



The 2024 report of the *Lancet* Countdown on health and climate change: facing record-breaking threats from delayed action

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Executive summary

Despite the initial hope inspired by the 2015 Paris Agreement, the world is now dangerously close to breaching its target of limiting global multiyear mean heating to 1.5°C. Annual mean surface temperature reached a record high of 1.45°C above the pre-industrial baseline in 2023, and new temperature highs were recorded throughout 2024. The resulting climatic extremes are increasingly claiming lives and livelihoods worldwide.

The *Lancet* Countdown: tracking progress on health and climate change was established the same year the Paris Agreement entered into force, to monitor the health impacts and opportunities of the world's response to this landmark agreement. Supported through strategic core funding from Wellcome, the collaboration brings together over 300 multidisciplinary researchers and health professionals from around the world to take stock annually of the evolving links between health and climate change at global, regional, and national levels.

The 2024 report of the *Lancet* Countdown, building on the expertise of 122 leading researchers from UN agencies and academic institutions worldwide, reveals the most concerning findings yet in the collaboration's 8 years of monitoring.

The record-breaking human costs of climate change

Data in this year's report show that people all around the world are facing record-breaking threats to their wellbeing, health, and survival from the rapidly changing climate. Of the 15 indicators monitoring climate change-related health hazards, exposures, and impacts, ten reached concerning new records in their most recent year of data.

Heat-related mortality of people older than 65 years increased by a record-breaking 167%, compared with the 1990s, 102 percentage points higher than the

65% that would have been expected without temperature rise (indicator 1.1.5). Heat exposure is also increasingly affecting physical activity and sleep quality, in turn affecting physical and mental health. In 2023, heat exposure put people engaging in outdoor physical activity at risk of heat stress (moderate or higher) for a record high of 27.7% more hours than on average in the 1990s (indicator 1.1.2) and led to a record 6% more hours of sleep lost in 2023 than the average during 1986–2005 (indicator 1.1.4).

People worldwide are also increasingly at risk from life-threatening extreme weather events. Between 1961–90 and 2014–23, 61% of the global land area saw an increase in the number of days of extreme precipitation (indicator 1.2.3), which in turn increases the risk of flooding, infectious disease spread, and water contamination. In parallel, 48% of the global land area was affected by at least 1 month of extreme drought in 2023, the second largest affected area since 1951 (indicator 1.2.2). The increase in drought and heatwave events since 1981–2010 was, in turn, associated with 151 million more people experiencing moderate or severe food insecurity across 124 countries assessed in 2022, the highest recorded value (indicator 1.4.2).

The hotter and drier weather conditions are increasingly favouring the occurrence of sand and dust storms. This weather-environmental phenomenon contributed to a 31% increase in the number of people exposed to dangerously high particulate matter concentrations between 2003–07 and 2018–22 (indicator 1.2.4). Meanwhile, changing precipitation patterns and rising temperatures are favouring the transmission of deadly infectious diseases such as dengue, malaria, West Nile virus-related illness, and vibriosis, putting people at risk of transmission in previously unaffected locations (indicators 1.3.1–1.3.4).

Lancet 2024; 404: 1847–96

Published Online
October 30, 2024
[https://doi.org/10.1016/S0140-6736\(24\)01822-1](https://doi.org/10.1016/S0140-6736(24)01822-1)

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Compounding these impacts, climate change is affecting the social and economic conditions on which health and wellbeing depend. The average annual economic losses from weather-related extreme events increased by 23% from 2010–14 to 2019–23, to US\$227 billion (a value exceeding the gross domestic product [GDP] of about 60% of the world's economies; indicator 4.1.1). Although 60·5% of losses in very high Human Development Index (HDI) countries were covered by insurance, the vast majority of those in countries with lower HDI levels were uninsured, with local communities bearing the brunt of the physical and economic losses (indicator 4.1.1). Extreme weather and climate change-related health impacts are also affecting labour productivity, with heat exposure leading to a record high loss of 512 billion potential labour hours in 2023, worth \$835 billion in potential income losses (indicators 1.1.3 and 4.1.3). Low and medium HDI countries were most affected by these losses, which amounted to 7·6% and 4·4% of their GDP, respectively (indicator 4.1.3). With the most underserved communities most affected, these economic impacts further reduce their capacity to cope with and recover from the growing impacts of climate change, thereby amplifying global inequities.

Concerningly, multiple hazards revealed by individual indicators are likely to have simultaneous compounding and cascading impacts on the complex and interconnected human systems that sustain good health, disproportionately threatening people's health and survival with every fraction of a degree of increase in global mean temperature.

Despite years of monitoring exposing the imminent health threats of climate inaction, the health risks people face have been exacerbated by years of delays in adaptation, which have left people ill-protected from the growing threats of climate change. Only 68% of countries reported high-to-very-high implementation of legally mandated health emergency management capacities in 2023, of which just 11% were low HDI countries (indicator 2.2.5). Moreover, only 35% of countries reported having health early warning systems for heat-related illness, whereas 10% did so for mental and psychosocial conditions (indicator 2.2.1). Scarcity of financial resources was identified as a key barrier to adaptation, including by 50% of the cities that reported they were not planning to undertake climate change and health risk assessments (indicator 2.1.3). Indeed, adaptation projects with potential health benefits represented just 27% of all the Green Climate Fund's adaptation funding in 2023, despite a 137% increase since 2021 (indicator 2.2.4). With universal health coverage still unattained in most countries, financial support is needed to strengthen health systems and ensure that they can protect people from growing climate change-related health hazards. The unequal distribution of financial resources and technical capacity

is leaving the most vulnerable populations further unprotected from the growing health risks.

Fuelling the fire

As well as exposing the inadequacy of adaptation efforts to date, this year's report reveals a world veering away from the goal of limiting temperature rise to 1·5°C, with concerning new records broken across indicators monitoring greenhouse gas emissions and the conditions that enable them.

Far from declining, global energy-related CO₂ emissions reached an all-time high in 2023 (indicator 3.1.1). Oil and gas companies are reinforcing the global dependence on fossil fuels and—partly fuelled by the high energy prices and windfall profits of the global energy crisis—most are further expanding their fossil fuel production plans. As of March, 2024, the 114 largest oil and gas companies were on track to exceed emissions consistent with 1·5°C of heating by 189% in 2040, up from 173% 1 year before (indicator 4.2.2). As a result, their strategies are pushing the world further off track from meeting the goals of the Paris Agreement, further threatening people's health and survival.

Although renewable energy could provide power to remote locations, its adoption is lagging, particularly in the most vulnerable countries. The consequences of this delay reflect the human impacts of an unjust transition. Globally, 745 million people still lack access to electricity and are facing the harms of energy poverty on health and wellbeing. The burning of polluting biomass (eg, wood or dung) still accounts for 92% of the energy used in the home by people in low HDI countries (indicator 3.1.2), and only 2·3% of electricity in these countries comes from clean renewables, compared with 11·6% in very high HDI countries (indicators 3.1.1). This persistent burning of fossil fuel and biomass led to at least 3·33 million deaths from outdoor fine particulate matter (PM_{2.5}) air pollution globally in 2021 alone (indicator 3.2.1), and the domestic use of dirty solid fuels caused 2·3 million deaths from indoor air pollution in 2020 across 65 countries analysed (indicator 3.2.2).

Compounding the growth in energy-related greenhouse gas emissions, almost 182 million hectares of forests were lost between 2016 and 2022 (indicator 3.4), reducing the world's natural capacity to capture atmospheric CO₂. In parallel, the consumption of red meat and dairy products, which contributed to 11·2 million deaths attributable to unhealthy diets in 2021 (indicator 3.3.2), has led to a 2·9% increase in agricultural greenhouse gas emissions since 2016 (indicator 3.3.1).

Health systems themselves, although essential to protect people's health, are also increasingly contributing to the problem. Greenhouse gas emissions from health care have increased by 36% since 2016, making health systems increasingly unprepared to operate in a net zero emissions future and pushing health care further from its guiding principle of doing no harm (indicator 3.5).

The growing accumulation of greenhouse gases in the atmosphere is pushing the world to a future of increasingly dangerous health hazards and reducing the chances of survival of vulnerable people all around the globe.

Health-threatening financial flows

With the availability of financial resources a key barrier to tackling climate change, a rapid growth in predictable and equitable investment is urgently needed to avoid the most dangerous impacts of climate change. A growing body of literature shows that the economic benefits of a transition to net zero greenhouse gas emissions will far exceed the costs of inaction. Healthier, more resilient populations will further support more prosperous and sustainable economies (indicators 4.1.2–4.1.4).

However, although funding to enable potentially life-saving climate change adaptation and mitigation activities remains scarce, substantial financial resources are being allocated to activities that harm health and perpetuate a fossil fuel-based economy. The resulting reliance on fossil fuel energy has meant many countries faced sharp increases in energy prices following Russia's invasion of Ukraine and the resulting disruption of fossil fuel supplies. To keep energy affordable to local populations, many governments resorted to increasing their explicit fossil fuel subsidies. Consequently, 84% of countries studied still operated net negative carbon prices (explicit net fossil fuel subsidies) in 2022, for a record high net total of \$1.4 trillion (indicator 4.3.3), with the sums involved often comparable to countries' total health budgets. In addition, although clean energy investment grew by 10% globally in 2023—exceeding fossil fuel investment by 73%—considerable regional disparities exist. Clean energy investment is 38% lower than fossil fuel spending in emerging market and developing economies outside China. Clean energy spending in these countries only accounted for 17.4% of the global total. Moreover, investment in energy efficiency and end use, essential for a just transition, decreased by 1.3% in 2023 (indicator 4.3.1).

The resulting expansion of fossil fuel assets is increasingly jeopardising the economies on which people's livelihoods depend. On the current trajectory, the world already faces potential global income losses ranging from 11% to 29% by 2050. The number of fossil fuel industry employees reached 11.8 million in 2022, increasing the size of a workforce whose employment cannot be sustained in a world that avoids the most catastrophic human impacts of climate change (indicator 4.2.1). Meanwhile, ongoing investments in coal power have pushed the value of coal-fired power generation assets that risk becoming stranded within 10 years (between 2025 and 2034) in a 1.5°C trajectory to a cumulative total of \$164.5 billion—a value that will increase if coal investments persist (indicator 4.2.3). The prioritisation of fossil fuel-based systems means most countries remain ill-prepared for the vital transition to

zero greenhouse gas emission economies. As a result of an unjust transition, the risk is unequally distributed: preparedness scores for the transition to a net zero greenhouse gas economy were below the global average in all countries with a low HDI, 96% of those with a medium HDI, and 84% of those with a high HDI, compared with just 7% of very high HDI countries (indicator 4.2.4).

Defining the health profile of people worldwide

Following decades of delays in climate change action, avoiding the most severe health impacts of climate change now requires aligned, structural, and sustained changes across most human systems, including energy, transportation, agriculture, food, and health care. Importantly, a global transformation of financial systems is required, shifting resources away from the fossil fuel-based economy towards a zero emissions future. Putting people's health at the centre of climate change policy making is key to ensuring this transition protects wellbeing, reduces health inequities, and maximises health gains. Some indicators reveal incipient progress and important opportunities for delivering this health-centred transformation.

As of December, 2023, 50 countries reported having formally assessed their health vulnerabilities and adaptation needs, up from 11 the previous year, and the number of countries that reported having a Health National Adaptation Plan increased from four in 2022 to 43 in 2023 (indicators 2.1.1 and 2.1.2). Additionally, 70% of 279 public health education institutions worldwide reported providing education in climate and health in 2023, essential to build capacities for health professionals to help shape this transition (indicator 2.2.6). Regarding the energy sector, the global share of electricity from clean modern renewables reached a record high of 10.5% in 2021 (indicator 3.1.1); clean energy investment exceeded fossil fuel investment by 73% in 2023 (indicator 4.3.1); and renewable energy-related employment has grown 35.6% since 2016, providing healthier and more sustainable employment opportunities than those in the fossil fuel industry (indicator 4.2.1). Importantly, mostly as a result of coal phase-down in high and very high HDI countries, deaths attributable to outdoor PM_{2.5} from fossil fuel combustion decreased by 6.9% between 2016 and 2021 (indicator 3.2.1), showing the life-saving potential of coal phase-out.

Important progress was made within international negotiations, which opened new opportunities to protect health in the face of climate change. After years of leadership from WHO on climate change and health, its Fourteenth General Programme of Work, adopted in May, 2024, made responding to climate change its first strategic priority. Within climate negotiations themselves, the 28th Conference of the Parties (COP28) of the United Nations Framework Convention on Climate Change (UNFCCC) featured the first health thematic day

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Panel 1: New opportunities to put health at the centre of the world's response to climate change

The 2023 report of the *Lancet* Countdown presented 11 priorities for a healthy future.¹⁷ These recommendations remain relevant. Over the past year, new opportunities have emerged to enact these recommendations and put health at the centre of the world's response to climate change. Indicators in this 2024 report inform the following seven near-term opportunities to act on the priorities presented in the 2023 report of the *Lancet* Countdown and deliver a healthy future for all.

- Put health at the centre of national commitments to meet the goals of the Paris Agreement—opportunity: countries are due to update their Nationally Determined Contributions (NDCs) by 2025 in response to the first Global Stocktake. As countries lay out their plans to meet the goals of the Paris Agreement, there is an opportunity to ensure that the health impacts and costs of climate change are accounted for, the health gains of actions to tackle climate change are prioritised, and the health benefits considered and maximised within all commitments put forward in the NDCs, thus ensuring national-level climate change actions to promote and protect people's health and survival. With mentions of health decreasing in the NDCs submitted as of February, 2024 (indicator 5.4.1), increased engagement of health professionals (including health system leaders, ministries of health, medical practitioners and nurses, public health experts, and academics) will be crucial to ensuring NDCs can promote improved health and wellbeing by meaningfully incorporating health considerations throughout.
- Invest in a healthy future and healthy populations—opportunity: fossil fuel subsidies reached record-high levels in 2022 as energy prices soared, and fossil fuels still attract 36.6% of global energy investment. Fossil fuel funding could be redirected to support a just transition and healthier, more resilient populations. Delivering the actions that protect and promote people's health in the face of climate change requires sufficient, stable, and predictable financial resources. Financial support for action on health and climate change is still scarce (indicator 2.2.4), and financial resources continue to be allocated to activities that hinder the transition to net zero greenhouse gas emissions, including the allocation of 36.6% of all global energy investments towards fossil fuels (indicators 4.2.3, 4.2.4, and 4.3.1–4.3.4). These resources could be redirected to accelerate a just transition. By phasing out fossil fuel subsidies, savings could be reinvested directly into renewable energy projects (particularly those that support equitable access to and uptake of clean energy), as well as towards targeted support for vulnerable groups that could be affected by subsidy removal (eg, through cash transfers, social protection programmes, and targeted subsidies for clean energy access; indicators 3.1.2 and 3.2.2). Investing in technology transfers and cheaper finance for low-income
- and middle-income countries (LMICs) that still rely heavily on fossil fuels could also support a global, just, and healthy transition. The associated benefits to human health and wellbeing could, in turn, help build more resilient populations and ultimately benefit the whole economy.
- Put human health at the centre of climate change finance—opportunity: at COP29, the New Collective Quantified Goal on Climate Finance is due to be adopted, and governing arrangements for the Loss and Damage fund will be considered and approved. The engagement of the health sector with these processes will be essential to ensure that the funding mechanisms optimise the health gains of climate action and account for the economic and non-economic losses and damages associated with the health impacts of climate change and the financial needs of health-centred and just climate change action. This engagement and the outcomes described will be key to ensure the funding can fully support the most affected countries, helping to address and minimise the inequities of climate change. Importantly, the processes for accessing and allocating funding must be simplified and tailored to accommodate the potential requirements of the countries and communities that need it most.¹⁸
- Set the protection and promotion of human health and wellbeing as the primary measure of climate action—opportunity: the metrics to monitor progress against the Global Goal on Adaptation (GGA) and Fourteenth General Programme of Work (GPW14) are being defined in 2024–25. In addition to the health gains of mitigation across sectors, adaptation in water and sanitation systems, food and agriculture, energy generation, health systems, human infrastructure, natural ecosystems, and the economy hold the potential to improve health outcomes. As the indicators to measure progress against the GGA and GPW14 are defined, indicators that monitor climate-sensitive morbidity and mortality could help ensure adaptation efforts are evaluated against their capacity to protect the most fundamental aspect of human wellbeing, while, in the case of GPW14, also quantifying the health co-benefits of mitigation. These indicators could also help identify and avoid potential unintended health harms of climate action and guide adaptation actions to reduce health inequities.
- Shape societies to promote health, equity, and climate justice—opportunity: at COP28, parties agreed to hold biannual dialogues under the United Nations Framework Convention on Climate Change Just Transition Work Programme. Inadequate and unjust climate change action is leaving the most underserved communities most exposed to the health effects of climate change (Indicators 2.2.2 and 2.2.4–2.2.6), most unprepared for the transition away from fossil fuels (indicator 4.2.4), and most exposed to the health harms of energy poverty and fossil fuel-derived air pollution

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(indicators 3.1.1–3.1.2). A persistent increase in investment in fossil fuels is increasing the value of assets that will become stranded and expanding the size of a workforce whose employment opportunities will wane as the world transitions to healthy, renewable energy in line with international agreements (indicators 4.2.1, 4.2.3, and 4.3.1). Additionally, an unjust transition to renewable energy could perpetuate harmful global power dynamics, leaving the most vulnerable populations, including Indigenous peoples, exposed to the health harms of extractive industries. Embedding health considerations in the evolving Just Transition Work Programme offers the opportunity to deliver a transition that enables sustainable, equitable, and healthy development pathways and deliver benefits to the health and wellbeing of people worldwide.

- Build future-proofed health systems—opportunities: WHO’s GPW14 and 77th World Health Assembly (WHA77) resolution on health and climate change established responding to climate change as a core priority, including through low-carbon and climate-resilient health systems. Building climate-resilient health systems is essential to ensure that health systems can deliver quality care in the face of climate change. However, to meet global climate targets and avoid causing harm to the health of the populations they serve, and beyond, health systems will simultaneously need to remove the 4–6% of greenhouse gas emissions they contribute (indicator 3.5), which will be a substantial challenge. The GPW14 offers a framework to deliver low-carbon, climate-resilient health systems that are fit for the future, an effort for which WHO’s Alliance for Transformative Action on Climate and Health is providing support.¹⁹ Ensuring countries engage with these processes will be essential to deliver health systems that are fit to operate in future climates.
- Tackle climate change through public health interventions—opportunities: WHO’s GPW14 and WHA77 resolution established a priority to address health determinants and the root causes of ill health in key policies across sectors, including by tackling air pollution and unhealthy diets. Tackling greenhouse gas emissions and delivering adaptation to climate change are core priorities of climate

change action and will help build a safer, healthier future for all. However, public health interventions that address the root causes of ill-health could also contribute to these goals: public health interventions aimed at reducing exposure to air pollution could save millions of deaths annually while promoting the shift to clean energy sources (indicators 3.2.1 and 3.2.2). Promoting and enabling healthier diets could save millions of deaths each year while aiding mitigation in the agri-food sector (indicators 3.3.1 and 3.3.2).

Responding to these new opportunities could help drive transformative changes to tackle climate change and deliver major improvements to people’s health. However, the success of this transformation requires simultaneous and sustained efforts to prepare for a health-centred response to climate change. These efforts include:

- Building capacity on health and climate change by providing formal training in climate change and health; making climate and health education part of core curricula within health education programmes would represent an important step to meet this goal (indicator 2.2.6).
- Engaging with, respecting, and elevating the knowledge and leadership of Indigenous peoples, frontline communities, and minoritised groups in the design and implementation of health and climate change policies, to ensure that they can protect people’s health and avoid unintended harms; these communities are often the ones most affected by the actions needed to tackle climate change and, in many cases, hold the key to their effective implementation (sections 2 and 3).^{20,21}
- Integrating health in all climate change policies at the international, national, and local levels, through cross-sectoral cooperation, as a key to ensure climate change actions, can protect and promote people’s health and survival.

These priorities are, however, insufficient on their own. To be effective, they rely on the world meeting the mitigation goals laid out in the Paris Agreement, for which other initiatives have provided detailed roadmaps.^{22–24} Unless that basic prerequisite is met, these priorities will have little effect, if any, in protecting people’s health.

in 2023: 151 countries endorsed the COP28 United Arab Emirates Declaration on Climate and Health, and the Global Goal on Adaptation set a specific health target. The outcome of the first Global Stocktake of the Paris Agreement also recognised the right to health and a healthy environment, urging parties to take further health adaptation efforts, and opened a new opportunity for human survival, health, and wellbeing to be prioritised in the updated Nationally Determined Contributions (NDCs) due in 2025. The pending decision of how the Loss and Damage fund will be governed and the definition

of the New Collective Quantified Goal on Climate Finance during COP29 provide further opportunities to secure the financial support crucial for a healthy net zero transition.

Although still insufficient to protect people’s health from climate change, these emerging signs of progress help open new opportunities to deliver a healthy, prosperous future. However, much remains to be done.

Hanging in the balance

With climate change breaking dangerous new records and emissions persistently rising, preventing the most

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catastrophic consequences on human development, health, and survival now requires the support and will of all actors in society. However, data suggest that engagement with health and climate change could be declining across key sectors: the number of governments mentioning health and climate change in their annual UN General Debate statements fell from 50% in 2022 to 35% in 2023, and only 47% of the 58 NDCs updated as of February, 2024, referred to health (indicator 5.4.1). Media engagement also dropped, with the proportion of newspaper climate change articles mentioning health falling 10% between 2022 and 2023 (indicator 5.1).

The powerful and trusted leadership of the health community could hold the key to reversing these concerning trends and making people's wellbeing, health, and survival a central priority of political and financial agendas. The engagement of health professionals at all levels of climate change decision making will be pivotal in informing the redirection of efforts and financial resources away from activities that jeopardise people's health towards supporting healthy populations, prosperous economies, and a safer future. As concerning records continue to be broken and people face unprecedented risks from climate change, the wellbeing, health, and survival of individuals in every country now hang in the balance.

Introduction

The devastation caused by record-breaking extreme weather events in 2023 and 2024 shows the human costs of a failure to curb greenhouse gas emissions and adapt to rapidly growing hazards. In 2023, annual global mean surface temperature broke all records, reaching 1.45°C above pre-industrial times; this 12-month record has also been breached again since then.^{1,2} Rapid attribution studies identified the influence of climate change in deadly events worldwide,³ including the floods that claimed over 300 lives in the Horn of Africa,⁴ the deadly heatwaves affecting much of the northern hemisphere,⁵⁻⁷ a record-breaking wildfire season in Canada,⁸ and many other events.³ At least 43 million child displacements were linked to extreme weather events over the past 6 years,⁹ and climate change-related extreme events are responsible for an estimated US\$143 billion of annual losses.¹⁰ People in every country now face threats to their health and survival as climate hazards increase.

Current policies and actions, if sustained, put the world on track to 2.7°C of heating by 2100.¹¹ The impacts seen to date could, therefore, be only the beginning of an increasingly dangerous future, with devastating impacts on the natural systems on which humanity depends.^{12,13}

The outcome of the first Global Stocktake of the Paris Agreement, which culminated at 28th Conference of the Parties (COP28) of the United Nations Framework Convention on Climate Change (UNFCCC), noted with grave concern the growing impacts of climate change and

the delays in necessary actions.¹⁴ Calling for a “transition away from fossil fuels in energy systems”, it was the first COP text in 30 years of negotiations to even acknowledge the need to address the use of fossil fuels in the energy system, which is the main driver of climate change. However, the final text reflected an over-reliance on carbon capture and storage—technologies that have not been developed or indeed proven to be safe at the necessary scale.

COP28 contributed to elevating health within global climate change negotiations with the first health thematic day. It also brought ministers of health and senior health officials to a UNFCCC COP for the first COP climate and health ministerial meeting, underscoring the imperative for health to be elevated in climate change negotiations. The inclusion of health in climate change negotiations was further bolstered by the endorsement of the COP28 Declaration on Climate and Health by 151 countries to date.^{15,16} The Global Stocktake recognised the right to health and to a healthy environment, and the Global Goal on Adaptation (GGA) set an overarching target towards the collective wellbeing of all people as well as a specific target for reducing the health impacts of climate change and promoting climate-resilient health services.¹⁴ Importantly, \$1 billion was committed at COP28 to enable action on climate change and health. Although far from sufficient, this support could be an important enabler of progress. As countries work to update their Nationally Determined Contributions (NDCs) in response to the Global Stocktake, COP28 laid the grounds for countries to commit to ambitious, health-promoting climate change action tailored to the possibilities and needs of their people.

Complementing the health focus of climate negotiations, WHO's Fourteenth General Programme of Work (GPW14) set the strategic objective of promoting health by responding to climate change and delivering climate-resilient health systems, as well as low greenhouse gas societies and health systems that contribute to better health and wellbeing. In addition, a new resolution on climate change and health adopted at the 77th World Health Assembly (WHA77) provides a platform for member states and WHO to develop and advance actions on climate change and health.

These milestones could provide new opportunities that pave the way to deliver a future of reduced life threats and improved health (panel 1). Nevertheless, much is still to be done to promote an integrated and health-centred response to the threats of climate change. Climate negotiations still largely feature health in the sidelines, without formal inclusion as agenda items, making people's health and wellbeing a secondary and voluntary consideration. 2024 could also see a major geopolitical shift, with multiple armed conflicts and 64 countries—representing nearly half of the global population—holding major elections. Amid this geopolitical uncertainty and with misinformation increasing,^{25,26} upholding international agreements and