



World Health
Organization

REGIONAL OFFICE FOR Europe

ZERO REGRETS

SCALING UP ACTION ON CLIMATE CHANGE MITIGATION AND ADAPTATION FOR HEALTH IN THE WHO EUROPEAN REGION

Key messages from the
Working Group on Health
in Climate Change

About this paper

The imperative to protect and improve the health of current and future generations is one of the strongest arguments for action on climate change and sustainable development (1).

Climate change is already affecting the lives and livelihoods of all, especially the vulnerable, and undermining the “right to health”. Without significant actions to mitigate and adapt to climate change there will be substantial increases in preventable morbidity and mortality and adverse impacts on the quality of life over the next decades. Policies and actions to achieve climate neutrality and a decarbonized, clean-energy economy will realize significant direct and near-term health co-benefits (2,3).

The Working Group on Health in Climate Change (HIC), established under the European Environment and Health Process, aims to articulate and consolidate an action-oriented position on health and climate change for the WHO European Region (4). This is in line with and in support of implementation of the WHO Global Strategy on Health, Environment and Climate Change (5), the WHO European Programme of Work 2020–2025 – “United Action for Better Health in Europe” (6) and the Declaration of the Sixth Ministerial Conference on Environment and Health (7), as well as other regional policies such as the European Union (EU) Strategy on Adaptation to Climate Change (8).

This HIC paper aims to support the health messaging at upcoming engagements on climate change and health, such as the 71st session of the WHO Regional Committee for Europe and the 26th United Nations Climate Change Conference (COP26), as well as the formulation of commitments to be put forward by Member States at the

7th Ministerial Conference on Environment and Health, expected to be held in 2023.

COP26, to be held in Glasgow, United Kingdom, in November 2021, offers a key moment for the health sector to demonstrate leadership on climate action and lead by example. WHO joins the COP26 Presidency and its Health Programme in calling on governments, businesses, and financial and civil society actors to put health front and centre of the global response to the climate crisis and the recovery from the COVID-19 pandemic (9). The COP26 Presidency Health Programme includes a call for all countries to make a commitment to build climate-resilient, low-carbon, sustainable health systems (9). To emphasize the health case for climate action, WHO will issue a special report during COP26, calling on the health and the health-determining sectors to promote action on climate change at the regional, national and local levels (10).

This paper is aimed at policy-makers, particularly from the health sector, and civil society representatives – with the intent to raise awareness about the links between health and climate change, as well as the policy options that can maximize the benefits for health and the environment. It further aims to equip them with evidence and messages to support an active engagement in national preparatory consultations for and negotiations at COP26 and indicate areas for action and collaboration across sectoral boundaries and social actors.

At the 9th HIC meeting on 19 May 2021, a first draft of the paper was discussed and subsequently circulated for review and comment by HIC members and stakeholders.

Climate change is a public health crisis calling for coordinated transformative efforts

Climate change is undoubtedly the greatest global challenge of the 21st century and at the same time presents an opportunity for positive societal transformations that support a greener and healthier future and enable everyone to thrive. Climate change has emerged as one of the biggest game changers for humanity, and its direct and indirect impacts on health and well-being are large and far-reaching. Direct effects are major pathways through which climate change harms health, such as the physical and mental effects of increased exposure to extreme weather outcomes – including heatwaves, wildfires, floods, storm surges and droughts, among others. Several noncommunicable diseases, particularly respiratory and cardiovascular diseases, are exacerbated by changing climate conditions. Indirect effects are mediated through natural and/or socioeconomic systems. For example, climate change can alter environmental and societal factors such that these favour the expansion of vectors and pathogens into new areas and potentially contribute to increasing the burden of communicable diseases. Climate change can also result in declining crop yields and reduced nutrient quality of crops, which can lead to increases in malnutrition. Effects on physical and mental health can also be mediated through socioeconomic systems, for example by threatening livelihoods, increasing poverty and leading to population displacement and migration (2,3,11).

As changes accelerate even faster than anticipated, urgent action at scale is necessary to limit the health, environmental and socioeconomic impacts on the population, particularly on vulnerable, disadvantaged and marginalized groups. Substantial increases in preventable morbidity and mortality are expected across a range of health outcomes if additional simultaneous actions to mitigate and adapt to climate change are not prioritized. Although an update is overdue, a conservative projection by

WHO from 2014, based on just four health outcomes (malnutrition, malaria, diarrhoea and heat stress) estimates that globally approximately 250 000 deaths will occur each year due to climate change in 2030–2050 (12). The direct costs to health (excluding costs in sectors such as agriculture, water and sanitation) are estimated to be US\$ 2–4 billion per year by 2030 (13). The risks will be considerably higher without investments in strengthening and expanding current resilience, adaptation and mitigation policies globally.

In addition to preventing the worst health impacts of climate change, accelerated mitigation, if delivered with health considerations at its centre, can potentially result in significant health co-benefits in the short term. For example, in 2019, anthropogenic fine particulate ambient air pollution alone contributed to over 512 000 premature deaths in the WHO European Region, of which 189 000 were directly related to the burning of fossil fuels (14,15). Shifting away from fossil fuels would contribute to preventing these deaths, as well as the many others associated with indoor air pollution from the use of fuels in the home. Green urban design – with safe active travel infrastructure, location of services and amenities in close proximity to residential areas, and increased green space and accessibility to it – can not only reduce fossil fuel use for road travel and increase the potential for carbon sinks, but can also reduce air pollution, urban heat and ultraviolet radiation exposure, promote physical activity and improve mental health. Shifting food systems towards low-carbon, plant-based diets can also reduce the morbidity and mortality associated with excess red meat consumption in the European Region, estimated to have resulted in 441 000 premature deaths in 2018 (14,15). However, for these health gains to be realized and maximized through climate change action, health must be prioritized in their design and implementation.

Climate change and COVID-19: two converging health crises with a joint way forward

Climate change and the COVID-19 pandemic are both strongly rooted in the profound alterations caused by human activity to nature and the planet. The COVID-19 pandemic has reversed some of the public health achievements made to date. It has worsened inequalities and threatened to increase vulnerability to climate change by driving large numbers of people into poverty, undermining food security, and adding stress to already strained health systems, among other impacts.

COVID-19 has brought to the forefront, like never before, the urgent need to address underlying environmental and socioeconomic determinants of health. As countries emerge from the pandemic and implement recovery packages, it is time to take stock and realign priorities around a coordinated “One Health” approach to responding to environmental, animal and human health and strengthening health system resilience against high-impact events in the future.

The window of opportunity is narrow and urgent action is needed at scale

The 2015 Paris Agreement aims to limit the global temperature rise to well below 2 °C (17). The global mean temperature for 2020 was 1.2 ± 0.1 °C above that of the preindustrial baseline period, and even if current unconditional Nationally Determined Contributions (NDCs) are implemented, we are now on track for around 3.2 °C of warming by 2100 (18,19). The recent report of the Intergovernmental Panel on Climate Change (IPCC) underlines that with every increment of global warming, changes in extremes increase in terms of

We have a unique opportunity to build forward greener, more equitably and inclusively – integrating action on climate change within COVID-19 recovery plans and placing health, decarbonization and adaptation to already existing impacts of climate change at the centre of a realigned policy agenda. The response to COVID-19 provides an opportunity to rethink how we can collectively address the two global crises simultaneously and more efficiently across relevant sectors. Healthy and green recovery is an overarching goal of the WHO Manifesto for a Healthy Recovery from COVID-19. The Manifesto offers six prescriptions (in the areas of nature, food systems, infrastructure, energy, cities and pollution) to support a green and sustainable recovery for all, alongside a long-term vision for enhanced public services and strengthening the resilience and response capacities of health systems (16).

frequency and intensity (20). Urgent, ambitious and transformational action at scale is needed, as opposed to minor incremental changes, to limit global warming, preferably at 1.5 °C, and minimize the harm to health and societal well-being (21,22).

The levels of greenhouse gas (GHG) emissions have risen consistently over the last 60 years and implementation of actions to address the climate-related health risks is slow and largely insufficient. As governments renew commitments

to deliver on targets to meet the goals of the Paris Agreement as communicated through their NDCs, National Adaptation Plans (NAPs) and Adaptation Communications (AComms), among others, in preparation for COP26, health professionals worldwide are presented with an unparalleled opportunity to influence and promote global ambition on emissions reduction and demand the scaling up of commitments to adaptation action for health (23).

Transition to a zero-carbon economy could bring a range of near- and long-term health gains, which provide a key hook to the policy debate on climate risks, mitigation and adaptation. For example, investing in climate policies that reduce air pollution will be a “best buy” in economic terms. At global level, the economic value of the gains for health from emission scenarios that meet the commitments of the Paris Agreement would exceed the financial cost of mitigation, in some cases several times over (24). Multiple benefits of mitigation action have also been demonstrated for the WHO European Region using the Carbon Reduction Benefits on Health (CaRBonH) calculation tool (25). Although most likely an underestimate, the tool shows that about

138 000 premature deaths could be avoided per year through reduced carbon emissions, potentially resulting in savings of US\$ 244–564 billion (7).

Even if we stopped excess GHG emissions today, the world would still need to deal with the irreversible consequences of climate disruption already underway (24) implying huge costs in terms of adaptation. Failure to cut emissions will considerably increase the annual costs of adaptation in the future. The costs of climate adaptation could escalate to be 2–3 times higher than the IPCC estimate of US\$ 70–100 billion per year by 2030, and plausibly 4–5 times higher by 2050 (24). Although there are financial, technological and physiological limits to adaptation, there is a need for prioritizing adaptation alongside mitigation.

Finally, as we advance into the Decade of Action for achieving the 2030 Agenda for Sustainable Development, in order to prioritize and scale up cost-effective solutions, improved understanding of the full extent of financing required for both adaptation and mitigation is essential. This includes estimates of the costs of action and, more importantly, the costs of delay and inaction.

The ask

- **Strive for “net zero by 2050”** to support a sustainable future that is better for our health and the planet. The faster we get there, the better. Done appropriately, a move to net-zero economies would bring significant health co-benefits from improved air quality, from a more physically active population and from healthier diets, among others.
- **Accelerate a resilient, sustainable and inclusive transition from COVID-19** and prioritize actions that optimize the multiple benefits for the environment, health and societal well-being, preferably in line with the prescriptions of the WHO Manifesto for a Healthy Recovery from COVID-19, which offer “triple win” interventions for climate, health and economies.
- **“Un-silo” climate change** and advocate for climate change as an integral policy consideration and responsibility in decision-making processes in all sectors, following the guiding principle of “climate change in all policies” analogous to “health in all policies”.
- **Optimize potential synergies between mitigation and adaptation**, raising and sustaining ambitions for mitigation and simultaneously scaling up adaptation at national and subnational levels.
- **Prioritize health co-benefits** and explore synergies of tackling climate change and air pollution, and minimize or avoid adverse health outcomes and address inequalities through policy coherence and implementation optimization in health and health-determining sectors. Future risks to health must be taken into account in planning urgent coordinated action to reduce GHG emissions in all sectors and countries.
- **Optimize climate resilience and sustainability within health systems** by scaling up adaption action at the local and national level, and climate-proofing health protection, promotion and improvement programmes. Lead by example and proactively promote and strive for green, low-carbon health service delivery as soon as feasible, preferably by 2050.
- **Facilitate community-led, people-centred decision-making approaches** for all interventions for assessing and maximizing potential co-benefits, as well as minimizing unintended harms of mitigation actions.
- **Strengthen the voice of health sector professionals and civil society organizations** for action on climate change by engaging and expanding the community of practice for health in climate action during COP26 and beyond. Undertake capacity strengthening exercises for health and climate change at local, national and regional levels and for different target groups.
- **Mobilize and sustain resources** (knowledge, technology and finance) for climate change mitigation and adaptation action in the health and health-determining sectors. Repurpose financial gains from reduction in, or the elimination of, fossil fuel subsidies to support health.

THE ASK



CALLS FOR HEALTH-ORIENTED ACTION

Calls for health-oriented action: seizing opportunities for local and national climate action

In support of “The ask”, the HIC advocates for the following health-oriented climate actions in the WHO European Region. The actions listed are not meant to be comprehensive or prescriptive; rather, they are intended to provide inspiration for possible actions at national, subnational and local levels and can be expanded and adapted as needed.

Assess, quantify and communicate

- Develop analytical capabilities for routine integrated health and climate risk assessments at regional, national and subnational levels.
- Conduct systematic all-hazards vulnerability assessments, and identify specific drivers of vulnerability and adaptive capacity to climate change at the population and health facility levels, in line with the COP26 Health Programme commitments on strengthening climate-resilience within health systems.
- Conduct baseline and follow-up assessments of GHG emissions for the health and social care sector (in concert with assessments for other sectors) and set out a plan for reducing or minimizing them in line with the COP26 Health Programme commitment on sustainable low-carbon health systems.
- Quantify the potential health and associated economic benefits, as well as the potential costs of inaction, of reducing GHG emissions and air pollution and of adaptation action, especially in relation to noncommunicable diseases.
- Facilitate action-orientated research and knowledge mobilization across the Region, including through a structured repository

of methods and effective case studies on adaptation and mitigation actions and their impacts on health (from health and health-determining sectors). Leverage existing platforms for open-source information sharing, such as the European Climate and Health Observatory, to support peer-to-peer learning and support.

Lead and advocate

- Reinforce the negotiation capacity of local and national health authorities to engage (with decision-makers) in constructive discussion on the implications of economic recovery plans in the context of COVID-19 and climate change mitigation and adaptation action for health.
- Optimize the role of trusted voices and reinforce the leadership capabilities of health authorities in catalysing action on prioritizing green energy, sustainable diets, clean transport, active mobility and other healthy mitigation policies.
- Seek a high level of ambition for both mitigation and adaptation in the health and health-determining sectors in accordance with national priorities.
- Advocate for the inclusion of health in the main climate planning and response instruments (such as NDCs, NAPs and AComms).
- Advocate for health and social systems to “lead by example” and encourage a steep reduction in emissions, targeting net zero in the health sector by 2050 in order to achieve the commitments of the Paris Agreement.

- Promote the integration of health in all climate policies and actions (and vice versa) across all relevant sectors at the national and local levels, with a focus on reducing health inequities and supporting the most vulnerable with low adaptive capacity.

Move from awareness to action

- Scale up attention to equity-oriented adaptation and mitigation actions to avoid worsening inequities.
- Develop and implement NAPs with specific “Health NAPs” that are informed by health vulnerability assessments.
- Prioritize climate change resilience and environmental sustainability within health and social care systems and improve their ability to detect, prepare for, respond to, recover from and learn from climate-related shocks.
- Enable health-care facilities to enhance their capacity to protect the health and well-being of their target communities and ensure responsible procurement, accessibility of services, safe operation and high quality of care despite the changing climate.
- Establish safe, reliable and climate-resilient water, sanitation and hygiene services for communities and health-care facilities, and mainstream climate change into water and sanitation policies and governance.
- Promote, legislate for and deliver healthy, sustainable food and nutritional systems and accessible diets that are rich in plant-based foods and low in red meat and processed meats.
- Establish and strengthen multihazard surveillance and early warning systems for risk-informed early action and climate-informed programming for health.

- Set up and maintain high-quality, adequately resourced and stress-tested preparedness and response capacities at the national and subnational levels in accordance with the International Health Regulations, including consideration of climate-related hazards.

- Empower health and social care professionals to understand, recognize, communicate and respond effectively to the health impacts of climate change through education (e.g. incorporating climate change in medical curricula) and leveraging existing health professional networks to promote messages and capacity-building.
- Institutionalize health and climate change through the creation of formal departments, specialties and institutions on health and climate change at the local and national levels.

Align and adjust

- Align and optimize action on climate change and health across core national priorities guided by international commitments to support country progress by 2030 on:
 - Leaving no one behind: several of the Sustainable Development Goals address the core drivers of climate change and health.
 - Building back (forward!) better: the Sendai Framework for Disaster Risk Reduction is the road map to make communities safer and more resilient to disasters.
 - Achieving universal health coverage with climate change as an integral consideration, incorporating goals for mitigation and cutting GHG emissions by the health sector, while implementing climate adaptation plans that prioritize climate resilience.
 - Attaining the WHO goal of reducing the number of deaths from air pollution by

two thirds by 2030, in particular taking measures in transport and energy production, stopping uncontrolled burning of solid waste and agricultural waste, reducing the use of fertilizers in agriculture, and promoting clean technologies and fuels and green, clean cities.

Deliver and monitor

- Conceptualize and implement monitoring and evaluation processes to track progress on impacts and responses.
- Integrate equality and equity considerations across all of the sectors that determine health.

- Improve access, quantity, quality, responsiveness and predictability of domestic and international climate finance for scaling up action on health, including from the private sector.
- Mobilize resources (people, technology and infrastructure) at the regional, national and local levels for research on the effectiveness of climate adaptation and mitigation interventions, including health risk assessments and cost–benefit analyses.
- Systematically collate evidence towards the first global stocktake under the Paris Agreement in 2023 to demonstrate what works and where.

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