

Belém Mission to 1.5: Submission by the Global Climate and Health Alliance

Introduction

The Global Climate and Health Alliance warmly welcomes the Belém Mission to 1.5 initiative and is grateful for this opportunity to submit our views. The IPCC and the Lancet Countdown on Health and Climate Change^{1,2} find that climate change drives injury, disease and deaths from hazards including heatwaves, wildfires, floods, droughts, storms, displacement, infectious disease transmission including pandemics, food and water insecurity, non-communicable diseases (NCDs), mental health impacts, and threats to maternal-child health and sexual and reproductive health and rights (SRHR). These impacts are compounded by ecosystem degradation leading to massive biodiversity loss and rising antimicrobial resistance, which further impacts human wellbeing. Without investment in climate action, by 2050, the costs of climate related health impacts could far exceed these levels, surpassing US \$20.8 trillion in LMICs alone³. Ambitious and inclusive climate action can reduce health impacts, by preventing acceleration of health hazards and reducing vulnerabilities. Additional physical and mental health gains of climate action across sectors include clean air, nutrition security, safe water, increased physical activity, protective living environments, decent jobs, energy security, ecosystem services and social protection, avoiding high costs and with associated returns on investment^{4,5,6,7}. A One Health and wider planetary health-informed approach which recognises the interconnectedness of human, animal, ecosystem and environmental health is vital to protect the health of people and the planet, and should be embedded in the development and implementation of national policies such as NDCs and NAPs.

Health is embedded in articles 1.1 and 4.1.f of the UNFCCC and the preamble and article 108 of the Paris Agreement^{8,9}. It has gained increasing traction in recent years, including with the adoption of the COP26 Health Commitments¹⁰ (the foundation for the Alliance for Transformative Action on Climate and Health, now comprising 100 countries), the first ever Health Day at COP28 and accompanying Ministerial and Declaration on Climate and Health, the Baku COP Presidencies Continuity Coalition, and the Belém Health Action Plan^{11,12}. Health impacts, healthcare sector planning, and health promoting actions across sectors feature widely in NDCs 3.0 submitted to date, but enhanced planning and implementation will be critical for the delivery of climate action sufficient to protect and promote human health.

1. What action areas and solutions have the highest impact potential to support the submission, ambition and implementation of NDCs and NAPs.

Climate change is a grave threat to health. As such, climate action is vital in order to protect human health. Furthermore, health rationale can drive more ambitious climate action. Not only are climate and health intrinsically linked, but embedding health considerations in climate action can unlock public and political support, and generate high returns on investment.

Public support

A recent study indicates that communicating the health impacts of climate change in a range of national settings (Brazil, India, Japan and South Africa) is twice as effective at shifting people's attitudes on climate change than non- health climate

¹ IPCC, 2022. Climate Change 2022: Impacts, Adaptation and Vulnerability. Working Group II Contribution to the IPCC Sixth Assessment Report. Chapter 7: Health, Wellbeing and the Changing Structure of Communities.

² Romanello et al, 2025. The 2025 report of the Lancet Countdown on health and climate change: climate change action offers a lifeline. Lancet 406 (10521): 2804-2857

³ World Bank, 2024. The Cost of Inaction: Quantifying the Impact of Climate Change on Health in Low- and Middle-Income Countries.

⁴ Whitmee, 2023. Pathways to a healthy net-zero future: report of the Lancet Pathfinder Commission

⁵ Hamilton 2021. The public health implications of the Paris Agreement: a modelling study. Lancet Planetary Health 5(2): e74-e83

⁶ Whitmee et al, 2024. Pathways to a healthy net-zero future: report of the Lancet Pathfinder Commission. Lancet 403 (10421) 67-110.

⁷ Convention on Biological Diversity, 2022. Kunming-Montreal Global Biodiversity Framework. CBD/COP/DEC/15/4.

⁸ UNFCCC, 2016. The Paris Agreement.

⁹ UNFCCC, 1992. United Nations Framework Convention on Climate Change.

¹⁰ WHO, n.d. COP26 Health Commitments.

¹¹ COP28 Presidency. COP28 UAE Declaration on Climate and Health.

¹² Government of Brazil. Belém Health Action Plan for the Adaptation of the Health Sector to Climate Change.

messages¹³. Three quarters of the public already recognize its impacts on health, and up to 82% want to see urgent government action to prevent the impact of climate change on health. Health is a well-established priority for many governments and is recognised as foundational to other priorities, such as labour productivity. Health arguments providing a unifying narrative that builds support from across the political spectrum for climate action. Health professionals are most often well respected and trusted, making them strong advocates for high climate ambition. These factors can help unlock the public support and political will needed to pursue greater climate ambition.

Avoided harms, reduced costs, health gains and returns on investment

The Lancet Countdown identifies a series of health related costs and potential returns on investment from climate action:

- Infants below 1 year and adults over 65 - the most vulnerable age groups experienced record-high heatwave exposures in 2024, with infants exposed to 389% more heatwave days and older adults to 304% more heatwave days compared with 1986–2005. In 2024, extreme heat events led to a 132% decline in people's overall mood and wellbeing compared with the 2006–22 average.
- Countries with climate-informed health early warning systems showed a significantly faster decline in annual mortality from floods and storms from 2000 to 2024 than countries without such systems (3.2% vs 1.6% decrease per year).
- Climate change is leading to conditions which are favorable for the spread of some infectious diseases (this may vary by area). For example, from 1951–60 to 2015/24, the average climate-defined transmission potential of dengue by the vector mosquitoes *Ae albopictus* and *Ae aegypti* increased by 48.5% and 11.6%, respectively.
- Global energy-related emissions rose by 1.6% in 2023, pushing CO₂ emissions to their highest level on record. Fossil fuel combustion still contributed to 2.52 million avoidable deaths from associated ambient particulate matter (PM_{2.5}) air pollution in 2022, for a monetized value equivalent of \$4.8 trillion, equal to 4.7% of global GDP.
- The proportion of household energy from harmful solid biomass dropped from 28% in 2016 to 26% in 2022; however, the decline varied based on country development status – in 2022, 88% of energy in countries with low Human Development Index (HDI) levels and 64% of energy in medium HDI countries still came from solid biomass. The persistent use of dirty fuels in people's homes led to 2.3 million avoidable deaths from household air pollution in 2022.
- Global agricultural greenhouse gas emissions increased by 36% from 2000 to 2022, with red meat and dairy responsible for 55% of agricultural emissions in 2022. Deaths related to unhealthy diets between 2021 and 2022 increased from 148 deaths to 150 deaths per 100 000, totaling 11.8 million deaths, including 1.9 million deaths from excessive red meat and dairy intake.
- In 2024, 640 billion potential work hours were lost due to heat exposure - a 98% increase from the 1990–99 average. Heat exposure reduced labour capacity, leading to an estimated \$1.09 trillion in lost income worldwide; about 39% of these losses were in the agriculture sector.
- 83% of the 87 countries reviewed (covering over 95% of global greenhouse gas emissions) had a net-negative carbon price in 2023, which generated a net fossil fuel subsidy of \$956 billion. Of these, 15 countries allocated more funds to net fossil fuel subsidies than to their overall health budgets.
- Of the 64 UNFCCC-designated developing countries that submitted costed NAPs and NDCs as of 21 March 2025, only 28 (44%) included quantified estimates for health adaptation needs. Collectively, these countries reported health adaptation needs exceeding \$7 billion per year for the 2025–30 period.

The following case studies have been collated by the Pathfinder Initiative, further information is available online¹⁴.

- Weatherizing and retrofitting homes can offer particular gains for low-income communities. In Victoria, Australia, home upgrades for social housing required an investment of approximately AUD 2,800 with benefits including increased indoor winter temperatures, lower energy bills, reduced breathlessness, and improved mental health and social care. Healthcare savings were equivalent to AUD 887 in just one winter.
- Buenos Aires has created bicycle lanes throughout the city, alongside a bicycle-sharing scheme and safety initiative.⁴⁴ The cycle network spans more than 286 km and links schools, universities and hospitals in the city, as well as less densely populated areas to ensure bike lanes are accessible to all. There has been a 131% increase in the number of bicycle trips made in Buenos Aires since 2013 and in 2020, cycling accounted for 10% of all trips made in the city. The programme was estimated to reduce CO₂ emissions by 12,155 tons in 2020, while the number of cyclists killed decreased from 0.10 to 0.02 per million cycle trips. There was a threefold increase in the number of cycle trips made by female cyclists along the newly developed cycle lanes.

¹³ Climate Opinion Research Exchange, 2026. Climate-Health Messages Build Support for Climate Action

¹⁴ London School of Hygiene and Tropical Medicine, 2023. Pathfinder Initiative Evidence Bank.

- Between 1995–2011, the Surat Municipal Corporation in India expanded and upgraded its sewerage network. In addition, sewage sludge underwent anaerobic treatment, restricting methane emissions and permitting its use to generate electricity to operate the sewerage system, while sewage removed after anaerobic treatment can be converted to organic manure and sold for agriculture. The project resulted in a reduction of 80,000 tonnes of CO₂ e emissions per year from four sewerage treatment plants, and improved water quality.⁴⁹ The four sewage treatment plants produced 3,000–5,000 tonnes of organic manure per year, generating annual revenue of approximately INR 2.5 million, and created approximately 30 jobs.

2.What is required to further strengthen international cooperation to enhance ambition and enable the effective implementation of NDCs and NAPs?

Enhanced coordination between sectors including climate, health, energy, agriculture, transport, sanitation, urban planning, finance and beyond is required to maximise the health gains of climate action through embedding health more deeply in NDCs and NAPs, as part of a “health in all policies approach”. This could be achieved through the inclusion of health experts on international climate councils, and health ministry expertise in committees shaping the development, implementation and monitoring of NDCs and NAPs.

Health impact assessments should be undertaken as standard when considering different pathways of climate action, in order to maximise health gains of and minimise health harms.

Finally, governments could consider establishing public communications narratives to support climate policy implementation, which refer to potential health, wellbeing and related economic gains, as well as prioritising ongoing community engagement, especially among underrepresented groups, to prevent regressive outcomes and reduce the risk of political backlash¹⁵.

¹⁵ Wellcome Trust, 2025. How health can support ambitious implementation of Nationally Determined Contributions (NDCs)