

Towards a Pollution-Free Planet

Background report



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Towards a Pollution-Free Planet

Background report



Executive summary

Pollution today is pervasive and persistent. While the world has achieved significant economic growth over the past few decades, it has been accompanied by large amounts of pollution, with significant impacts on human health and ecosystems and the ways in which some of the major Earth system processes, such as the climate, are functioning. Though some forms of pollution have been reduced as technologies and management strategies have advanced, approximately 19 million premature deaths are estimated to occur annually as a result of the way societies use natural resources and impact the environment to support production and consumption. If consumption and production patterns continue as they are, the linear economic model of “take-make-dispose” will seriously burden an already-polluted planet, affecting current and future generations.



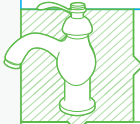



Pollution is not a new phenomenon; it is largely controllable and often avoidable, but considerably neglected. Better knowledge, alternative consumption and production models, as well as innovative technological solutions now mean that many countries, cities, and businesses are successfully tackling serious pollution issues. Encouragingly, more governments, industries and citizens are moving towards sustainable materials management, greater resource efficiency, less environmentally damaging chemistry, clean technologies, and circular economies, as part of a more comprehensive transformation towards a sustainable economy. Trade can lead to greater environmental burdens in countries that extract and produce resources, as such activities generate waste and emissions. But trade can also provide solutions in terms of improved environmental goods and services. However, the capacity to adequately tackle pollution varies hugely across regions, social groups and genders.

Pollution can have negative impacts and disproportionate burdens on women and men, and particularly on the poor and the vulnerable such as the elderly, children and the disabled, affecting their rights to health, water, food, life, housing and development. Many toxic dumpsites are located in poor areas, leading to environmental injustice. Pollution has significant economic costs from the point of view of health, productivity losses, health-care costs and ecosystem damages. These costs, already substantial, are expected to rise over time, not only because of the direct effect of pollution on health, but also the impact of weakened livelihoods, as well as the longer-term impact on ecosystem services, that in turn affect local communities, societies and economies. While a better understanding of the economic costs of pollution can inform decision-making and support more effective policies, the human costs of pollution are even more critical.

Pollution poses a direct threat to respecting, protecting and promoting human rights and gender equality, international human rights obligations related to health, life, food and water, safeguarding a healthy and sustainable environment for present and future generations, and achieving the 2030 Agenda's pledge to "leave no one behind".

Responses by governments, business and citizens to pollution exist, but they remain limited in scope and scale. Global and regional environmental agreements provide a partial framework, but there are many gaps. For example, some agreements are target-based, some are time-bound, while others cover compliance-related actions, monitoring and reporting. Many countries have adopted national policy and legal frameworks to implement these agreements as well as addressing other pollution issues, but to date there are no legally binding agreements that systematically address pollution in all its forms. Voluntary initiatives and global alliances – on topics such as fuel efficiency improvements, cleaner air and lead in paint – have addressed some of the more urgent issues, yet much more remains to be done to control and prevent pollution.

Figure 1: Examples of impacts on human health and ecosystems

Example Of Impacts On Human Health And Ecosystems	
 <h3>Air pollution</h3> <ul style="list-style-type: none"> • 6.5 million people die annually as a result of poor air quality including 4.3 million due to household air pollution • Lower respiratory infections: 52 million years lost or lived with disability annually due to household or ambient air pollution, including second-hand tobacco smoke • Chronic obstructive pulmonary diseases: 32 million years life lost or lived each year with disability because of household air pollution and workers' exposure • Ground level ozone pollution is estimated to reduce staple crop yields up to 26 per cent by 2030 	 <h3>Marine and coastal pollution</h3> <ul style="list-style-type: none"> • 3.5 billion people depend on oceans as a source of food yet oceans are used as waste and waste water dumps • Close to 500 "dead zones", regions that have too little oxygen to support marine organisms, including commercial species • 4.8 to 12.7 million tonnes of plastic waste enters the ocean every year from inadequate waste management
 <h3>Freshwater pollution</h3> <ul style="list-style-type: none"> • 58 per cent of diarrhoeal disease due to lack of access to clean water and sanitation and a major source of child mortality • 57 million years of life lost or lived with disability annually due to poor water, sanitation, hygiene and agricultural practices • Over 80 per cent of the world's wastewater is released to the environment without treatment 	 <h3>Chemicals</h3> <ul style="list-style-type: none"> • Over 100,000 die annually from exposure to asbestos • Lead in paint affects children's intellectual ability • Children poisoned by mercury and lead develop problems in their nervous and digestive systems and kidney damage • Many impacts of chemicals such as endocrine disruptors and developmental neurotoxins and long-term exposure to pesticides on human health and well-being and biodiversity and ecosystems are still to be fully assessed
 <h3>Land/Soil pollution</h3> <ul style="list-style-type: none"> • Open waste dumps and burning impacts lives, health and livelihoods and affect soil chemistry and nutrition • Excessive exposure and inappropriate use of pesticides affects health of all - men, women and children • Stockpiles of obsolete chemicals pose a threat to people's health and the environment 	 <h3>Waste</h3> <ul style="list-style-type: none"> • 50 biggest active dump sites affect the lives of 64 million people, including their health and loss of lives and property when collapses occur • 2 billion people are without access to solid waste management and 3 billion lack access to controlled waste disposal facilities

Sources: Avnery *et al.* 2011; European Environment Agency 2013; Food and Agriculture Organization of the United Nations 2016b; Jambeck *et al.* 2015; Prüss-Ustun *et al.* 2016; Shepherd *et al.* 2017; United Nations Environment Programme 2016a and b; United Nations Environment Programme and International Solid Waste Association 2015; World Health Organisation 2008

Challenges and gaps limit the effectiveness of current actions. The key gaps are: (i) implementation, (ii) knowledge, (iii) infrastructure, (iv) limited financial and industry leadership, (v) pricing and fiscal, and (vi) behavioural. **Existing international environmental agreements and the 2030 Agenda for Sustainable Development present significant opportunities to accelerate actions to tackle pollution and improve the well-being of humans and ecosystems.** The international framework for the Sustainable Development Goals encourages synergies between Goal 3 and its associated target to “substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination”, and others such as the targets for climate change, air quality, nutrient pollution and marine debris.

“Towards a pollution-free planet” is about encouraging a synergetic mix of actions and a whole-system, multi-beneficial policymaking approach that builds directly on existing internationally agreed environmental goals, including those relating to climate change, disaster and risk reduction and the 2030 Agenda for Sustainable Development, with its numerous pollution-reducing targets. Transitioning to a pollution-free world can drive innovation and social equity throughout the economy, by seeing pollution prevention and regulation compliance as an opportunity to clean up everyone’s environment, create new jobs, improve economic productivity and protect the rights of this and future generations. **A pollution-free planet** is by far and away the best insurance for the survival and well-being of current and future generations of humans and ecosystems.

To advance this goal, this report has the following five overarching messages:

1. A global compact on pollution would make prevention a priority for all. It would also encourage policymakers to integrate prevention into national and local planning, development processes, poverty reduction strategies and national accounts;
2. Environmental governance needs to be strengthened at all levels – with targeted action on “hard-hitting” pollutants through risk assessments and enhanced implementation of environmental legislation (including multilateral environmental agreements) and other measures;
3. Sustainable consumption and production, through improved resource efficiency and lifestyle changes, should be promoted; waste reduction and management must be prioritized;
4. Investment in cleaner production and consumption will help to counter pollution, alongside increased funding for pollution monitoring, infrastructure, management and control;

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