



Make "Clean Air" a UN Sustainable Development Goal

In 2015, the United Nations adopted 17 Sustainable Development Goals (SDGs) as part of the 2030 Sustainable Development Agenda. The goals, which call for action to end poverty while protecting the planet and ensuring a better world for future generations, recognize almost every area of global concern. However, air pollution - harming human health, affecting food security, hindering economic development and contributing to climate change - has been neglected. To encourage government and business to tackle indoor and outdoor air pollution, which affects nine out of 10 people in the world, the UN must make "Clean Air" a Sustainable Development Goal.

Air pollution: A global health threat

According to the World Health Organization, air pollution is the world's single biggest environmental health threat. About 92% of the world's population is exposed to unhealthy levels of air pollution, causing more than seven million premature deaths a year. Nearly 3.7 million are caused by outdoor air pollution-related diseases and more than 4.3 million by disease caused by poor indoor air quality. The most vulnerable populations - women, children and elderly - are particularly affected.



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SDGs: Clean water and clean energy but not clean air

There are currently 17 goals recognizing almost every issue of global concern - from poverty, education and gender equality to clean water and sanitation, clean energy and climate action through to decent work and peace, justice and strong institutions. The vital resource of clean air has sadly not been recognized. Instead ambient air pollution is addressed as part of the solution to help reduce marine pollution, mitigate effects on ecosystems and biodiversity. Only SDG 11, Sustainable Cities and Communities, has an explicit target linked to improving air quality. None of the existing goals address the biggest health concern, that of indoor air pollution.

Indoor air: Five times more polluted than outdoors

Indoor air is up to five times more polluted than outdoor air. Toxic chemicals from paint, building materials, cleaning products, clothing and furniture mix with the outdoor air entering buildings through windows and ventilation systems. In low- and middle-income countries, some three billion people still cook and heat their homes using wood, crop wastes, charcoal and coal. All of these heating sources produce high levels of tiny soot particles that can penetrate lung tissue, make their way into the bloodstream and cause disease. Exposure is especially high among women and young children, who spend most of their time at home.

SDGs: Drive business and government agenda

Adding an SDG for "Clean Air" will spur action among government, business, academia and civil society, promoting investment and driving initiatives to achieve real change. For cleaner air indoors, it means helping rural communities move to cleaner fuels and clean stoves to protect women and children from disease. It also means identifying global indoor air standards, monitoring indoor air quality in schools and public spaces, legislating and enforcing indoor air quality regulations and educating people about what they can do to exert greater control over the air quality in their homes. For cleaner air outdoors, cleaner fuels, innovative emission control technologies and global air standards - not guidelines - are required along with monitoring, legislating and enforcing air quality standards.

Cross-sector collaboration to address indoor and outdoor air pollution is a win-win situation for human health, the economy and the environment - on local, national and global levels.

Act now for clean air

Let's mobilize efforts to stop indoor and outdoor air pollution.

1. Blueair believes that the world needs an international agreement on air quality because air is shared by all and is the single most important resource to sustain life.
2. We advocate the addition of a UN Sustainable Development Goal: Clean Air.
3. We support the UN Environment Assembly's declaration, "Towards a pollution-free planet", and its call to work towards a pollution-free planet.
4. We agree that the issue of pollution, especially air pollution, is neglected by funding agencies worldwide according to the 2017 report by the Lancet Commission on pollution and health.
5. We support the Global Alliance on Health and Pollution's recommendation to stop air pollution. The number one priority: to elevate pollution as a national and international priority, and to integrate it into urban planning processes.
6. We call on World Economic Forum leaders to adopt air pollution as a priority for its Global Health Security Agenda.

Air pollution: Too high a price to pay

The price of air pollution is staggering. The global burden of air is "severe and underreported", according to the 2017 Lancet Commission on pollution and health. In addition to harming human health, air pollution contributes to workdays lost, increased healthcare spending, crop damage, food insecurity – and premature mortality.

The world's wealthiest nations spend six times more on health effects caused by the use of fossil fuels than they do to support the fossil fuel industry with subsidies. According to a 2016 report, G20 governments spend \$444 billion on fossil fuel subsidies and US\$2.7 trillion to deal with air-pollution related health effects – not to mention productivity losses estimated at 0.1% of Global GDP and up to a 43% decline in crop yields.

The Lancet Commission report also details a way forward, with short-, medium- and long-term interventions against air pollution. These include:

- Monitoring indoor and outdoor air quality
- Physically moving stationary facilities that contribute to air pollution away from heavily populated areas and/or legislating and enforcing emissions control in these areas
- Legislating and enforcing public and private vehicle fuel quality standards
- Addressing biomass burning issues by identifying, legislating and implementing alternative treatment methods and enforcing legislation

Why a UN SDG on Clean Air?

Here's a look at the global burden of disease from air pollution. The numbers are telling. Action is required at local, national and international levels.

\$5.3 trillion in global air pollution costs

The global costs of indoor and outdoor air pollution are estimated at US\$5.3 trillion, which is equivalent to 7.2% of the global economic output.

\$2.7 trillion in air pollution-related health costs

Health costs related to air pollution from fossil fuels is six times greater than the amount of government subsidies to the fossil fuel industry. G20 governments spend about \$444 billion on oil, gas and coal subsidies but \$2.7 trillion on health costs related to fossil fuel use.

Health costs from fossil fuels

Select countries	Health costs from fossil fuels (in \$ billions)	Annual number of pre-mature deaths from air pollution
China	\$1785.4	1,625,164
European Union -Germany \$42.7 billion -Poland \$39.2 -United Kingdom \$30.7	\$229.5*	41,485 23,295 19,803
United States	\$219.2	91,045
India	\$140.7	1,403,136
Japan	\$57.8	64,428

Source: "Hidden Price Tags: How Ending Fossil Fuel Subsidies Would Benefit Our Health", Health and Environment Alliance, August 2017. *Total EU.

What we can do

Here are a few measures you can take to champion clean air for future generations.

1. Write to the UN's [Division for Sustainable Development](#) and tell them to add a Sustainable Development Goal for "Clean Air".
2. Sign the UNEP pledge [#BEAT POLLUTION](#)
3. Advocate better air quality and the establishment and enforcement of air quality standards.
4. Support investments in energy efficiency and renewable energy.
5. Donate to help supply clean cooking and heating stoves to prevent air pollution-related diseases among women and children in low- and middle-income communities.
6. Use cleaner-burning fuels and reduce emissions when using other fuels.
7. Prioritize walking, cycling and public transport over taking the car.

More than 7 million lives lost due to air pollution

About three million lives are lost every year due to outdoor air pollution and more than four million due to indoor air pollution.¹ By 2060, an estimated 9 million lives will be lost each year as a result of diseases related to poor air quality.² The toll on individual countries varies, but no country is untouched by the health effects of air pollution.

¹ "Mortality from both ambient and household air pollution", World Health Organization, 2012. http://www.who.int/phe/health_topics/outdoorair/databases/en/ ² OECD. <http://www.oecd.org/environment/air-pollution-to-cause-6-9-million-premature-deaths-and-cost-1-gdp-by-2060.htm>

3.75 billion lost working days

Economic consequences of outdoor air pollution: In 2060, lost working days at the global level are projected to be around 3.75 billion days. But there will also be an increasing number of (minor) restricted activity days.

Source: "The economic consequences of outdoor air pollution", OECD Publishing, Paris, 2016.

\$15 billion lost in sick leave

The US Occupational Safety and Health Administration estimates that poor indoor air quality costs employers about US\$15 billion in sick leave and poor work performance each year. That's in the US alone.

Source: OSHA, 2014.

Lost productivity of about 0.1% of global GDP

Reduced productivity from pollution-related disease amounts to 0.1% of the global GDP. Losses are higher in low- to lower-middle income countries.

Source: Lancet Commission on pollution and health, 2017.

Up to a 43% reduction in staple crop yields by 2050

By 2050, there will be between 13% and 43% reduction in staple crop yields due to ground-level ozone pollution and extreme temperatures. This contributes to the risks associated with global food insecurity.

Source: <https://doi.org/10.1016/j.atmosenv.2017.09.002>

2.5% reduction in China's GDP

Forecasts for 2060 indicate that air pollution may reduce the size of China's economy by up to 2.5% due to crop losses, reduced productivity, more worker sick days and increased health care costs.

Source: OECD, 2016.

3% of India's GDP

In India, the health effects of particulate air pollution are an estimated 3% of the country's gross domestic product according to the government's Health Ministry. The cost of air pollution includes more than a million premature deaths and US\$800 billion each year.

Source: "Health cost of air pollution in India", Times of India, Dec. 9, 2016 and the Global Burden of Disease study, The Lancet, 2016, and OECD.

Annual UK air pollution costs: UK£ 22.6 billion

Air pollution costs the UK an estimated UK£22.6 billion in social costs and lost productivity due to more than 6 million employee sick days.

Source: The Royal College of Paediatrics and Child Health, 2016.

Annual South Korea air pollution costs: More than \$8.9 billion

Air pollution is estimated to cost over 10 trillion won (\$8.9 billion) a year due to fine dust particles in the atmosphere.

Source: "Fine dust costs Korea 10 trillion won a year", The Korea Times, March 23, 2017.



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Blueair is committed to improve the health and well-being of people everywhere. We do so by innovative, best-in class air purification solutions and by raising awareness on the importance of clean air for human health. Contact: Sara Alsén, Global Sustainable Business & Communications Director, sara.alsen@blueair.com

