

# Governing for climate-health action in the WHO European Region

Iris Martine Blom Robin Fears

#### **About this document**

This document summarizes key considerations for improving the uptake of evidence on climate change and health into policy and practice through strengthening governance to address barriers to action at scale in the WHO European Region.

It is the third of a series of short thematic briefs developed for the Pan-European Commission on Climate and Health (PECCH), which has been convened by the WHO Regional Office for Europe to accelerate decisive climate action that protects and promotes health.

PECCH will convene for three hybrid hearings in 2025, engaging leading experts, people with lived experience and other key informants and stakeholders in specific areas of climate change and health, as well as social development and policy-making, to present current evidence and case examples, and identify gaps and opportunities for accelerated action. Drawing upon these hearings, PECCH will make recommendations for accelerated health and climate action.

Ahead of each hearing, the PECCH research team, in close collaboration with its Chief Scientific Advisor will prepare a short thematic brief for PECCH members to help inform – and contextualize the evidence from the WHO European Region related to the scope of – the hearing. Each thematic brief contains a set of key messages for consideration by the Chair and the commissioners to guide their discussions at the hearings on areas that might be deliberated as input to the final "Call to action" of the Commission.

The three hearings of the Commission are intended to build on each other, addressing the broad themes of:

- threats to human health, well-being and ecosystems;
- **opportunities and co-benefits** of addressing these threats through both adaptation and mitigation measures; and
- possible entry points for actions to enhance mitigation, adaptation and resilience
  to climate change in terms of legislation, governance, capacity strengthening,
  technologies and economic frameworks, among others, applied at different levels
  of governance, for equitable health and well-being outcomes.



## From warning to will: governance as a cornerstone of health and climate action

The ability to act on climate-health threats hinges not only on resources or science, but on governance and political will. Where governance fails, health risks escalate; where it is visionary and inclusive, transformation becomes possible.

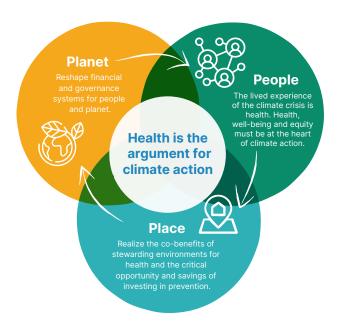
The health impacts of climate change are increasingly well documented, and the potential health benefits of climate action are becoming more evident (1,2), but there is a major gap in translating opportunities into effective action. One of the key considerations for improving the uptake of evidence into policy and practice is through strengthening governance to address barriers to action at scale (3). Governance, defined as the architecture of decision-making across institutions, processes, rules and power dynamics, shapes health outcomes by mediating exposure to risks, influencing vulnerability and adaptive capacity, and determining the ambition and effectiveness of mitigation efforts towards net-zero emissions (4). Current deficits, including fragmentation, short-termism, policy incoherence and weak accountability, have become a major contributor to the lack of effective action that is increasingly imperilling health. Good governance is based on the understanding that governments cannot act alone but must involve multiple stakeholders in planning, implementing and evaluating actions, including empowering those most affected in the community.

Effective, inclusive governance is essential to operationalizing a "people-place-planet" framework (5) (Fig. 1). It ensures equitable protection of populations, integration across institutions and territories, and inclusive development aligned with well-being economy principles that place health and sustainability above narrow gross domestic product growth metrics (6). Multilevel governance is critical for connecting global frameworks with local delivery and enhancing legitimacy through participatory approaches (7). Further, and recognizing the plurality of governance models, selecting a specific approach for climate-health transformation is context dependent (8).

Barriers to governance are created by vested interests, and the legitimacy of governance is increasingly undermined by public disillusionment, alongside the erosion of trust in climate science, actively fuelled by well-funded misinformation campaigns from fossil fuel interests (9). Moreover, the commercial determinants of health – namely the conditions, actions and omissions by commercial actors that affect health – demonstrate how concentrated market power, lobbying and marketing in sectors such as energy, agriculture and finance can entrench harmful exposures and delay regulation (10,11). To be effective, governance must therefore embed transparent rules of engagement, manage conflicts of interest and create mission-oriented partnerships that align private investment with public value, while also confronting the political barriers that often hinder intersectoral action (12).

These challenges for mobilizing power exist across the Region. A comprehensive review of the evidence is beyond the scope and scale of the present briefing but there are examples that illustrate how existing weaknesses in governance and health inequalities are exacerbated by climate change (13).

**Fig. 1.** The "people-place-planet" framework: key pillars of taking action for climate change and health



Source: (5).

# Governing across boundaries: overcoming fragmentation

Fragmentation is not just a design flaw; it is also a policy failure. Effective governance requires whole-of-government mechanisms that bind actors together across sectors, territories and timeframes.

Systemic fragmentation remains one of the most persistent barriers to climate-health action. Silos between ministries – health, environment, agriculture, transport, urban planning and others - limit coordinated responses, while tensions between national and subnational mandates dilute accountability (14). Fragmentation also occurs within institutions and across governance levels; unclear mandates and central-local disconnects (varying by degree of decentralization) impede internal integration and vertical coherence, reinforcing the need to interconnect national and urban policy, and align with existing health-system frameworks (15). Short-term electoral cycles further undermine long-term risk planning (16). Compounding crises and competing priorities, combined with limited technical capacity, resource constraints and unclear institutional mandates, exacerbate policy drift and inaction. Historically, climate change has been framed primarily as an environmental issue, positioning environment ministries at the forefront of platforms such as the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP), while the health sector has remained marginalized (17). Additionally, the public health impacts of policies across a range of sectors, including energy; transport; housing; education; agriculture, forestry and other land use; and waste are often underappreciated and unaccounted for. This



narrow lens has reinforced fragmented responses and delayed the mainstreaming of health within governance frameworks. Nonetheless, the health sector has helped take a lead with other sectors to develop solutions (e.g. heat-health action plans). In Netherlands (Kingdom of the), for example, the National Institute for Public Health and Environment has developed cross-sectoral strategies for climate action (18). Other cross-governmental health sector initiatives include green social prescribing at the community level, collaboration with the transport sector to promote active travel and with housing departments to implement home energy efficiency.

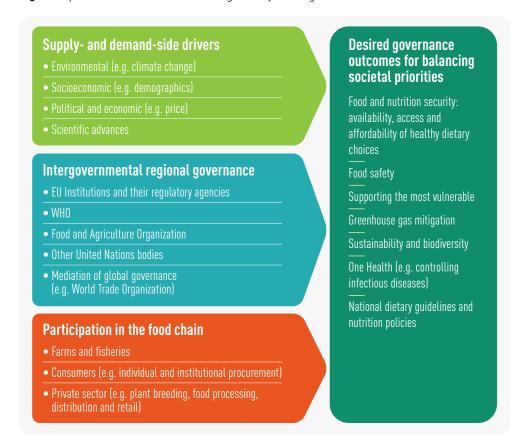
Many countries in the WHO European Region have also established national climate advisory bodies but these vary in design and purpose, ranging from scientific councils and in-house advisory bodies to stakeholder engagement platforms. When officially mandated to advise government, such advisory bodies are eligible to join the International Climate Councils Network, which plays a role in standardizing and strengthening governance activities (19).

Food systems illustrate the stress test of cross-government action. Within the European Union (EU), food policy ambitions have faltered: the European Commission withdrew its Sustainable Use of Pesticides proposal in 2024 after legislative deadlock, and the long-anticipated Sustainable Food Systems framework has yet to be tabled (20,21). At the same time, the Strategic Dialogue on the Future of EU Agriculture and Food Policies, has shifted focus back to productivity and farm incomes (22). These developments underscore tensions between sustainability, nutrition and competitiveness, and reveal how horizontal fragmentation across portfolios, vertical misalignment and coordinated lobbying can stall sustainability and nutrition objectives. They highlight the need for multilevel governance mechanisms capable of holding a long-term course (Fig. 2). Embedding health- and climate-sensitive standards into procurement of food for schools, hospitals and care facilities could reduce the demand for high-impact foods, support sustainable producers and tie national objectives to local delivery through budgeting and accountability structures (23), as well as help to inform recipients about healthy food choices. Implemented programmes already show this coordinating effect, including the city-wide shift to around 90% organic public meals in Copenhagen, Denmark delivered through cross-departmental procurement; and the EU School Fruit, Vegetables and Milk Scheme, which links EU funds to national strategies and local school delivery (24,25).

Regional and multilateral processes are also evolving. These processes shape national priorities and governance arrangements, by setting mandates, financing signals and coordination platforms, as reflected in the *Declaration of the Seventh Ministerial Conference on Environment and Health: Budapest, Hungary 5–7 July 2023* (Budapest Declaration) (26) and in the *Seventy-seventh World Health Assembly resolution on Climate change and health (27).* Within the Region, the European Environment and Health Process (EHP) (28) – including the Working Group on Health in Climate Change (29) and the EHP Partnership on Health Sector Climate Action (30) – provides an intersectoral vehicle for translating the commitments made in the Budapest Declaration and in the resolution on Climate change and health into implementation. Moreover, One Health governance has undergone a significant shift: in April 2025, the Quadripartite mechanism in Europe and central Asia transferred leadership from WHO to the Food and Agriculture Organization (31), positioning agriculture at the centre of climate–health governance

in areas such as antimicrobial resistance, zoonotic spillovers and food security but this may run the risk of weakening other important objectives for sustainable food systems, in particular encouraging healthy dietary choices (Fig. 2). This underscores the importance of auditing and monitoring institutional leadership shifts that may reshape priorities and coordination, and providing clear roles and responsibilities.

Fig. 2. Important factors in transforming food systems governance.



**Notes:** In a sector characterized by multiple objectives for health, environment and competitiveness, determinants have to be considered within wider contexts, such as planetary limits and political economy. This figure is intended to be illustrative rather than comprehensive and does not attempt to incorporate various governance typologies or give a detailed overview of the issues for transforming food systems, which are discussed elsewhere (32,33).

The WHO European Region has a longstanding interest in national governance for climate change and health. For example, a WHO review published in 2014, drawing on a questionnaire sampling 22 Member States, examined governance arrangements, vulnerability assessment, adaptation and mitigation planning, green transformation of health systems and awareness raising (34). Since then, progress across the WHO European Region has remained heterogenous, with pockets of innovation coexisting with persistent fragmentation. Post-disaster responses often reveal gaps in coordination and accountability (35). These gaps reflect vertical misalignment across national, regional and local authorities, alongside intra-institutional fragmentation. A recent regional analysis in central Asia recommends four coherence levers – strategic alignment of disaster risk reduction and climate action, dedicated coordination platforms, technical



collaboration on data and methods, and integrated financing – to address such gaps (36). Promising examples include integrated risk governance platforms and urban adaptation plans that bring health, environment and infrastructure sectors together (37,38). Governance tools such as climate budget tagging and strategic foresight can institutionalize coherence across ministries and planning cycles. Adopting a Health-in-All-Policies lens reframes intersectoral action around co-benefits (39).

At the global level, a legally binding international treaty on climate change – the Paris Agreement – remains foundational, yet gaps in adherence, particularly on emission reductions, persist (40). The Seventy-seventh World Health Assembly resolution on Climate change and health (27) and the WHO Global Plan of Action (41) are other global instruments that enable progress in Member States. Ahead of COP30 in Belém, Brazil, a focus on developing healthy nationally determined contributions (NDCs), supported by WHO guidance (42) might help systematically integrate health into climate commitments (43–45). In the Belém Health Action Plan for the Adaptation of the Health Sector to Climate Change (46), three main action lines on surveillance and monitoring, evidence-based policy strategy and capacity building, and innovation and production, can - if tied to accountability and finance - be equitably delivered. While the Action Pan identifies several actions under "multisector strategies for public policy with health co-benefits", an explicit alignment with NDC targets and budget-tagging across energy, transport and industry sectors could contribute to reducing fragmentation (46). Multilateral commitments often catalyse national climate-health initiatives but require stronger accountability and financing mechanisms to ensure equitable delivery in countries.

Another example of the importance of introducing integrated and statutory action is provided by the threat from wildfires, where recent European research (47) indicates exposure to wildfire particulate matter is much more hazardous to human health than previously assumed. In this context, the proposed Landscape Fire Governance Framework shifts from voluntary guidance to an integrated governance architecture including cross-sector coordinating bodies; unified budgets and incident command; risk-based targets and indicators; and transboundary data-sharing, explicitly designed to reduce fragmentation across local to national levels (48).

One further example of the need for a coherent approach to governance comes from a focus on security in central Asia that integrates climate change issues for health and livelihoods with other sectors for diverse "hotspots": high mountain areas, densely populated areas, the Amu Darya River Basin and the central Asia "breadbasket" (49).

Overcoming fragmentation requires mechanisms that integrate across scales and actors: from the Arctic and the Mediterranean to central Asia, and from government to civil society and the private sector. Inclusive governance models – whole-of-government and whole-of-society arrangements that formalize the participation of civil society, academia, the private sector and local communities across the policy cycle (e.g. via the EHP Partnerships (30)) – offer pathways to coherence, legitimacy and more resilient climate–health outcomes. Although, a significant proportion of the regional efforts resides in EU initiatives, there are opportunities to introduce climate–health issues into fora across the WHO European Region. Existing United Nation interagency mechanisms, such as climate–health financing channels via the Green Climate Fund, provide operational hooks; the fora below are further examples from across the Region:

- The Arctic Council chaired by Denmark in 2025–2027, has a priority topic on climate change, covering biodiversity, ecosystems and societies, which presents an opportunity to increase the visibility of health issues for the Arctic communities (especially Indigenous peoples) and their neighbours (e.g. the potential transmission of newly-emerging infectious diseases) (50).
- The United Nations Special Programme for the Economies of central Asia'a Economic
  Forum adopted the Dushanbe Declaration on shared opportunities for green
  development in 2024, but the Declaration did not mention health (51). This forum,
  too, could become an opportunity to link health, environment and development
  governance issues.
- Regional Fora on NDCs organized by the United Nations Development Programme and the United Nations Environment Programme, with other partners, in particular one for eastern Europe and central Asia held in Istanbul, Türkiye in 2024, which covered relevant sectors such as agriculture and water but not explicitly health. A brief summary of the outputs from this Regional Forum exemplifies opportunities for stronger engagement between United Nations bodies at the regional level to integrate health into climate governance, particularly through NDCs and joint funding mechanisms for transformative change (52).

## Values, voices and vested interests: who governs and for whom?

Governance is not only about institutions. It is about legitimacy and accountability. Climate-health action must be governed by inclusive values and transparent, participatory processes.

Legitimacy and trust in governance are challenged by the lack of meaningful inclusion of youth, marginalized groups and Indigenous communities in decision-making. Explicitly centring health equity, both procedurally (meaningful participation) and distributively (fair sharing of risks, costs and benefits), enhances procedural and distributive justice, which in turn strengthens institutional legitimacy, public trust and uptake of climate-health measures. Evidence from international surveys documents high levels of climate anxiety among young people and low confidence in government responses (53). WHO's World report on social determinants of health equity (2025) further notes that unequal burdens of climate change are compounded by dis- and mis-information, and points to the establishment of mechanisms such as the Loss and Damage Fund at COP29 as a step toward redressing inequities (54). Loss and damage has been regarded as a third pillar of international governance alongside mitigation and adaptation (55) but further work is needed to assess its sociopolitical implications (56).

Against this backdrop, powerful vested interests in fossil energy and agrifood systems continue to shape climate and health agendas, often slowing or redirecting health-positive action. Other sectors also influence climate and health agendas, for example the transport sector ("road lobby"), which often delays transitions to low-emission



mobility and urban planning reforms, and thereby keeps a carbon lock in (57); and the media and information technology sectors, which shape public perception and political discourse around climate action (58,59). Analyses of lobbying show fossil fuel firms intensify influence when transition risks threaten profits (60), while increasing corporate concentration in food systems constrains policy space and undermines public interest (61). The commercial determinants of health literature highlights how such practices externalize health harms and obstruct regulation, underscoring the need to rebalance public and private priorities (10,62).

Meanwhile, engagement with private actors remains contested. Evidence indicates that while collaboration can bring resources and innovation, it also carries risks of undue influence. Critically, WHO's Framework for Engagement with Non-State Actors offers explicit guidelines for managing conflicts of interest and promoting transparency in engagement with non-state actors (63,64). By contrast, the UNFCCC lacks similarly robust guidance. Civil society and transparency groups have repeatedly called for the adoption of conflict of interest protocols within UNFCCC processes, suggesting that frameworks such as the Framework for Engagement with Non-State Actors could serve as useful models (65,66). These debates highlight the importance of clear rules of engagement and the sharing of best practices across United Nations entities to safeguard the independence of scientific and regulatory advice without closing off constructive forms of co-production.

Within the governance of commercial determinants of health, some interaction with private sector vested interests may become confrontational, but more generally, the experience and knowledge of the private sector may be important in identifying and progressing solutions, for example in occupational health and safety. The WHO Climate change and workplace heat stress: technical report and quidance raises issues for heat-health governance that can best be tackled by the private and public sectors acting together on standard-setting and in the implementation of solutions (67). In addition, private sector innovation could also hold promise. A recent report estimates that dedicating under 5% of annual pharmaceutical research and development funding (about US\$ 65 billion over 5–8 years) toward climate-driven health solutions, such as vaccines, climate-resilient diagnostics and treatment devices, could avert some 6.5 million deaths and US\$ 5.8 trillion in losses, especially if governed through mission-oriented frameworks that emphasize public value, open science, equitable access and independent evaluation (68). The WHO Council on the Economics of Health for All provides guidance on aligning mission-driven innovation with broader Health-for-All goals (69). These examples show how mission-oriented, public-value approaches can also coordinate public-private action (e.g. in standard-setting, co-investment, equitable access).

In parallel, innovations in inclusive governance are emerging. Citizen assemblies on climate across Europe have demonstrated the potential to broaden inclusion, enhance legitimacy and generate cross-sectoral recommendations, albeit while overcoming practical challenges (70,71). Structured youth dialogues and the involvement of patient and vulnerable-group organizations in climate-health policy discussions could potentially contribute to more responsive governance processes.

Ultimately, governance that centres values of equity, transparency and participation is better placed to protect those most affected, foster societal cohesion, and align health, climate and prosperity goals.

## **Governing with foresight: institutionalizing resilience and transformation**

Transformative governance is not static. It is forward-looking, reflexive and adaptive. Building foresight into institutions is key to thriving amid compound crises.

Anticipatory governance emphasizes preparing for uncertainty through long-range risk assessments, scenario modelling and early warning systems. The European Commission's Joint Research Centre highlights that Europe faces compound risks, including climate shocks, pandemics and geopolitical instability, requiring integrated foresight capacities that cut across traditional silos (72). In the health domain, resilience planning includes stress-testing health systems, bolstering primary care and building social protection buffers for vulnerable groups. Strengthening primary health care is consistently identified as central to climate—health resilience and equity (73).

Institutional innovations also play a role. Examples include national climate—health taskforces, interministerial councils and proposals for planetary health legislation. In many contexts, ministries of health are also internalizing climate responsibilities, for example by establishing dedicated climate change or environment and health units and focal points to coordinate health adaptation planning, surveillance integration and intersectoral action (74). At the global level, an integrated United Nations body mandated to safeguard all planetary boundaries has been proposed, reflecting the need for governance architectures that match the scale and complexity of Earth system risks (see the next paragraph) (75). Such innovations would complement regional mechanisms to mainstream health into climate governance. Importantly, climate action should not only mitigate emissions but also advance other public goods, such as improved access to and quality of care, demonstrating how co-benefits can strengthen political traction.

It is noteworthy that the UN80 initiative's tracks of reform (launched by the United Nations Secretary-General in March 2025) has a remit to explore whether structural changes and programme realignment are needed across the United Nations system. While internal to the United Nations, this integrative, mission-oriented ambition is directly relevant to Member States: it would reshape mandates, finance and technical support, and offers a template to mirror domestically, consolidating climate-health functions, aligning budgets and indicators across energy, environment and health, and streamlining access to climate finance (76). The connection of such interests, perhaps piloted at the regional level, might become increasingly important as mechanisms for the post-2030 agenda are developed, offering an opportunity to embed planetary health concepts and integrate oversight of human progress, including in health, within Earth system governance (77).

Governance should be guided by the best available evidence, building trust and informing decisions, while proceeding under uncertainty and iterating as new knowledge emerges. Adaptive capabilities will lack legitimacy unless built on rigorous evaluation of climate and health interventions (77). Governments frequently face "overload" in identifying priority measures, underscoring the need for strong partnerships with academia to



co-produce knowledge, enhance transparency and support evidence-informed policy. Furthermore, the identification of new priorities and their governance must be well-integrated with agreed existing health system priorities, in particular universal health coverage.

Data architecture, rules, standards and pipelines for generating, linking and using climate-environment-health data, is another critical enabler. Embedding these within national health information and statistical systems institutionalizes resilience (e.g. early warning, surveillance, risk assessment) and enables transformative change by tracking performance and aligning budgets. WHO and the World Meterological Organization have launched a 2023–2033 implementation plan for integrated climate and health data, alongside a 2024 draft action agenda to embed heat, air quality and vector surveillance within national health information systems (78). Such systems require clear stewardship, interoperability standards and public-interest safeguards, alongside strengthened capacity of national statistical offices to deliver on these tasks. Where private data or analytics are employed, contractual frameworks should align access and intellectual property with public-value outcomes.

Foresight governance institutionalizes horizon scanning, scenario- and risk-stress-testing across the policy cycle, and links these to multi-year budgets, accountability and integrated climate-health information systems. In practice, this means embedding ecological limits and well-being indicators in targets and plans; using integrated surveillance and early-warning systems to trigger anticipatory action; and aligning national-local delivery through whole-of-government/society platforms (e.g. the EHP Partnerships). Done together, these functions steer climate-health governance toward planetary stability and human well-being, while enabling course correction as evidence evolves.

## Governing mitigation and adaptation: institutions, interests and international responsibility

Governing mitigation and adaptation is politically complex but essential. Addressing vested interests, realigning institutional mandates and honouring international responsibilities can unlock significant health and climate gains, if governance is bold, fair and accountable.

Effective governance for mitigation and adaptation shares core features: clear legal mandates and accountability, cross-sector coordination tied to budgets, evidence-guided planning and data systems, meaningful participation and equity, and the management of vested interests. Adaptation additionally relies on decentralized, locally tailored delivery and disaster-risk integration, while mitigation depends on coherent policy packages across energy, transport, food systems and health sectors (79).

Nonetheless, institutional entry points for integrated mitigation exist. Success factors include explicit health integration in NDCs and sectoral policies, climate budget tagging and multivear plans, just-transition arrangements, and legally anchored timelines for fossil-fuel

subsidy phase-out. In the EU, mechanisms such as the Green Deal, Fit for 55 and the Just Transition Mechanism provide frameworks to align climate, health, employment and equity goals (80–83). Nationally, Paris Agreement commitments and NDCs increasingly incorporate health dimensions, offering avenues to mainstream health in mitigation planning (40,84). WHO-led efforts, like the Budapest Declaration and the Alliance for Transformative Action on Climate and Health (26,85), also promote policy coherence and institutional coordination to ensure health considerations inform climate strategies, although the Alliance's limited intersectoral reach underscores the need for closer integration with UN agencies.

While the current geopolitical situation may not seem conducive to fossil fuel phase-out, advances in innovation can bring new opportunities, and the remarkable progress in developing and deploying key clean energy technologies is a reason for some optimism (86). The diffusion of renewable energy technologies illustrates how policy choices can trigger positive feedback loops across sociotechnical systems (87), generating momentum for transformative change.

The EU has advanced "systems thinking" through mechanisms such as the COP29 Energy Community Roundtable [88], which has been recently extended to include six West Balkan partners and Georgia, the Republic of Moldova and Ukraine. The Roundtable may have significant potential for sharing, financing and implementing best practice in the transformation to renewable energy across the wider Region.

According to a global policy network on greening the financial system, managed by the group of central banks (89), early implementation of ambitious climate policies pays off in a globally coordinated transition to a low-carbon economy. However, the European Environment Agency reports that subsidies for fossil fuels doubled from 2021 during the energy crisis and still totalled approximately €111 billion in 2023; a figure that includes both direct and broader crisis-related support. Of these, direct subsidies targeting fossil fuels exclusively were estimated at about €43.5 billion in 2023, with many lacking planned phase-out timelines (90). Additionally, health-care sector emissions remain largely unaccounted for (91), and military emissions are not mandated for reporting under the Paris framework (92).

Historical emissions from within the Region (1) and the externalized health impacts borne by vulnerable countries raise profound ethical and legal questions about mitigation responsibility. Proposals such as debt relief and enhanced climate finance, especially to Vulnerable Twenty countries (93), reflect emerging equity frameworks that Europeans (and WHO Member States) may need to adopt to meet international obligations.

Recent developments in international law may catalyse legislative momentum. The International Court of Justice's landmark Advisory Opinion in July 2025 held that states have a legal duty to reduce greenhouse emissions, including from fossil fuel production, and may be liable for environmental harms. Importantly, the Court also recognized that inadequate climate action directly undermines the right to health, affirming that climate change is not only an environmental concern but a human rights issue. By linking climate inaction to foreseeable and preventable health impacts, the opinion reframes climate action as both a legal and health obligation rather than a voluntary policy choice, potentially opening new avenues for accountability (94,95). A recent publication of a critical mass of evidence for attribution of heatwaves to the "carbon majors" (the fossil fuel industry and cement producers) helps to establish this accountability (96).



#### Final reflections ahead of the third PECCH hearing

The preceding sections have highlighted how governance is central to shaping climate and health outcomes, yet the challenges of fragmentation, vested interests and legitimacy deficits remain unresolved. At the third hearing, commissioners may wish to reflect on both the tensions that constrain governance capacity and the opportunities for transformative change.

Key prompts for discussion include:

- Where do we see governance capacity growing and what lessons can be drawn from these cases?
- How can governance structures address multisectoral action for health and climate?
- How can more robust governance respond effectively to lobbying by special interest groups negatively affected by climate policies?
- How can climate and health policies address social, commercial and environmental determinants of ill health in a more integrated way?
- What can we learn about driving transformational change from examples of "social tipping points" (97)?
- What reforms or new institutions are needed to strengthen the "people-place-planet" framework (5) alignment in climate-health governance?
- How do we close the legitimacy gap between those most affected by climate-health risks and those making decisions?
- What governance innovations could the Commission champion for scaling across the Region?

These reflections aim to open a strategic space for commissioners to deliberate on pathways forward, including the balance between incremental reforms and transformational adaptation; a tension already visible in debates at the 62nd session of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of the UNFCCC [98].

#### References<sup>1</sup>

- 1. Blom IM, Fears R, Najera Espinosa S, Brunn A, Scheelbeek P, Haines A. The climate and health nexus in Europe and central Asia: a technical brief. Copenhagen: WHO Regional Office for Europe; 2025 (https://www.who.int/europe/publications/m/item/the-climate-and-health-nexus-in-europe-and-central-asia-a-technical-brief).
- 2. Blom IM, Fears R. Understanding climate-related threats to health in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2025 (https://www.who.int/europe/publications/m/item/understanding-climate-related-threats-to-health-in-the-who-european-region-pecch-series).
- 3. Blom IM, Fears R. Realizing the health potential of climate action: adaptation and mitigation opportunities in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2025 (<a href="https://www.who.int/europe/publications/m/item/realizing-the-health-potential-of-climate-action--adaptation-and-mitigation-opportunities-in-the-who-european-region--pan-european-commission-on-climate-and-health-information-series).
- 4. Ostrom E. Polycentric Systems For Coping With Collective Action and Global Environmental Change. Glob Environ Chang. 2010;20:550-7 (<a href="https://doi.org/10.1016/j.gloenvcha.2010.07.004">https://doi.org/10.1016/j.gloenvcha.2010.07.004</a>).
- 5. Health is the argument for climate action: COP29 Special Report on Climate Change and Health. Geneva: World Health Organization; 2024 [https://cdn.who.int/media/docs/default-source/environment-climate-change-and-health/58595-who-cop29-special-report\_layout\_9web.pdf].
- 6. Costanza R, Kubiszewski I, Giovannini E, Lovins H, McGlade J, Pickett KE, et al. Development: Time to leave GDP behind. Nature. 2014;505(7483):283–5 (https://doi.org/10.1038/505283a).
- 7. Maharjan P, Alberti A, Jagwanth S, Rodríguez Acosta CA, Haataja-Beeri A. Multilevel Governance for Climate Change Mitigation and Adaptation. New York: United Nations Department of Economic and Social Affairs; 2024 (<a href="http://www.unpoq.org/paqe/sub3">http://www.unpoq.org/paqe/sub3</a> 1 view.asp?sn=613&page=1&search=&SearchString=&BoardID=0003).
- 8. Korhonen-Kurki K, D'Amato D, Belinskij A, Lazarevic D, Leskinen P, Nylén EJ, et al. Transformative governance: Exploring theory of change and the role of the law. Earth Syst Gov. 2025;23:100230 [https://doi.org/10.1016/j.esg.2024.100230].
- Remsö A, Schmidt J, Geiger SJ, Većkalov B, Krajnc Ž, Laughton I, et al. Trust in climate scientists is associated with political ideology: A 26-country analysis. J Environ Psychol. 2025;104:102609 [https://doi.org/10.1016/j.jenvp.2025.102609].
- Kickbusch I, Allen L, Franz C. The commercial determinants of health. Lancet Glob Heal. 2016;4(12):e895-6 (<a href="https://doi.org/10.1016/S2214-109X[16]30217-0">https://doi.org/10.1016/S2214-109X[16]30217-0</a>].
- 11. Commercial Determinants of Noncommunicable Diseases in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2024 [https://iris.who.int/handle/10665/376957].
- 12. Buse K, Tomson G, Kuruvilla S, Mahmood J, Alden A, van der Meulen M, et al. Tackling the politics of intersectoral action for the health of people and planet. BMJ. 2022;376:e068124 (https://doi.org/10.1136/bmj-2021-068124).
- 13. Prosceviciute R, Telesiene A. Climate change and public health: Governance approaches and challenges in Lithuania. Sustain Fut. 2025;9:100627 (<a href="https://doi.org/10.1016/j.sftr.2025.100627">https://doi.org/10.1016/j.sftr.2025.100627</a>).
- 14. Petzold J, Hawxwell T, Jantke K, Gonçalves Gresse E, Mirbach C, Ajibade I, et al. A global assessment of actors and their roles in climate change adaptation. Nat Clim Chang. 2023;13(11):1250–7 (https://doi.org/10.1038/s41558-023-01824-z).
- 15. Hoeben AD, Otto IM, Chersich MF. Integrating public health in European climate change adaptation policy and planning. Clim Policy. 2023;23(5):609–22 (https://doi.org/10.1080/14693062.2022.2143314).
- Ogami M. The Conditionality of Political Short-Termism: The Case of Climate Policymaking in Democracies. Polit Gov. 2024;12 [https://doi.org/10.17645/pag.7764].
- 17. van Daalen KR, Wyma N, Schauer-Berg J, Blom IM, Mattijsen J, Othman R, et al. The global health community at international climate change negotiations. BMJ Glob Heal. 2024 Apr;9(4) [https://doi.org/10.1136/bmjqh-2024-015292].
- Hall L, Hagens W, Limaheluw J. How RIVM engages in cross-sectoral collaboration to ensure health is at the centre of climate action. Eur J Public Health. 2023;33(Supplement\_2):ckad160.099 (<a href="https://doi.org/10.1093/eurpub/ckad160.099">https://doi.org/10.1093/eurpub/ckad160.099</a>).
- Policy brief 2024-2025: What is a climate council, why countries should establish one, and how the ICCN can help. London: International Climate Councils Network; 2025 (<a href="https://www.climatecouncils.org/wp-content/uploads/2024/11/ICCN-Policy-Brief-2024-2025.pdf">https://www.climatecouncils.org/wp-content/uploads/2024/11/ICCN-Policy-Brief-2024-2025.pdf</a>).
- 20. Proposal for a regulation of the European Parliament and of the Council on the sustainable use of plant protection products and amending Regulation (EU)2021/2115. Brussels: European Commission; 2025 (<a href="https://ec.europa.eu/food/system/files/2022-06/pesticides\_sud\_eval\_2022\_reg\_2022-305\_en.pdf">https://ec.europa.eu/food/system/files/2022-06/pesticides\_sud\_eval\_2022\_reg\_2022-305\_en.pdf</a>).
- 21. Guerrieri V, Borchardt S, Listorti G, Marelli L, Vittuari M. Time to transform? Sustainability narratives for European food systems. Glob Food Sec. 2025;44:100831 (<a href="https://doi.org/10.1016/j.qfs.2025.100831">https://doi.org/10.1016/j.qfs.2025.100831</a>).
- 22. Strategic Dialogue on the Future of EU Agricultural and Food Policies [Internet]. Final Report. Brussels: European Commission, Directorate-General for Agriculture and Rural Development; 2024 [https://agriculture.ec.europa.eu/system/files/2024-09/strategic-dialogue-report-2024\_en.pdf].
- 23. European Commission. Sustainable public procurement of food: implementation of EU framework. European Commission Staff Working Document. Luxembourg: Publications Office of the European Union; 2023 (https://op.europa.eu/en/publication-detail/-/publication/b1b7d65b-5334-11e8-be1d-01aa75ed71a1/language-en).
- 24. EU School scheme explained [website]. Brussels: European Commission; 2025 (<a href="https://agriculture.ec.europa.eu/common-agricultural-policy/market-measures/school-scheme-explained\_en">https://agriculture.ec.europa.eu/common-agricultural-policy/market-measures/school-scheme-explained\_en</a>].
- The City of Copenhagen's Food Strategy. Copenhagen: City of Copenhagen; 2019 (<a href="https://maaltider.kk.dk/sites/default/files/2022-06/The%20City%20of%20Copenhagen%20Food%20Strategy%202019.pdf">https://maaltider.kk.dk/sites/default/files/2022-06/The%20City%20of%20Copenhagen%20Food%20Strategy%202019.pdf</a>].



<sup>1</sup> All references were accessed on 21 September 2025.

- Declaration of the Seventh Ministerial Conference on Environment and Health: Budapest, Hungary 5–7 July 2023. Copenhagen: WHO Regional Office for Europe; 2023 (<a href="https://iris.who.int/handle/10665/371461">https://iris.who.int/handle/10665/371461</a>].
- 27. Seventy-seventh World Health Assembly. Climate change and health. Geneva: World Health Organization; 2024 [WHA77.14; https://apps.who.int/gb/ebwha/pdf\_files/WHA77/A77\_R14-en.pdf].
- 28. European Environment and Health Process (EHP) [website]. WHO Regional Office for Europe; 2025 (<a href="https://www.who.int/europe/initiatives/european-environment-and-health-process-[ehp]">https://www.who.int/europe/initiatives/european-environment-and-health-process-[ehp]</a>).
- 29. Working Group on Health in Climate Change (HIC) [website]. WHO Regional Office for Europe; 2025 [https://www.who.int/europe/groups/european-environment-and-health-task-force-ehtf/working-group-on-health-in-climate-change-[hic]].
- 30. EHP Partnership for Health Sector Climate Action [website]. WHO Regional Office for Europe; 2025 [https://www.who.int/europe/initiatives/european-environment-and-health-process-[ehp]/ehp-partnerships/ehp-partnership-for-health-sector-climate-action].
- 31. FAO takes lead coordination role for the One Health approach in Europe and Central Asia [website]. Food and Agriculture Organization of the United Nations; 2025 [https://www.fao.org/europe/news/detail/fao-takes-lead-coordination-role-for-the-one-health-approach-in-europe-and-central-asia/en].
- 32. Kraak VI, Niewolny KL. A Scoping Review of Food Systems Governance Frameworks and Models to Develop a Typology for Social Change Movements to Transform Food Systems for People and Planetary Health. Sustainability. 2024;16[4]:1469 [https://doi.org/10.3390/su16041469].
- 33. From Rome to Addis and Beyond: Call to Action by the Secretary-General. Addis Ababa: United Nations Food Systems Summit Stocktake+4; 2025 (<a href="https://www.unfoodsystemshub.org/docs/unfoodsystemslibraries/unfss-4/call-to-action/unfss4-call-to-action.pdf">https://www.unfoodsystemshub.org/docs/unfoodsystemslibraries/unfss-4/call-to-action/unfss4-call-to-action.pdf</a>).
- 34. Wolf T, Martinez GS, Cheong HK, Williams E, Menne B. Protecting health from climate change in the WHO European Region. Int J Environ Res Public Health. 2014 Jun 16;11(6):6265-80 [https://doi.org/10.3390/ijerph110606265].
- 35. European Court of Auditors. Special Report 12/2024: Climate spending in the 2021-2027 EU budget Good planning but already facing serious challenges. Brussels: European Union; 2024 (<a href="https://www.eca.europa.eu/en/publications/special-reports/climate-spending-eu-budget-2021-2027">https://www.eca.europa.eu/en/publications/special-reports/climate-spending-eu-budget-2021-2027</a>).
- 36. United Nations Office for Disaster Risk Reduction, United Nations Development Programme. Disaster Risk Reduction and Climate Change Adaptation: Coherence Pathways in Europe and Central Asia. Geneva: United Nations Office for Disaster Risk Reduction; 2025 (<a href="https://www.undrr.org/publication/disaster-risk-reduction-and-climate-change-adaptation-coherence-pathways-europe-and">https://www.undrr.org/publication/disaster-risk-reduction-and-climate-change-adaptation-coherence-pathways-europe-and</a>).
- 37. Strategy and action plan on health emergency preparedness, response and resilience in the WHO European Region (Preparedness 2.0) [website]. WHO Regional Office for Europe; 2025 (<a href="https://www.who.int/europe/teams/who-health-emergencies-programme-(whe)/preparedness-2.0">https://www.who.int/europe/teams/who-health-emergencies-programme-(whe)/preparedness-2.0</a>].
- 38. Building Anticipatory Capacity with Strategic Foresight in Government. Paris: OECD Publishing; 2024 (<a href="https://doi.org/10.1787/d7eb0bb6-en">https://doi.org/10.1787/d7eb0bb6-en</a>].
- 39. Greer SL, Falkenbach M, Siciliani L, McKee M, Wismar M, Vissapragada P, et al. Making Health for All Policies: Harnessing the co-benefits of health. Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies; 2023 (https://iris.who.int/handle/10665/366119).
- 40. Climate Action Tracker, Climate Analytics, NewClimate Institute. 2030 Emissions Gaps: CAT projections and resulting emissions gap in meeting the 1.5°C Paris Agreement goal [webite]. Climate Action Tracker; 2025 (<a href="https://climateactiontracker.org/global/cat-emissions-gaps/">https://climateactiontracker.org/global/cat-emissions-gaps/</a>].
- 41. Climate change and health: Draft Global Action Plan on Climate Change and Health. Geneva: World Health Organization; 2025 [https://apps.who.int/gb/ebwha/pdf\_files/EB156/B156\_25-en.pdf].
- 42. Quality criteria for integrating health into Nationally Determined Contributions (NDCs). Geneva: World Health Organization; 2024 (https://iris.who.int/handle/10665/380214). License: CC BY-NC-SA 3.0 IGO.
- 43. Clarke J, Blom IM, Campbell-Lendrum D, Kerry V. Health workforce as a climate and health priority in nationally determined contributions. Lancet Planet Health. 2025;9(8):101288 [https://doi.org/10.1016/j.lanplh.2025.101288].
- 2023 Healthy NDC Scorecard [website]. Global Climate and Health Alliance; 2023 (<a href="https://climateandhealthalliance.org/ndc-scorecards-2023/">https://climateandhealthalliance.org/ndc-scorecards-2023/</a>].
- 45. Blom IM, Rasheed FN, Singh H, Eckelman MJ, Dhimal M, Hensher M, et al. Evaluating progress and accountability for achieving COP26 Health Programme international ambitions for sustainable, low-carbon, resilient health-care systems. Lancet Planet Heal. 2024 Oct 1;8[10]:e778–89 (https://doi.org/10.1016/S2542-5196[24]00206-7].
- 46. Ministry of Health of Brazil. Belém Health Action Plan for the Adaptation of the Health Sector to Climate Change. Belém, Brazil: Ministry of Health of Brazil; Pan American Health Organization (PAHO); World Health Organization (WHO); 2025 <a href="https://cdn.who.int/media/docs/default-source/climate-change/en---belem-action-plan.pdf">https://cdn.who.int/media/docs/default-source/climate-change/en---belem-action-plan.pdf</a>).
- 47. Alari A, Ballester J, Milà C, Benmarhnia T, Sofiev M, Uppstu A, et al. Quantifying the short-term mortality effects of wildfire smoke in Europe: a multicountry epidemiological study in 654 contiguous regions. Lancet Planet Heal. 2025;9[8];101296 [https://doi.org/10.1016/j.lanplh.2025.101296].
- 48. Elmqvist T, Valkó O, Stoof C, Aakala T, Arca B, Arianoutsou M, et al. Changing Wildfires Policy Options for a Fire-literate and Fire-adapted Europe. EASAC Policy Report 48. Vienna: European Academies Science Advisory Council; 2025 (https://easac.eu/publications/details/changing-wildfires/).

- 49. Mosello B, Foong A, Viehoff A, Rüttinger L. Regional consultation on climate change and security in Central Asia. Vienna and Berlin: Organization for Security and Co-operation in Europe and adelphi research; 2023 (<a href="https://www.osce.org/files/f/documents/c/7/546653.pdf">https://www.osce.org/files/f/documents/c/7/546653.pdf</a>).
- 50. Kingdom of Denmark's Chairship, 2025-2027 [website]: Arctic Council Secretariat; 2023 (https://arctic-council.org/about/kingdom-of-denmarks-chairship-2025-2027).
- 51. United Nations Economic and Social Commission for Asia and the Pacific, United Nations Economic Commission for Europe. United Nations Special Programme for the Economies of Central Asia (SPECA) 2024 SPECA Economic Forum "Green Development in the SPECA Region" 26-27 November 2024, Dushanbe, Tajikistan DUSHANBE DECLARATION. Dushanbe: United Nations Economic and Social Commission for Asia and the Pacific; 2024 (<a href="https://unece.org/sites/default/files/2024-12/ANNEX%20III.%20Dushanbe%20Declaration">https://unece.org/sites/default/files/2024-12/ANNEX%20III.%20Dushanbe%20Declaration</a> ENG 0.pdf).
- 52. Countries in Eurasia come together to boost climate ambition at NDCs 3.0 Forum [website]. United Nations Development Programme; 2024 [https://www.undp.org/eurasia/events/countries-eurasia-come-together-boost-climate-ambition-ndcs-30-forum].
- 53. Hickman C, Marks E, Pihkala P, Clayton S, Lewandowski RE, Mayall EE, et al. Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey. Lancet Planet Heal. 2021;5(12):e863–e873 [https://doi.org/10.1016/S2542-5196(21)00278-3].
- 54. World report on social determinants of health equity. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/381152). License: CC BY-NC-SA 3.0 IGO.
- 55. Jackson Guy, N'Guetta Alicia, De Rosa Salvatore Paolo, Scown Murray, Dorkenoo Kelly, Chaffin Brian, et al. An emerging governmentality of climate change loss and damage. Prog Environ Geogr. 2023;2(1–2):33–57 (https://doi.org/10.1177/27539687221148748).
- 56. Calliari E, Serdeczny O, Vanhala L. Making sense of the politics in the climate change loss & damage debate. Glob Environ Chang. 2020;64:102133 [https://doi.org/10.1016/j.gloenvcha.2020.102133].
- 57. Seto KC, Davis SJ, Mitchell R, Stokes EC, Unruh G, Ürge-Vorsatz D. Carbon Lock-In: Types, Causes, and Policy Implications. An Rev Envir Res. 2016; 41:425–452 (<a href="https://doi.org/10.1146/annurev-environ-110615-085934">https://doi.org/10.1146/annurev-environ-110615-085934</a>).
- 58. Mattioli G, Roberts C, Steinberger JK, Brown A. The political economy of car dependence: A systems of provision approach. Energy Res Soc Sci. 2020;66:101486 [https://doi.org/10.1016/j.erss.2020.101486].
- Intergovernmental Panel on Climate Change (eds.). National and sub-national Policies and Institutions. In: Climate Change 2022 - Mitigation of Climate Change. Working Group III Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge and New York: Cambridge University Press; 2023 (<a href="https://doi.org/10.1017/9781009157926.015">https://doi.org/10.1017/9781009157926.015</a>].
- 60. Lantushenko V, Schellhorn C. The rising risks of fossil fuel lobbying. Glob Financ J [Internet]. 2023;56(C) (https://doi.org/10.1016/j.qfj.2023.100829).
- 61. Clapp J, Vriezen R, Laila A, Conti C, Gordon L, Hicks C, et al. Corporate concentration and power matter for agency in food systems. Food Policy. 2025 Jul 1;134:102897 (https://doi.org/10.1016/j.foodpol.2025.102897).
- 62. Lacy-Nichols J, Jones A, Buse K. Taking on the Commercial Determinants of Health at the level of actors, practices and systems. Front public Heal. 2022;10:981039 [https://doi.org/10.3389/fpubh.2022.981039].
- 63. Sixty-ninth World Health Assembly. Framework of engagement with non-State actors. Geneva: World Health Organization; 2016 [WHA69.10; https://iris.who.int/handle/10665/252790].
- 64. Handbook for non-state actors on engagement with the World Health Organization, 2nd ed. Geneva: World Health Organization; 2024 (<a href="https://iris.who.int/handle/10665/376253">https://iris.who.int/handle/10665/376253</a>). License: CC BY-NC-SA 3.0 IGO.
- 65. Position on Conflicts-of-interest and polluting industry obstruction of climate policy in the UNFCCC Process. Bonn: Climate Action Network; 2020 (<a href="https://climatenetwork.org/wp-content/uploads/2020/11/can position on conflicts">https://climatenetwork.org/wp-content/uploads/2020/11/can position on conflicts of interest-2.pdf</a>).
- 66. Behind the Badge: Understanding the roles, reach, and risks of fossil fuel industry participation in UN climate talks. Berlin: Transparency International; 2025 (<a href="https://www.transparency.org/en/publications/behind-the-badge-understanding-roles-reach-risks-of-fossil-fuel-industry-participation-un-climate-talks">https://www.transparency.org/en/publications/behind-the-badge-understanding-roles-reach-risks-of-fossil-fuel-industry-participation-un-climate-talks</a>).
- 67. World Health Organization, World Meteorological Organization. Climate change and workplace heat stress: technical report and guidance. Geneva: World Health Organization; 2025 (<a href="https://iris.who.int/handle/10665/382351">https://iris.who.int/handle/10665/382351</a>). License: CC BY-NC-SA 3.0 IGO
- 68. Bishen S, Eitelwein O. How life sciences innovation and collaboration could halve climate change's adverse health effects [news release]. World Economic Forum; 13 January 2025 [https://www.weforum.org/stories/2025/01/life-sciences-innovation-climate-driven-health-solutions/].
- 69. World Health Organization & WHO Council on the Economics of Health for All. Health for all: transforming economies to deliver what matters: final report of the WHO Council on the Economics of Health for All. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/373122). License: CC BY-NC-SA 3.0 IGO.
- 70. Sandover R, Moseley A, Devine-Wright P. Contrasting Views of Citizens' Assemblies: Stakeholder Perceptions of Public Deliberation on Climate Change. Polit Governance. 2021;9(2) (https://doi.org/10.17645/pag.v9i2.4019).
- 71. Engaging and empowering citizens for the net-zero transition. OECD Net Zero+ Policy Papers No. 11. Paris: Organisation for Economic Co-operation and Development; 2025 (<a href="https://doi.org/10.1787/8d869640-en">https://doi.org/10.1787/8d869640-en</a>).
- 72. Lentini A, Eklund G, Corbane C, Asikainen T, Ronco M, Urso G, et al. Analysis of Risks Europe is facing. Brussels Publications Office of the European Union; 2025 [https://publications.jrc.ec.europa.eu/repository/handle/JRC141673].
- 73. Shumake-Guillemot J, Villalobos-Prats E, Campbell-Lendrum D. Operational framework for building climate resilient health systems. Geneva: World Health Organization; 2015 [https://iris.who.int/handle/10665/189951].
- 74. Indicators index. The Global Health Observatory [online database]. Geneva: World Health Organization; 2024 (<a href="https://www.who.int/data/gho/data/indicators/indicators-index">https://www.who.int/data/gho/data/indicators/indicators-index</a>).



- 75. Gupta J, Bai X, Liverman DM, Rockström J, Qin D, Stewart-Koster B, et al. A just world on a safe planet: a Lancet Planetary Health-Earth Commission report on Earth-system boundaries, translations, and transformations. Lancet Planet Health. 2024;8(10):e813-e873 [https://doi.org/10.1016/S2542-5196(24)00042-1).
- 76. Fletcher ER. Exclusive: Full Text of UN80 Task Force Pitch for Streamlined UN; UNAIDS Merger with WHO. Geneva: Health Policy Watch; 2025 (https://healthpolicy-watch.news/exclusive-full-text-of-un80-task-force-pitch-for-streamlined-un-including-who-and-unaids-merger/).
- 77. Benton L, Brousselle A, McDavid J, Whitmee S, Haines A. Need for planetary health perspective in guidance for complex interventions for climate and health. BMJ. 2025 Jun;389:e083337 [https://doi.org/10.1136/bmj-2024-083337].
- 78. WHO-WMO Implementation Plan for Advancing Climate, Environment and Health Science and Services 2023-2033. Geneva: World Meteorological Organization and World Health Organization; 2023 (<a href="https://climahealth.info/resource-library/who-wmo-implementation-plan-2023-2033/">https://climahealth.info/resource-library/who-wmo-implementation-plan-2023-2033/</a>].
- 79. Sherman JD, MacNeill AJ, Biddinger PD, Ergun O, Salas RN, Eckelman MJ. Sustainable and Resilient Health Care in the Face of a Changing Climate. Annu Rev Public Health. 2023 Apr 3;44(1):255–77 (<a href="https://doi.org/10.1146/annurev-publhealth-071421-051937">https://doi.org/10.1146/annurev-publhealth-071421-051937</a>).
- 80. European Commission: European Green Deal: Delivering on Our Targets. Luxembourg: Publications of the European Union; 2021 [https://ec.europa.eu/commission/presscorner/api/files/attachment/869807/EGD\_brochure\_EN.pdf].
- 81. Haines A, Scheelbeek P. European Green Deal: a major opportunity for health improvement. Lancet. 2020 Apr 25;395(10233):1327-9 (https://doi.org/10.1016/S0140-6736(20)30109-4).
- 82. "Fit for 55": Council adopts key pieces of legislation delivering on 2030 climate targets [news release]. Council of the European Union; 2023 (<a href="https://www.consilium.europa.eu/en/press/press-releases/2023/04/25/fit-for-55-council-adopts-key-pieces-of-legislation-delivering-on-2030-climate-targets/">https://www.consilium.europa.eu/en/press/press-releases/2023/04/25/fit-for-55-council-adopts-key-pieces-of-legislation-delivering-on-2030-climate-targets/</a>).
- 83. The Just Transition Mechanism: making sure no one is left behind [website]. European Commission; 2025 [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism\_en].
- 84. 2023 WHO review of health in nationally determined contributions and long-term strategies: health at the heart of the Paris Agreement. Geneva: World Health Organization; 2023 (<a href="https://iris.who.int/handle/10665/372276">https://iris.who.int/handle/10665/372276</a>). License: CC BY-NC-SA 3.0 IGO.
- 85. Alliance for Transformative Action on Climate and Health (ATACH): Commitments [website]. World Health Organization; 2024 (https://www.who.int/initiatives/alliance-for-transformative-action-on-climate-and-health/commitments].
- 86. Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach. Paris: International Energy Agency; 2023 (<a href="https://www.iea.org/reports/net-zero-roadmap-a-global-pathway-to-keep-the-15-0c-goal-in-reach">https://www.iea.org/reports/net-zero-roadmap-a-global-pathway-to-keep-the-15-0c-goal-in-reach</a>).
- 87. Smith EK, Wiedermann M, Donges JF, Heitzig J, Winkelmann R. A global threshold model of enabling conditions for social tipping in pro-environmental behaviours the role of sea level rise anticipation and climate change concern. Earth Syst Dyn. 2025;16(2):545–64 (https://doi.org/10.5194/esd-16-545-2025).
- 88. Working with EU neighbours for a cleaner continent: the Energy Community roundtable at COP29 [news release]. European Commission; 16 Nov 2024 [https://climate.ec.europa.eu/news-your-voice/news/working-eu-neighbours-cleaner-continent-energy-community-roundtable-cop29-2024-11-16\_en].
- 89. Origin and Purpose of the Network for Greening the Financial System (NGFS) [website]. Network for Greening the Financial System; 2025 (https://www.ngfs.net/en/about-us/origin-and-purpose).
- 90. Fossil fuel subsidies in Europe [website]. European Environment Agency; 2025 (<a href="https://www.eea.europa.eu/en/analysis/indicators/fossil-fuel-subsidies">https://www.eea.europa.eu/en/analysis/indicators/fossil-fuel-subsidies</a>).
- 91. Romanello M, Walawender M, Hsu SC, Moskeland A, Palmeiro-Silva Y, Scamman D, et al. The 2024 report of the Lancet Countdown on health and climate change: facing record-breaking threats from delayed action. Lancet. 2024 9;404(10465):1847–96 (https://doi.org/10.1016/S0140-6736(24)01822-1).
- 92. Huibregtsen H. Military spending and military emissions: the hidden links [blog]. Scientists for Global Responsibility; 24 June 2025 (https://www.sgr.org.uk/resources/military-spending-and-military-emissions-hidden-links).
- 93. Members V20 [website]. The Vulnerable Group of Twenty; 2025 (https://www.v-20.org/members)
- 94. International Court of Justice. Obligations of States in Respect of Climate Change: Advisory Opinion of 23 July 2025. The Hague: International Court of Justice; 2025 [https://icj-cij.org/sites/default/files/case-related/187/187-20250723-adv-01-00-en.pdf].
- 95. Khadim A. ICJ's Landmark Ruling and the Future of Health-based Climate Litigation. [website]. SDG Knowledge Hub; 2025 [https://sdq.iisd.org/commentary/icjs-landmark-ruling-and-the-future-of-health-based-climate-litigation/].
- 96. Quilcaille Y, Gudmundsson L, Schumacher DL, Gasser T, Heede R, Heri C, et al. Systematic attribution of heatwaves to the emissions of carbon majors. Nature. 2025;645[8080]:392–8 (https://doi.org/10.1038/s41586-025-09450-9).
- 97. Rodin J, Bratburd JR, Duff N, Patz JA, Frumkin H, Woteki CE, et al. Charting a path to health for all at net-zero emissions. Lancet. 2025 (https://doi.org/10.1016/S0140-6736(25)00813-X).
- 98. SBSTA 62 [website]. Unite Nations Climate Change; 2025 (https://unfccc.int/event/sbsta-62)



#### **Acknowledgments**

This paper was prepared at the request of the Pan-European Commission on Climate and Health. The authors are Iris Martine Blom (London School of Hygiene & Tropical Medicine, London, United Kingdom) and Robin Fears (bioscience consultant based in the United Kingdom). The authors would like to thank the staff of the WHO Regional Office for Europe, Copenhagen, Denmark and the WHO European Centre for Environment and Health in Bonn, Germany for their technical review of the paper: Dorota Jarosinska, Vladimir Kendrovski, Mareike Kroll, Francesca Racioppi, Oliver Schmoll and Marisol Yglesias Gonzales.

**Suggested citation:** Blom I, Fears R. Governing for climate–health action in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2025.

The named authors alone are responsible for the views expressed in this publication.

