ACCELERATING HEALTHCARE DECARBONISATION IN THE MEDITERRANEAN REGION
These policy recommendations for healthcare decarbonisation have been developed as part of the Low-carbon healthcare in the Mediterranean region project, coordinated by Health Care Without Harm (HCWH) Europe.

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INTRODUCTION

POLICY RECOMMENDATIONS

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2. IMPLEMENT A ZERO EMISSIONS ROADMAP FOR HEALTHCARE
3. ENSURE THAT HEALTHCARE IS RESILIENT AND FUTURE-PROOF

ANNEX 1:

BACKGROUND AND FURTHER INFORMATION
Global temperatures are rising and increasing the negative health impacts associated with a changing climate. Within Europe, the Mediterranean region faces specific threats from climate change, e.g. extreme heat waves and rising sea levels. The Low-carbon healthcare in the Mediterranean region project has highlighted key gaps in the climate and health policies of Mediterranean countries. The following series of policy recommendations aims to address those gaps and accelerate healthcare decarbonisation in the region. More background information about climate and health in the region can be found in Annex 1 of this document.

The healthcare sector in the Mediterranean has the opportunity to be a climate leader by moving to zero emissions and improving the sector’s resilience and equity. Healthcare can also help drive broader societal transformation and protect public health from climate change. Such far-reaching systemic change requires healthcare climate action from all levels of government, international institutions, the private sector, and civil society. To get there, the entire sector must mobilise and transform itself, working in collaboration with other sectors to navigate the future.

To build a resilient, zero-carbon healthcare system that is protected from the worst impacts of climate change and supports a healthy society, it is important for policymakers to:

- Recognise the contribution healthcare makes to climate change.
- Implement net-zero roadmaps for healthcare that are compatible with the 2015 Paris Agreement.
- Ensure the healthcare sector’s resilience and preparedness in times of climate and health emergency.
Considering the region’s unique climate and associated challenges, Mediterranean countries need to implement strong and decisive policies that protect the health of their citizens from the impacts of climate change. Not only ensuring that the healthcare sector minimises its own carbon emissions, but also supporting healthcare systems to become resilient in the face of future climate risks and increasing health threats.

As well as environmental protection and a reduced contribution to climate change, stronger environmental policies can also yield significant health benefits for citizens. More thorough and targeted mitigation strategies, better environmental protection, better air quality, improved energy efficiency and infrastructure, better equipped urban spaces, all contribute to a healthier and more active population. National and sub-national governments should establish action plans to decarbonise their health systems, build resilience, and improve health outcomes.

This series of recommendations for the Mediterranean region, aimed at policy-makers at an EU, national, and subnational level, draws attention to the crucial interdependence of climate change and health, and advocates for stronger partnerships between climate action and health action.
1. RECOGNISE THE CONTRIBUTION HEALTHCARE MAKES TO CLIMATE CHANGE

The healthcare sector’s contribution to greenhouse gas (GHG) emissions and to climate change cannot be ignored. As awareness grows about the link between climate and health, the sector should be encouraged and supported to play its part in transitioning to net-zero emissions by 2050 at the latest, thereby reducing its own negative impact on human health. It is imperative for EU, national, and regional governments to recognise the healthcare sector’s contribution to climate change and take steps to address it. Creating an overarching commitment and policy framework for healthcare decarbonisation would provide legitimacy and support to health systems and individual healthcare institutions that are already working to reduce their emissions.

DECLARE CLIMATE CHANGE A HEALTH EMERGENCY

We urge all governments to issue a declaration recognising that the climate crisis is a public health emergency, which requires national and global action. The declaration should commit health authorities to taking action to prepare health systems for the impacts of climate change and prevent GHG emissions by measuring and reducing their own climate footprint, setting the goal of a net-zero healthcare sector by 2050 at the latest.

THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST, UNITED KINGDOM

In June 2019, Newcastle Hospitals became the first healthcare organisation in the world to declare a climate emergency. This is their recognition that a climate emergency is a health emergency and a commitment to becoming a net-zero carbon organisation by 2040. Newcastle Hospitals are members of the Global Green and Healthy Hospitals (GGHH) network and the Health Care Climate Challenge, as well as the United Nations Framework Convention on Climate Change’s (UNFCCC) Race to Zero initiative.
SPECIFICALLY INCLUDE HEALTHCARE WITHIN MITIGATION AND CLIMATE POLICIES

The EU is the third largest contributor to global healthcare emissions. Separating the health sector from the wider built environment would allow for more targeted emissions reduction policies. The EU and national governments should therefore include healthcare as a stand-alone sector within Nationally Determined Contributions (NDCs) and mitigation policies.

By including the health sector as a standalone sector, governments can encourage health systems to take responsibility for their carbon emissions and set national emission reduction targets. This would build momentum within the sector to take immediate climate action. Requiring health systems to report on carbon emissions would also foster the development of tools and support systems to guide and help hospitals measure and mitigate these emissions.

ACKNOWLEDGING HEALTHCARE IN CLIMATE POLICY, ARGENTINA

In December 2020, Argentina presented its second Nationally Determined Contribution before the UNFCCC. This new NDC recognises health as one of its guiding principles. Additionally, it establishes concrete measures to ensure healthcare resilience, such as modelling impact scenarios and strengthening health sector responsiveness to extreme weather events. By including estimations of health sector emissions and concrete actions to reduce them, Argentina was the first country in the world to include healthcare sector decarbonisation in its NDC. They have acknowledged that addressing healthcare is a key step for implementing their NDC.2
STRENGTHEN COOPERATION BETWEEN HEALTH AND CLIMATE GOVERNANCE

Health and climate change are inextricably linked and cooperation between health and climate governance bodies is therefore essential. The EU is well-placed to set an example by fostering strong and public coordination between DG SANTE and DG CLIMA. At a national and subnational level, this should translate into partnerships and cooperation between climate and health ministries or bodies. This coordination can be beneficial in sharing, collecting, and centralising data as well as resources that can support EU, national, and subnational efforts. Such partnerships can also support the creation of streamlined health and climate strategies; policies and cooperation with local actors are crucial to improving uptake throughout the health system.

A GREEN DEAL ON SUSTAINABLE HEALTHCARE, THE NETHERLANDS

Healthcare institutions, government authorities, and companies have set out agreements for a healthy future in the Dutch Green Deal on Sustainable Healthcare. The aim is to ensure that healthcare not only benefits people, but also the planet and society; the sector should also not cause further pollution or health problems. Hospitals and care institutions that have signed the Green Deal pledge to do their best to minimise the waste they produce and to use less energy by better insulating their buildings. More than 200 parties have signed the Green Deal, each with their own goals, all focussed on four targets, one of which is a 49% reduction in carbon emissions by 2030. By 2050, all care organisations must be carbon-neutral.
2. IMPLEMENT A ZERO EMISSIONS ROADMAP FOR HEALTHCARE

Establishing a sector decarbonisation target at a national, regional, or system level, that is compatible with the 2015 Paris Agreement, would encourage and support healthcare to assess where and how to reduce its emissions, make necessary investments, and ultimately take action. This would contribute to overall national emissions reductions and would become another highly effective instrument to help countries and regions achieve their national emissions targets. This decarbonisation can be done at a trajectory appropriate to each country and compatible with its NDCs and the Global Road Map for Health Care Decarbonization.

ZERO EMISSIONS COMMITMENTS

Health ministries and public healthcare services, and the hospitals and health systems under their jurisdiction, should make a sector-wide zero emissions commitment. As the health sector represents a large source of emissions, it is vital that national and subnational climate or health ministries support healthcare providers and health services to decarbonise their activities. This would support already existing efforts or help launch new initiatives in the move to decarbonise healthcare services by providing information, establishing a baseline, creating a national roadmap, developing a detailed action plan, and investing in implementation measures.

NHS ENGLAND’S COMMITMENT TO ZERO EMISSIONS

In October 2020, England’s National Health Service became the first health system in the world to make a commitment to achieving net-zero emissions.4

Set against a 1990 baseline, the NHS has set two clear and feasible targets for their net-zero commitment. The NHS Carbon Footprint (emissions they control directly), will be net-zero by 2040, with the ambition to reach an 80% reduction from 2028-2032. The NHS Carbon Footprint Plus (emissions they can influence), will be net-zero by 2045, with the ambition to reach an 80% reduction from 2036-2039.
**SUPPORT THE TRANSITION TO CLEAN AND RENEWABLE ENERGY**

Governments should develop and support policies, including subsidies or tax exemptions, for the rapid and accelerated adoption of 100% clean energy and fuels, such as solar, small-scale hydro, and wind-generated electricity.

**INVEST IN EFFICIENT, ZERO-EMISSIONS INFRASTRUCTURE AND TECHNOLOGIES**

In the context of rising temperatures and increasing instances of extreme heat, healthcare buildings in the Mediterranean region must be equipped to handle increasing temperatures and extreme weather events in a way that does not increase its emissions. For this reason, it is crucial to invest in efficient, zero emissions public buildings, more green spaces (e.g. plants and trees) on hospital grounds for natural cooling, as well as sustainable and resilient technology that allow continuous and high-quality medical care with a low climate impact. Governments must seriously consider both the mitigation and impacts of climate change when making investment decisions.
PROMOTE LOW-CARBON HEALTHCARE SUPPLY CHAINS

Three quarters (75%) of the EU’s healthcare climate footprint is attributable to indirect emissions throughout its value chain - the vast majority of which is from the supply chain. Health ministries, health systems, and healthcare providers should set criteria for low-carbon or zero emissions procurement. Suppliers and manufacturers should decarbonise their operations and products.

Decarbonising the healthcare supply chain will require greater responsibility and accountability from private companies and suppliers. This can be achieved through national government action as well as market-based approaches. Leveraging the healthcare sector’s purchasing power and aggregating demand for low-carbon energy sources and technologies or plant-centred, sustainable, and locally grown food can make a significant impact. Working hand in hand with other stakeholders, we can see improved and more low-carbon supplies, logistics chains, and improvements to tackle the more complex supply chain emissions.

THE HEALTHCARE MARKET TRANSFORMATION NETWORK

The Healthcare Market Transformation Network (HMTN), is a network coordinated by HCWH Europe that addresses the need for harmonised sustainable procurement criteria, tailored to products and services purchased by the healthcare sector. The network facilitates dialogue amongst procurers, health professionals, suppliers, and recyclers, and identifies opportunities for sustainable and innovative solutions.

In the long term, the harmonisation of sustainable procurement criteria across countries will lead to an increased demand for sustainable products (considering life-cycle assessments and circularity principles), giving a clear signal to the market and eventually reducing costs.
SUPPORT AND REQUIRE HOSPITALS TO MEASURE THEIR EMISSIONS

To establish strong decarbonisation policies, governments must require that all sectors measure their emissions. They should also develop tools and incentives to monitor emissions across all sectors, including the health sector, to make this possible. National and subnational health systems should provide healthcare providers with assistance to monitor their own emissions to feed into national measurements.

CLIMATE IMPACT CHECKUP: HEALTHCARE’S GHG EMISSIONS CALCULATOR

The Climate Impact Checkup is a tool developed by HCWH that enables any healthcare facility in the world to calculate and track its GHG emissions. The tool was developed within the scope of the Low-carbon healthcare in the Mediterranean region project. Using the Climate Impact Checkup and the accompanying guidelines, healthcare providers can determine the footprint of their operations, pinpoint priority areas, and design effective carbon management plans tailored to their needs.
3. ENSURE THAT HEALTHCARE IS RESILIENT AND FUTURE-PROOF

Healthcare preparedness and resilience must be a top priority for policy makers to both counter future increase in service demand due to climate change and to safeguard healthcare infrastructure and supply chains from the physical effects of a changing climate. There are a variety of actions that can be taken, such as creating preparedness plans for hospital staff and emergency responders, creating satellite facilities for remote areas, investing in resilient energy systems, and making sure health facilities are equipped for local projected climate and health impacts.

RESILIENCE FRAMEWORK FOR HEALTH SYSTEMS AND HOSPITALS (LIFE RESYSTAL)

Supported by the EU’s LIFE Programme, the RESYSTAL project’s main objective is to increase climate adaptation capacities and resilience of the European Health Infrastructure (EHI) and systems and related dependent critical infrastructures.

HCWH Europe participates in the project, which will address remaining gaps in the climate resilience of European health systems. The RESYSTAL project will pave the way for better assessment of health system climate vulnerability, improved analysis of interdependencies between infrastructures (ensuring a secured health service provision), and better investment decisions to consider and encourage climate change adaptation.
SUPPORT HEALTH PROFESSIONALS TO COMMUNICATE ON CLIMATE CHANGE

Health professionals are amongst the most trusted professions in our societies, which makes them important advocates and messengers for public action on climate change. It is therefore crucial that health professionals are trained to communicate about the effects of climate change on health. Health and environmental ministries should work together in creating effective tools that enable health professionals to communicate the health implications of climate change and the importance of taking individual action to reduce carbon emissions, to both the public and their patients. Environmental ministries can provide expertise and existing communication tools, while health ministries can bring the perspective of healthcare professionals in order to help shape the tools for a new purpose and audience.

RESEARCH AND MONITOR CLIMATE AND HEALTH CONSEQUENCES

Effective policies require a strong evidence base for decision-making and the ability to track progress over time. Therefore, governments need to promote research into the health impacts of climate change, whilst simultaneously monitoring climate change trends. Both research and monitoring will help inform and identify gaps in current policies, as well as support the tracking of climate risks and public health impacts of climate change at all levels. Greater monitoring of climate change trends will also enable a better understanding of the stresses placed on health systems.

CREATE REGIONAL CLIMATE EMERGENCY PLANS FOR HEALTHCARE

Healthcare is a critical sector that needs to be among the first to know of climate change events, so that it can react and support community health. Governments at a national and international level therefore need to create strong resilience plans and ensure that health systems are ready and informed of short to long term impacts within their regions on a regular basis. The Mediterranean is set to face extreme weather events, many of them generalised over the entire region. To respond, a climate emergency plan for the region needs to include a strong and regularly tested early warning system and staff that are trained to face climate impacts.
PUBLICLY REPORT ON CLIMATE RISK AND RESILIENCE IN HEALTHCARE

Requiring healthcare providers and health systems to develop vulnerability assessments and report on climate risk registers and resilience strategies will strengthen their preparedness in the face of adverse climate change scenarios. This will also help guide national or regional governments to take steps to protect the health of their populations. Current climate change strategies focus primarily on enhancing the resilience of key infrastructure, such as energy, transport, and buildings, but overlook the climate change adaptation needs of the healthcare sector.

OPERATIONAL FRAMEWORK FOR BUILDING CLIMATE RESILIENT HEALTH SYSTEMS

The World Health Organization (WHO) Operational framework for building climate resilient health systems responds to the demand from Member States for guidance on how the health sector and its operational basis in health systems can systematically and effectively address the challenges increasingly presented by climate variability and change. The objective of this framework is to provide guidance for health systems and public health programming to increase their capacity for protecting health in an unstable and changing climate.
ANNEX 1: BACKGROUND AND FURTHER INFORMATION
The effects of climate change are many and far-reaching, with mounting evidence linking health and climate change. We can already see the devastating consequences of climate change on health - the WHO estimates that climate change contributes to 150,000 deaths per year.\(^5\)

It is also now clear that the healthcare sector is playing a role in aggravating climate change. The global healthcare climate footprint represents 4.4% of global net emissions (equivalent to annual emissions from 514 coal-fired power plants). In the EU this figure reaches 4.7%.\(^7\)

If the sector were a country, healthcare would be the fifth largest emitter on the planet. Considering that EU health sector expenditure accounts for approximately 10% of GDP, the sector has strong economic and ethical influence that can make a positive difference.\(^6\)

The health sector, whose mission is protecting and promoting health, has an important role to play in tackling climate change. In addition to reducing its own direct climate impact, the sector has an opportunity to be a climate leader and accelerate the broader societal transformation necessary to protect public health from climate change. This mission is shared by health and environmental ministries who focus on both resilience and climate change mitigation. Action and collaboration between health ministries and environmental ministries is critical to reducing the negative impacts of climate change, as well as protecting public health.

In April 2021, Health Care Without Harm launched the Global Road Map for Health Care Decarbonization - the first attempt to chart a global healthcare course to zero emissions by 2050. To achieve this, health leaders at all levels and in all countries must move quickly to decarbonise, transform, and align the sector’s growth trajectory to achieve zero emissions while building resilience and meeting global health goals. Such a fundamental transformation will require large-scale collaboration and innovation across this significant sector.
CLIMATE AND HEALTH IN THE MEDITERRANEAN REGION

IMPACTS OF CLIMATE CHANGE

The Mediterranean region is facing unique challenges from climate change. It is important to understand both the current and projected impacts on public health and the healthcare sector to create an effective policy response. The expected climate impacts in the region are highly influenced by the Mediterranean Sea and Northern Africa. It is expected that the Mediterranean region will face a larger rise in average temperature than the rest of Europe. The region will also see a decrease in annual precipitation and river flow, as well as an increase in forest fires and disease vectors.

These anticipated climate impacts will have numerous consequences on health and health services in the Mediterranean region. With the expected rise in average temperature and heat wave events, we can expect an increased rate of mortality. Forest fires can impact health by worsening air quality and more directly result in death and injuries. Finally, the increased prevalence of vector-borne diseases could result in a larger infected population from a variety of diseases.

It is critical that national and regional policy makers and healthcare systems fully evaluate and prepare for the challenges that climate change will bring to the region. They must ensure that the health sector is resilient and prepared for future climate and health emergencies. It is also crucial that the health sector takes action to mitigate its own contribution to climate change, which requires appropriate policies and interventions.
CURRENT STATE OF CLIMATE AND HEALTH POLICY

Climate and health policies in four Mediterranean region countries (Greece, Italy, Portugal, and Spain) were studied at the national and regional levels. The analysis sought to determine the strength and quality of alignment between health and climate policy in these countries and therefore the extent to which policy making in health and environment departments is being coordinated. The following sets out a summary of key findings.

**Greece**

Most of Greece’s policies relating to healthcare and climate are issued by environmental and climate authorities. At a national level, there is a strong focus on climate policies relating to heatwave preparedness by monitoring processes of vulnerable populations and awareness-raising. At a regional level, the Special Managing Authority of Notio Aigaio has cited health as one of the key sectors needing adaptation; however, there is little information as to what actions that translates into. The Ministry of Health acknowledges the link between climate and health through the expected impacts and cites disease prevention as a major concern.

**Italy**

Italy’s national health prevention plan strongly acknowledges that the healthcare sector must contribute to climate change mitigation and improve its resilience, but it does not explain how that should be done. There are mentions of both the Ostrava Declaration and Agenda 2030, but the health sector is not mentioned when emissions reductions are outlined for various sectors. Italy’s climate policies, however, promote improved infrastructure at a national level and energy improvement at a regional level in public sector buildings, including hospitals.

**Portugal**

Portuguese health policies lack an explicit connection between climate and health. At a national level, the impacts are acknowledged but the policies do not provide any detail as to how they should be anticipated. Climate policies in Portugal do go a step further, offering a series of measures to adapt and monitor the impacts of climate change. Mitigation measures are, however, not a strong focus; the priority for healthcare is awareness of health authorities at a national level, cooling of health centres and hospitals at a regional level, and monitoring and awareness at a municipal level.
Spain

Looking at regional health policies, Galicia and Valencia are more detailed than their national counterparts. Health authorities at a regional level link climate change to healthcare, whereas climate and environmental authorities focused solely on the impacts on health. In Galicia, policies include plans for increasing the use of renewable energy and improved energy efficiency, as well as an ambition for more sustainable healthcare. This ambition is shared by the Valencian regional health authority, which wants to see health considered in all settings and promotes sustainable healthcare along with a reduction of the healthcare sector’s contribution to climate change. Climate authorities at all levels in Spain focus on health impacts with measures aiming to improve awareness and monitoring of climate projections, vulnerable populations, and the effects of climate change.

CONCLUSIONS

In all four countries, health and climate are acknowledged by policymakers as being a convergent problem. Common to all countries is the acknowledgement that climate change has a significant impact on public health. Awareness and monitoring are the most common policy initiatives identified in the region and many of the measures cited focus on tackling heatwaves and their effect on health. The policy landscape across the countries analysed is more fragmented in regard to committing the health sector to decarbonisation. However, there is a common need for stronger decarbonisation policies in the health sector.

Healthcare’s contribution to climate change in the Mediterranean region cannot be understated. The healthcare sector accounts for 3.7% of total emissions in Greece, 4% in Italy, 4.8% in Portugal, and 4.5% in Spain. There remains a lot of work to do to ensure that healthcare climate mitigation action becomes embedded across all policies.
REFERENCES


