

# Target setting for low carbon sustainable health systems

Discussion draft





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# Acronyms and abbreviations



<b>ATACH</b>	Alliance for Transformative Action on Climate and Health
<b>COP</b>	Conference of the Parties
<b>GHG</b>	Greenhouse Gas
<b>ICVCM</b>	Integrity Council for the Voluntary Carbon Market
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>SBTi</b>	Science Based Targets Initiative
<b>SDGs</b>	Sustainable Development Goals
<b>UHC</b>	Universal Health Coverage
<b>UNEP</b>	United Nations Environment Programme
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>WASH</b>	Water, Sanitation and Hygiene
<b>WHO</b>	World Health Organization

# Introduction



The purpose of this document is to supplement the World Health Organization (WHO) Operational Framework for Building Climate Resilient and Low Carbon Health Systems (Box 1) with additional advice and resources on how to set credible and ambitious decarbonization targets for low carbon sustainable health systems.

The intended audience of this document is national or sub-national health systems that have either committed to a health system decarbonization target or are in the process of defining one.

This document provides a checklist of key criteria that can be used to ensure that emissions reduction targets are tangible and clearly defined, consistent with other decarbonization targets inside and outside the health sector, and function as an effective tool for driving and monitoring progress on health system decarbonization.

Defining a specific target for greenhouse gas (GHG) emissions can be a highly effective mechanism for setting a clear long-term direction and monitoring progress towards delivering low carbon health services.

This document is not prescriptive about the decarbonization targets that should be set – if at all – for specific health systems. The appropriate targets will vary according to the “common but differentiated responsibilities and respective capabilities”<sup>1</sup> of health systems and the countries to which they belong (1). This document does not establish new standards or seek to replicate other guidance on setting emissions targets but draws on existing standards and recommendations and provides guidance on the major implications for health systems. For more detailed technical information and guidance, users should refer to the resources at the end of this document.

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<sup>1</sup> “The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.”

## WHO Operational Framework for Building Climate Resilient and Low Carbon Health Systems

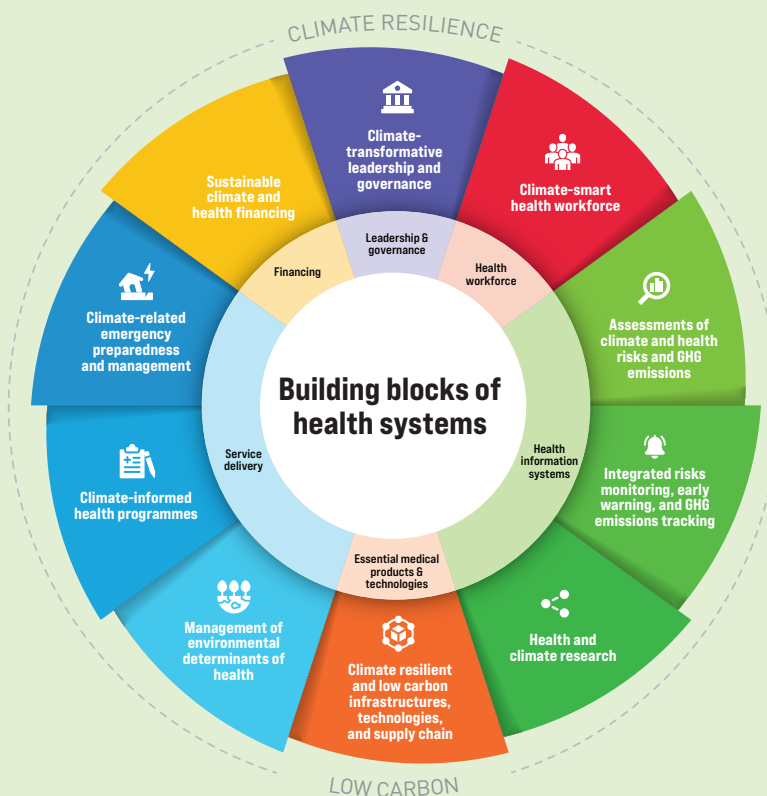
The WHO Operational Framework for Building Climate Resilient and Low Carbon Health Systems provides guidance on how the health sector can systematically and effectively address the challenges increasingly presented by climate change, while reducing its own contribution to climate change.

The goal of the Operational Framework is to “increase the climate resilience of health systems to protect and improve the health of communities in an unstable and changing climate, while optimizing the use of resources and reducing GHG emissions.” (2) The framework aims to:

- guide health sector professionals, including through their collaborations with officials in health-determining sectors, to understand and effectively prepare for the additional health risks posed by climate change, through climate resilience and low carbon approaches;
- highlight the main health system functions that need to be strengthened to build climate resilience and low carbon health systems, using these as the basis for developing comprehensive and practical strategies and plans;
- support the development of specific health system interventions to address the increased risks posed by climate change and to reduce carbon emissions, focusing on the synergies between these actions;
- support health decision-makers to identify roles and responsibilities for developing and implementing resilience and low carbon action plans, engaging actors both within and outside the health sector.

Implementing this Framework would enhance the health sector’s ability to anticipate, prevent, prepare for, and manage climate-related health risks and therefore reduce the burden of associated climate-sensitive health outcomes. Implementing low carbon health practices would contribute to climate change mitigation while also improving health outcomes. Achieving these aims is an important contribution to Universal Health Coverage (UHC), global health security, and specific targets within the Sustainable Development Goals (SDGs). This framework proposes interventions around the ten components as well as indicators to monitor progress (Fig. 1).

**Fig. 1. Operational Framework for Climate Resilient and Low Carbon Health Systems**





# 1 Why are targets important for low carbon sustainable health systems?



Climate change poses a significant threat to health systems and population health worldwide. The Intergovernmental Panel on Climate Change (IPCC) warns that limiting global warming to 1.5 degrees Celsius is crucial to avoid catastrophic health consequences and millions of deaths (3).

Even slight temperature increases have substantial impacts on global health and well-being. Climate change is already affecting human health by increasing the frequency and magnitude of extreme weather events, disrupting food and water systems, and increasing burdens of a wide range of infectious and non-communicable diseases, including mental health impacts. Climate change will continue to undermine important social determinants of health, such as livelihoods, equitable access to healthy environments, health care services and social support structures.

The health sector is responsible for approximately 5% of global emissions, mainly due to energy-intensive production of goods and services, energy consumption, transportation, and waste treatment (4).

Taking action to reduce emissions will deliver significant health benefits from improved health system resilience, sustainable and efficient infrastructure, technologies and supply chains, safer Water, Sanitation, and Hygiene (WASH) and waste management, clean energy, sustainable healthy diets, clean and climate-resilient homes, improved air quality, and more. Climate resilient and environmentally sustainable health care facilities contribute to high quality of care and accessibility of services, and by helping reduce facility costs also ensure better affordability. They are, therefore, an important component of universal health coverage (UHC).

Health systems therefore play a unique and crucial role in addressing the health impacts of climate change, strengthening resilience to climate-related and other disruptions and enhancing sustainability of health care facilities, while maximizing the health co-benefits of global climate action.

The Paris Agreement's goal of limiting warming to well below 2 degrees Celsius, with an aim of 1.5 degrees Celsius, requires all sectors of the global economy to contribute, including the health sector. To limit global warming to 1.5 degrees, global greenhouse gas (GHG) emissions need to be reduced by 45% by 2030 and reach net zero by 2050.

Reaching net zero means cutting GHGs rapidly and as close to zero as possible, with any remaining emissions balanced by carbon sinks, such as forests and oceans (5).

Different geographical areas and economic sectors will decarbonize at different rates and reach net zero at different times, all contributing to this shared goal. In the health sector, this will only be possible if more carbon intense health systems with a higher level of per-capita emissions decarbonize more rapidly.

Defining targets can provide clarity, motivation, and accountability, allowing for measurable evaluation and guiding effective prioritization of resources to ensure that necessary actions are taken to progress towards a low carbon sustainable health system.

An ambitious emissions reduction target is only credible if it is backed up by action to meet it. If a target has not yet been set, this should not prevent interventions from being made to deliver improved health system sustainability.

## 2 Defining appropriate targets



Setting an appropriate decarbonization target for a health system is highly dependent on national circumstances and local priorities. This document does not prescribe specific decarbonization targets for any given health system, but rather provides key considerations that can guide health systems in developing targets appropriate to their circumstances and capabilities.

The principle of “common but differentiated responsibilities and respective capabilities” should guide target-setting, acknowledging the unequal distribution of causes and impacts of climate change worldwide, as well as the right to development, including the development of high-quality health systems.

A target should represent a clear commitment to build the necessary capabilities and take the appropriate measures to deliver on the stated ambition and allocate resources to monitor and verify progress against the target.

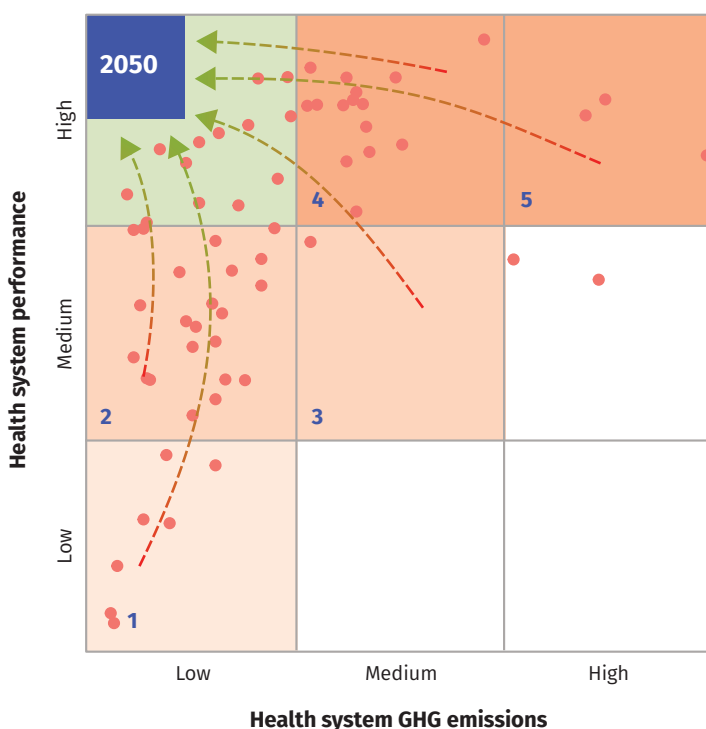
Health systems should only set targets if they have a reasonable understanding of what achieving them entails. This is reflected in the checklist (Section 3), which outlines the need to measure a base year of emissions and develop a detailed emissions pathway to meet targets to the best extent possible. The initial estimates and trajectories developed may be limited by data availability. Over time, achieving targets will require the development of capabilities to measure emissions, fill evidence gaps, and verify reductions in each health system. The WHO Operational Framework provides a more detailed framework of specific actions and measures that are likely to be required, with a particular focus on the different optimal pathways for building climate resilient and low carbon health systems depending on current circumstances.

Many health systems that set targets – particularly high ambition systems and all health systems in high-income countries – should aim to reach net zero GHGs by 2050 at the latest, in line with the Paris Agreement. Achieving net zero GHGs

requires rapid reductions in emissions starting in the 2020s and reducing emissions by at least 90% from base year levels. No more than 10% of residual emissions should be offset or neutralized using GHG removal credits. A list of health systems that made net zero target declarations as part of COP26 health commitments can be found on the Alliance for Transformative Action on Climate and Health (ATACH) Community of Practice website (6).

Efforts to reduce emissions should not be made at the expense of health. In some health systems, particularly those with lower performance and/or more limited access to resources, setting a net zero target for 2050 may not yet be appropriate or represent a fair contribution to the Paris Agreement. Here, actions to support progress towards decarbonization must focus on health system development, aiming for improved access, performance and quality of health services, while minimizing GHG emissions (Fig. 2) (2). Targets should recognize the need to achieve universal access to quality healthcare in a sustainable manner, minimizing growth in GHG emissions and other pollutants while building resilience to climate change.

**Fig. 2. Illustrative pathways to balance decarbonization and health system performance, from the WHO Operational Framework for Building Climate Resilient and Low Carbon Health Systems**



# 3 Checklist for setting low carbon sustainable health system targets



To establish effective decarbonization targets, the following checklist can help health systems ensure that target setting results in targets that are credible, feasible, ambitious and compatible with those established by other health systems. The checklist provides brief explanations, actions and resources in nine areas that can support an effective target setting process.

Checklist	Status (e.g. Complete/ in progress/ not yet attempted/ etc.)	Additional information and resources
<b>1. Public commitments</b>		
These actions promote transparency and accountability, as well as adding to the collective effect of commitments from different health systems around the world.		
Make a public commitment towards developing low-carbon sustainable health systems through ATACH or an appropriate national mechanism.		List of all commitments made under ATACH (7) <a href="https://www.atachcommunity.com/atach-community/countries/">https://www.atachcommunity.com/atach-community/countries/</a>
Publicly declare all targets to ensure transparency and accountability. Third-party target validation or peer review may optionally be used to provide additional confidence in targets.		SBTi Corporate Net-Zero Standard (8) <a href="https://sciencebasedtargets.org/net-zero">https://sciencebasedtargets.org/net-zero</a> SBTi list of declared targets (9) <a href="https://sciencebasedtargets.org/target-dashboard">https://sciencebasedtargets.org/target-dashboard</a> UN Global Compact E-Learning on setting targets (10,11) <a href="https://info.unglobalcompact.org/SBTi">https://info.unglobalcompact.org/SBTi</a> <a href="https://info.unglobalcompact.org/net-zero-standard">https://info.unglobalcompact.org/net-zero-standard</a> UNFCCC Race to Zero and Race to Resilience campaigns (12) <a href="https://climatechampions.unfccc.int/">https://climatechampions.unfccc.int/</a> Aga Khan Development Network Environment and Climate Commitment Statement (13) <a href="https://the.akdn/en/what-we-do/building-resilient-communities/environment-climate-change">https://the.akdn/en/what-we-do/building-resilient-communities/environment-climate-change</a>
<b>2. Long-term target ambition aligned with 1.5°C</b>		
Aligning targets to 1.5°C pathways is consistent with the legally binding Paris Agreement. To limit global warming to 1.5°C with limited overshoot, global GHG emissions should reach net zero by 2050.		
Ensure the target is, at minimum, aligned with the global ambition of the Paris Agreement.		The Paris Agreement (14) <a href="https://www.un.org/en/climatechange/paris-agreement">https://www.un.org/en/climatechange/paris-agreement</a>
High-income and high-ambition countries – set target to reach net zero GHG emissions by 2050 at the latest.		WHO review of health in nationally determined contributions and long-term strategies (15) <a href="https://iris.who.int/handle/10665/372276">https://iris.who.int/handle/10665/372276</a> IEA credible pathways to 1.5°C (16) <a href="https://www.iea.org/reports/credible-pathways-to-150c">https://www.iea.org/reports/credible-pathways-to-150c</a> Climate Analytics 1.5°C National Pathway Explorer (17) <a href="http://1p5ndc-pathways.climateanalytics.org/">http://1p5ndc-pathways.climateanalytics.org/</a> IPCC Synthesis Report Summary for Policymakers (3) <a href="https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf">https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf</a> UNEP Emissions Gap Report 2022 (18) <a href="https://www.unep.org/resources/emissions-gap-report-2022">https://www.unep.org/resources/emissions-gap-report-2022</a>

Checklist	Status (e.g. Complete/ in progress/ not yet attempted/ etc.)	Additional information and resources
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### 3. Interim targets

Reducing global emissions in the next decade is critical for limiting global temperature rises. To limit global warming to 1.5°C, global GHG emissions must peak before 2025 and decline by 45% by 2030. Setting interim targets helps to ensure that progress is made now.

Set and publicly declare interim targets at regular intervals, preferably every five years to ensure progress is made and monitored over time.		SBTi target-setting tool, available in the resource centre (19) <a href="https://sciencebasedtargets.org/resources/">https://sciencebasedtargets.org/resources/</a>
Set at least one interim target for the year 2030 or earlier.		Health Care Without Harm – Global Road Map for Health Care Decarbonization (20) <a href="https://healthcareclimateaction.org/roadmap">https://healthcareclimateaction.org/roadmap</a>

### 4. Target definition and coverage

Clearly defining and specifying boundaries for a target provides clarity for strategic planning, and the inclusion of all GHGs and emissions scopes ensures that the full climate impacts of a health system are captured by the target.

Clearly define the boundary of the target. State which sources of emissions and health system activities are included. State any sources of emissions that are excluded and explain why they are not included.		GHG Protocol – Required Greenhouse Gases in Inventories (21) <a href="https://ghgprotocol.org/sites/default/files/2022-12/Required%20gases%20and%20GWP%20values.pdf">https://ghgprotocol.org/sites/default/files/2022-12/Required%20gases%20and%20GWP%20values.pdf</a>
Include all Scope 3 emissions produced across the entire lifecycle of health system operations and products, including domestic and international supply chains and end-of-life disposal.		GHG Protocol – Chapter 4 Setting Operational Boundaries (22) <a href="https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf">https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf</a>
Include all GHGs, not just CO <sub>2</sub> . This includes gases that cause extremely high global warming impacts relative to CO <sub>2</sub> , such as metered-dose inhaler propellants, volatile anaesthetic gases, refrigerants, and SF <sub>6</sub> .		Health Care Without Harm – Designing a net zero roadmap for healthcare: Technical methodology and guidance (23) <a href="https://noharm-europe.org/documents/designing-net-zero-roadmap-healthcare-technical-methodology-and-guidance">https://noharm-europe.org/documents/designing-net-zero-roadmap-healthcare-technical-methodology-and-guidance</a>

### 5. Measuring emissions, monitoring and reporting progress, and updating targets

Public monitoring and reporting of climate targets promotes transparency and allows health systems to verify success and identify areas where further action is needed to meet targets. A regular review of targets balances the need for a consistent and stable basis for action with the ability to reflect the latest scientific, technological and societal context in plans.

Define how progress will be measured against targets. (For example, emissions targets could be defined on an absolute, percentage reduction, or intensity basis, and a base year should be defined).		GHG Protocol – Chapter 11 Setting GHG Targets (22) <a href="https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf">https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf</a> UNFCCC Global Climate Action Portal (24) <a href="https://climateaction.unfccc.int/">https://climateaction.unfccc.int/</a>
Commit to monitoring and reporting progress regularly and publicly, for example through annual reports. Progress reporting can include key performance metrics as well as emissions data.		Health Care Without Harm – Designing a net zero roadmap for healthcare: Technical methodology and guidance (23) <a href="https://noharm-europe.org/documents/designing-net-zero-roadmap-healthcare-technical-methodology-and-guidance">https://noharm-europe.org/documents/designing-net-zero-roadmap-healthcare-technical-methodology-and-guidance</a>
Disclose annual emissions data publicly, for example through the UNFCCC Global Climate Action Portal.		
Commit to conduct periodic reviews of the targets to ensure they remain relevant and ambitious, ideally every five years.		

Checklist	Status (e.g. Complete/ in progress/ not yet attempted/ etc.)	Additional information and resources
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### 6. Base year of emissions

Calculating a base year of emissions establishes a reference point from which to measure progress, enabling the tracking of emission reduction efforts over time. A base year of emissions can also help to identify hotspots of emissions to target action. To control for the effects of the COVID-19 pandemic, a base year of 2019 is preferred to 2020 or 2021 when setting targets. Several independent estimates of the carbon footprints of different national health systems have been published. These, or other external sources, may be used as a first step in defining a base year of emissions. The initial baseline and trajectory estimates developed will be limited by data availability. Over time, achieving targets will require the development of a carbon analytics capability to calculate emissions, fill evidence gaps, and verify reductions in each health system.

Calculate and publicly report the base year emissions of the health system in a recent year.		<p>GHG Protocol – Chapter 5 Tracking Emissions Over Time (22)  <a href="https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf">https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf</a></p> <p>UNFCCC national emissions data by greenhouse gas (25)  <a href="https://di.unfccc.int/time_series">https://di.unfccc.int/time_series</a></p> <p>Lancet Countdown indicator 3.4, Healthcare Sector Emissions (26)  <a href="https://www.lancetcountdown.org/data-platform/mitigation-actions-and-health-co-benefits/3-4-healthcare-sector-emissions">https://www.lancetcountdown.org/data-platform/mitigation-actions-and-health-co-benefits/3-4-healthcare-sector-emissions</a></p> <p>Health Care Without Harm – Health Care’s Climate Footprint (27)  <a href="https://noharm-global.org/documents/health-care-climate-footprint-report">https://noharm-global.org/documents/health-care-climate-footprint-report</a></p> <p>Aga Khan Health Services – Calculating the carbon footprint of AKHS operations (28)  <a href="https://static.the.akdn/53832/1697480454-revised_akhs_calculating_the_carbon_footprint_of_akhs_operations_oct-2023.pdf">https://static.the.akdn/53832/1697480454-revised_akhs_calculating_the_carbon_footprint_of_akhs_operations_oct-2023.pdf</a></p> <p>A Carbon Footprint Assessment of the NHS in England (29)  <a href="https://www.thelancet.com/journals/lanph/article/PIIS2542-5196(20)30271-0/fulltext">https://www.thelancet.com/journals/lanph/article/PIIS2542-5196(20)30271-0/fulltext</a></p> <p>CASCADES Greenhouse Gas Emissions Estimation in Canadian Healthcare Playbook (30)  <a href="https://cascadescanada.ca/resources/greenhouse-gas-emissions-estimation-in-canadian-healthcare-playbook/">https://cascadescanada.ca/resources/greenhouse-gas-emissions-estimation-in-canadian-healthcare-playbook/</a></p> <p>Aga Khan Development Network approach to supply chain carbon footprinting for healthcare providers (31)  <a href="https://www.sciencedirect.com/science/article/pii/S2772390923000185">https://www.sciencedirect.com/science/article/pii/S2772390923000185</a></p> <p>More resources and tools are available on the ATACH Community of Practice Resource Centre (32)  <a href="https://www.atachcommunity.com/resources/">https://www.atachcommunity.com/resources/</a></p>
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Checklist	Status (e.g. Complete/ in progress/ not yet attempted/ etc.)	Additional information and resources
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### 7. Transition plans and emissions pathways

Transition plans and emissions pathways are essential tools to demonstrate how health systems will successfully deliver on their commitments. The exact pathway to a long-term emissions target cannot be predicted perfectly, but transition plans make pledges concrete while highlighting uncertainties, assumptions and barriers and specifying at least one route to meet targets. Emissions pathways should ideally be developed in parallel with target-setting to increase confidence in the targets' feasibility, although this may be limited by current carbon analytics capacity.

<p>Commit to developing a comprehensive roadmap or transition plan with specific strategies, actions, timelines, and assigned responsibilities to achieve targets.</p> <p>This roadmap should be published within one year of defining a target. It should clearly demonstrate how specific actions will contribute to near-, medium- and long-term targets.</p>		<p>NHS England – Delivering a Net Zero National Health Service (33)  <a href="http://www.england.nhs.uk/greenernhs/publication/delivering-a-net-zero-national-health-service/">www.england.nhs.uk/greenernhs/publication/delivering-a-net-zero-national-health-service/</a></p> <p>How to produce a Green Plan: A three-year strategy towards net zero (34)  <a href="https://www.england.nhs.uk/greenernhs/get-involved/organisations/">https://www.england.nhs.uk/greenernhs/get-involved/organisations/</a></p>
<p>In addition to reviewing targets, commit to update transition plans regularly to ensure they remain relevant and ambitious, ideally every five years.</p>		<p>Health Care Without Harm – Global Road Map for Health Care Decarbonization (20)  <a href="https://healthcareclimateaction.org/roadmap">https://healthcareclimateaction.org/roadmap</a></p> <p>Health Care Without Harm – Designing a net zero roadmap for healthcare: Technical methodology and guidance (23)  <a href="https://noharm-europe.org/documents/designing-net-zero-roadmap-healthcare-technical-methodology-and-guidance">https://noharm-europe.org/documents/designing-net-zero-roadmap-healthcare-technical-methodology-and-guidance</a></p> <p>CDP Technical Note: Reporting on Climate Transition Plans (35)  <a href="https://cdn.cdp.net/cdp-production/cms/guidance_docs/pdfs/000/003/101/original/CDP_technical_note_-_Climate_transition_plans.pdf?1643994309">https://cdn.cdp.net/cdp-production/cms/guidance_docs/pdfs/000/003/101/original/CDP_technical_note_-_Climate_transition_plans.pdf?1643994309</a></p>

### 8. Carbon offsets, credits and avoided emissions

Reaching global net zero relies on reducing all human made emissions to near zero, with only the hardest-to-abate residual emissions being offset by a limited supply of carbon sinks. Health systems should prioritize urgent and deep reduction of emissions across the entire value chain.

<p>Commit to achieving at least a 90% reduction from base year emissions or base year emissions intensity (ideally &gt;95% reduction across both Scopes 1 and 2) before any high quality, verified carbon credits or offsets can be used to meet a long-term target.</p>		<p>The Integrity Council for the Voluntary Carbon Market (ICVCM) (36) has work in progress defining a transparent, high-integrity standard for measuring and assigning the greenhouse gas equivalent credits.  <a href="https://icvcm.org/">https://icvcm.org/</a></p>
<p>Carbon credits must not count toward interim targets.</p>		<p>World Resources Institute Working Paper: Estimating and reporting the comparative emissions impacts of products (37)</p>
<p>Avoided emissions must not count towards any target.<sup>2</sup></p>		<p><a href="https://www.wri.org/research/estimating-and-reporting-comparative-emissions-impacts-products">https://www.wri.org/research/estimating-and-reporting-comparative-emissions-impacts-products</a></p>

<sup>2</sup> So-called avoided emissions are hypothetical emissions that would have occurred had another product or service been used instead of those used in or provided by a health system.

Checklist	Status (e.g. Complete/ in progress/ not yet attempted/ etc.)	Additional information and resources
<b>9. Supporting universal health coverage, climate resilience and sustainability of health systems</b>		
Efforts to reduce emissions should support improvements in health services to protect health and achieve better health outcomes. Coordinated strategies should be established within the health sector and health-determining sectors to develop policies for building a climate-resilient and low carbon sustainable health system, maximizing health co-benefits and enabling the provision of universal health coverage.		
State in your transition plan how you have accounted for future changes in demand for health services, particularly if significant health system expansion is necessary to support access to quality health care and achieve provision of universal health coverage.		WHO Operational Framework for Building Climate Resilient and Low Carbon Health Systems (2) <a href="https://iris.who.int/handle/10665/373837">https://iris.who.int/handle/10665/373837</a> Co-benefits of greenhouse gas mitigation: a review and classification by type, mitigation sector, and geography (38) <a href="https://iopscience.iop.org/article/10.1088/1748-9326/aa98d2">https://iopscience.iop.org/article/10.1088/1748-9326/aa98d2</a>
State in your transition plan how you have considered health co-benefits, quantifying them where possible.		Public health co-benefits of greenhouse gas emissions reduction: A systematic review (39) <a href="https://pubmed.ncbi.nlm.nih.gov/29426161/">https://pubmed.ncbi.nlm.nih.gov/29426161/</a>
State in your transition plan how you have considered climate resilience of the health system.		Health benefits of policies to reduce carbon emissions (40) <a href="https://www.bmj.com/content/368/bmj.l6758">https://www.bmj.com/content/368/bmj.l6758</a>
State in your transition plan how you have considered broader environmental sustainability of the health system. This could include how the health system contributes to or helps address air pollution, water use, plastic and other toxic waste, nature and biodiversity degradation, or any other environmental impacts.		Impact on mortality of pathways to net zero greenhouse gas emissions in England and Wales (41) <a href="https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(22)00310-2/fulltext">https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(22)00310-2/fulltext</a> Tackling air pollution for better health: the role of the NHS in England (Section 4.71) (42) <a href="https://www.gov.uk/government/publications/chief-medical-officers-annual-report-2022-air-pollution">https://www.gov.uk/government/publications/chief-medical-officers-annual-report-2022-air-pollution</a> CASCADES Sustainable quality improvement & patient safety (43) <a href="https://cascadescanada.ca/action-areas/quality-improvement-patient-safety/">https://cascadescanada.ca/action-areas/quality-improvement-patient-safety/</a> Sustainability in Quality Improvement (44) <a href="https://sustainablehealthcare.org.uk/susqi">https://sustainablehealthcare.org.uk/susqi</a> WHO Tracking Universal Health Coverage: 2023 Global monitoring report (45) <a href="https://www.who.int/publications/i/item/9789240080379">https://www.who.int/publications/i/item/9789240080379</a> WHO Measuring the climate resilience of health systems (46) <a href="https://www.who.int/publications/i/item/9789240048102">https://www.who.int/publications/i/item/9789240048102</a> WHO guidance for climate resilient and environmentally sustainable health care facilities (47) <a href="https://www.who.int/publications/i/item/9789240012226">https://www.who.int/publications/i/item/9789240012226</a>

# 4 Next steps



After declaring the ambition to set a long-term decarbonization target, health systems should first focus on implementing actions that will lead to real emissions reductions, even if those impacts cannot yet be fully measured through carbon accounting. This is especially important where actions lead to positive health co-benefits or cost savings. For practical case studies, refer to the ATACH Community of Practice website.

Within one year of declaring a target, the following first steps can help health systems progress towards achieving it:

1. **Designate a senior responsible officer** to oversee the delivery of long-term and interim targets.
2. **Publicly report GHG emissions for a defined base year**, with documentation that clearly specifies how emissions have been calculated.
3. **Develop a comprehensive transition plan** with specific strategies, actions, timelines, and assigned responsibilities to achieve all targets.
4. **Implement specific policies** that will deliver tangible emissions savings in the near-term.

These direct actions should be implemented as soon as is practicable and be supported by enabling actions to increase capabilities for health systems to deliver low carbon sustainable health systems.

Enabling actions include sharing sustainable health system knowledge and expertise; working with other health systems and suppliers to support supply chain decarbonization; and building the necessary climate-transformative governance structures, resources, knowledge, and capabilities to deliver decarbonization at all levels of the health system, including carbon analytics capability.



# 5 Additional resources



For further guidance and resources on decarbonization target setting for health systems, the following resources can be valuable:

## **ATACH Community of Practice**

The ATACH Community of Practice resource repository (32) aims to make resources which directly support delivery of the COP26 Health commitments easily accessible.

The resources can be filtered by resource type, ATACH working group, COP26 commitments, and geography.

<https://www.atachcommunity.com/resources/>

## **Operational Framework for Building Climate Resilient and Low Carbon Health Systems**

The WHO Operational Framework (2) provides detailed guidance on how the health sector can systematically and effectively address the challenges increasingly presented by climate change, while reducing its own contribution to climate change.

<https://iris.who.int/handle/10665/373837>

## **SBTi (Science Based Targets Initiative)**

The Science Based Targets initiative (SBTi) defines and promotes best practice in emissions reductions and net zero targets, in line with climate science (8). It provides technical assistance and resources to organizations who set science-based targets.

<https://sciencebasedtargets.org/>

## **GHG Protocol and ISO 14064**

The Greenhouse Gas Protocol (22) and ISO 14064 (48) are two widely used global standards to measure and manage greenhouse gas emissions and removals from private and public sector organizations. They include requirements for the design, development, management, reporting and verification of an organization's GHG inventory.

<https://ghgprotocol.org/>

<https://www.iso.org/standard/66453.html>

## **UN High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities**

The UN High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities (49) was established to develop stronger and clearer standards for net zero emissions pledges by non-State entities – including businesses, investors, cities, and regions – and speed up their implementation. The group's report establishes five principles and ten detailed recommendations about what non-state actors should consider through each stage of progress towards being net zero aligned.

The report also provides more detailed checklists for business, cities and regions on implementing the group's recommendations (50).

[https://www.un.org/sites/un2.un.org/files/high-level\\_expert\\_group\\_n7b.pdf](https://www.un.org/sites/un2.un.org/files/high-level_expert_group_n7b.pdf)

<https://www.un.org/en/climatechange/implementing-high-level-expert-group-report>

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