



Introduction

Operation Zero is [Health Care Without Harm \(HCWH\) Europe](#)'s flagship climate project. It aims to put the European healthcare sector on the path to net-zero carbon emissions, in line with European and international climate commitments.

Operation Zero will develop a new methodology that can be applied by any national or regional healthcare ministry to support the production of a net-zero decarbonisation roadmap for their healthcare system, piloted in four European countries.

HCWH Europe is now seeking four national or regional health ministries to join Operation Zero as pathfinder systems. These ministries will take an active role in developing and piloting this new methodology by creating net-zero decarbonisation roadmaps for their healthcare systems.

Rationale

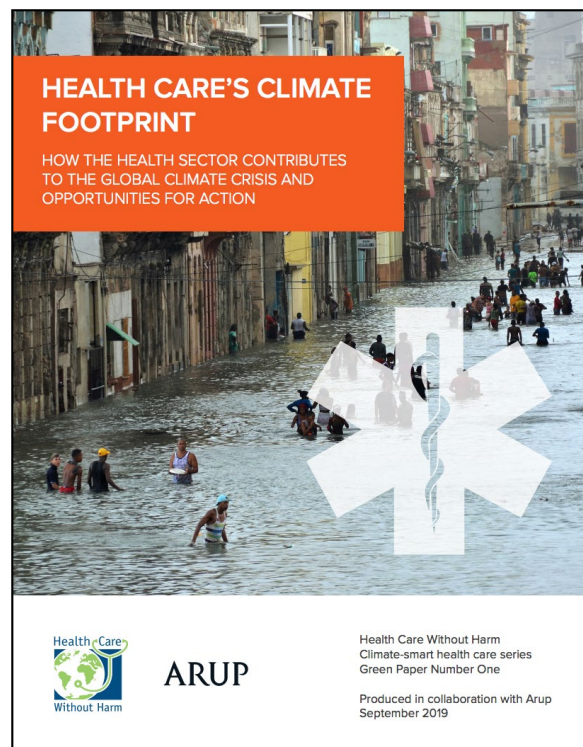
Since the industrial revolution, anthropogenic greenhouse gas (GHG) emissions have risen exponentially. As the most significant contributory factor to our changing climate, these gases have serious consequences for both environmental and human health.

Climate change is already having serious impacts on our health.¹ These include temperature-related illness and death, injuries and illnesses due to extreme weather events, the spread of infectious disease vectors, increases in waterborne illnesses, and wide-ranging impacts from air pollution.

1 <https://www.euro.who.int/en/health-topics/environment-and-health/Climate-change>

The healthcare sector is on the frontline when it comes to dealing with these health impacts. However, as a major emitter, the sector itself is contributing to the problem. The very organisations that we trust to heal us in our time of need also play a role in harming us.

In 2019, and in partnership with Arup, Health Care Without Harm (HCWH) published [*Health Care's Climate Footprint report*](#) – the most comprehensive global analysis of healthcare's contribution to climate change to date. Setting out the healthcare climate footprints of 43 different countries from around the globe, this report highlights the scale of the challenge. As a whole, the healthcare sector's climate footprint is equivalent to 4.4% of global net emissions; if it were a country, it would be the fifth largest emitter in the world. Nearly three quarters (71%) of emissions originate from indirect, Scope 3 sources (e.g. business travel, procurement, waste disposal and water supply/treatment), and it is likely the majority of these emanate from the supply chain. The European Union (EU) is the third largest contributor to global healthcare emissions (behind the US and China), accounting for 12% of global healthcare emissions.



With these challenges comes opportunity. There are opportunities for the sector to lead by example, for health professionals to use their trusted voices to educate on the health impacts of climate change and advocate for change, and for the sector to leverage its purchasing power (10% of GDP in Europe)² to influence changes within the supply chain.

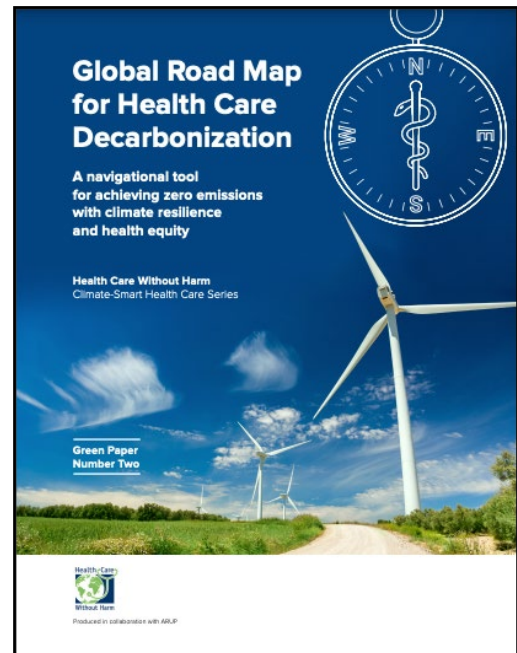
Health Care's Climate Footprint described the problem - *Operation Zero* aims to provide the solution.

2 https://noharm-europe.org/sites/default/files/documents-files/2646/Low%20Carbon%20Buildings%20in%20the%20Healthcare%20Sector_Report_FINAL.pdf

A global context

In April 2021, HCWH launched its [Global Road Map for Health Care Decarbonization](#) - the first of its kind to chart a global healthcare course to net-zero emissions by 2050.

The *Road Map* utilises the World Input-Output Database (WIOD) and the Eora Global Supply Chain Database to generate emissions reduction pathways for 68 countries plus the 'rest of the world' (a category for remaining countries not covered individually by the WIOD or Eora), which are aggregated and presented under four specific typologies. Data sheets were also developed for each country, supplementing the Road Map.



The *Road Map* was developed in partnership with multidisciplinary consulting firm Arup. The project was guided by a Technical Advisory Group, comprising several global representatives, including the World Health Organization.

In addition, HCWH is developing a number of tools that support healthcare facilities more directly in measuring, monitoring, and reducing their operational GHG emissions.

The Operation Zero Project

The *Road Map* presents a global perspective to decarbonise the healthcare sector. It does not present detailed decarbonisation pathways for individual countries.

In Europe, we aim to take this global perspective a step further by developing something that is more tangible and actionable at a national level and provides healthcare facilities with the direction and support required to take action on the ground.

Our vision is that *every* European country develops a national decarbonisation plan for its healthcare sector, that charts a 'Paris compatible' course to net-zero emissions. To do this, we have launched Operation Zero. Split into two components, this project will:

- 1. Develop a methodology** that will guide national or regional health ministries and other relevant organisations in developing a roadmap for the decarbonisation of their own healthcare system, while supporting system resilience and improving health outcomes.
- 2. Pilot the methodology through the development of four national or regional healthcare decarbonisation roadmaps.** HCWH Europe will partner with four national or regional health ministries to pilot this methodology, supporting participants to generate their own detailed climate footprint analyses and decarbonisation roadmaps. Through these pilots, we will gain valuable feedback into the practicalities and limitations of developing national/regional decarbonisation roadmaps and plans that will help to build a more robust methodology and ultimately drive action.

It is important to highlight that the activities presented above are not necessarily iterative. To ensure the development of a robust methodology, it is vital for pilot countries/regions to be fully engaged in its development and that there is a constant feedback loop to drive improvements.



The aim of the project is to develop a methodology that can be applied in any country or region. Using several metrics (e.g. GDP, geography, healthcare emissions per capita, and electricity grid decarbonisation trends), HCWH Europe has developed a shortlist of potential partner countries that we would be particularly interested in partnering with. These include:

Eastern Europe	Northern Europe	Southern Europe	Western Europe
Poland	Estonia	Greece	Netherlands
Bulgaria	Iceland	Italy	
Croatia	Lithuania		
Hungary			
Georgia			
Israel			

Project outputs

Operation Zero will produce the following outputs:

Output #1: Publish a methodology, detailing a common approach to measuring the national/regional healthcare climate footprint and developing a net-zero national/regional-level roadmap for the decarbonisation of healthcare.

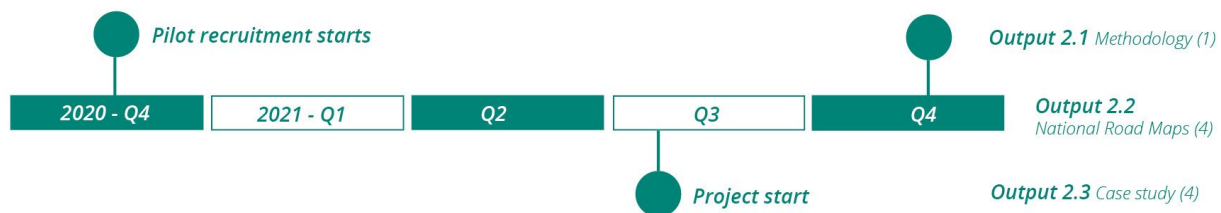
Output #2: Publish healthcare climate footprints and decarbonisation roadmaps for four pilot European countries/regions.

Output #3: Publish case studies demonstrating the implementation of the methodology in four pilot European countries/regions.

Target audience

The outputs of Operation Zero are primarily aimed at national or regional health/environment ministries and health systems. In some instances, it may also be relevant to civil society groups with access to national/government data sets, such as think tanks, hospital coalitions, or NGOs.

Indicative project timeline



What is our offer to you?

Becoming a pathfinder health system within *Operation Zero* offers the following benefits:

- The opportunity to receive direct support from HCWH Europe and our technical consultants in developing a decarbonisation roadmap for your national/regional healthcare system, which will enable you to drive emissions reductions in line with national and international commitments
- An opportunity to directly influence the development of a common methodology that can be utilised by any country/region in the world
- A first-mover advantage and the opportunity to be recognised as a world leader in healthcare decarbonisation
- An opportunity to recognise and strengthen the links between climate change and health in your country
- An opportunity to contribute to and support the delivery of your country's [National Energy and Climate Plan](#) (EU only) and/or Nationally Determined Contributions

- An opportunity to demonstrate activity and progress under the 2017 [Ostrava Declaration](#) on Environment and Health

What commitment is required?

Whilst you would receive hands-on support from HCWH Europe staff and partners, we are asking pathfinder systems joining Operation Zero to make the following commitments:

- Make a formal public commitment to working towards net zero emissions from healthcare, and to implementing the necessary support measures (e.g. funding, policies, etc.) to achieve this
- Provide a formal letter of support to HCWH Europe, confirming your intentions to participate in the project
- Contribute both policy and technical staff time to the project team
- Have an understanding of and access to national-level climate and health data that will facilitate the effective development of a robust roadmap for your country
- Sign a Memorandum of Understanding with HCWH Europe, formalising your commitment to the project
- Promote the [Global Green and Healthy Hospitals network](#), the [Health Care Climate Challenge](#) and Race to Zero as a means of supporting health organisations in your country to progress their own decarbonisation trajectories



In addition to the above general requirements, you will be required to engage throughout the development and delivery of the project. This will include:

- Attending regular project team meetings
- Actively contributing to project work, including team meetings
- Attending and participating in sectoral consultation events

Next steps

If you are interested in joining Operation Zero as a pathfinder system, please contact Scott Brady (scott.brady@hcwh.org), Climate Programme Manager, HCWH Europe.

APPENDIX A

About HCWH Europe

HCWH Europe is a non-profit network of European hospitals and healthcare providers, healthcare systems, local authorities, research/academic institutions and environmental and health organisations. We currently have 151 members in 33 countries.

HCWH Europe's mission is to transform the European healthcare sector so that it reduces its environmental footprint, becomes a community anchor for sustainability, and a leader in the global movement for environmental health and justice.

Through our four interconnected programme areas of Climate-smart Healthcare, Circular Healthcare, Sustainable Food, and Safer Pharma we work with members, partners, and other stakeholders to pilot and innovate sustainable healthcare solutions which can then be scaled up across Europe and beyond.

Our Climate-smart Healthcare Programme

Our Climate-smart Healthcare programme has an exciting and ambitious programme of work. Our far-reaching activities include working with strategic partners to influence EU policy, supporting national governments in developing healthcare decarbonisation roadmaps, working with hospitals to improve their carbon management and resilience practices, and mobilising healthcare professionals to use their trusted voice to drive change.

Our vision is to transform European healthcare into a net zero carbon and climate resilient sector that protects public health from climate change and accelerates the transition to a low-carbon economy. To achieve this, the programme is build on three key pillars:

- 1. Mitigation:** Decarbonise healthcare's energy consumption, operations and supply chain, reducing its climate footprint in alignment with the ambition of the Paris Agreement.
- 2. Resilience:** Build health systems and facilities to withstand the impacts of climate change while deploying climate-smart healthcare as an anchor strategy to achieve more equitable access to care, resulting in healthy, resilient communities.
- 3. Leadership:** Accelerate the transition to a low-carbon economy by activating healthcare as a climate policy advocate, leveraging healthcare's purchasing power to hasten societal decarbonisation, and mobilising healthcare institutions and their employees as trusted climate communicators.



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