



A GLOBAL
TOBACCO
INDUSTRY
WATCHDOG

Uraian
Singkat



Global



Industri Rokok dan Kerusakan Lingkungan

June 2021

Perusahaan rokok secara signifikan mengendalikan desain produk dan rantai pasokan yang bertanggung-jawab atas:

Kerusakan biota laut.

Substansi racun lingkungan merembes dari puntung rokok selama proses dekomposisi yang memakan waktu puluhan tahun^{1,2} yang merusak biota laut.³

Kerusakan ekosistem.

Budidaya tembakau berkontribusi sebesar 5% terhadap kerusakan hutan global⁴ dan tidak memungkinkan peremajaan tanah atau perbaikan komponen ekosistem pertanian lainnya.⁵

Proses Produksi Industri Rokok Merusak Ekosistem.

Tembakau dan rokok adalah perusak utama ekosistem. Dengan terus memproduksi dan mengambil keuntungan dari tembakau dan rokok, dan melanjutkan kerusakan terhadap lingkungan yang sudah berlangsung lama,⁶ industri rokok menghambat upaya-upaya pemulihan lingkungan.⁷

1. **Pembukaan lahan**, dan kecenderungan untuk membuka lahan perawan untuk perkebunan tembakau, menimbulkan **penggundulan hutan**, dan berefek negatif terhadap sumberdaya hutan.⁸
 - Praktik budidaya tembakau yang dilakukan saat ini sifatnya tidak berkelanjutan. Periode pemulihan hutan dan tanah yang pendek membahayakan pemulihan hutan kayu, dan pada gilirannya mengakibatkan perubahan topografis dari hutan kayu menjadi semak-semak, atau bahkan penggundulan hutan permanen.⁹
 - **Penebangan dan pembakaran** batang dan sisa-sisa tanaman setelah panen karena tidak dapat dijadikan makanan untuk ternak atau unggas mengurangi sumber daya hewani seperti pupuk kandang.¹⁰

Rangkuman Fakta

Rokok: Kematian Lingkungan di Semua Fase

Produksi rokok mengakibatkan:

- 5% penggundulan hutan global (sampai dengan 30% penggundulan hutan di negara penanam tembakau)¹¹
- Kerusakan 200.000 hektar biomassa kayu setiap tahun¹²

Konsumsi rokok mengakibatkan:

- 4,5 triliun puntung rokok dibuang setiap tahun di seluruh dunia, yang menyumbang 766 juta ton sampah beracun setiap tahun¹³
- 2 juta ton limbah padat dari kardus dan kemasan rokok¹⁴
- Materi partikulat dalam ruangan dengan konsentrasi 10 kali lipat dari asap mobil diesel¹⁵
- 19-38% sampah yang dikumpulkan dari pembersihan laut secara global berasal dari puntung rokok¹⁶

Untuk menyalakan rokok, diperlukan:

- Penebangan 9 juta batang pohon setiap tahun untuk memproduksi korek api¹⁷

2. Menyalakan api dari kayu bakar, yang diambil dari hutan tetangga, untuk "mengasapi"¹⁸ daun tembakau, sehingga mengakibatkan erosi tanah dan habisnya sumberdaya kayu.
 - Penebangan pohon, termasuk pohon karet dan pohon asli, yang menyebabkan **penggundulan hutan** sekaligus **pengalihan aliran air setempat**, dari perenial (sepanjang tahun secara alami) menjadi musiman, sehingga mengakibatkan kelangkaan air.¹⁹
 - Produksi korek api untuk menyalakan rokok juga menghancurkan pohon.²⁰
3. **Penggunaan agrokimia** menyebabkan **keracunan²¹ dan polusi air**, dibuktikan dengan ditemukannya residu agrokimia di badan air yang berdekatan dengan komunitas perkebunan tembakau, yang menyebabkan dampak kerugian amat parah terhadap sistem hidrologi dan endapan di lahan basah, wilayah riparian (daratan yang mengelilingi aliran air), dan tebing-tebing curam.²²
 - Tembakau termasuk salah satu dari 10 tanaman budi daya yang paling banyak membutuhkan pupuk.²³
 - Salah satu dari sekian banyak pestisida yang digunakan adalah Chloropicrin, yang merupakan bahan beracun yang merusak paru-paru dan berbahaya untuk ikan serta organisme lain.²⁴
4. **Pemakaian plastik dan bahan kimia** dalam filter rokok sangat berpengaruh buruk **terhadap biota laut dan kesehatan air, diperparah dengan fakta bahwa puntung rokok adalah benda yang paling banyak dibuang di seluruh muka bumi.**²⁵
 - Arsenik, timbal, dan etil fenol merembes dari puntung rokok ke badan air, sehingga merusak biota air dan kualitas air minum.²⁶
 - Pemantik rokok yang biasanya bersifat sekali pakai, membutuhkan plastik, logam dan gas butan.²⁷
 - Rokok elektrik dan perlengkapannya menggunakan baterai dan bahan lain yang berbahaya²⁸ dan tidak terbio-degradasi.²⁹
5. Desain rokok anti-padam mengakibatkan kebakaran.³⁰ Rokok adalah penyebab utama kebakaran tak disengaja, termasuk kebakaran hutan. Sekitar -8-10% kebakaran di US disebabkan oleh rokok.³¹

Bagaimana industri rokok menghambat upaya menyelamatkan lingkungan dan memulihkan ekosistem kita?

Perusahaan rokok transnasional ditengarai sebagai salah satu penghasil polusi terburuk di dunia³² tetapi, mereka justru memamerkan praktik-praktik pro lingkungan,³³ penghargaan dari komunitas bisnis³⁴ dan hasil audit rantai pasokan atau bidang-bidang yang dianggap patuh terhadap aturan.³⁵ Industri rokok menerapkan strategi humas untuk mengalihkan perhatian publik dari dampak sejati kerusakan lingkungan yang ditimbulkan, mengaburkan solusi yang sebenarnya, menghambat strategi diversifikasi, menenggelamkan suara para pemangku kepentingan, dan mengalihkan kesalahan kepada konsumen serta menghindari tanggung-jawab.

Melalui kedok kegiatan bakti sosialnya (CSR), perusahaan rokok transnasional berusaha memberi kesan bahwa mereka bekerja sama dengan komunitas bisnis untuk mendukung upaya tertentu, sehingga mengalihkan perhatian publik dari fakta bahwa produksi tembakau tidak sama dengan bisnis lain - produk tembakau bersifat unik karena sama sekali tidak memberikan manfaat kesehatan atau sosial apapun, membunuh delapan (8) juta orang setiap tahun³⁶ dan menimbulkan beban ekonomi sebesar 1,4 triliun dolar AS setiap tahun.³⁷ Publisitas terhadap kegiatan CSR, selain melanggar larangan sponsor rokok di seluruh dunia, juga menimbulkan kesan palsu bahwa industri rokok dapat dipercaya untuk secara sukarela melaksanakan praktik-praktik taat asas di sepanjang rantai pasokannya,³⁸ ketika World Health Organization Framework Convention on Tobacco Control (WHO FCTC) sudah mensyaratkan bahwa industri rokok harus diatur secara ketat oleh pemerintah dan tidak dapat dipercaya untuk melakukan pengaturan sendiri dalam bentuk apapun. Konsisten dengan rekomendasi ahli³⁹ dan praktik-praktik terbaik, panduan WHO FCTC merekomendasikan regulasi dan kerangka kerja pemerintah yang kuat, riset independen dan diversifikasi, yang didanai secara berkelanjutan dan dilindungi dari campur tangan industri tembakau.⁴⁰

1. Inisiatif CSR perusahaan rokok mengalihkan perhatian dari dampak merusak industri rokok terhadap lingkungan.^{41,42}

Program CSR perusahaan rokok dalam bidang lingkungan seperti penanaman pohon, pembersihan pantai,⁴³ dll, telah terekspose sebagai kedok pengalihan perhatian dari masalah sebenarnya - terus memproduksi produk berbahaya, gagal bertanggung-jawab terhadap produk mereka selama siklus produk, mempertahankan harga rendah rokok, menolak memberikan daya tawar kepada pekerja dan mendorong perluasan ke lahan yang lebih subur dan penggunaan agrokimia beracun.⁴⁴

Audit terhadap perusahaan rokok⁴⁵ hanyalah ilusi, dan justru secara efektif mengekalkan masalah-masalah tersebut.⁴⁶ Audit justru mengaburkan betapa luasnya dampak kerusakan lingkungan dan tanggung-jawab industri rokok⁴⁷ serta merupakan pelanggaran terhadap Pasal 5.3 WHO FCTC.

Perusahaan sudah mengakui bahwa puntung rokok adalah benda yang paling banyak dibuang,⁴⁸ mencapai 4-5 triliun batang setiap tahun, dan perlu waktu sampai 15 tahun untuk terurai.⁴⁹ Sebagai respon, pembersihan laut sesekali didanai oleh perusahaan sambil mengingatkan bahwa konsumenlah yang bersalah karena membuang sampah, tanpa mengakui tanggungjawab bahwa toksin yang terus dilepaskan ke lingkungan selama penguraian berasal dari produk mereka yang tidak dirancang dengan baik.⁵⁰ Perlu dicatat bahwa puntung rokok yang diklaim "bio-degradable" (dapat terurai secara alami) tetap merusak biota air.⁵¹

Sambil mengklaim bahwa mereka mematuhi regulasi lingkungan di negara maju, perusahaan rokok sudah memindahkan sebagian besar manufaktur ke negara berpendapatan rendah dan menengah, di mana sebagian besar tanaman tembakau dibudi-dayakan,⁵² ini dilakukan untuk menghindari pertanggung-jawaban dan regulasi lingkungan yang ketat.⁵³ Karena rokok menghasilkan 2 juta ton limbah padat setiap tahun,⁵⁴ kerusakan lingkungan di negara berpendapatan rendah dan menengah makin parah karena buruknya pengolahan limbah,⁵⁵ sistem pengairan yang terpolusi⁵⁶ dan penggundulan hutan.^{57,58}

2. Strategi Humas industri rokok terkait lingkungan mengaburkan solusi kesepakatan internasional untuk mengatasi dampak lingkungan dari produksi rokok.

"Kontribusi" industri rokok untuk lingkungan, seperti promosi "penanaman pohon", mengaburkan solusi sebenarnya untuk melindungi lingkungan dan memulihkan ekosistem, dan di saat bersamaan memberi publikasi terhadap "praktik berkelanjutan" mereka. Upaya-upaya ini tidak mendukung opsi publik apapun yang sudah menjadi kesepakatan komunitas internasional dalam rangka mengatasi dampak lingkungan produksi rokok. Upaya yang termasuk dalam kesepakatan antara lain mencakup secara sinergis mengimplementasikan Pasal 17 (memberikan memberikan bantuan untuk kegiatan alternatif yang bernilai ekonomi layak) dan pasal 18 (perlindungan lingkungan dan kesehatan manusia) WHO FCTC, yang pada garis besarnya menghimbau **kebijakan yang mengutamakan kepentingan petani dan pekerja dan program-program diversifikasi yang didanai secara berkelanjutan dan terlindungi dari campur tangan industri rokok.**⁵⁹ Syarat-syarat ini antara lain ditujukan untuk mengatasi penggundulan hutan, degradasi lahan, dan pekerja di bawah umur. Contohnya, upaya mengalihkan lahan tembakau menjadi perkebunan tomat⁶⁰ atau bambu⁶¹ mempromosikan pemanfaatan lahan secara positif, mengurangi emisi karbon dan meningkatkan profitabilitas lahan, sekaligus mendukung keragaman hayati.⁶²

Selain itu, para ahli juga menghimbau peningkatan / penegakan regulasi lingkungan yang dapat diterapkan terhadap industri rokok, misalnya skema pertanggung-jawan produsen secara luas, yang melibatkan litigasi dan intervensi ekonomi untuk mengganti biaya pelanggaran industri dan kerusakan lingkungan serta meniadakan penggunaan plastik/filter sekali pakai.⁶³ Inisiatif CSR industri rokok tidak menanggapi solusi-solusi ini.

3. Perusahaan rokok mengalihkan kesalahan kerusakan lingkungan kepada konsumen.⁶⁴

Strategi CSR industri tembakau dalam mengatasi kerusakan lingkungan difokuskan pada upaya yang terang-terangan memamerkan "proyek tanam

pohon" dan "proses manufaktur bersih" sekaligus meningkatkan kesadaran tentang sampah puntung rokok dengan menyediakan asbak dan bak sampah di area publik serta berkontribusi untuk pembersihan laut. Pesan yang disampaikan industri rokok sangat jelas: "Halaman rumah kami bersih" dan "masalahnya adalah perokok yang membuang sampah sembarangan, namun kami juga membantu mengatasinya." Pesan ini membuat kabur fakta bahwa membuang puntung rokok pada dasarnya disebabkan oleh filter rokok itu sendiri, yang dirancang oleh perusahaan rokok, dan mereka bertanggung-jawab terhadap desain yang amat buruk dari produk yang mematikan dan adiktif ini.

Produk rokok sangat adiktif dan lebih dari 70% perokok ingin berhenti.⁶⁵ Konsumen, yang sudah dirayu dengan produk yang mematikan dan dibebani adiksi, juga disalahkan oleh perusahaan rokok karena membuang sampah dari sisa produk mereka. Alih-alih menyalahkan konsumen, tanggung-jawab produk di seluruh siklusnya harus dipikul oleh produsen rokok. Hal ini disebut juga Tanggung-jawab Produsen Secara Luas (Extended Producer Responsibility (EPR)).⁶⁶

Kami mengusulkan berbagai upaya untuk memungkinkan skema ganti rugi untuk mendanai penegakan hukum lingkungan, dan menyarankan perusahaan tembakau membayar atas kerusakan lingkungan yang ditimbulkan melalui skema "polluter pays."⁶⁷ Berbagai upaya terkait yang direkomendasikan di bawah konsep ini meliputi serangkaian prinsip yang dimuat dalam Pasal 19 dan Pasal 5.3 WHO FCTC, seperti membebaskan biaya pembersihan kepada industri rokok, proses peradilan terhadap kerugian yang ditimbulkan dan memberlakukan undang-undang untuk membebaskan tanggung-jawab kepada produsen dan penjual, bukan kepada konsumen.^{68,69}

4. Riset yang didanai industri rokok dilakukan untuk kepentingan mereka sendiri, dengan niat untuk melindungi diri dari kewajiban, bukan untuk keperluan pertanggung-jawaban.

Laporan industri rokok dengan sengaja menutup-nutupi dampak buruk rokok terhadap lingkungan.⁷⁰ Sebagai contoh, perkiraan konsumsi bahan bakar

kayu oleh perusahaan tembakau multinasional sangat rendah, dengan perkiraan indeks SFC (Specific Fuel Consumption) sebesar hanya 7,8 kg kayu / kg daun tembakau dibandingkan dengan perkiraan sebelumnya yaitu antara 100 kg sampai dengan 230 kg kayu / kg daun tembakau.⁷¹ Dampak penggundulan hutan global tahunan diperkirakan hanya 5% namun angka sesungguhnya diperkirakan mencapai 30% di beberapa negara, dan hanya diungkap melalui riset independen.⁷²

Perlu dicatat bahwa riset industri rokok mengenai sampah yang mengklaim tingkat penyelundupan yang amat tinggi, dimanfaatkan oleh perusahaan rokok untuk mengimbangi kenaikan pajak, dan dapat dikatakan sebagai teknik menyelamatkan diri. Tidak mengakui kepemilikan sejumlah besar puntung rokok dengan mengklaim bahwa puntung-puntung itu berasal dari produk bajakan juga mengurangi kewajiban potensial perusahaan rokok terhadap kerusakan yang terkait dengan pembersihan dan racun lingkungan yang dilepaskan ke laut.

5. Praktik industri rokok yang memberi insentif terhadap perkebunan tembakau dan menghambat strategi diversifikasi membuat petani kecanduan budidaya tembakau, yang sangat merusak lingkungan.

Sebagai bagian dari bisnis inti dan rantai pasokan, perusahaan rokok memberi kesan palsu bahwa mereka mendukung budidaya tembakau⁷³ dan komunitas-komunitas terkait, sehingga dengan kedok inisiatif CSR memungkinkan mereka memberi bantuan teknis dan finansial untuk budidaya tembakau. Namun, pemberian insentif kepada budidaya tembakau merupakan upaya menentang diversifikasi, yang merupakan solusi utama untuk mengatasi bahaya rokok terhadap kesehatan dan lingkungan.⁷⁴

Struktur perjanjian keuangan yang dibuat oleh industri rokok diciptakan untuk membuat petani tetap kecanduan terhadap budidaya tembakau.⁷⁵ Sebagian insentif yang diberikan oleh perusahaan rokok misalnya berupa pinjaman, dimaksudkan untuk memikat petani tembakau dan para pekerja untuk masuk ke perangkat produksi rokok dan menimbulkan ketergantungan,⁷⁶ dan pada akhirnya, terus menerus berutang.⁷⁷ Budidaya tanaman

tembakau mengakibatkan penggundulan hutan sampai 10 kali lipat lebih agresif dibandingkan dengan tanaman lain.⁷⁸

6. Front pembela perusahaan rokok dan kedok CSR-nya membungkam suara petani dan pekerja yang terdampak oleh kerusakan lingkungan.

Kesepakatan global dan perjanjian kebijakan mensyaratkan perusahaan rokok untuk tidak berperan dalam pembuatan kebijakan dalam hal diversifikasi pertanian, dan upaya-upaya diversifikasi harus dipimpin oleh pekerja/petani.⁷⁹ Namun, petani tembakau dan pekerja yang terdampak dan merasakan langsung dampak kerusakan lingkungan produksi rokok sangat kurang terwakili. Hal ini diperparah oleh fakta bahwa perusahaan rokok telah membentuk front-front pembela seperti International Tobacco Growers' Association (ITGA - Asosiasi Pembudidaya Tembakau Internasional)⁸⁰ untuk melakukan lobi atas nama mereka,⁸¹ dengan tujuan untuk memberikan argumen palsu tentang sosial-ekonomi petani⁸²⁻⁸⁵ sebagai dasar untuk menentang upaya pengendalian rokok seperti kenaikan pajak.⁸⁶

Pekerja di pertanian tembakau telah menuding perusahaan rokok menenggelamkan suara mereka dengan janji palsu selama diskusi mengenai Eliminating Child Labour in Tobacco Growing (ECLT) Foundation - (Eliminasi Buruh Anak dalam Budidaya Tembakau) yang didanai industri rokok.⁸⁷ Selain itu, industri rokok justru mengambil alih suara pemangku kepentingan dalam diskusi mengenai diversifikasi melalui Agriculture Transformation Initiative (ATI - Inisiatif Transformasi Agrikultur) bentukan Foundation for a Smoke-Free World

(FSFW - Yayasan Dunia Bebas Asap) yang didanai Philip Morris,⁸⁸ meskipun Pasal 5.3 WHO FCTC mensyaratkan untuk melindungi kebijakan agrikultur dan lingkungan dari kepentingan komersial industri rokok.

7. Perusahaan rokok menolak untuk membayar biaya kerusakan lingkungan meskipun sudah didukung oleh basis legal dan rasional.

Budidaya tanaman tembakau mengakibatkan kerusakan ekosistem dan menyumbang 5-30% penggundulan hutan,⁵⁷ yang merupakan sebab utama emisi gas rumah kaca.⁵⁸ Produksi rokok menghasilkan 2 juta ton limbah padat setiap tahun,⁵² dan menyebabkan terpolusinya sistem aliran air,⁵⁶ ditambah lagi dengan sistem kelola limbah yang buruk.⁵⁵ Desain puntung rokok yang buruk terus menerus mengakibatkan kebakaran dan membahayakan biota laut selama puluhan tahun. Melaksanakan litigasi dan intervensi ekonomi untuk mengganti biaya pelanggaran dan kerusakan lingkungan yang ditimbulkan industri rokok adalah solusi utama yang direkomendasikan para ahli untuk mengatasi kerusakan lingkungan akibat rokok.⁸⁹ Ini konsisten dengan Pasal 19 WHO FCTC untuk menangani kewajiban industri rokok termasuk kompensasi. Namun sampai saat ini industri rokok masih berhasil menghindari tanggung-jawab mereka terhadap kerusakan lingkungan dengan memindahkan operasionalnya ke wilayah yurisdiksi dengan regulasi yang tidak terlalu ketat atau bahkan longgar. Contohnya, untuk menanggapi keluhan mengenai polusi udara dan seruan terhadap regulasi rokok yang lebih ketat di Uganda, British American Tobacco memindahkan fasilitasnya ke Kenya.⁹⁰

Meskipun penilaian mengindikasikan tingkat kerusakan lingkungan yang sangat luas, tidak ada proses pengadilan yang menuntut tanggung jawab perusahaan rokok.⁹¹ Pasal 6 WHO FCTC (upaya harga dan pajak untuk mengurangi permintaan tembakau) sudah mencakup perlunya menuntut industri rokok untuk membayar dampak eksternal negatif industri melalui kenaikan pajak rokok.

Sejalan dengan ketentuan ini, beberapa negara sudah mengenakan bea dan biaya tambahan yang sesuai dengan prinsip "polluter pays" (penghasil polusi diharuskan untuk membayar).^{92,93} Perusahaan rokok telah menentang kenaikan pajak rokok dalam bentuk apapun⁹⁴ termasuk kebijakan yang mengharuskan produsen untuk menyisihkan keuntungan bagi mengganti kerugian akibat rokok. Perusahaan rokok menentang kebijakan yang mengharuskan industri

rokok membayar biaya pembersihan,⁹⁵ termasuk kebijakan-kebijakan yang sedang dipertimbangkan di Uni Eropa,⁹⁶ Perancis,⁹⁷ Irlandia,⁹⁸ Kerajaan Inggris⁹⁹ dan Amerika Serikat.¹⁰⁰

Anneks




Bagaimana Industri Rokok Menghambat Sustainable Development Goals (SDGs) PBB Terkait dengan lingkungan

SDG	Klaim Perusahaan Rokok...	Tindakan perusahaan rokok dalam kenyataan...
<p>6. Air Bersih dan Sanitasi</p> 	<p>Mempromosikan daur ulang air, melindungi badan air, dan mempromosikan tata Kelola air yang berkelanjutan</p>	<p>Menimbulkan polusi badan air dan mengancam biota air melalui puntung rokok dan pestisida.</p> <ul style="list-style-type: none"> Puntung rokok, yang sering dibuang ke laut, danau dan sumber air lain, mengandung substansi beracun yang berdampak terhadap mutu air minum
<p>12. Konsumsi dan Produksi secara bertanggung-jawab</p> 	<p>Mengurangi dampak lingkungan dari produk-produknya, termasuk daur ulang dan program pencegahan pembuangan sampah yang tidak pada tempatnya</p>	<p>Menghasilkan 766 juta ton limbah beracun setiap tahun melepas ribuan zat kimia beracun ke udara, air dan tanah.</p> <ul style="list-style-type: none"> Lebih dari 4,5 triliun puntung rokok tidak dibuang dengan semestinya, sehingga menjadi benda paling banyak dibuang di seluruh planet.
<p>13. Aksi Iklim</p> 	<p>Mitigasi risiko perubahan iklim melalui program netral karbon</p>	<p>Menghindari tanggung-jawab untuk memberikan kompensasi terhadap kerusakan lingkungan yang ditimbulkan oleh bisnisnya, termasuk tingkat penggundulan hutan yang mencapai 200.000 hektar per tahun</p> <ul style="list-style-type: none"> Perusahaan rokok terus menerus meremehkan kerusakan lingkungan ayng mereka timbulkan.
<p>14. Kehidupan bawah air</p> 	<p>Mengurangi dampak lingkungan produk, termasuk pencegahan pembuangan sampah, dan emmastikan eflue yang dilepaskan berada di bawah ambang batas regulasi pemerintah</p>	<p>Menemukan cara-cara untuk melanjutkan praktik-praktik bisnis yang merusak sistem perairan.</p> <ul style="list-style-type: none"> Perusahaan rokok mengadakan donasi kampanye yang memungkinkan puntung rokok terhindar dari regulasi meskipun puntung rokok adalah satu-satunya benda yang paling banyak terkumpul dalam upaya pembersihan laut Perusahaan rokok juga menimbulkan polusi di badan-badan air dan mengancam biota air melalui puntung rokok dan pestisida.

Source: Sy D, Castillo C, Trivino D. How tobacco industry interference hinders the UN Sustainable Development Goals. Issue Brief. STOP (September 2020).

Anneks

Bagaimana Industri Rokok Menghambat Sustainable Development Goals (SDGs) PBB Terkait dengan lingkungan

SDG	Klaim Perusahaan Rokok...	Tindakan perusahaan rokok dalam kenyataan...
<p>15. Kehidupan di daratan</p> 	<p>Melindungi keragaman hayati, terutama di wilayah hutan terdampak</p>	<p>Mengadakan kegiatan lingkungan sebagai kedok untuk mengalihkan perhatian dari tanggung-jawab terhadap kerusakan lingkungan.</p> <ul style="list-style-type: none"> • Budidaya tanaman tembakau mengakibatkan kerugian permanen hilangnya pohon dan keragaman hayati. • Membuka lahan untuk menanam tembakau dan kebakaran hutan terkait rokok mengakibatkan penggundulan hutan.
<p>16. Kedamaian, keadilan dan lembaga yang kuat</p> 	<p>“Memerangi perdagangan gelap produk tembakau,”⁷ mendukung peran undang-undang dan transparansi</p> <p>Melawan “industry tembakau ilegal” yang dapat “menggerus peran undang-undang dan mengacaukan keadaan damai dengan mendanai operasional jaringan kriminal.”⁸</p>	<p>Melobi dan menyuap pembuat kebijakan untuk berpihak kepada kepentingan komersial dan melemahkan, menunda atau sepenuhnya menghambat implementasi upaya penyelamatan melalui tuntutan hukum terhadap pemerintah atau secara terang-terangan menghindari syarat pemerintah.</p> <ul style="list-style-type: none"> • Perusahaan rokok trans-nasional besar diketahui terlibat dalam perdagangan gelap; mayoritas rokok yang diperdagangkan secara gelap adalah “produk palsu tetapi asli” atau produk yang diproduksi secara legal namun diperjualbelikan di pasar gelap.
<p>17. Kemitraan untuk mencapai sasaran</p> 	<p>Menjadi mitra dalam bidang Kesehatan, meskipun ada konflik kepentingan, dalam rangka mempromosikan produk alternatif</p> <p>Bermitra dengan pemerintah untuk memerangi perdagangan gelap.</p>	<p>Mempengaruhi pembuat kebijakan untuk melonggarkan upaya penyelamatan (termasuk menaikkan pajak dan melarang iklan, promosi dan sponsor rokok) dan berpihak kepada kepentingan komersial produk yang berbahaya dan adiktif sehingga secara efektif menghambat upaya mencapai SDG.</p> <ul style="list-style-type: none"> • Kedok kegiatan CSR industri rokok yang terkait dengan SDG dirancang untuk memperbaiki citra publik dan mendapatkan pembebasan pajak • Perusahaan rokok mengakibatkan pelanggaran undang-undang perjanjian, yang menentang kemitraan dengan industri rokok secara keseluruhan, dan terutama dalam upaya memerangi perdagangan gelap.

Source: Sy D, Castillo C, Trivino D. How tobacco industry interference hinders the UN Sustainable Development Goals. Issue Brief. STOP (September 2020).

References

1. Although cigarette filters eventually decompose into smaller pieces, their toxic components and plastic pieces may never disappear from water and soil and can continue to leach chemicals for up to 10 years.
See: Thomas E. Novotny & Elli Slaughter. Tobacco Product Waste: An Environmental Approach to Reduce Tobacco Consumption. Current Environment Health Report (2014) 1:208–216 (6 May 2014). Available at: <https://link.springer.com/content/pdf/10.1007/s40572-014-0016-x.pdf>
2. PMI conducted a cigarette butt litter survey in 2020. The survey revealed:
 - i. 25 percent of adult smokers throw cigarette butts to the ground because they think it is normal to dispose a cigarette in this manner. Every one in eight individuals in the survey said they don't think its polluting.
 - ii. Smokers identified in the survey said they smoke 11 cigarettes per day, of which 60% are smoked outdoors, thereby creating ample chances of littering.
 - iii. Only 13% of individuals correctly identified plastic as the main component of cigarette filters.The main constituent of cigarette filters is 'cellulose acetate', a bio-plastic that takes anything from three months to 15 years to decompose. This was also acknowledged in the PMI Integrated Report 2020.
3. Slaughter, Elli et al. "Toxicity of cigarette butts, and their chemical components, to marine and freshwater fish." Tobacco control vol. 20 Suppl 1, Suppl_1 (May 2011):i25-9. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3088407/#:~:text=Background,in%20cigarettes%20prepared%20for%20consumption.>
4. Geist HJ. Global assessment of deforestation related to tobacco farming. Tobacco Control (March 1999); 8:18-28. Available at: <https://tobaccocontrol.bmj.com/content/8/1/18>
5. Lecours N, Almeida GEG, Abdallah JM, et al. Environmental health impacts of tobacco farming: a review of the literature. Tobacco Control (February 2012);21:191-196. Available at: <https://tobaccocontrol.bmj.com/content/21/2/191>
6. In Cambodia, tobacco farmers buy firewood for curing tobacco. They also cut and use fuel wood as well as rubber trees, a useful economic product, for tobacco curing. In Kenya, soil erosion, widespread deforestation, cutting of indigenous trees for curing, water pollution as well as change in flow patterns of local streams have been documented, all due to tobacco plantations. In Brazil, reduced forest land cover, soil depletion as well as abundant agrochemical residues in waterways located close to tobacco cultivating communities were found, severely impacting natural hydrological systems.
See: Lecours N, Almeida GEG, Abdallah JM, et al. Environmental health impacts of tobacco farming: a review of the literature. Tobacco Control (February 2012);21:191-196. Available at: <https://tobaccocontrol.bmj.com/content/21/2/191>
7. "Article 2 of the Convention on Biological Diversity defines an 'ecosystem' as a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit".
See: Convention on Biological Diversity (CBD) (1992). Article 2 Use of Terms. Available at: <https://www.cbd.int/kb/record/article/6872?RecordType=article>
"The term 'ecosystem' can refer to any functioning unit at any scale which is determined by the problem being addressed."
See: Convention on Biological Diversity (CBD). (no date). Description. Available at: <https://www.cbd.int/ecosystem/description.shtml>
"Ecosystem restoration is defined as a process of reversing the degradation of ecosystems, such as landscapes, lakes and oceans to regain their ecological functionality; in other words, to improve the productivity and capacity of ecosystems to meet the needs of society. This can be done by allowing the natural regeneration of overexploited ecosystems or by planting trees and other plants".
See: New UN Decade on Ecosystem Restoration offers unparalleled opportunity for job creation, food security and addressing climate change opportunity. UNEP (2019). Available at: <https://www.unep.org/news-and-stories/press-release/new-un-decade-ecosystem-restoration-offers-unparalleled-opportunity>
"The objective of ecosystem restoration is to contribute to the conservation and sustainable use of biodiversity as well as create social, economic and environmental benefits, whereby healthy and connected ecosystems should contribute to improve food and water security, peoples' livelihoods and to mitigate and adapt to climate change."
See: 'Decision XIII/5. Ecosystem restoration: short-term action plan', in, p. 10. CBD (2019). Available at: <https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-05-en.pdf>
"Ecosystem restoration substantially supports the objectives of international agreements and global objectives, including the Sustainable Development Goals (specifically Target 6, 14, and 15), the Strategic Plan for Biodiversity 2011-2020 (specifically Target 15), the Paris Agreement, the Land Degradation Neutrality goal, the Global Forest Goals, and the Ramsar Convention on Wetlands."
See: What is ecosystem restoration? International Union for Conservation of Nature (no date). Available at: https://www.iucn.org/sites/dev/files/content/documents/what_is_ecosystem_restoration.pdf
8. In low- and middle-income countries, land clearing for tobacco cultivation has depleted forest reserves. In Tanzania, expanding cultivations can only be done by clearing virgin forest lands for their increased yield and disease-free soil. According to Abdallah et al, 69% of tobacco cultivators in Urambo District clear new woodland every season for tobacco farming and only 25% of them grow on the same area for two successive seasons, while only a mere 6% do so for more than two successive seasons. This type of 'shifting cultivation' accounts for 96% of deforestation in the area, making tobacco farming a massive threat to forest biomes.
See: Lecours N, Almeida GEG, Abdallah JM, et al. Environmental health impacts of tobacco farming: a review of the literature. Tobacco Control (February 2012);21:191-196. Available at: <https://tobaccocontrol.bmj.com/content/21/2/191>
9. Mangora, M.M. Ecological impact of tobacco farming in miombo woodlands of Urambo District, Tanzania. African Journal of Ecology (December 2005), 43: 385-391. Available at: https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2028.2005.00603.x?casa_token=iyzW6vln700AAAAA%3AvLghnpcJRYHivkklpq9Ds1LCPFabAQJBTRGRdzwN2Cxn0j-UjelSFZi-jM4omNny1PbsHIBCRCSeZA
10. Lecours N, Almeida GEG, Abdallah JM, et al. Environmental health impacts of tobacco farming: a review of the literature. Tobacco Control (February 2012);21:191-196. Available at: <https://tobaccocontrol.bmj.com/content/21/2/191>
11. Discussion Paper: The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development. United Nations Development Programme (May 2017). Retrieved from: <https://www.who.int/fctc/implementation/publications/who-fctc-undp-wntd-2017.pdf>

12. 'WHO. Tobacco control, a 'major component' of environmental protection efforts (11 September 2018). Available at: <https://www.who.int/fctc/mediacentre/news/2018/tobacco-control-a-major-component-of-environmental-protection/en/#:~:text=Estimates%20show%20that%20tobacco%20farming,da%20Costa%20e%20Silva%20noted.>
13. Eriksen, M, et al. The Tobacco Atlas: Fifth Edition. American Cancer Society and World Lung Foundation (2015). Available at: https://ncdalliance.org/sites/default/files/resource_files/TA5_2015_WEB.pdf
Cited in: Discussion Paper: The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development. United Nations Development Programme (May 2017). Retrieved from <https://www.who.int/fctc/implementation/publications/who-fctc-undp-wntd-2017.pdf>
See also: Wright, S., Rowe, D., Reid, M. et al. Bioaccumulation and biological effects of cigarette litter in marine worms. *Sci Rep* 5, 14119 (2015). Available at: <https://www.nature.com/articles/srep14119#:~:text=Approximately%204.5%20trillion%20smoked%20cigarette,to%20the%20environment%20annually4.>
14. Waste generated from cartons and cigarette packaging alone generates 2 million tonnes of solid waste annually. These figures are comparable with 1.83 million tonnes of plastic waste generated annually by plastic water bottles.
See: Novotny, Thomas E et al. "The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption." *Bulletin of the World Health Organization* vol. 93,12 (December 2015): 877-80. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4669730/>
15. There is increased risk of dying from heart diseases and lung cancer due to exposure from ambient fine particulate matter (PM2.5) caused by air pollution. This risk is higher for smokers because PM 2.5 synergistically combined with smoking increases mortality.
See: Discussion Paper: The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development. United Nations Development Programme (May 2017). Retrieved from <https://www.who.int/fctc/implementation/publications/who-fctc-undp-wntd-2017.pdf>
16. Novotny, T.E., Slaughter, E. Tobacco Product Waste: An Environmental Approach to Reduce Tobacco Consumption. *Curr Envir Health Rpt* 1, 208–216 (May 2014). Available at: <https://link.springer.com/article/10.1007/s40572-014-0016-x>
17. "Most cigarettes are lit using matches or gas-filled lighters. If, for example, one wooden match is used to light two cigarettes, the six trillion cigarettes smoked globally each year would require the destruction of about nine million trees to produce three trillion matches."
See: Novotny, Thomas E et al. "The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption." *Bulletin of the World Health Organization* vol. 93,12 (December 2015): 877-80. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4669730/>
18. "The production of Virginia tobacco (for which there is higher demand and therefore higher price) requires flue curing, which is performed in kilns by burning wood at constant heat temperatures for several days. Thus, for this type of crop, farmers in LMICs must acquire wood from the surrounding forests, their own land, or from public lands. These wood resources are less and less available as a result of shifting cultivation."
"As a major factor contributing to crop-specific deforestation, the global mean of flue-cured produce using wood is only about 12%, but increases to a mean 62% in the producer countries with minor-to-serious tobacco-related deforestation."
See: Lecours N, Almeida GEG, Abdallah JM, et al. Environmental health impacts of tobacco farming: a review of the literature. *Tobacco Control* (February 2012);21:191-196. Available at: <https://tobaccocontrol.bmj.com/content/21/2/191>
19. Lecours N, Almeida GEG, Abdallah JM, et al. Environmental health impacts of tobacco farming: a review of the literature. *Tobacco Control* (February 2012);21:191-196. Available at: <https://tobaccocontrol.bmj.com/content/21/2/191>
20. "Most cigarettes are lit using matches or gas-filled lighters. If, for example, one wooden match is used to light two cigarettes, the six trillion cigarettes smoked globally each year would require the destruction of about nine million trees to produce three trillion matches."
See: Novotny, Thomas E et al. "The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption." *Bulletin of the World Health Organization* vol. 93,12 (December 2015): 877-80. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4669730/>
21. Discussion Paper: The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development. WHO Framework Convention on Tobacco Control and United Nations Development Program (26 May 2017). Available at: <https://www.who.int/fctc/implementation/publications/who-fctc-undp-wntd-2017.pdf>
22. Lecours N, Almeida GEG, Abdallah JM, et al. Environmental health impacts of tobacco farming: a review of the literature. *Tobacco Control* (February 2012);21:191-196. Available at: <https://tobaccocontrol.bmj.com/content/21/2/191>
23. "Tobacco ranks among the 10 crops with the highest fertilization rates."
See: Fertilizer use by crop. Rome, Food and Agriculture Organization of the United Nations; 2006.
Cited in: Economically sustainable alternatives to tobacco growing (in relation to Articles 17 and 18 of the WHO Framework Convention on Tobacco Control) Report by the working group. Conference of the Parties to the WHO Framework Convention on Tobacco Control (18 July 2014); FCTC/COP/6/12. Available at: https://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_12-en.pdf
24. "Among the pesticides used in tobacco growing is chloropicrin, a lung-damaging agent that was used as a tear gas in World War I and is toxic to fish and other organisms."
See: Discussion Paper: The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development. WHO Framework Convention on Tobacco Control and United Nations Development Program (26 May 2017). Available at: <https://www.who.int/fctc/implementation/publications/who-fctc-undp-wntd-2017.pdf>
25. Ocean Conservatory, International Coastal Cleanup Report 2015.; United Nations Development Programme. Available at: <https://oceanconservancy.org/wp-content/uploads/2017/04/2015-Ocean-Conservancy-ICC-Report.pdf>

26. "In Nueva Segovia department of Nicaragua, where most tobacco farms are close to important rivers, researchers found pesticide contamination in both the superficial aquifer and deep groundwater. Studies in Brazil have found excessive agrochemical residues in waterways near tobacco farming communities."
See: Discussion Paper: The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development. WHO Framework Convention on Tobacco Control and United Nations Development Program (26 May 2017). Available at: <https://www.who.int/ctct/implementation/publications/who-ctct-undp-wntd-2017.pdf>
27. "There are also environmental impacts of manufacturing and disposing of the plastic, metal and butane used in making cigarette lighters."
See: Novotny, Thomas E et al. "The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption." *Bulletin of the World Health Organization* vol. 93,12 (December 2015): 877-80. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4669730/>
28. The tobacco industry is very much aware of the scope and extent of environmental harms it causes. For example, Philip Morris International (PMI) acknowledged that selling of electronic smoking devices leads to worsening of the water and energy used (PMI, 2016). The Lifecycle Analysis reports by PMI for the so-called reduced risk products (RRRs) clearly showed the impact of product development, manufacturing and distribution on their ecological footprint (PMI, 2017). The tobacco industry has refused to implement practices that could reduce the waste generated from manufacture and disposal of their products. Cigarette filters have been proven to do more harm than good to both health and the environment. They were developed as a consequence of growing fears in consumers regarding health harms of cigarette use and are, in reality, unnecessary appendages to the cigarette. Yet, the industry has done nothing to reduce its ecological impact of cigarette production, use and disposal.
See: Hendlin, Y.H., Bialous, S.A. The environmental externalities of tobacco manufacturing: A review of tobacco industry reporting. *Ambio* 49, 17–34 (January 2020). Available at: <https://link.springer.com/article/10.1007/s13280-019-01148-3#citeas>
See also: "Unlike petrochemical-derived plastic products such as straws and plastic cutlery, cigarette filters do biodegrade, but not quickly enough currently to avoid any short-term littering problems." -BAT, Integrated Report 2020
29. "Electronic cigarettes may contain batteries that require special disposal as well as chemicals, packaging and other non-biodegradable materials. The US Federal Emergency Management Agency (FEMA) has expressed concerns about the flammability and lack of product regulation of electronic cigarettes and their components." See: Novotny, Thomas E et al. The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption. *Bulletin of the World Health Organization* [online]. 2015, v. 93, n. 12, pp. 877-880. Available from: <https://www.who.int/bulletin/volumes/93/12/15-152744/en/>
30. "Regulations requiring cigarettes to self-extinguish in Canada and the USA were associated with a 30% decline in fire-related deaths from 2003 to 2011."
See: Novotny, Thomas E et al. "The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption." *Bulletin of the World Health Organization* vol. 93,12 (December 2015): 877-80. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4669730/>
31. "Cigarettes remain an important cause of accidental fires and resulting deaths. In the United States of America, cigarettes have been responsible for 8–10% of all fires over the past 10 years (on average 90000 fires per year); they also remain the single most important cause of deaths related to fires (540 of 2855 total deaths in 2011)." See: Novotny, Thomas E et al. "The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption." *Bulletin of the World Health Organization* vol. 93,12 (December 2015): 877-80. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4669730/>
32. Rachel Koning Beals. Coca-Cola, PepsiCo and Nestlé top '10 worst plastic polluters' of 2020. *Market Watch* (8 December 2020). Available at: <https://www.marketwatch.com/story/coca-cola-pepsico-and-nestle-top-10-worst-plastic-polluters-of-2020-11607465840>
33. For example: "PMI partners, supports, participates, and is a member of sustainability related initiatives and organizations such as the World Business Council for Sustainable Development (WBCSD), Business for Social Responsibility (BSR), CSR Europe, and the We Mean Business coalition, which harness the power of collaboration to implement solutions at scale." (PMI Integrated Report 2020) "For decades, we have invested in developing and testing products with the aim of replacing cellulose acetate filters alongside our suppliers. We have commissioned more than 20 different projects exploring the potential development of such alternatives. There are strict requirements to be met before we can roll out any alternatives." (BAT Integrated Report 2020) "[Key issues in 2020] Environment: (a) Supporting the TCFD (Task Force on Climate-related Financial Disclosures) and (b) the appropriate use and responsible disposal of materials, including plastics, used in our products and packaging." (JTI Integrated Report 2020) "The tobacco sector has been one of the leaders in promoting sustainability and good agricultural practices (GAP). These subjects are central to the debates, discussions and decision-making processes between ITGA and sectoral bodies such as CORESTA, the international Scientific Research Committee on Tobacco." (ITGA, Environmental Aspects)
34. FTSE 100 – the 5 highest ESG rated companies.
See: Sophie Lund-Yates, Equity Analyst. Hargreaves Lansdown (3 March 2021). Available at: <https://www.hl.co.uk/news/articles/ftse-100-the-5-highest-esg-rated-companies>
See also: Philip Morris International Recognized Among World's Top Sustainable Businesses with "Triple A" Score from CDP. *BusinessWire India* (10 December 2020). Available at: <https://www.businesswireindia.com/philip-morris-international-recognized-among-worlds-top-sustainable-businesses-with-triple-a-score-from-cdp-70732.html>
35. "tobacco industry's efforts to reduce their environmental harms amount to CSR initiatives displaying a lack of transparency and independent verification, that limit objective assessment of the environmental impact of tobacco manufacturing."
See: Hendlin, Y.H., Bialous, S.A. The environmental externalities of tobacco manufacturing: A review of tobacco industry reporting. *Ambio* 49, 17–34 (January 2020). Available at: <https://link.springer.com/article/10.1007/s13280-019-01148-3>
See also: Sustainable supply chain management - Progress in 2019. Philip Morris International. Available at: <https://www.pmi.com/integrated-report-2019/operating-with-excellence/sustainable-supply-chain-management---progress-2019>
See also: Sustainable Tobacco Programme. British American Tobacco. Available at: [https://www.bat.com/group/sites/ukmedMDAZRHPC.pdf?openelement9d9kcy.nsf/vwPagesWebLive/DO9QEGXN/\\$FILE/](https://www.bat.com/group/sites/ukmedMDAZRHPC.pdf?openelement9d9kcy.nsf/vwPagesWebLive/DO9QEGXN/$FILE/)
See also: Sustainability- Respecting Human Rights. Japan Tobacco. Available at: https://www.jt.com/sustainability/human_rights/index.html
36. WHO Report on the Global Tobacco Epidemic, 2019. Geneva: World Health Organization (25 July 2019). Licence: CC BY-NC-SA 3.0 IGO. Available at: <https://www.who.int/teams/health-promotion/tobacco-control/who-report-on-the-global-tobacco-epidemic-2019>

37. "The total economic cost of smoking (from health expenditures and productivity losses together) totalled PPP \$1852 billion (US\$1436 billion) in 2012, equivalent in magnitude to 1.8% of the world's annual gross domestic product (GDP). Almost 40% of this cost occurred in developing countries, highlighting the substantial burden these countries suffer."
See: Goodchild M, Nargis N, Tursan d'Espaignet E. Global economic cost of smoking-attributable diseases. *Tobacco Control* (2018);27:58-64. Available at: <https://tobaccocontrol.bmj.com/content/27/1/58>
38. "tobacco industry's efforts to reduce their environmental harms amount to CSR initiatives displaying a lack of transparency and independent verification, that limit objective assessment of the environmental impact of tobacco manufacturing."
See: Hendlin, Y.H., Bialous, S.A. The environmental externalities of tobacco manufacturing: A review of tobacco industry reporting. *Ambio* 49, 17–34 (January 2020). Available at: <https://link.springer.com/article/10.1007/s13280-019-01148-3>
See also: Sustainable supply chain management - Progress in 2019. Philip Morris International. Available at: <https://www.pmi.com/integrated-report-2019/operating-with-excellence/sustainable-supply-chain-management---progress-2019>
See also: Sustainable Tobacco Programme. British American Tobacco. Available at: [https://www.bat.com/group/sites/ukmedMDAZRHPC.pdf?openelement9d9kcy.nsf/vwPagesWebLive/DO9QEGXN/\\$FILE/](https://www.bat.com/group/sites/ukmedMDAZRHPC.pdf?openelement9d9kcy.nsf/vwPagesWebLive/DO9QEGXN/$FILE/)
See also: Sustainability- Respecting Human Rights. Japan Tobacco. Available at: https://www.jt.com/sustainability/human_rights/index.html
39. Novotny and Thomas et al. propose seven policy recommendations and suitable alternatives to tobacco production which are more environmentally-oriented. First, identify and monitor health effects associated with tobacco production. Second, support farmers and their children in freeing themselves from the unsafe and unfair agricultural practices. Third, tighten tobacco production regulations to prevent further deforestation and land degradation. Fourth, implement extended producer responsibility (EPR) on the tobacco industry to reduce and prevent waste. Fifth, extend tobacco sale regulations to eliminate use of single-use filters, including biodegradable ones, to reduce waste. Sixth, recover the cost of industry misconduct and environmental damages through litigation and economic interventions. Seventh, improve and enforce environmental regulations and agreements that can be applied to tobacco manufacturing, transport and management of post-consumption waste.
See: Novotny, Thomas E et al. "The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption." *Bulletin of the World Health Organization* vol. 93,12 (December 2015): 877-80. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4669730/>
See also: "Because tobacco's particular harm to human and environmental health, and the non-essential status of the product, mandating data transparency for tobacco manufacturing warrants prioritization. Policies to provide a mechanism for outside accounting could consider tobacco product taxes to account for environmental impact, and then allow independent auditing of the tobacco industry using state funds, creating a financial firewall between industry and CSR assurance agencies."
See: Hendlin, Y.H., Bialous, S.A. The environmental externalities of tobacco manufacturing: A review of tobacco industry reporting. *Ambio* 49, 17–34 (January 2020). Available at: <https://link.springer.com/article/10.1007/s13280-019-01148-3>
40. Policy options and recommendations on economically sustainable alternatives to tobacco growing (in relation to Articles 17 and 18). Conference of the Parties, sixth session and WHO Framework Convention on Tobacco Control decision; FCTC/COP6(11) (2014). Available at: https://www.who.int/fctc/treaty_instruments/Recommendations_Articles_17_18_English.pdf?ua=1%22
41. Forthcoming paper 'Towards Health with Justice 2' by World Health Organization Regional Office for the Eastern Mediterranean.
42. Doubtful Campaign Against Stray Butts. The Plastic Soup Foundation (2015) [unofficial translation]. Available at: <https://www.plasticsoupfoundation.org/2015/05/dubieuze-campagne-tegen-zwerfpeuken/>
See also: Environmental program VARA gives the tobacco lobby a podium. *Tabaknee Netherlands* (23 March 2016) [unofficial translation]. Available at: <https://www.tabaknee.nl/nieuws/item/847-milieuprogramma-vara-geeft-tabakslobby-podium>
43. Keep America Beautiful (KAB) is funded by Philip Morris USA, an Altria company as well as Reynolds American International and Santa Fe Natural Tobacco Company, companies under British American Tobacco; and runs programs such as 'Cigarette Litter Prevention Programme'. KAB has been criticised for being a corporate greenwashing front group. Unsmoke Canada Cleanups is another initiative that organises litter clean-ups. It is funded by Rothmans, Benson & Hedges Inc., a Philip Morris International subsidiary.
See: Greenwashing. *Tobacco Tactics* (21 December 2020). Available at: <https://tobaccotactics.org/wiki/greenwashing/>
See also: KAB funds informational and educational tools on littering. Its Cigarette Litter Prevention Program includes enforcing litter laws, raising awareness, placing ash receptacles at public places and distributing pocket or portable ashtrays.
See: Cigarette Litter Prevention Program by Keep America Beautiful.
44. The tobacco industry's response to such environmental harms was to work with agricultural front groups and partnering with renowned organisations in order to lobby against tobacco control measures. Through these front groups such as ITGA, tobacco companies worked with sympathetic businessmen and politicians. The tobacco companies also encouraged excessive use of hazardous agrochemicals as well as shifting cultivation to virgin fertile lands. Their deceptive CSR programs shift attention away from real issues, such as keeping tobacco prices very low, socio-economic inequalities, child labour, health hazards, undermining the voices of farmers, instead of addressing them.
See: Lecours N, Almeida GEG, Abdallah JM, et al. Environmental health impacts of tobacco farming: a review of the literature. *Tobacco Control* (February 2012);21:191-196. Available at: <https://tobaccocontrol.bmj.com/content/21/2/191>
45. Sustainable supply chain management - Progress in 2019. Philip Morris International. Available at: <https://www.pmi.com/integrated-report-2019/operating-with-excellence/sustainable-supply-chain-management---progress-2019>
Sustainable Tobacco Programme. British American Tobacco. Available at: [https://www.bat.com/group/sites/ukmedMDAZRHPC.pdf?openelement9d9kcy.nsf/vwPagesWebLive/DO9QEGXN/\\$FILE/Sustainability-RespectingHumanRights.JapanTobacco.pdf](https://www.bat.com/group/sites/ukmedMDAZRHPC.pdf?openelement9d9kcy.nsf/vwPagesWebLive/DO9QEGXN/$FILE/Sustainability-RespectingHumanRights.JapanTobacco.pdf)
See also: "tobacco industry's efforts to reduce their environmental harms amount to CSR initiatives displaying a lack of transparency and independent verification, that limit objective assessment of the environmental impact of tobacco manufacturing."
See: Hendlin, Y.H., Bialous, S.A. The environmental externalities of tobacco manufacturing: A review of tobacco industry reporting. *Ambio* 49, 17–34 (January 2020). Available at: <https://link.springer.com/article/10.1007/s13280-019-01148-3>

46. As highlighted in the report by Genevieve et al., auditing as a mechanism of transnational governance is exclusionary and failing. Audit regimes designed to work for corporations have begun to gain acceptance, despite a failure to detect underlying issues that, if addressed, can lead to far more beneficial changes to environmental as well as labour standards. Regulatory authority by governments and NGOs call for ethical audit mechanisms as an effective means of governing global change. However, auditing is helping retailers legitimize and expand their businesses as well as increase their supply chain, while also advancing their social license to operate while maintaining a 'responsible' image. It is also helping retailers monitor over their decentralized system of global production, thus perpetuating the cycle of inequality, corporate power, environmental harms and more; and creates only an illusion of the global supply chain rather than portray its dark reality. While the pressure for an accountable and transparent approach to corporate functioning has been increasing, these audit regimes are being used to preserve the retail business models which focus on cheap labour, cheap goods, low prices and short-term purchase contracts.
See: Genevieve LeBaron, Jane Lister & Peter Dauvergne (2017) Governing Global Supply Chain Sustainability through the Ethical Audit Regime, *Globalizations*, 14:6, 958-975. Available at: <https://www.tandfonline.com/doi/full/10.1080/14747731.2017.1304008>
47. Instead of exhibiting authentic CSR, the tobacco companies use such programs, especially in the production sector, to ward-off tobacco control regulations.
See: The environmental externalities of tobacco manufacturing: A review of tobacco industry reporting. Hendlin, Y.H., Bialous, S.A. *Ambio* 49, 17-34 (2020). Available at: <https://link.springer.com/article/10.1007/s13280-019-01148-3>
48. Ocean Conservancy, International Coastal Cleanup Report 2015.; United Nations Development Programme. Available at: <https://oceanconservancy.org/wp-content/uploads/2017/04/2015-Ocean-Conservancy-ICC-Report.pdf>
Cited in: Discussion Paper: The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development. WHO Framework Convention on Tobacco Control and United Nations Development Program (26 May 2017). Available at: <https://www.who.int/fctc/implementation/publications/who-fctc-undp-wntd-2017.pdf>
49. Slaughter, Elli et al. "Toxicity of cigarette butts, and their chemical components, to marine and freshwater fish." *Tobacco control* vol. 20 Suppl 1, Suppl_1 (2011): i25-9. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3088407/#:~:text=Background,in%20cigarettes%20prepared%20for%20consumption.>
50. Although cigarette filters eventually decompose into smaller pieces, their toxic components and plastic pieces may never disappear from water and soil and can continue to leach chemicals for up to 10 years.
See: Novotny, T.E., Slaughter, E. Tobacco Product Waste: An Environmental Approach to Reduce Tobacco Consumption. *Curr Envir Health Rpt* 1, 208-216 (May 2014). Available at: <https://link.springer.com/article/10.1007/s40572-014-0016-x>
See also: PMI conducted a cigarette butt litter survey in 2020. The survey revealed
i. 25 percent of adult smokers throw cigarette butts to the ground because they think it is normal to dispose a cigarette in this manner. Every one in eight individuals in the survey said they don't think its polluting.
ii. Smokers identified in the survey said they smoke 11 cigarettes per day, of which 60% are smoked outdoors, thereby creating ample chances of littering.
iii. Only 13% of individuals correctly identified plastic as the main component of cigarette filters.
The main constituent of cigarette filters is 'cellulose acetate', a bio-plastic that takes anything from three months to 15 years to decompose. This was also acknowledged on the PMI Integrated Report 2020.
51. "Effects of leachate from cellulose acetate vs cellulose cigarette butts were tested." "Cigarette butt leachate (5 butts L-1) was acutely toxic to freshwater invertebrates." "After 120 h leachate from 1 butt L-1 killed 60% of juvenile B. tentaculate".
"There was a decrease in activity in invertebrates exposed to 1 butt L-1 leachate." "Leachate from biodegradable butts caused the same impact as conventional butts."
See: Dannielle Senga Green, Louise Kregting and Bas Boots. Smoked cigarette butt leachate impacts survival and behaviour of freshwater invertebrates. *Environmental Pollution*, Volume 266, Part 3, 2020, 115286, ISSN 0269-7491 (November 2020). Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0269749120359741>
See also: P. Dilip Venugopal, Shannon K. Hanna, Gregory G. Gagliano and Hoshing W. Chang. No Butts on the Beach: Aquatic Toxicity of Cigarette Butt Leachate Chemicals. *Tobacco Regulatory Science* (Jan 2021); 7(1): 17-30. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7849351/>
52. "With almost 90% of tobacco leaf production and the majority of cigarette consumption now concentrated in the less developed regions, the environmental burden and the many risks associated with tobacco are largely borne by lower-income countries. Thus, for example, while Malawi and Tanzania are among the top 10 tobacco growing countries, they consume less than 5% of the tobacco they produce. At the same time, in the UK, Canada, Portugal, and Austria, with no or very little domestic tobacco leaf or cigarette production, smoking cigarettes, literally means burning other countries' resources."
See: Maria Zafeiridou, Nicholas S Hopkinson and Nikolaos Voulvoulis. Cigarette Smoking: An Assessment of Tobacco's Global Environmental Footprint Across Its Entire Supply Chain. *Environ. Sci. Technol.* 2018, 52, 15, 8087-8094 (3 July 2018). Available at: <https://pubs.acs.org/doi/10.1021/acs.est.8b01533>
53. Hendlin, Y.H., Bialous, S.A. The environmental externalities of tobacco manufacturing: A review of tobacco industry reporting. *Ambio*; 49, 17-34 (2020). Available at: <https://link.springer.com/article/10.1007/s13280-019-01148-3>
54. Waste generated from cartons and cigarette packaging alone generates 2 million tonnes of solid waste annually. These figures are comparable with 1.83 million tonnes of plastic waste generated annually by plastic water bottles.
See: Novotny, Thomas E et al. "The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption." *Bulletin of the World Health Organization* vol. 93,12 (December 2015): 877-80. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4669730/>
55. Low- and Middle-income countries tend to have higher smoking rates as a result of targeting by the tobacco industry, and suffer from systemic inequities, making it harder for them to access healthcare, educational tools and cessation resources. In addition, they have inequitable waste management, which can worsen from cigarette butt pollution.
See: Tiny but Deadly: Cigarette Butts Are The Most Commonly Polluted Plastic. *The Great Global Cleanup*. Earth Day (28 August 2020). Available at: <https://www.earthday.org/tiny-but-deadly-cigarette-butts-are-the-most-commonly-polluted-plastic/>

56. Tobacco growing takes up a lot of water and disperses toxins to waterways.
See: Slaughter, Elli et al. "Toxicity of cigarette butts, and their chemical components, to marine and freshwater fish." *Tobacco control* vol. 20 Suppl 1,Suppl_1 (2011): i25-9. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3088407/#:~:text=Background,in%20cigarettes%20prepared%20for%20consumption>.
57. Studies have confirmed the serious threat of deforestation and soil erosion as a result of tobacco cultivation.
See: Sauer, Johannes, and Jumanne M. Abdallah. "Forest diversity, tobacco production and resource management in Tanzania." *Forest Policy and Economics* 9.5 (January 2007): 421-439. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S1389934105001255?via%3Dihub>
See also: Mangora, M.M. Ecological impact of tobacco farming in miombo woodlands of Urambo District, Tanzania. *African Journal of Ecology* (December 2005), 43: 385-391. Available at: https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2028.2005.00603.x?casa_token=iyzW6vln700AAAAA%3AvLghnncJRYHivkklpq9Ds1LCPFabAQJBTBGRdzWN2Cxn0j-UjelSFZi-jM4omNy1PbsHIBCRICSeZA
See also: Abdallah, J. M., et al. "Impact of flue-cured Virginia on Miombo woodland: a case of small-scale flue-cured Virginia production in Iringa region, Tanzania." *DiscovInnov* 19 (2007): 92-106. Available at: https://www.researchgate.net/profile/Jumanne-Abdallah/publication/289110125_Impact_of_flue-cured_Virginia_on_Miombo_woodland_A_case_of_small-scale_flue-cured_Virginia_production_in_Iringa_region_Tanzania/links/5fa41c3592851cc28696255d/Impact-of-flue-cured-Virginia-on-Miombo-woodland-A-case-of-small-scale-flue-cured-Virginia-production-in-Iringa-region-Tanzania.pdf
See also: Chapman, S. "Tobacco and deforestation in the developing world." *Tobacco Control* vol. 3,3 (September 1994): 191-193. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1759351/pdf/v003p00191.pdf>
See also: Geist HJ. Global assessment of deforestation related to tobacco farming. *Tobacco Control* (March 1999); 8:18-28. Available at: <https://tobaccocontrol.bmj.com/content/8/1/18>
58. "In 2006, 200 climate change experts warned that, each year, deforestation accounts for 25-30 percent of greenhouse gas emissions globally. More recent estimates which show reductions in the percentage of GHG [green house gases] contributions from deforestation can be misleading, in part because total emissions from all sources including fossil fuels (i.e. the denominator) have risen" Deforestation causes global warming. Key role for developing countries in fighting greenhouse gas emissions. Food and Agriculture Organisation of the United Nations (September 2006). Available at: <http://www.fao.org/newsroom/en/news/2006/1000385/index.html>; Doug Boucher. 10% of Greenhouse Gas Emissions Come from Deforestation. Union of Concerned Scientists (December 2013). Available at: <http://blog.ucsusa.org/doug-boucher/ten-percent-of-greenhouse-gas-emissions-come-from-deforestation-342>
Citing in: Discussion Paper: The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development. WHO Framework Convention on Tobacco Control and United Nations Development Program (26 May 2017). Available at: <https://www.who.int/fctc/implementation/publications/who-fctc-undp-wntd-2017.pdf>
59. Policy options and recommendations on economically sustainable alternatives to tobacco growing (in relation to Articles 17 and 18). Conference of the Parties, sixth session and WHO Framework Convention on Tobacco Control decision; FCTC/COP6(11) (2014). Available at: https://www.who.int/fctc/treaty_instruments/Recommendations_Articles_17_18_English.pdf?ua=1%22
60. In Tanzania, the Global Environment Facility and United Nations Development Programme (UNDP) have helped farmers shift from tobacco farming to growing tomatoes.
See: T. Lee. Country practices in the implementation of Article 17 (Economically sustainable alternatives to tobacco growing) of the WHO Framework Convention on Tobacco Control. WHO FCTC (December 2019). Available at: <https://www.who.int/fctc/implementation/publications/country-practices-implementation-article-17-WHO-FCTC.PDF>
61. In Kenya, International Bamboo and Rattan Organisation (INBAR) has helped farmers switch to bamboo plantations, which has created a positive impact on the land and livelihood of the farmers.
See: Bamboo as an Alternative to Tobacco. Inbar News (June 2017). Available at: <https://www.inbar.int/bambootobaccoalternative/>
62. Discussion Paper: The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development. WHO Framework Convention on Tobacco Control and United Nations Development Program (26 May 2017). Available at: <https://www.who.int/fctc/implementation/publications/who-fctc-undp-wntd-2017.pdf>
63. Novotny, T.E. et al. propose seven policy recommendations and suitable alternatives to tobacco production which are more environmentally-oriented. First, identify and monitor health effects associated with tobacco production. Second, support farmers and their children in freeing themselves from the unsafe and unfair agricultural practices. Third, tighten tobacco production regulations to prevent further deforestation and land degradation. Fourth, implement extended producer responsibility (EPR) on the tobacco industry to reduce and prevent waste. Fifth, extend tobacco sale regulations to eliminate use of single-use filters, including biodegradable ones, to reduce waste. Sixth, recover the cost of industry misconduct and environmental damages through litigation and economic interventions. Seventh, improve and enforce environmental regulations and agreements that can be applied to tobacco manufacturing, transport and management of post-consumption waste.
See: Novotny, T.E. et al. "The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption." *Bulletin of the World Health Organization* vol. 93,12 (December 2015): 877-80. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4669730/>
64. "British American Tobacco, whose brands include Lucky Strike and Rothmans, said in a statement it would work with the government to educate smokers, and distribute pocket ashtrays. But it rejected new taxes. It is not up to companies, smokers or citizens to pay, via additional taxes, for the cost linked to the clean-up of cigarette butts," BAT public affairs director Eric Sensi-Minautier said. Imperial Brands, which sells the French Gauloises and Gitanes brands, said it encouraged smokers to dispose of butts responsibly. It said it had no plans to alter its filters to make them less polluting."
See: France orders tobacco industry: stub out cigarette butt pollution. Geert De Clercq. Reuters (14 June 2018) Available at: <https://www.reuters.com/article/instant-article/idINKBN1JA257> Also available at: <https://www.egypttoday.com/Article/1/52148/France-orders-tobacco-industry-stub-out-cigarette-butt-pollution>
See also: Saabira Chaudhuri. The World's Most Littered Item Comes Under Fire. *The Wall Street Journal* (31 July 2019). Available at: <https://www.wsj.com/articles/the-worlds-most-littered-item-comes-under-fire-11564580324>
See also: PMI Launches "Our World Is Not an Ashtray" Initiative and Aims to Halve Plastic Litter from Products by 2025. (16 July 2020).
See also: PMI: We can reduce littering: Three inspiring campaigns that prove change is possible (14 Jul 2020)
65. WHO Report on the Global Tobacco Epidemic, 2019. Geneva: World Health Organization (25 July 2019). Licence: CC BY-NC-SA 3.0 IGO. Available at: <https://www.who.int/teams/health-promotion/tobacco-control/who-report-on-the-global-tobacco-epidemic-2019>

66. Curtis, C. et al. "Extended Producer Responsibility and Product Stewardship for Tobacco Product Waste." *International journal of waste resources* vol. 4,3(2014): 157. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4597783/>
67. "Environmental principles underlying the Model Tobacco Waste Act: EPR is a policy principle that promotes environmental protection by extending the responsibilities of the producer across the product's entire life cycle. As set out by Lindhqvist, EPR addresses three core tenets:
1. Internalise the environmental cost of products into their retail price.
2. Shift the economic burden of managing toxicity and other environmental harm associated with postconsumer waste from local governments and taxpayers, to producers. Provide incentives to producers to incorporate environmental considerations into the design of their products."
See: Clifton C., Novotny T.E., Lee K., Freiberg M. and McLaughlin I. Tobacco industry responsibility for butts: A Model Tobacco Waste Act. *TobaccoControl* (2017); 26:113-117. Available at: <https://tobaccocontrol.bmj.com/content/26/1/113>
68. Tobacco Product waste can be prevented and reduced by banning smoking in outdoor areas and workplaces, applying additional fees for litter caused by tobacco products, asking tobacco companies and sellers to pay for clean-ups, and enforcing fines for littering. Other possible interventions include banning of disposable or single-use filters, litigation for damages, and classifying tobacco product waste (TPW) as hazardous waste and labelling products accordingly.
See: Clifton C., Novotny T.E., Lee K., Freiberg M. and McLaughlin I. Tobacco industry responsibility for butts: A Model Tobacco Waste Act. *TobaccoControl* (2017); 26:113-117. Available at: <https://tobaccocontrol.bmj.com/content/26/1/113>
See also: Novotny, T.E., Slaughter, E. Tobacco Product Waste: An Environmental Approach to Reduce Tobacco Consumption. *Curr Envir Health Rpt* 1, 208-216 (May 2014). Available at: <https://link.springer.com/article/10.1007/s40572-014-0016-x>
69. Novotny and Thomas et al. propose seven policy recommendations and suitable alternatives to tobacco production which are more environmentally-oriented. First, identify and monitor health effects associated with tobacco production. Second, support farmers and their children in freeing themselves from the unsafe and unfair agricultural practices. Third, tighten tobacco production regulations to prevent further deforestation and land degradation. Fourth, implement extended producer responsibility (EPR) on the tobacco industry to reduce and prevent waste. Fifth, extend tobacco sale regulations to eliminate use of single-use filters, including biodegradable ones, to reduce waste. Sixth, recover the cost of industry misconduct and environmental damages through litigation and economic interventions. Seventh, improve and enforce environmental regulations and agreements that can be applied to tobacco manufacturing, transport and management of post-consumption waste.
See: Novotny, Thomas E et al. "The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption." *Bulletin of the World Health Organization* vol. 93,12 (December 2015): 877-80. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4669730/>
70. Lecours N, Almeida GEG, Abdallah JM, et al. Environmental health impacts of tobacco farming: a review of the literature. *Tobacco Control* (February 2012);21:191-196. Available at: <https://tobaccocontrol.bmj.com/content/21/2/191>
71. "In response to rising international criticism, the multinational tobacco industry commissioned a report to evaluate its impact on global deforestation. Known as the International Forest Sciences Consultancy report, it was commissioned by the International Tobacco Information Centre (INFOTAB) and published in 1986 by AI Fraser. The report described fuel wood consumption for tobacco agriculture in Argentina, Brazil, Kenya, Malawi, Zimbabwe, India and Thailand, then extrapolated the data to 69 other tobacco-growing developing countries. Unsurprisingly, the study showed a remarkably low average specific fuel consumption (SFC) index of 7.8 kg of wood/kg of tobacco, much lower than the reported, but also criticised, estimates of 100 kg to 230 kg of wood/kg of tobacco."
See: Lecours N, Almeida GEG, Abdallah JM, et al. Environmental health impacts of tobacco farming: a review of the literature. *Tobacco Control* 2012;21:191-196. Available at: <https://tobaccocontrol.bmj.com/content/21/2/191>
72. Lecours N, Almeida GEG, Abdallah JM, et al. Environmental health impacts of tobacco farming: a review of the literature. *Tobacco Control* 2012;21:191-196. Available at: <https://tobaccocontrol.bmj.com/content/21/2/191>
73. "In Thailand, Philip Morris International funds environmental projects to achieve their own ends by supporting villagers in tobacco growing regions. For example, funding the Phrae Provincial Administrative Organization (PPAO) to create dams in their region to provide water for agricultural production and fire prevention."
See: The Tobacco Industry And Corporate Social Responsibility (CSR): An Overview From South East Asia. South East Asia Tobacco Industry Surveillance and Monitoring Program (SIS), SEATCA (June 2011). Available at: <https://seatca.org/dmdocuments/CSR%20fact%20sheet.pdf>
74. Policy options and recommendations on economically sustainable alternatives to tobacco growing (in relation to Articles 17 and 18). Conference of the Parties, sixth session and WHO Framework Convention on Tobacco Control decision; FCTC/COP6(11) (2014). Available at: https://www.who.int/fctc/treaty_instruments/Recommendations_Articles_17_18_English.pdf?ua=1%22
75. Raw M, Regan S, Rigotti NA, McNeill A. A survey of tobacco dependence treatment guidelines in 31 countries. *Addiction*. 2009;104(7):1243-1250. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2736395/>
76. A survey of tobacco dependence treatment guidelines in 31 countries. Raw M, Regan S, Rigotti NA, McNeill A. *Addiction*. 2009;104(7):1243-1250 (July 2009). Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2736395/>
77. T. Lee. Country practices in the implementation of Article 17 (Economically sustainable alternatives to tobacco growing) of the WHO Framework Convention on Tobacco Control. WHO FCTC (December 2019). Available at: <https://www.who.int/fctc/implementation/publications/country-practices-implementation-article-17-WHO-FCTC.PDF>
See also: Policy options and recommendations on economically sustainable alternatives to tobacco growing (in relation to Articles 17 and 18). Conference of the Parties, sixth session and WHO Framework Convention on Tobacco Control decision; FCTC/COP6(11) (2014). Available at: https://www.who.int/fctc/treaty_instruments/Recommendations_Articles_17_18_English.pdf?ua=1%22
78. Discussion Paper: The WHO Framework Convention on Tobacco Control: An Accelerator for Sustainable Development. WHO Framework Convention on Tobacco Control and United Nations Development Program (26 May 2017). Available at: <https://www.who.int/fctc/implementation/publications/who-fctc-undp-wntd-2017.pdf>

79. WHO Framework Convention on Tobacco Control. World Health Organization (2005). Available at: https://www.who.int/fctc/text_download/en/
See also: Policy options and recommendations on economically sustainable alternatives to tobacco growing (in relation to Articles 17 and 18). Conference of the Parties, sixth session and WHO Framework Convention on Tobacco Control decision; FCTC/COP6(11) (2014). Available at: https://www.who.int/fctc/treaty_instruments/Recommendations_Articles_17_18_English.pdf?ua=1%22
See also: WHO Statement on Philip Morris funded Foundation for a Smoke-Free World. WHO (28 September 2017). Available at: <https://www.who.int/news/item/28-09-2017-who-statement-on-philip-morris-funded-foundation-for-a-smoke-free-world>
80. Tobacco Industry Front Groups and Activities. South East Asia Tobacco Industry Surveillance and Monitoring Program (SIS), SEATCA (October 2010). Available at: <https://seatca.org/dmdocuments/TI%20front%20groups%20fact%20sheet.pdf>
See also: Tobacco Industry Front Group: The International Tobacco Growers' Association. Campaign for Tobacco-Free Kids (November 2011). Available at: https://www.tobaccofreekids.org/assets/global/pdfs/en/IW_interference_ITGA_fact_sheet.pdf
81. ITGA claims "The aim of the association is to share non-competitive information and monitor market conditions, build mutual understanding and protect members and their dependents. Its policies and activities are developed by the growers to further their own interests." However, tobacco industry documents reveal that the true intention behind ITGA is to advance tobacco industry lobbying, especially in developing countries. In the early nineties, one of ITGA's specific aim was to dilute WHO's tobacco control efforts. They expanded UN's work on tobacco beyond the WHO. They stressed that a successful 'Tobacco and Health Program' will cause a negative socio-economic impact on countries that produce tobacco.
See: Emma Must. ITGA uncovered: Unravelling the spin – the truth behind the claims. PATH Canada Guide (June 2001). Available at: <https://healthbridge.ca/images/uploads/library/itgabr.pdf>
82. Tobacco Institute of India v. Union of India. Tobacco Control Laws. Available at: <https://www.tobaccocontrolaws.org/litigation/decisions/in-20160114-tobacco-institute-of-india-v.->
83. Judicial Review of Law No. 36 of 2009, Ruling in Case No. 24. Tobacco Control Laws. Available at: <https://www.tobaccocontrolaws.org/litigation/decisions/id-00000000-judicial-review-of-law-no.-36->
84. Judicial Review of Law No. 36 of 2009, Ruling in Case No. 66. Tobacco Control Laws. Available at: <https://www.tobaccocontrolaws.org/litigation/decisions/id-00000000-judicial-review-of-law-no.-36--1-2>
85. Judicial Review of Article 113 of Law No. 36 of 2009, Ruling in Case No. 19. Tobacco Control Laws. Available at: <https://www.tobaccocontrolaws.org/litigation/decisions/id-20111101-judicial-review-of-article-114>
86. Warner, Kenneth. (2000). The Economics of Tobacco: Myths and Realities. Tobacco control. 9. 78-89. 10.1136/tc.9.1.78. Available at: <https://tobaccocontrol.bmj.com/content/tobaccocontrol/9/1/78.full.pdf>
See also: Sy, D. Tobacco Industry Interference and Tobacco Taxation. B2B#12. July 2020, University of Cape Town. REEP Back to Basics Policy Brief (July 2020). Available at: https://untobaccocontrol.org/kh/taxation/wp-content/uploads/sites/3/2020/09/KH_1pager-12_Tobacco-Industry-Interference-Taxation.pdf
See also: Tobacco industry tactics: tax policies. World Health Organisation WHO-EM/TFI/200/E (2019). Available at: <https://applications.emro.who.int/docs/FS-TFI-200-2019-EN.pdf?ua=1>
See also: Assunta M. Tobacco industry's ITGA fights FCTC implementation in the Uruguay negotiations. Tobacco Control (May 2012);21:563-568. Available at: <https://tobaccocontrol.bmj.com/content/21/6/563.long>
87. "Our voices are being drowned out by false promises of economic prosperity from cigarette makers and leaf buying companies. Smallholder and tenant farmers in Malawi do not share the same views as the tobacco industry when it comes to our future. In the short term, tobacco companies are interested in profit and the addiction to smoking by our people is in direct opposition to the long-term goal of ensuring safe, resilient livelihoods for smallholder and tenant farmers, as well as the vast majority of the people of Malawi."
See: Tobacco Tenants and Allied Workers Union Of Malawi (TOAWUM)'s letter to the President of the Republic of Malawi (10 October 2014).
88. Agricultural Transformation Initiative (ATI), Foundation for a Smoke-Free World.
89. Novotny, T.E. et al. propose seven policy recommendations and suitable alternatives to tobacco production which are more environmentally-oriented. First, identify and monitor health effects associated with tobacco production. Second, support farmers and their children in freeing themselves from the unsafe and unfair agricultural practices. Third, tighten tobacco production regulations to prevent further deforestation and land degradation. Fourth, implement extended producer responsibility (EPR) on the tobacco industry to reduce and prevent waste. Fifth, extend tobacco sale regulations to eliminate use of single-use filters, including biodegradable ones, to reduce waste. Sixth, recover the cost of industry misconduct and environmental damages through litigation and economic interventions. Seventh, improve and enforce environmental regulations and agreements that can be applied to tobacco manufacturing, transport and management of post-consumption waste. See: Novotny, Thomas E et al. "The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption." Bulletin of the World Health Organization vol. 93,12 (December 2015): 877-80. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4669730/>
90. In 2013, local leaders in Uganda complained of fouled air near the British American Tobacco (BAT) Ugandan plant, and the Parliament called for stricter regulations of production and sale of tobacco in the country. Soon after, BAT moved its facilities from Uganda to Kenya. In such cases, to preempt government regulation and cost-effective measures, the tobacco industry cloaks its actions in the garb of selflessness and environmental concerns, whereas they are the results of public pressure.
See: Hendlin, Y.H., Bialous, S.A. The environmental externalities of tobacco manufacturing: A review of tobacco industry reporting. *Ambio*; 49, 17-34 (2020). Available at: <https://link.springer.com/article/10.1007/s13280-019-01148-3>

91. Litigation against tobacco companies, especially in USA, have mostly been focused on recovering smoking related government-funded healthcare costs. In case of environmental harms, EPR could be invoked to hold tobacco companies responsible for clean-up costs and other related damages. Under EPR, manufacturers are held responsible for environmental damages through class action lawsuits, which are based on two notions- negligence (failure to prevent environmental damages) and nuisance (disruption of 'right to quiet enjoyment'). Litigation by governments or local entities can be considered as an effective means to recover costs of environmental clean-up. See: Thomas E. Novotny & Elli Slaughter. Tobacco Product Waste: An Environmental Approach to Reduce Tobacco Consumption. *Curr Envir Health Rpt* (2014) 1:208-216. Available at: <https://link.springer.com/content/pdf/10.1007/s40572-014-0016-x.pdf>
92. D. Sy. Tobacco Industry Accountability and Liability in the Time of COVID-19. STOP (28 July 2020). Available at: https://exposetobacco.org/wp-content/uploads/TL_Accountability_Policy_Brief.pdf
93. Gail Hurley, Dudley Tarlton. Helping Zambia's farmers ditch tobacco. UN Development Programme (30 May 2019). Available at: <https://undp.medium.com/helping-zambias-farmers-ditch-tobacco-19384a54323c>
See also: Gail Hurley, Dudley Tarlton. How incentivizing small tobacco farmers can change livelihoods. *Devex Opinion* (8 May 2018). Available at: <https://www.devex.com/news/opinion-how-incentivizing-small-tobacco-farmers-can-change-livelihoods-92669>
See also: Tax Reform Case Study: Philippines. Campaign for Tobacco Free Kids (June 2017). Available at: https://www.tobaccofreekids.org/assets/global/pdfs/en/Philippines_Tax_Reform_Case_Study.pdf
See also: The Master Settlement Agreement: An Overview. Public Health Law Center (November 2018). Available at: <https://publichealthlawcenter.org/sites/default/files/resources/MSA-Overview-2018.pdf>
94. Sy, D. Tobacco Industry Interference and Tobacco Taxation. B2B#12. July 2020, University of Cape Town. REEP Back to Basics Policy Brief (July 2020). Available at: https://untobaccocontrol.org/kh/taxation/wp-content/uploads/sites/3/2020/09/KH_1pager-12_Tobacco-Industry-Interference-Taxation.pdf
95. Synopsis Report Stakeholder Consultation: Proposal for Directive of the European Parliament and of the Council on the reduction of the impact of certain plastic products on the environment. European Commission (28 May 2018); pg4. Available at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SWD:2018:0257:FIN:EN:PDF>
96. "Member states would have to ensure that tobacco companies cover the costs of waste collection for those products, including transport, treatment and litter collection." See: Plastic Oceans: MEPs back EU ban on throwaway plastics by 2021. *European Parliament News/ Press Release* (24 October 2018). Available at: <https://www.europarl.europa.eu/news/en/press-room/20181018IPR16524/plastic-oceans-meps-back-eu-ban-on-throwaway-plastics-by-2021>
97. Geert De Clercq. France orders tobacco industry: stub out cigarette butt pollution. *Reuters* (14 June 2018) Available at: <https://www.reuters.com/article/instant-article/idINKBN1JA257>
98. "One key aspect of the plan will be to place the costs associated with cleaning up cigarette butt litter on the tobacco industry." See: Adam Higgins. No Ifs or Butts- Government considers placing cost of cigarette butt cleanup on tobacco industry. *The Sun* (30 December 2019). Available at: <https://www.thesun.ie/news/4935971/government-cost-cigarette-butt-cleanup-tobacco-industry/>
99. "Britain is considering a plan to force big tobacco companies to pay the 40 million pound (\$55 million) annual cost of cleaning up discarded cigarette butts." See: Guy Faulconbridge. UK warns big tobacco firms: You should pay for cleaning up cigarette butts. *Reuters* (30 March 2021). Available at: <https://www.reuters.com/article/us-britain-tobacco-idUSKBN2BM1BZ>
See also: Correspondence: Smoking related litter roundtable meeting, 2 September 2020. Department for Environment Food & Rural Affairs (28 September 2020). Available at: <https://www.gov.uk/government/publications/defra-engagement-with-the-tobacco-industry-on-litter/smoking-related-litter-roundtable-meeting-2-sep-2020>
See also: On December 2013, in order to comply with WHO FCTC, Department for Environment, Food and Rural Affairs (DEFRA) cut all links with Keep Britain Tidy, an environmental campaign group co-founded by Imperial Tobacco.
See: CSR: Imperial and Love Where You Live. *Tobacco Tactics* (27 April 2020). Available at: <https://tobaccotactics.org/wiki/csr-imperial-and-love-where-you-live/>
100. Heidi Sanborn. Commentary: Big Tobacco and e-cigarette companies should help clean up their mess. *Call Matters* (13 May 2019). Available at: <https://calmmatters.org/commentary/2019/05/toxic-tobacco/>
See also: Arlene Karidis. Who's Doing What to Tackle Cigarette Litter. *Waste 360* (4 November 2020). Available at: <https://www.waste360.com/waste-reduction/whos-doing-what-tackle-cigarette-litter>.
Please note: Waste 360 article promotes 2 tobacco industry linked clean-up efforts. *Keep America Beautiful* and *Keep Britain Tidy* (the latter has cut ties with TI in 2013). There have been massive cleanup efforts around the globe, but mostly done locally by volunteers, and or at a cumulative expense of billions of dollars to cities and counties. Some regions have pushed for policy around cigarette litter; just this year, three U.S. states tried to move legislation to address the problem. And the European Union is working to pass the costly clean-up tab onto tobacco manufacturers.



A GLOBAL
TOBACCO
INDUSTRY
WATCHDOG

Acknowledgements and Authorship

This brief was prepared by Deborah Sy and Ambika Narain for the Global Center for Good Governance in Tobacco Control (GGTC) in partnership with STOP, a tobacco industry watchdog.



Global Center for
Good Governance
in Tobacco Control

The Union

International Union Against
Tuberculosis and Lung Disease
Health solutions for the poor



UNIVERSITY OF
BATH