 2021-22 but it is yet to adopt biodegradable butts and find alternatives to cellophane.
- Overall ITC couches its cigarette segment within its diversified portfolio, and this makes it difficult to assess the performance of individual businesses specially cigarettes and tobacco.

## Godfrey Phillips India Limited (GPIL)

- Reports targeted emissions and water reduction but lacks specific renewable energy commitments or targets to reduce material intensity.
- Limited focus on Scope 3 emissions and post-consumer waste management.
- Renewable energy makes for just 17% of GPI's total energy consumption. Although the company plans to reach 50% by 2030, it has not shown additional investments or other sources from where it will acquire it. This is much lower than the progress made by ITC and VST, or other FMCG companies of similar size and diversity of manufacture.
- GPI plans to transition to biodegradable packaging materials but it has made limited progress in reducing plastic, foil, board and other forms of packaging.

## VST Industries Limited

- Claims to have rainwater harvesting capacity three times its net water consumption but this remains unvalidated.
- Although VST has transitioned to 100% biodegradable BOPP overwrap, it does not have an explicit recycled BOPP use policy or take back mechanism.
- Claims commitment to sustainability but lacks robust reporting on emissions, energy use, and cigarette waste disposal.

# Sustainability Reporting Gaps: company analysis

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## ITC Ltd.

- Reports sustainability efforts across its FMCG portfolio, making it difficult to isolate cigarette-related impact.
- Claims reductions in energy and emissions but lacks clear baselines and numerical specifics.
- Highlights efforts in plastic-neutrality and sustainable sourcing but omits detailed life cycle assessments (LCAs) of inputs needed to make cigarettes.
- AWS-certified facilities contribute to water positivity, but groundwater extraction impact remains undisclosed.
- ITC claims to be carbon-positive for 19 years yet lacks granular data on other emissions (NOx/SOx) and fugitive emissions from tobacco curing and production.
- Waste recycling footprint exceeds 99%, yet there are no specific EPR programs for post-consumer cigarette waste.
- No specific reporting on supply chain emissions related to logistics and raw material sourcing.
- No firm strategy to transition towards biodegradable cigarette filters.

## Godfrey Phillips India Ltd. (GPIL)

- Reports reductions in emissions and water usage but does not provide process-specific data.
- Claims sustainability initiatives in tobacco farming but lacks data on environmental trade-offs.
- Reports plastic waste recovery but does not include comprehensive waste disposal metrics.
- GPI watershed and reforestation projects which are positioned to offset its negative environmental footprint from the cigarette segment. GPI also does not disclose its impact on agricultural water use.

## VST Industries Limited

- Reports Scope 1 and 2 emissions but lacks clear Scope 3 reporting. (Endnote: Scope 1 are direct emissions from owned sources (e.g., company vehicles, factories); Scope 2 are indirect emissions from purchased electricity; and Scope 3 are indirect emissions from the supply chain, including suppliers, distribution, and product use.)
- Sustainability initiatives include solar energy expansion, but process-level data is absent.
- Fails to report on water pollution, chemical use, and deforestation related to tobacco farming.
- VST aims to add 50% renewable energy to its overall energy mix by 2030 but does not provide detailed energy intensity reduction strategies.
- Has achieved AWS Gold certification but relies heavily on groundwater extraction without disclosing downstream impact assessments.
- No clear roadmap to transition towards net-zero carbon emissions across all operations.

# Policy Recommendations to improve environmental performance of India's cigarette companies

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Currently all companies fail to meet their obligations on the following, and therefore these measures needed to be addressed urgently.

## 1. Mandatory Comprehensive Sustainability Reporting

- Implement stricter regulatory requirements mandating full LCAs covering cultivation, processing, manufacturing, distribution, and disposal. The Bureau of Energy Efficiency, Pollution Control Boards and the Ministry of Environment, Forests and Climate Change must work together to build monitoring mechanism for all inputs needed to manufacture cigarettes.
- As part of Comprehensive LCA Reporting, companies must establish mandatory disclosure of supply chain impacts, covering tobacco cultivation, curing, and distribution.
- Enforce third-party audits for all environmental claims to prevent greenwashing. To comply with independent audits and standardized metrics, companies must report third-party verification in investor and sustainability reports to enhance transparency and accountability.

## 2. Extended Producer Responsibility (EPR) Enforcement

- Establish enforceable EPR mandates requiring cigarette companies to manage waste collection and recycling, especially by making CPCB Guidelines of 2022 actionable.

- Introduce penalties for failure to meet cigarette waste reduction targets.
- Mandatory EPR Regulations for all packaging and cigarette butts must require manufacturers to manage post-consumer waste, including biodegradable filters and take-back programs.

### **3. Stronger Carbon Emission Regulations**

- Require cigarette manufacturers to report and reduce Scope 1, 2, and 3 emissions.
- Implement carbon taxation on cigarette production and distribution to incentivise sustainable practices.
- There is a need for enhanced Carbon Accounting Standards. Companies must voluntarily adopt and report on carbon mitigation measures (outside of CSR and procurement) carbon credit purchased through voluntary carbon markets, and CDM projects to reduce tobacco's carbon footprint.

### **4. Sustainable Tobacco Farming Practice**

- Enforce sustainable water management and agroforestry initiatives in tobacco-growing regions.
- Encourage crop diversification programs to reduce dependency on tobacco cultivation.

### **5. Public Awareness and Behavioural Interventions**

- Launch nationwide campaigns highlighting the environmental impact of cigarette smoking and littering.
- Introduce cigarette waste disposal stations in urban areas to mitigate littering.

### **6. Adopt stronger biodegradable and recyclable packaging materials in the entire supply chain**

- Cigarette companies must adopt more rigorous targets for biodegradable or recyclable packaging materials especially cellophane, board, and paper. Cigarette butts need a specific and urgent strategy.
- Impose stricter regulations on the use of foil and plastic in cigarette packaging.

### **7. Make toxic use and release inventory (TUI/ TRI) mandatory**

Cigarette manufacturing and collection of butts and cigarette wastes fall under the purview Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016, under which companies need to present mandatory declarations. The Central Pollution Control Board has released detailed guidelines in 2022 directing cigarette companies to comply with safe disposal of cigarette butts. The initiatives by companies are not being publicly reported.

## Global progress in extended producer responsibility (EPR) and cigarette butt management

Several countries have taken strong steps to tackle cigarette butt litter, recognising its environmental harm. The European Union has imposed EPR rules, making tobacco companies financially responsible for cleaning up cigarette waste. France has gone further by introducing a dedicated eco-tax on cigarette producers to fund waste management efforts. In Canada, cities like Vancouver have installed specialised cigarette butt recycling bins, encouraging responsible disposal. The collected butts are processed into plastic products. Australia has also implemented similar recycling initiatives, with some states enforcing fines for littering cigarette butts. Several cities and jurisdictions within the United States have initiated local programmes. States of California, Oregon and Washington, along with San Francisco's cigarette litter fee, which funds citywide cleanup efforts. The Netherlands and Germany have introduced awareness campaigns and urban cleanup drives, urging smokers to dispose of butts responsibly. In Asia, South Korea, China, Sri Lanka, Taiwan and Brunei have launched public disposal initiatives. Singapore enforces heavy fines on cigarette littering. Japan has taken a cultural approach, ensuring widespread public ashtrays and strict anti-littering laws.

**Source:** Pazzaglia, A., & Castellani, B. (2023). Review of the Policy, Social, Operational, and Technological Factors Affecting Cigarette Butt Recycling Potential in Extended Producer Responsibility Programs. *Recycling*, 8(6), 95.; Vanapalli, K. R., Sharma, H. B., et al. (2023). Cigarettes butt littering: The story of the world's most littered item from the perspective of pollution, remedial actions, and policy measures. *Journal of Hazardous Materials*, 453, 131387

## Conclusion

India's cigarette industry's environmental impact is significantly underreported, with misleading sustainability claims obscuring the true ecological costs. While manufacturers acknowledge climate risks, gaps in data transparency, LCAs, and accountability persist. Policy interventions mandating stricter compliance, waste management responsibilities, and sustainable farming practices are essential to mitigating the sector's environmental damage. The E (environment component) of the ESG framework and reporting is currently deficient across all cigarette companies. For deeper analysis better disclosure of data and inspection reports of regulators must be shared publicly. Strengthening ESG and in particular EPR frameworks, enforcing comprehensive LCA reporting, and incentivizing carbon reduction initiatives are critical to mitigating tobacco's environmental footprint in India. Without urgent reforms, the cigarette industry will continue to impose irreversible costs on India's natural resources and ecosystems. Without stringent regulatory interventions and industry-led accountability measures, sustainability commitments will continue to fall short.

## Call to Action

- **Regulators:** Strengthen compliance to environmental and social laws and make reporting and data disclosure mandatory. Regulators must demand better data and push for standards which mandate stronger waste reduction which reduce material intensity; demand compliance for toxic release inventories; monitor emissions data; audit occupational health and safety data of workers; and set standards which seek compliance towards supplier, retail and post-consumer waste management strategies. In particular, CPCB Guidelines need to be made actionable through rules.
- **Manufacturers:** Improve transparency of data which helps adopt sustainable production, and take responsibility for all wastes.
- **Consumers:** Recognise the environmental cost of smoking and adopt for more sustainable choices.
- **Civil society:** Monitor, report and demand for complete takeback of all cigarette associated waste.
- **Researchers:** Conduct independent LCAs and fill data gaps and shortcomings in industry reporting.

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25. Download the full report from [www.react.net.in/bigtobacco-greenwashing-in-india/](http://www.react.net.in/bigtobacco-greenwashing-in-india/)

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