

Health as a political driver for increased ambition on climate change, in the UN Secretary-General's 2019 Climate Summit

Cutting carbon emissions, cleaning our air, saving lives

1. Why address climate change and clean air together?

The same human activities that are destabilizing the Earth's climate also contribute directly to poor health. The main driver of climate change, fossil fuel combustion, also contributes about 2/3 of human exposure to outdoor air pollution, which causes over 4 million deaths a year. Including indoor air pollution brings the total to over 7 million deaths worldwide every year – about 1 in every 8 deaths, similar to the death toll from tobacco smoking, and comparable to any other human health risk. In addition to early death, air pollution causes long term health harms, from asthma to impaired brain development in children.

The overall cost to human wellbeing, and to economies, is enormous. Air pollution costs an estimated US\$ 5.11 trillion in welfare losses globally each year. In the 15 countries that emit the most greenhouse gas emissions, the health impacts of air pollution are estimated to cost more than 4% of their GDP. Public concern over the health impacts of air pollution is an increasing driver of social movements for action on climate change and overall environmental protection.

Therefore, a lack of progress in reducing emissions and building adaptive capacity threatens both human lives and the viability of national health systems. In that sense, ensuring a widespread understanding of climate change as a central public health issue will be crucial in delivering an accelerated response.

Hence, there is a huge opportunity to simultaneously advance climate, health, and sustainable development goals. The latest evidence shows that meeting the Paris agreement would be expected to save over 1 million lives a year by 2050 through reduced air pollution, and that the value of the health gains would be approximately twice the costs of mitigation. The health burden of polluting energy sources is now so high, that moving to cleaner and more sustainable choices for energy supply, transport and food systems effectively pays for itself. When health is taken into account, climate change mitigation is an opportunity, not a cost, and brings immediate and visible benefit to local populations.

Acting on climate change and air pollution together also responds to the mandates of the Paris Agreement, and promotes increased ambition. The Paris agreement refers to obligations to protect “the right to **health**”, and recognizes the “social, economic and environmental value of voluntary mitigation actions and their co-benefits for adaptation, **health** and sustainable development”. The Paris agreement is therefore not only an environmental commitment but is potentially the strongest health agreement of this century.

There are a range of practical actions that address both climate mitigation, clean air, and wider health benefits. For example, switching to low-carbon energy sources will not only improve air quality but provide additional opportunities for immediate health benefits, while

facilitating sustainable and clean mobility (based on alternative fuels) and active transport options such as cycling, and walking not only will help increase physical activity, but also can help prevent diseases like diabetes, lung cancer and heart disease.

The development of e-mobility creates real perspectives for the improvement of air quality. Coherent actions in the field of transport electrification should be conducted parallel with liquidation of low emission originating from the combustion of solid fuels in home systems and promotion of transition to electrical heating. This results from the fact that a part of applicable instruments are common for pollution from both sources. Therefore, the improvement of air quality thanks to development of e-mobility will not only impact the improvement of public health (lower costs of health care), but also the reduction of natural environment damage and building substance. An additional factor that has a positive impact on health will be the reduction of noise related to transport in the cities. Unfavourable health symptoms are observed in case of long-term exposure to noise already at the level of 55 dB, and in certain big cities the noise levels are even higher. The development of e-mobility will contribute significantly to reduction of noise originating from transport.

Countries are beginning to recognize these connections, but much more can be done. Approximately 20% of Intended Nationally Determined Contributions (INDCs) to the Paris Agreement addresses health implications of mitigation, and a range of international initiatives support different specific parts of the agenda. However, there is currently no overall initiative that brings together commitments to raise ambition to simultaneously mitigate climate change, reduce air pollution, and promote health, in a comprehensive manner.

Draft Commitments and Rationale

XXXX national and subnational governments, covering a population of Y million people, commit to achieving air quality that is safe for their populations, and to align their climate change and air pollution policies, by 2030.

Governments would meet this commitment through specifically committing to:

- Implementing air quality and climate change policies that will achieve the WHO Ambient Air Quality Guideline values.
- Implementing e-mobility and sustainable mobility policies and actions with the aim of making a decisive impact on road transport emissions.
- Assessing the number of lives that are saved, the health gains in children and other vulnerable groups, and the avoided financial costs to health systems, that result from implementing their policies.
- Tracking progress, sharing experience and best practice through an international network supported by the UN system.

At the global level, the commitment aims to maximize the number of people breathing clean air, and who live in jurisdictions that have made a firm commitment to addressing climate change. It includes enhancing air quality monitoring by governments and designing policy and interventions that addresses both air quality and climate mitigation measures. At the local level, it aims to provide a positive narrative of improving local lives, backed up by quantitative

assessment of the health improvements that can be expected by making these interventions, and with sustained support in recording and promoting the progress made.

The commitment aims to provide a clear goal, while maintaining the flexibility for countries and jurisdictions to select the specific course of actions to achieve this aim, depending on their own contexts and capacities.

The [health report to UNFCCC COP24](#) provides recommendations for governments on how to maximize the health benefits of tackling climate change and avoid the worst health impacts. [“Driving Change Together – Katowice Partnership for E-mobility”](#) endorsed at COP24 in Poland by 42 countries from 5 continents, as well as international organisations, representing over 1500 cities and regions as well as 1200 companies induces further transition to clean transport. Examples of specific sectoral interventions through which countries can reach these commitments are below.

Support by the Global Health Community

To all City, Regional or National Governments ready to commit to one or more of the above, WHO and partners will provide:

- Assessment, and/or tools, based on indicators, to assess the expected health gains (numbers of lives saved, illness avoided, increase in life expectancy), through achievement of the commitments made.
- WHO guideline values and methods to assess health benefits through reductions in air pollution, including disaggregation by gender and age group.
- Establishment of an expert reference group to provide quality assurance, and technical support to participating entities.
- Technical guidance and support for inclusion and progress tracking in including mitigation actions and health co-benefits in the Nationally Determined Contributions to the UNFCCC.
- Platform for making, tracking and promoting the commitments made, through the [Breathelife Initiative](#), and the monitoring system for the commitments to the Geneva Action Agenda to Combat Air Pollution, and WHO/UNFCCC climate and health country/city profiles.

Progress tracking

Progress can be tracked through indicators already monitored through international initiatives, including the Lancet Climate Countdown and the WHO/UNFCCC climate and health country profiles, which are both aligned with SDG monitoring. This may include, for example, a subset of the following indicators within the Lancet Climate Countdown.

Mitigation actions and health co-benefits

- Indicator 3.1: carbon intensity of the energy system

- Indicator 3.2: coal phase-out
- Indicator 3.3: zero-carbon emission electricity
- Indicator 3.4: access to clean energy
- Indicator 3.5: exposure to ambient air pollution
- Indicator 3.5.1: exposure to air pollution in cities
- Indicator 3.5.2: premature mortality from ambient air pollution by sector
- Indicator 3.6: clean fuel use for transport
- Indicator 3.7: sustainable travel infrastructure and uptake
- Indicator 3.8: ruminant meat for human consumption
- Indicator 3.9: health-care sector emissions

Opportunities for promoting synergies and engagement

- 20-28 May – Discussion on potential commitments with Ministers of Health at the **World Health Assembly**, Geneva.
- 30 June – 1 July: **Health Ministerial meeting** on climate change in margins of UAE preparatory conference for UNSG Climate Summit, Abu Dhabi.
- 22 September—**WHO “Walk the Talk”** and 23 September **UN PGA’s High-Level Meeting on Universal Health Coverage**—leveraging health events of the high-level week to incorporate climate/environment and provide a coordinated narrative which demonstrates the co-benefits (and costs of inaction).

Examples of interventions to simultaneously address air pollution and climate change.

TRANSPORT



Commit to invest on:

- **Walking & cycling paths**
Walking and cycling networks make trips by foot or bicycle safer and more accessible, preventing pollution from vehicles, traffic injuries, and promoting better health through physical activity.
- **Efficient mass transit**
Shifting people to cleaner and more efficient forms of transport, including popularization of public mobility based on alternative fuels, bus rapid transit, light rail and other forms of shared transportation dramatically reduces air pollution by cutting down on private vehicle use and emissions.
- **Emission standards**
Raising emissions standards for all vehicles takes heavy polluters off the road and drives market pressures for cleaner vehicles, as well as innovation for cleaner technologies. Reducing high-sulfur fuels in many emerging economies is an important first step.
- **Soot-free vehicles**

“Soot-free” vehicles reduce tailpipe particulate/black carbon emissions by 85% or more, as compared to uncontrolled diesel exhaust. Soot-free vehicles are typically vehicles certified to Euro VI or US 2010 emission levels, including electric drive or hybrid engines, compressed natural gas (CNG), biogas/other biofuels, or diesel engines with a functioning diesel particle filter.

WASTE MANAGEMENT



Landfills account for 11% of the world’s methane emissions, and municipal waste is expected to nearly double by 2025.

Commit to invest on:

- **Landfill gas recovery**
Landfill gas recovery is an innovative, renewable energy option that actually harnesses harmful landfill emissions rather than allowing them to enter the atmosphere or our lungs.
- **Improved wastewater treatment**
Improving wastewater treatment and sanitation provisions, both in the home and in industry, can make an enormous difference in reducing infectious disease risks.

HOUSEHOLD



Nearly 60% of premature deaths from household air pollution are among women and children who spend hours around sooty cookstoves burning wood, coal and kerosene. Shifting to cleaner stoves can have a domino effect of benefits – reducing black carbon emissions as well as the time spent by women and girls in gathering fuel. Low-emission stoves and fuels

Cleaner-burning biomass stoves and other low-emission fuels or stove types improve air quality in the home and the community, and lower risk of burns or other injuries.

Commit to invest on:

- **Improved lighting**
Electric lighting, including PV solar rooftop panels, reduces reliance on kerosene lamps that emit heavy concentrations of harmful black carbon and other air pollutants.
- **Passive building design principles**
Reducing the need for extra heating or cooling by designing homes that take advantage of the sun’s natural warming and fresh air ventilation for cooling can help minimize a home’s air pollution and carbon footprint.

Energy Supply



Oil and gas produce 25% of the world's methane emissions. Flaring, the burning of uncaptured gas during production, emits harmful black carbon. Better control of fugitive emissions and capturing flared gas as fuel helps limit emissions from current oil and gas production in the short-term, while the shift to renewable energy sources can ensure a cleaner, healthier future in the long-term.

Commit to invest on:

- **Renewable power supply**

Renewables directly improve air quality while slowing climate change. For example, rooftop PV solar systems in off-grid rural areas or fast-growing cities with unreliable energy supply is a clean, and cost-effective alternative to heavily polluting portable diesel generators.

- **Diesel replacement**

The fine particles and black carbon emitted by diesel vehicles and engines can be virtually eliminated through technologies that are already present on half of new heavy-duty vehicles sold today.

Commit to join the:

Powering Past Coal Alliance

([https://poweringpastcoal.org/about/Powering Past Coal Alliance Join](https://poweringpastcoal.org/about/Powering_Past_Coal_Alliance_Join))

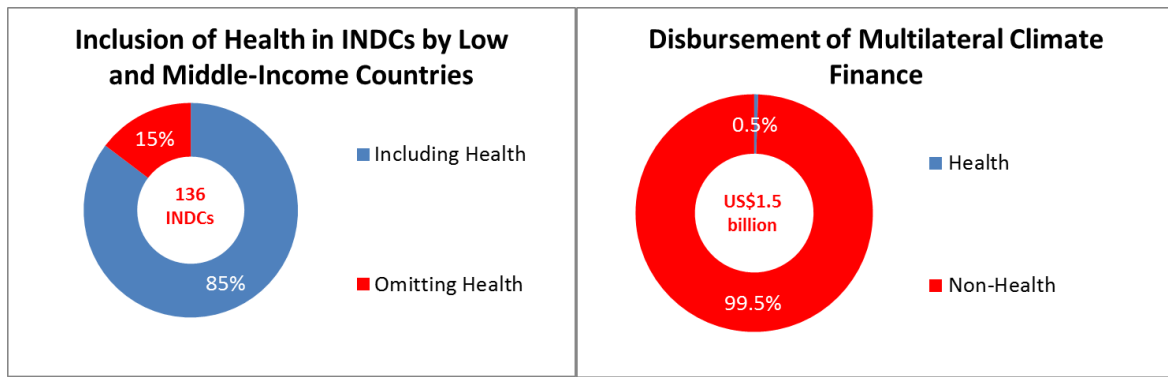
Health as a political driver for increased ambition on climate change, in the UN Secretary-General's 2019 Climate Summit

"Guiding investment to support climate action, health and sustainable development"

1. Why address climate change and health funding?

There is now a very strong body of evidence that (i) the energy pathways driving climate change already cause approximately seven million deaths a year from air pollution, and that climate change itself is already having major health impacts, expected to increase to the loss of hundreds of thousands of lives a year in the near future, and potentially reverse the gains of providing Universal Health Coverage; (ii) proven, effective interventions exist both for protecting against climate-sensitive health impacts, and for providing low carbon, low air pollution energy sources, (iii) the health gains from investment in simultaneously addressing climate change and air quality, and interventions such as early warning systems, and climate-resilient and environmentally sustainable health systems, would repay the cost of investment, (iv) healthcare is a significant, and growing emitter of greenhouse gases, now contributing 5-10% of total carbon emissions in high-income countries, and growing around the world.

Investment in health adaptation must be increased, particularly in the LMICs that are most vulnerable to climate impacts. Parties to the UNFCCC are committed to collectively mobilizing US\$ 100 billion a year for adaptation and to promoting low-carbon development in LMICs by 2020. Financial support for health adaptation to climate change in LMICs remains, however, alarmingly low. A survey of the main multilateral funds that support climate adaptation indicated that only about US\$ 9 million (0.5%) of over US\$ 1.5 billion of disbursed funding has been allocated to projects that specifically address health, despite strong demands for support from the health ministers of the most vulnerable countries. In the field of air pollution and climate change mitigation, large areas of the developing world lack any air quality monitoring stations that provide the necessary data for citizens, local and national decision makers to track progress in simultaneously addressing air pollution and climate change.



- (a) Numbers of LMICs that included health in their intended nationally determined contributions to the Paris Agreement and (b) disbursement of funds for projects by the Global Environmental Facility, the Adaptation Fund, the Pilot Programme for Climate and Resilience, the MDG Achievement Fund and the Green Climate Fund.

Draft Commitment and Rationale

X multilateral development banks, climate funds, bilateral development agencies, philanthropic organizations, and private sector actors, responsible for Y billions in climate finance, commit to significantly scale up their investment in proven interventions for climate-resilient health systems, and in air quality monitoring and policy implementation.

Targeted areas of investments would include

- Climate-informed health surveillance and response systems for heatwaves, storms and floods, and for water and vector-borne diseases such as cholera, malaria and dengue.
- Investment in “climate-smart” healthcare facilities, that meet agreed criteria for climate resilience, access to renewable energy, and minimization of carbon emissions.
- Quality controlled air pollution monitoring equipment in major cities in LMICs, as part of a global network.
- Development of integrated air quality and climate change mitigation policies in LMICs.
- Development and implementation of national adaptation plans for public health, which include evaluation of risks and impacts, risk reduction measures, , , early warning systems, preparation and response to health emergencies associated to climate change.
- Monitoring and evaluation systems for adaptation measures in the health sector and the monitoring of their effectiveness.

The commitment aims to protect the lives of the most vulnerable populations, and to deliver and scale up the Paris commitments on adaptation financing, and to address the widely recognized gap in financing health adaptation, by mainstreaming climate change into their core health sector investments. It would also raise ambition by improving the access of citizens, subnational and national Governments to the data and information necessary to

assess the extent to which progress is being made in addressing air pollution simultaneously with carbon emissions.

Support by the UN system and the Global Health Community

Relevant UN family agencies including WHO, WMO, UNFCCC Secretariat and partner academic groups would provide:

- Aggregated global tracking and reporting on financial investments in health adaptation to climate change.
- Technical standards, guidance and best practice on investments in climate-resilient health systems, surveillance and response for climate-sensitive diseases, and climate-smart healthcare.
- Technical standards and guidance on air quality monitoring equipment.
- Global platform on air quality, integrating data collected from city-level monitoring stations to provide regional and global assessments, and analytical models to provide estimated air pollution levels for populations without local monitoring stations.
- Technical guidance and support for inclusion and progress tracking in including health investments in National Adaptation and Nationally Determined Contributions to the UNFCCC, and WHO/UNFCCC climate and health country/city profiles.

Opportunities for promoting synergies and engagement

- 20-28 May – Discussion on potential commitments with Ministers of Health at the **World Health Assembly**, Geneva.
- 30 June – 1 July: **Health Ministerial meeting** on climate change in margins of UAE preparatory conference for UNSG Climate Summit, Abu Dhabi.