

The Tobacco Industry's Negative Impact on the Environment

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The harm caused to people's health by tobacco industry products is well known. The industry's impact on the planet is less understood. From beginning to end, the process used by manufacturers to turn tobacco seeds into packaged cigarettes is energy intensive and destructive to the planet. The annual addition of 6 trillion cigarette butts to the environment also has serious environmental ramifications, as does the improper disposal of cigarettes.

Detailed analyses of tobacco's impact on the planet have been completed.¹ This fact sheet is less comprehensive, but is intended to shine some light on the tobacco industry's contribution to deforestation, climate change, soil depletion, forest fires and cigarette butt litter. Unfortunately, to date, these tobacco-related issues have received little attention from researchers, environmental activists and the public.

Deforestation

Tobacco growing plays a significant role in deforestation in many areas of the world. If tobacco farms are not already established, land is cleared to grow the plants. More deforestation occurs when farmers use wood as fuel for fires to dry and cure the green leaf tobacco.

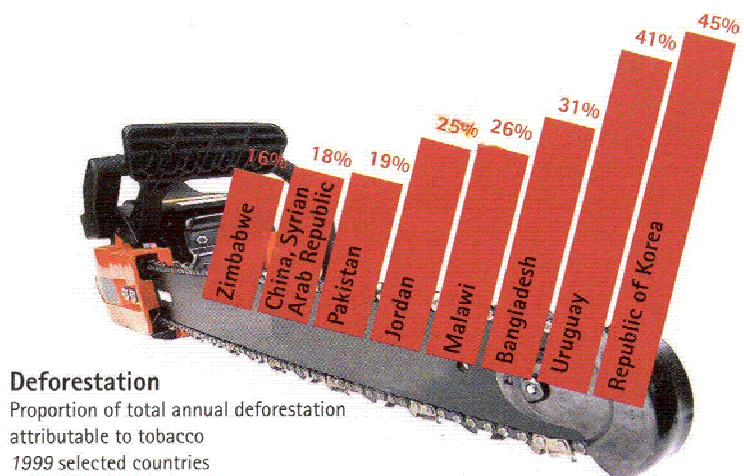
As well, a significant volume

of paper is needed for cigarette tubes and packaging, since tobacco companies produce an estimated 6.3 trillion cigarettes annually.²

Researcher Helmut Geist has determined that 200,000 hectares of forests are cut down for tobacco farming each year.³ This deforestation mainly occurs in the developing world and accounts for 2-4% of all global deforestation.⁴

"Environmental criticality exists or is emerging in 35 countries with an estimated serious, high, and medium degree of tobacco-related deforestation, mainly in southern Africa, middle east, south, and east Asia, South America, and the Caribbean. The hypothesis that deforestation from tobacco production does not have a significant negative effect has to be challenged."⁵

Although the data used in the graph below is dated, it shows how critical the situation is in a variety of countries.⁶



Climate Change

Cigarette use is a contributor to anthropomorphic climate change (caused by human activities), as cigarette smoke contains greenhouse-effect-causing gases carbon dioxide and methane.

“Smoking worldwide releases about 2.6 billion kilograms of carbon dioxide in the air every year. It also releases about 5.2 billion kilograms of methane every year.”⁷

Deforestation also plays a significant negative role in climate change, according to a World Health Organization body:

“Although the global share of agricultural land used for tobacco growing is less than 1%, its impact on global deforestation is 2-4%, making a visible footprint for climate change.”⁸



A dry river bed in Kenya highlights the perils of catastrophic climate change.

Toxic Pesticides & Soil Depletion

Agricultural practices associated with tobacco growing cause widespread environmental and public health problems. A toxic cocktail of agricultural pesticides and herbicides used on tobacco farms runs off into streams, rivers and lakes.

The intensive nature of tobacco farming quickly leads to soil becoming depleted of its naturally occurring minerals. “Tobacco depletes soil nutrients at a much faster rate than most crops,” exacerbated by specific growing practices such as topping⁹ and desuckering (the removal, either by hand or chemical spraying, of young shoots from a tobacco plant in order to ensure the robust growth of large leaves), thus triggering a “massive outflow of nutrients” from the soil.¹⁰

Mono-culture farming prevents alternative crops from being able to thrive when tobacco is no longer grown.

Forest & Residential Fires

Cigarettes discarded irresponsibly are a common cause of forest fires worldwide. Experts estimate that smokers who don't extinguish their cigarettes properly cause 10% of all forest fires.¹¹

It has been estimated that 17,000 people worldwide are killed annually by fires caused by cigarettes or cigarette lights, causing property damage in excess of US\$27 billion.^{12 13 14}

Fires caused by smokers in Alberta in the first five months of 2010 caused \$4.1 million in damage.¹⁵ In China in 1987, a massive forest fire caused by cigarettes killed 300 people, 5,000 more were made homeless, and 1.3 million hectares of land were destroyed.¹⁶

Cigarettes are the leading cause of residential fires in Canada and the leading cause of fire-related death.¹⁷ Health Canada analyzed data collected from 1995 to 1999 by the Canadian Association of Fire Chiefs and found that during those four years:

- 14,030 fires were started in Canada by smokers' materials.
- These fires killed 356 people and injured 1,615.
- The fires caused more than \$200 million in property damage.

Cigarette Butt Litter

Cigarette butts are a huge source of litter on land, along shorelines and in waterways. In an annual global survey by the Ocean Conservancy, cigarettes/cigarette filters have been the most prevalent littered items for the past 20 years.¹⁸

In 2008, during the annual International Coastal Cleanup organized by the Conservancy, over 3.2 million butts were removed from beaches and inland waterways around the world.¹⁹ During the 2009 Cleanup, cigarettes and cigarette filters accounted “for nearly twice the number of any other debris item.”²⁰

Cigarette butts are not biodegradable. The paper and tobacco in cigarette butts are biodegradable, but filters (most of which are made of cellulose acetate, a form of plastic) are not.

“Cellulose acetate is photodegradable but not bio-degradable. Although ultraviolet rays from the sun will eventually break the

filter into smaller pieces under ideal environmental conditions, the source material never disappears; it essentially becomes diluted in water or soil.”²¹

Estimates of the amount of time it takes for a cigarette butt to degrade vary greatly (from 1 to 10 years).²²



Cigarette butts litter the street in Ottawa at a busy downtown intersection.

Montreal has estimated that 3 million cigarette butts are discarded on the ground every day in its downtown.²³ Toronto found that cigarette-related litter made up 17% of all small litter found on its streets.²⁴ San Francisco estimates that cleaning up cigarette butts costs the city about \$7.5 million a year.²⁵

Cigarette Butts Toxic to Children, Wildlife & Pets

When ingested by children or other living organisms, cigarette butts are poisonous. Poison control centres worldwide report thousands of incidents involving children ingesting cigarette butts annually.^{26 27} The nicotine in cigarette butts is poisonous and children under six who have ingested them suffer symptoms of “vomiting, nausea, pale

or flushed appearance, lethargy, and gagging.”²⁸

Research in the U.S. on the effects of discarded cigarette butts on marine life has found that just one filtered cigarette was enough to kill fish living in a one litre container of water. In response to the finding, a U.S. public interest group has recommended that cigarette butts be classified as toxic hazardous waste and that special requirements be placed on consumers to ensure safe disposal.^{29 30}

Popular pets, such as dogs, are also susceptible to nicotine poisoning and have experienced great discomfort when ingesting cigarette butts.³¹



Research has found that cigarette butts can be toxic to children and animals.

Progress Is Slow, But It Is Occurring

Progress is lacking on holding the tobacco industry accountable for its environmental impact. So far it is

mostly smokers who are being taken to task for littering their cigarette butts.

A 20-cent charge on each pack of cigarettes sold in San Francisco was enacted in October 2009 to help offset the \$7 million the city says it spends annually cleaning up cigarette butts. However, that levy may be challenged in court by Philip Morris.³²

Meanwhile, city officials in Ville Marie, a downtown borough in Montreal, have begun enforcing a public cleanliness bylaw and are issuing \$169 tickets to smokers who discard their cigarette butts on streets and sidewalks.³³

In Ontario, Liberal Dave Levac, the MPP for Brant, has introduced a Private Member's Bill (Bill 28, the *Cigarette and Cigar Butt Litter Prevention Act, 2010*) that would make tossing a cigarette or cigar from a car window onto a road an offence under the *Highway Traffic Act*. The Bill would also amend the *Environmental Protection Act* to increase the fine from \$1,000 to \$2,000 for a first conviction, and change the maximum fine from \$2,000 to \$3,000.³⁴ The Bill received First Reading in April.

As of January 2010, 92 U.S. municipalities had prohibited smoking on their beaches, along with the entire state of Maine.³⁵ Nine municipalities in Canada have also enacted similar smoking restrictions on beaches.³⁶ If properly enforced, these rules could lead to a reduction

of cigarette butts littered in lakes, rivers and oceans.

A New York state politician has proposed a bill to create a cigarette butt recycling program that would require consumers to pay a one-cent deposit per cigarette.³⁷ Meanwhile, Chinese scientists have shown that cigarette butts could be used to help protect a type of steel, widely used by the oil industry, from rusting even under harsh conditions.^{38 39}

Tobacco Companies Try to Seize the High Road

Since tobacco companies are constantly trying to deflect attention away from their own irresponsible behaviour, they have been putting their own public relations spin on tobacco-related environmental issues—though some of their efforts have been greeted with justifiable scorn.

Attempts by Imperial Tobacco Canada, the wholly owned Canadian subsidiary of British American Tobacco (BAT), to advertise its new “environmentally friendly” cigarette packaging were met with ridicule in May 2009. The company was lambasted in the *Toronto Star*, in an article written by the newspaper’s environment reporter, after advertisements for its *du Maurier* cigarettes appeared in numerous publications across Canada (see ad

below). The ads, published in *Toronto Life* magazine, free entertainment weeklies and in bar bathrooms, said: “We have updated our packaging to reduce its impact on the environment.” They stated that Imperial had replaced foil wrapping with paper and that its cardboard packaging now “meets standards supporting sustainable forest management.”



But commentators in the *Star* were not buying it. Gideon Forman of the Canadian Association of Physicians for the Environment laughed when asked about it. Later, when he stopped laughing, he said, “Is it green washing? Yes. Are they making a product that is still toxic to people’s health? Yes. So they are

now making a product with a little bit more paper. Big deal.”

Attempts to give themselves a green sheen are not uncommon among tobacco companies. The industry has surely noticed an upswing in concern for the environment by citizens in Canada and around the world, largely due to scientific findings related to climate change. For example, annual reports to shareholders by Japan Tobacco (and other tobacco companies) have detailed the company’s efforts to reduce the greenhouse gas emissions associated with its operations. Imperial Tobacco Canada has a page on its website that boasts it is “committed to following the highest standards in environmental protection.”⁴⁰

BAT regularly funds tree planting initiatives, such as the one advertised below in Bangladesh.



Concerns held by the public and politicians about cigarette butt litter have led tobacco companies to fund campaigns intended to improve their image. For example, BAT and Altria

(owner of Philip Morris USA) both regularly fund cigarette butt cleanup activities.^{41 42} Japan Tobacco International recently distributed handheld green pocket ashtrays at fairs and public events in Italy (see photo below).⁴³ These activities are designed to shift responsibility away from the tobacco companies themselves and onto consumers.



Neither the tobacco control community nor the public should be deceived by these cynical moves. The best way to reduce the negative impact tobacco companies have on the planet is to drastically reduce the number of cigarettes being smoked. This goal can be achieved through comprehensive tobacco control programmes, regulation and legislation.

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