Health in environment and climate adaptation policies

HOPE REPORT

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INTRODUCTION

The present report compiles information regarding health in environment and climate adaptation policies in the countries participating to the HOPE Exchange Programme 2023. The information comes from the Climate ADAPT platform, a narrative review and data shared by the HOPE Liaison officers.

It aims to support the topic of the European Hospital and Healthcare Federation (HOPE) Agora 2023: "Climate and Environment: Challenges for Hospitals and Healthcare Services". This theme can be approached in two different ways.

Climate and environment changes are impacting healthcare services, with increasing diseases linked to air pollution, infectious diseases, flooding, etc. Hospitals and healthcare services then must adapt and develop their resilience on buildings, organisation, professionals, etc. This angle is the most represented in the present document, as it is the one with the more information found. Results are mainly national plans concerning climate adaptation, with inequal parts concerning health.

For their presentation during the HOPE Agora, the HOPE Exchange participants are invited to focus more on the other angle: how the healthcare sector is impacting the climate and the environment and more positively how it is trying to reduce its impact. The impact of the sector stems from different sources such as buildings, transports, medical chemicals and gases, pharmaceuticals, medical devices, textiles, food and energy.

It can be noticed however that in the present report, the information available on the impact of the healthcare sector on the environment and climate is rather marginal, making it even more interesting to get feedback from HOPE Exchange participants.

AUSTRIA

Austrian Strategy for Adaptation to Climate Change

The Austrian Strategy for Adaptation to Climate Change was adopted by the Council of Ministers in October 2012 and was endorsed by the Provincial Governors' Conference in May 2013.

The document includes health recommendations to cope with and avoid direct (e.g., due to heat waves) and indirect (e.g., through the spread of allergic plants and animals) climate-related health effects through appropriate measures, even, if needed, early adoption of precautionary measures:

- General public relations and specific work on preparing for extreme events or outbreaks of infectious diseases.
- Dealing with heat and drought.
- Dealing with floods, mudslides, avalanches, landslides, and rock falls.
- Advancement of knowledge and preparation for handling pathogens/infectious diseases.
- Risk management with regards to the spread of allergenic and toxic species.
- Dealing with pollutants and ultraviolet radiation.
- Linking in and further development of monitoring and early warning systems.
- Incorporation of climate-relevant topics in the training and further education of doctors and personnel in medical, therapeutic, and diagnostic health professions (MTDG).

Link to the document

Two progress reports on the strategy were made in 2015 and 2021. They are both available in German.

Austrian Strategy for Adaptation to Climate Change – progress report (2015)

Austrian Strategy for Adaptation to Climate Change – progress report (2021)

Competence Centre Climate and Health

In Austria, in March 2022, a Competence Center Climate and Health was established at the Austrian National Public Health Institute on behalf of the Federal Ministry of Health. The Competence Center Climate and Health bundles interdisciplinary expertise from science, policy, and practice at the interfaces of climate change mitigation, climate change adaptation, health promotion, and health care. It aims to support the development of national strategies for health system resilience in the context of climate change, develop and analyse indicators related to the impact of climate change on health and support evidence-based development of sustainable health policy frameworks. In its activities, the Competence Center Climate and Health addresses both emission reduction measures and climate change adaptation strategies and takes into account the social dimension of climate change.

Link in German

Consulting Climate-friendly healthcare facilities

Link (in German)

Documents in progress

- Austrian Strategy for a Climate Neutral Health Care System
- WHO UNFCCC Health and Climate Change Country Profile: Austria 2022
- WHO Vulnerability and Adaptation Assessment

BELGIUM

Belgian National Adaptation Plan

The National Adaptation Plan considers the different adaptation plans of the country's regions. As a thematic sector, health is part of the plans of Flanders, Wallonia and of the national one.

In the National Plan, two measures focus directly on health:

- Measure 8: "Take climate change impacts and adaptation needs into account in the framework of the future National Environmental Health Action Plan (NEHAP)".
- Measure 9: "Education and awareness-raising among health professionals on the subject of climate change impacts".

The Annex of the plan is a summary table of the measures contained in the Flemish Climate Plan, the Brussels Air-Climate-Energy Plan and the Walloon Air-Climate-Energy Plan, the Federal contribution to the National Adaptation Plan and the National Adaptation Plan, classified by sector.

Link

NEHAP (National Environmental Health Action Plan"

The NEHAP is a framework for planning and implementing environmental health actions at all institutional levels in Belgium.

Since 2015, all hospitals (except psychiatric and revalidation) are required to join a network within a geographical area, forming local-regional hospital networks. Every hospital (network) has a Hospital Emergency Plan (HEP/ZNP/PUH) – an action plan with procedures to follow in case of major accidents inside and outside the hospital. The hospital emergency plan aims to undertake the necessary actions with all disciplines within the hospital to increase surge capacity and to transform the hospital organisation as quickly as possible from day-to-day assistance to urgent joint emergency assistance, without jeopardising the care for the patients already admitted. The Federal Public Service (FPS) foresees a template, guidance, checklist, action maps and an e-learning module in order to develop a HEP.

Training of health professionals

The National Cell Health-Environment launched a feasibility study in 2011 on the training of health professionals in environmental health and in environmental medicine. The goal of this study was to analyse how education in these two topics can be integrated into education programs for health professionals. The report of the study shows that education in environmental health and environmental medicine must contain basic training and continuous training, in addition to a certificate in environmental medicine, so qualified health professionals can specialise.

The recommendations of the report as summarised like this by the NEHAP:

- Recommendations for basic training: the researchers propose basic training, aimed at medical students. They should receive at least 5 hours of education during their bachelor's or master's education, so they become aware of the theme. Basic training should also be provided at a higher education level for nurses and midwives.

- Recommendations for qualified health professionals: the researchers recommend developing training (theory and case studies) and internships for qualified doctors who want to specialise in environmental medicine. Based on these studies, which will take at least 80 hours, the doctors can obtain a certificate. The researchers propose to draw up an interuniversity or an international certificate for additional specializations (in environmental health or environmental medicine).

- Recommendations for continuous training: practising doctors who've never received any training in environmental health should follow continuous training.

- Recommendations for diagnostic tools and general recommendations: health professionals should be supported in their practice when it comes to environment and health by means of kits, help desks, professional networks, databases, communication networks, etc.

Link

In 2015, the NEHAP indicated that doctors, nurses, and other health workers would be able to follow basic training and continuous education in environmental medicine and to obtain a certificate in environmental medicine. However, no follow-up information appeared on this certificate since then.

Link

Impact of climate on the healthcare system in Belgium

In July 2021, the final report of a study commissioned by the federal public service health, food chain safety and environment was released. It was entitled the "Impact of climate on the healthcare system in Belgium".

This report assessed the impact of climate change on the healthcare system in Belgium. For different health sector-related threats, the current situation as well as expected changes were identified in a first step. In the second step, existing and planned measures were inventoried and evaluated. From the combination of this information, possible gaps were identified leading to the proposal of adaptation measures and recommendations that can ensure the healthcare system continues its health-protective and curative role in the context of a changing climate.

Different sections consider the health sector:

- Section 4 deals with climate change adaptation in the healthcare sector.
- Section 6 deals specifically with the healthcare personnel: Training and skills / Workload due to extra care / Peak capacity due to the influx of patients
- Section 7 focuses on the infrastructure of the healthcare sector: Quality of indoor environment of healthcare infrastructure /Infrastructure damage and maintenance costs.
- Section 8 is about energy and IT infrastructure in the healthcare sector.

- Section 9 analyses crisis and risk management in the healthcare sector: Crisis and emergency management / Risk management (sections 9.2.3.3 and 9.2.6.1 specific to hospitals). In this section, not all healthcare infrastructure are classified as critical infrastructure: residential care homes for elderly people, revalidation centres, and centres for disabled people do not fall within this category.

Link

Collaboration with research and call for proposal.

On 15 June 2022, the first project call for "Belgium builds back circular" was released. The objective of the call was to bring the circular economy to the healthcare sector.

A study is ongoing at Ghent University on the single-use medical market in Belgium. The study's goal is to research how to put single-use medical devices and personal protective equipment in hospitals in compliance with the circular economy principles, taking into account the limits of each solution. In the scope of the study, the tenth most common single-use products in terms of volume (size) and purchase value (cost) in hospitals will be determined and alternatives will be examined.

An eligible project should be complementary or have added value compared to this study or other national or international ones on the topic.

Link for more information

DENMARK

Danish regions

The Danish regions are involved in climate and sustainability with a specific webpage on their website.

The document Green hospitals and institutions is one of the examples of their implication. The Danish regions contributes to the green transition and the national ambitions (stated below) in many ways. For example, by working with energy savings, they can have an efficient use of capacity and find sustainable solutions when building. In addition, the regions work actively to minimise waste, enhance circular economy and focus on green procurement.

Denmark Market Study 2021

All hospitals in Denmark are working to become more sustainable and are eager to contribute to the green agenda. New hospital projects are launching eco-friendly initiatives and environmentally friendly practices to the design, building and management of facilities as well as initiatives on circular economy and procurement in order to reduce their carbon footprint and improve patient care. Denmark has policies to cut emissions by 70% by 2030 compared to 1990 levels and to achieve carbon neutrality by 2050 (scopes 1 and 2). These plans also include the healthcare sector and include all hospitals. An extensive amount of the CO_2 emissions from hospitals is consumption-based and procurement is therefore an area with much focus. CO_2 emissions and circular economy are on a wider base integrated with tenders for hospital projects. This change towards zero-emission will not only affect Danish hospitals but also the municipalities, which are responsible for the elderly and long-term care.

Link

National Adaptation Plan

The National Adaptation Plan (NAP) was adopted in 2012.

This action plan focuses on 5 general areas of initiative:

- An improved framework for climate adaptation.
- More consultancy and a new knowledge base.
- Strengthened collaboration and coordination.
- Green transition.
- International climate change adaptation.

The plan is “a solid framework also means that the municipal authorities can incorporate climate change adaptation in the long-term plans and that individuals and the business community are able to prevent damage to buildings, avoid health risks and exploit the opportunities that climate change offers to Denmark.”

There is quite a big focus on flooding risks in the document.

The Ministry of Health (MoH) regularly adapts its consultancy on prevention of the health risks connected with climate change, and guidance on health emergency response as a consequence of changing climatic conditions and new knowledge about health risks.

The MoH also undertakes ongoing monitoring of the influence of climate change on the spread of infectious diseases and the occurrence of new micro-organisms. Moreover, the ministry also ensures timely communication of new knowledge to the people and authorities who are responsible for treatment, prevention, and control.

In 2012, the MoH issues a prevention package about health risks from the sun to all Danish municipalities. This initiative aims to support local government efforts to curb the increase in skin cancer due to UV radiation from the sun.

The document also mentions the WHO work: “in the health sector, WHO Europe is preparing information and knowledge about health and climate change adaptation. The Ministry of Health is using this knowledge in Danish consultancy on health aspects of climate change adaptation”.

Link

ESTONIA

General Principles of Climate Policy until 2050

The Parliament of Estonia adopted the Estonian low carbon strategy, officially named "General Principles of Climate Policy until 2050" (GPCP2050) in April 2017.

The GPCP2050 is a vision document setting long-term greenhouse gas emissions reduction targets and policy guidelines for adjusting to the impact of climate change or ensuring the preparedness and resilience to react to the impact of climate change.

Sectoral policy guidelines for adaptation to climate change impacts state that the negative health impacts, morbidity and mortality resulting from adverse extreme weather conditions are to be reduced or mitigated. Population groups affected by the effects of climate change will be assisted and the population's preparedness for emergency situations and rescue capacity will be increased.

Climate Change Adaptation Development Plan until 2030

In 2016, the "Climate Change Adaptation Development Plan until 2030" with its action plan was adopted.

The main objective of the development plan is to increase the readiness and capacity of the state, regional and local levels to adapt to the effects of climate change. The development plan sets eight subgoals based on the priority sectors of the economic and administrative structure in the Republic of Estonia in which the first subgoal is health and rescue capability.

The first subgoal is "improved rescue capacity and the ability of people to protect their health and property has reduced the negative effect of climate change and the quality of life". This first subgoal contains two measures: 1. The development of information, monitoring, and support systems and preparation of action plans for improving the efficiency and managing the health risks arising from climate change; 2. Increasing rescue capacity.

"Health measures are mainly focused on increasing the awareness of the residents about the health effects of climate risks. The capacity of the healthcare system to react to extreme weather phenomena must improve. Increasing risks presuppose additional surveys to specify such risks. Additional health measures are reflected in the National Health Plan 2009-2020. According to the need and the topicality, health measures related to climate change will be added to and removed from the National Health Plan.

The prerequisite for increasing the rescue capacity is the improvement of risk management. Risk management can be improved in situations caused by climate change, in order to ensure the best prevention and mitigation possibilities. Risk communication also requires development – public information and early warning to communicate vital information seamlessly to vulnerable residents. It is also important to increase the hazard awareness of the residents and their ability to cope in emergency situations as well as to teach them how to help others. Greater emphasis must be put on arranging cooperation between the civil and military institutions as well as public authorities and the private sector. It is also important to obtain and develop the equipment of the rescue service for solving

the emergency situations related to climate change because although the number of forest and landscape fires is generally decreasing, the number of fires caused by climate factors is increasing."

Link to the document

This plan will be merged with the newly prepared environmental field strategy document "Environmental field development plan until 2030" (KEVAD) in 2023.

Extensive sectoral research was conducted to address climate change effects in Estonia until the year 2100. For example:

- the KATI project "Assessment of the effects of climate change and development of adaptation measures in the field of planning, land use, human health and rescue capacity" (link to the final report in Estonian). The purpose of the project was to analyse the impact of climate change on the population and people and to evaluate the possible measures of adaptation to climate change for the purpose of the Estonian national climate change adaptation strategy and action plan.

- the BioClim project (link to the final report in Estonian), the project aimed to find answers to the following questions:

    - What does climate change mean in Estonian conditions?
    - How do they affect biodiversity and different ecosystems?
    - What is the impact of rising temperatures, changes in the amount of precipitation and extreme weather events on bio-economy sectors important for Estonia, e.g., forestry, agriculture or tourism?
    - What can be done to mitigate the negative effects and make better use of the positive ones?

Population health development plan 2020-2030

Environmental protection and climate change issues have been integrated with the new "Population health development plan 2020-2030". In accordance with the guidance document, environmental protection means protecting natural resources and increasing the efficiency of the use of natural resources. The National Health Plan 2020–2030 (NHP) specifically addresses the development direction of environmental health protection, which is also related to environmental protection. The environmental impact of the NHP can generally be considered positive. The environmental protection aspect is taken into account through the information technology and electronic solutions planned in the context of modernising and improving the quality of the services, helping to reduce paperwork and thus reduce the negative impact on the environment. The development of health infrastructure also takes into account the principles of energy efficiency, thereby mitigating the effects of climate change. At the same time, it should be kept in mind that socially less privileged people are most at risk due to climate change (e.g., storms and floods during winter and hot periods during summer), as they may lack the resources and network to withstand the effects of the climate change affecting them directly or to mitigate the climate risks. Therefore, extreme weather conditions may increase inequality in society. The health effects caused by climate change are primarily felt by children, the elderly, and chronically ill people, and by people with multiple health problems.

There is a subsection that states a health-supportive environment as one of the sub-objectives. It is also mentioned in the plan that the prerequisites to achieve these goals (among others) are that:

- environmental risks and health impacts are taken into account in policymaking and decision-making in other fields;
- in terms of organisation models and regulations, readiness and the necessary flexibility have been established to take into account the health effects of climate change and to respond to them.

Link

FRANCE

The Shift Project: Report on the decarbonisation of the health sector

This report is part of the PTEF (Transformation Plan of the French Economy) of the Shift Project. The aim is to initiate deep work to give insights to the health sector on its greenhouse gas emissions and on the path to follow to decarbonise. The first report on the health sector was published in November 2021, it was updated in April 2023.

In France, the health sector represents more than 9% of the working population with more than 2.6 million professionals. The effect of our sector on climate change is significant with around 49 million tons of CO_2e from the greenhouse gases (GHG) emissions, more than 8% of the French total amount of emissions.

According to the report, the main sectors of emissions are:

- The purchase of medicines
- The purchase of medical devices
- Food
- Transportation of clients and visitors
- Fixed sources of combustion
- Immobilisations

The Shift project states that action is needed, but to act you need to identify your energetic dependencies and identify your vulnerabilities. Today in France, the GHG assessments do not have to take into account the third scope of emissions, which represents 87% of the health sector emissions.

The report also highlights the lack of education for healthcare students and professionals regarding the environmental stakes, despite a manifest interest.

Link (all documents are in French)

Education of health professionals

A formation was opened in the EHESP (French School of Public Health) for health professionals. It is organised by the project coordinator of the report, Laurie Marrauld, who is co-responsible for the formation and who has a chair entitled respect (Resilience, prevention, environment, climate and transition).

Link to the course in French

ANAP (Agence Nationale d'Appui à la Performance des établissements de santé et médico-sociaux).

The Agency gives several tools to improve the sustainable development of establishments. They also release publications and some field support.

A tool of self-diagnosis through the "Observatoire du Développement Durable" (Sustainable Development Observatory). With 40 questions, the tool helps to see your advancement on key issues of sustainable development.

The FHF is a signatory of this initiative.

From the French Hospital Federation (FHF)

In 2022, the FHF released 30 ambitions for the future of the health system, structured around 7 priorities. Priority 7 relates to the acceleration of the ecological transition of [health] institutions and compiles 2 ambitions:

- 29. Give to public health and medico-social institutions the means to meet the challenge of ecological transformation.
- 30. Involve all stakeholders in the ecological transformation of health and medico-social institutions.

In the same year, the FHF released a document compiling 50 propositions to support the ecological transition of hospitals and healthcare institutions (Les 50 propositions pour soutenir la transition écologique des hôpitaux et établissements médico-sociaux publics).

The FHF also published a document compiling 20 proposals for energy sobriety in health and medico-social institutions. Link (in French).

During its main conference, Santexpo, the FHF hosted a session entitled "Green hospital in France and Europe: is the single-use era over?". The recording is available here. In 2023, another session is planned this time on the role of users in the health system ecological transition.

Unicancer

Unicancer is supporting the action of the ANAP, regrouping all information regarding sustainable development on its website

As leading actors in environmental health research and prevention, our cancer treatment centres are working on holistic care for patients. The Centre Léon Bérard in Lyon has a department called "Cancer Prevention and Environment" aiming at studying the environmental, occupational and nutritional factors. The Epidaure at the Cancer Institute (ICM) in Montpellier has a prevention area and a health prevention and research resource centre (alcohol, tobacco, sun exposure, food).

Unicancer is also working to propose organisational innovations that contribute to preserving the environment, with the example of home treatment of patients, receiving oral anticancer drugs (ONCO'LINK). The aim is to improve the quality of patient follow-up, reduce the consumption of care

related to complications by strengthening early detection, and transfer care from the hospital team to professionals in the community.

As far as training is concerned, Unicancer does not yet offer any modules dedicated to this topic.

The National Health Strategy (2018-2022)

Link to Summary

Link to full document (in French)

Priority 1: implementing a policy of life-long health promotion, including prevention in every living environment.

- Environmental hazards: we need to reduce people's exposure to atmospheric pollution and harmful substances. In addition to these hazards, French people are exposed to soil and water pollution, to allergens, to contaminated food and to the hazards associated with the use of toxic products. Various disorders are believed to be attributable to exposure to endocrine disruptors.

Priority 2: tackling social and territorial inequality in terms of access to health.

Priority 3: guaranteeing quality, safety and appropriateness at every stage in a patient's health case management.

- Adapting the system to accommodate emerging risks: our health services need to be able to adapt efficiently to crisis situations and health emergencies. In times of crisis, they need to be ready to provide appropriate responses and limit the impact on the population.

Second national adaptation plan (2018)

Link in French

4th National Health and Environment Plan

Link in French

GERMANY

Strategy paper on climate protection and sustainable healthcare

With the Greens in the government coalition, there will be a national strategy. This will have costs for hospitals. Regions have already planned investment as well as for digitalisation.

Link

German Climate change adaptation strategy

In 2008, the Federal Cabinet adopted the German Strategy for Adaptation to Climate Change. This creates a framework for adapting to the impacts of climate change in Germany. It primarily describes the contribution of the Federation, thus acting as a guide for other actors. The strategy lays the foundation for a medium-term, step-by-step process undertaken in cooperation with the federal Länder and other civil groups and aimed at assessing the risks of climate change, identifying the possible need for action, defining appropriate goals and developing and implementing options for adaptation measures.

The Second Progress Report on the German Strategy for Adaptation to Climate Change (DAS) (2020)

The DAS provides a political framework for adaptation to climate change that enables a cross-sectoral approach by the federal government. The monitoring is currently updated every four years, and the evaluation is also conducted every four years. The DAS was updated in 2015 and 2020 as part of progress reports and adopted by the federal government. Together with the progress reports, the measures of the action plans are currently updated every four years.

“The health cluster involves the action area of ‘human health’. This cluster is key to the reasoning behind adaptation measures in Germany because climate impacts in other action areas very often have a direct or indirect effect on human health. For example, extreme weather can cause accidents and other health problems through damage to infrastructure.”

Some topics mentioned in the document are heatwaves, modes of action of new pollen allergens, and trend analyses of imported vector-borne infectious diseases.

2020 Progress Report **Last updated: 21 October 2020**

Climate impact		Assessment of climate impact:			Duration of adaptation	Need for action major intermediate
		Present	Near future			
			minor change	major change		
Human health						
GE						
GE-01	Heat exposure	high	medium	high	short	
GE-02	Respiratory complaints caused by ground-level ozone	medium	medium	high	short	
GE-03	Pathogen carriers/vectors	medium	medium	medium	long	
GE-04	Pressures upon emergency services, hospitals and doctors	low	low	low	long	

Health in environment and climate adaptation policies

This table describes the mechanism/action, the field of action, the lead organisation and partners, the finding and the climate impact addressed. (For health p91 to 96.)

Other topics mentioned are education and training, research and monitoring, networks and cooperation arrangements, public awareness, communication, information (education, guidance)

Link to the full progress report

2019 Monitoring Report on the German Strategy for Adaptation to climate change

Link

Climate impact and risk assessment 2021 for Germany.

Link to summary

Sub-report 5: Risks and Adaptation in the thematic clusters Economy and Health Link (in German)

Global Health Strategy of the German Federal Government

Part I.2. is dealing with holistic approaches to the environment, climate change and public health.

Link

Research Article Environmental Management in German Hospitals—A Classification of Approaches (2020)

Link

Decision concerning the German Sustainability Strategy (2022)

Link

Sustainability for Health and Care: Sustainability Report of the Federal Ministry of Health (2021)

Link (in German)

Climate Protection Plan 2050 – Federal Ministry of Economic Affairs and Climate Action (2016)

Link (in German)

Program for the sustainable use and protection of natural resources – Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (2020)

Link

Funding programme: Climate adaption in social facilities - Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (2023)

Link (in German)

Klima Mensch Gesundheit (Climate Human Health)

Information portal of the Federal Center for Health Education (BZgA) about the effects of climate change on human health as well as tips and recommendations for the prevention of heat-related health burdens.

Link (in German)

KlimGesundAkt – Update of the progress report "Climate Change and Health" – Robert Koch Institute (2021)

Link (in German)

Investigation of the influence of heat on morbidity – University of Duisburg-Essen/Federal Ministry of Health (2019)

Link (in German)

Survey: Effects of Germany's climate adaption strategy on municipalities – German Environment Agency (2019)

Link (in German)

KLIK Green: Hospital meets Climate protection (2019-2022)

Project funded by the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection that included 250 hospitals and rehabilitation clinics that successfully integrated climate protection mechanisms in their operations.

Link (in German)

Report – Target vision: carbon-neutral hospital - Hospital Federation North Rhine-Westphalia (2022)

Link 1 (in German)

Link 2 (in German)

KLUG - German Alliance Climate Change and Health (founded in 2017)

Alliance founded in 2017 as a network of individuals, organisations and associations from the health sector.

Link (in German)

DKG event on climate protection in hospitals (2022)

Link (in German)

Climate Pact Health – Federal Ministry of Health (2022)

Link (in German)

Global Green and Healthy Hospitals (includes hospitals from Germany)

Link

GREECE

National Strategy for Adaptation to Climate Change (2016)

This strategy aims to contribute to enhancing the resilience of the country to the effects of climate change.

Part 4.11 deals with health.

Link in Greek

National Action Plan to Address Environmental Risks to Health (2008-2012)

The whole document deals with the relationship between health and the environment.

Link in Greek

IRELAND

Health Service Executive

The HSE has a National Health Sustainability Office dealing with different topics.

Link to website

The National Adaptation Framework (2018)

The National Adaptation Framework (NAF) sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. This framework is planned to be reviewed at least once every five years, in that sense a Consultation on Review of the National Adaptation Framework was released in May 2022.

Health: Climate Change Sectoral Adaptation Plan (2019-2024)

This plan is one of twelve sectoral adaptation plans developed under the National Climate Change Adaptation Framework (2018) and the Climate Action and Low Carbon Development Act 2015.

The plan sets out the main climate change-related risks and vulnerabilities expected in the health sector. The vision of this adaptation plan is to reduce climate vulnerability across the health sector. This involves protecting people's health and well-being to prevent avoidable illness and increasing the resilience of the health and social care services and the critical infrastructure to severe weather events and other negative effects of climate change.

The plan is divided into 5 chapters, which follow the six steps of the adaptation planning cycle.

- Chapter 1: Introduction (Preparing the Ground)
- Chapter 2: Scene-setting: climate change, health and Ireland (Climate Impact Screening)
- Chapter 3: Prioritisation and Priority Impact Assessment)
- Chapter 4: Adaptation Action (Develop Your Plan)
- Chapter 5: Implementation and Review (Implement, Evaluate and Review)

Link to document

The Climate Action Plan 2023

The Climate Action Plan 2023 (CAP23) is the second annual update to Ireland's Climate Action 2019. The plan implements the carbon budgets and sectoral emissions ceilings and sets out a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. Climate Action Plan 2023 sets out how Ireland can accelerate the

actions that are required to respond to the climate crisis, putting climate solutions at the centre of Ireland's social and economic development.

Point 10.3.4 mention the role of the Health Sector.

The Health Service Executive (HSE) has developed an ambitious Climate Action and Sustainability Strategy 2022-2050 [*Not found, only a note that a five-year plan for climate adaptation is under development]*. The strategy will be delivered through a series of detailed Implementation Plans which establish governance structures for each focus area, assign responsibilities, develop measurement and reporting mechanisms, prioritise the deployment of resources, and promote engagement and awareness.

The implementation of the HSE Climate Action and Sustainability Strategy will be enabled by the development in 2023 of a suite of frameworks and supporting Implementation Plans targeting priority areas of focus, with additional work to develop enabling environments. This will allow for full integration with the Climate Action Plan process going forward.

During the period to 2025, the Department of Health and the HSE will develop a successor to the 2019 Health Sectoral Adaptation Plan (see above), informed by the review of the National Adaptation Framework, as well as domestic and international developments.

Link to the full Climate Action Plan 2023

Healthy Ireland Strategic Action Plan 2021-2025

The Healthy Ireland Framework aims to:

- Bring a concerted focus on life-long well-being, prevention of illness
- Seeks to reduce health inequalities
- Address the settings in which health and well-being are impacted and
- Emphasise the need to empower people and communities to better look after their own health and well-being.

Figure 1: Healthy Ireland Framework Themes in first phase (2013-2020)

Figure 2: Healthy Ireland themes for the second phase of implementation (2021-25)

The environmental factors taken into account, classified under Social Determinants, are:

- Air Quality Index
- Water Quality
- Radon
- Noise Pollution
- Fuel Poverty
- Skin Cancer Incidence

Energy poverty is one of the themes tackled under the healthy homes setting.

Under theme 2 "Partnerships and Cross-Sectoral Work", one of the strategic actions is to "engage and collaborate with the Department of the Environment, Climate and Communications to align policy and initiatives with Healthy Ireland policy". There are 9 following implementation actions:

- Implement the Climate Action Plan
- Work to ensure that older people who are at greater risk of fuel poverty and the respiratory illnesses associated with air pollution be prioritised in climate action and climate-mitigation plans.
- Extend the smoky coal ban to new towns and, over the term of Government, move towards a full nationwide ban.
- Publish the first-ever clean air strategy.
- Develop a regional approach to air quality and noise enforcement.

- Invest in the network of monitoring stations, to provide scientific evidence of air quality across different parts of the country, including real-time and localised air quality information.
- Develop a multi-agency approach to clamping down the safe high-sulphur content fuel imported from the UK, with local authorities and the Revenue Commission involved.
- Implement the EPA National Radon Control Strategy 2029-2024.
- Enable the Department of the Environment, Climate and Communications to combat energy poverty.

Link to the Healthy Ireland Strategic Action Plan 2021-2025

ITALY

National Strategy for Adaptation to climate change

In 2015, the National Adaptation Strategy (NAS) was adopted. It aims to set out a coherent national approach to deal with the impacts of climate change on natural systems and socio-economic sectors.

Link in Italian

National Plan for Adaptation to Climate Change

Following the National Strategy, the National Adaptation Plan (NAP) was adopted in December 2022. This document aims to bring a more operational and concrete document to support national, regional and local institutions in the definition of their own sectoral and local adaptation paths.

Part 3.19 is focused on health.

Link to document and annexes in Italian

Adaptation Communication of Italy – Submission to the United Nations Framework Convention on Climate Change

This document contains information regarding relevant policies, institutional arrangements and initiatives undertaken at the national and sub-national scale. It also describes activities that Italy is supporting in developing countries on the international scale. It is a 14-page summary of the Italian actions on climate adaptation.

Part 2.7 is focused on health.

Link

National Plan of Prevention 2020-2025

Approved on 6 August 2020, the National Prevention Plan 2020–2025 represents the fundamental central-level planning tool for prevention and health promotion interventions. It aims to ensure both the health and sustainability of the National Health Service through actions that are as evidence-based as possible in terms of effectiveness, equity and sustainability. The Plan reinforces a vision that considers health as the result of the harmonious and sustainable development of humans, nature and the environment (One Health).

The plan consists of six macro objectives:

- Chronic non-communicable diseases
- Addictions and related problems
- Road and domestic accidents
- Accidents and injuries at work; occupational diseases

- Environment, climate and health
- Priority infectious diseases.

Each Region is called upon to adopt the National Prevention Plan and to prepare and approve its own local Plan (Regional Prevention Plan), incorporating the contents, objectives, lines of action and indicators of the National Plan within the regional and local contexts.

Link in Italian

LATVIA

Latvia's Climate Change Adaptation Plan for the Period up to 2030 (2019)

Adopted in 2019, the plan examines the climate changes observed in the country and determines adaptation solutions for various risks and opportunities related to them.

Link

MALTA

National Climate Change Adaptation Strategy

Released in 2012, the document stated that early warning systems need to actively involve the people and communities at risk from a range of hazards, facilitate public education and awareness of risks, and disseminate messages and warnings efficiently to ensure preparedness and enable timely action.

Actions 58 to 64 (pages 39-40) are related to health.

Link

National Health Systems Strategy for Malta 2023-2030

Released in December 2022, the new National Health Systems Strategy for Malta is subtitled “investing successfully for a healthy future”. Although not directly related to environmental issues, part 4.3 of the plan “preventing illness through a healthy living environment” develops on the importance of clean, green, sustainable and healthy environments “for the preservation of human health and for the preservation of biospheric life on which all life depends”.

Link

THE NETHERLANDS

National Climate Adaptation Strategy

The National Climate Adaptation Strategy (2016) aims to set the course to climate-proof the Netherlands by providing an overview of the main climate risks.

Link

The NAS Implementation Programme was published in March 2018.

Implementation Programme 2018-2019

National Delta Programme

The Delta Programme is in place to protect the Netherlands from high water and flooding, to ensure a sufficient supply of fresh water, and to contribute to rendering the Netherlands climate-proof and water-resilient.

Link to website

Green Deal on Sustainable Healthcare

The Green Deal on Sustainable Healthcare sets out agreements to reduce the sector's impact on the, by cutting carbon emissions, for instance. More than 200 parties have signed the Green Deal. Each one has its own goals, but they are all based on the following four targets:

- A 49% reduction in carbon emissions by 2030
- Socially and environmentally responsible procurement
- Fewer pharmaceutical residues in drinking water
- A healthy environment for care workers and patients.

Link

POLAND

National Environment and Health Action Plan

The National Environment and Health Action Plan (NEHAP) is a comprehensive plan adopted by the Polish government in 2013. It aims to reduce environmental threats to public health. The plan focuses on several areas, including air pollution, water quality, chemicals, and noise.

Climate Adaptation strategy

The Polish National Strategy for Adaptation to Climate change by 2030 with the perspective by 2030 was adopted to reduce the impacts of climate change on human health and the environment. The strategy focuses on several areas, including agriculture, forestry, and water management.

The impact on health is developed in part 3.3.11 of the strategy, on page 31. Action line 1.6 also mentions “ensuring the functioning of the effective health protection system in the conditions of climate change”. Lastly, point 6.1.1 calls for the “development, in primary school, grammar school and secondary school curricula, of issues of adaptation to climate change and the extension of further training programmes for medical personnel by the issue of climate-dependent, tropical and vector-borne diseases.”

Link

National Health Program (2021-2025)

The National Health Program adopted by the Polish government in 2021 aims to improve public health in Poland. The programme focuses on several areas, including prevention and health promotion, healthcare quality, and health education.

The part of the programme related to the environment is part VIII: “List of tasks serving the implantation of operational objective 4: environmental health and infectious disease”.

There is no translation available for this document.

Link to the Program

National Strategy for Sustainable Development

The National Strategy for Sustainable Development adopted by the Polish government in 2018 aims to promote sustainable development in Poland. The strategy focuses on several areas including environmental protection, energy security and social cohesion.

Green Hospitals Polish Federation of Hospitals (GH PFSz)

The Polish Federation of Hospitals works on climate and environment-related topics through the Green Hospitals Polish Federation of Hospitals (GH PFSz). Its action plan for 2023 has been released.

There is no information available on the environment and climate and its impact on hospitals on the Ministry of Health website. Overall, Poland has adopted several policies aimed at reducing environmental threats to public health and promoting sustainable development. However, some critics argue that the government has not done enough to address the issue of air pollution, which remains a significant health threat in the country.

PORTUGAL

National Adaptation to Climate Change Strategy

(ENAAC 2020) and the respective extension until 2025

Link in Portuguese

National Energy and Climate Plan 2030

(PNEC 2030) is the main energy and climate policy instrument for the decade 2021-2030 towards a carbon-neutral future.

Link in Portuguese

Roadmap for Carbon neutrality

Portugal has a Roadmap for Carbon neutrality 2050 (RNC 2050) but this long-term strategy does not count the impact of the healthcare sector on carbon emissions.

Link

Recovery and Resilience Plan (RRP) for Portugal

This plan devotes 38 % of its total allocation to measures supporting climate objectives. According to RRP for Portugal, EUR 610 million will be available to renovate public and private buildings by improving their energy performance, which is expected to result in the reduction of Portugal's energy bill, greenhouse gas emissions and energy dependency, as well as reducing energy poverty.

Link in Portuguese

Adaptation Strategy to Climate Change – Health Sector

The Adaptation Strategy to Climate Change – Health Sector stems from the National Adaptation to Climate Change Strategy (ENAAC 2020). This Health Sector strategy aims to focus on the effects of environmental determinants (water, air, extreme adverse temperatures, extreme meteorological events and disease-transmitting vectors) on human health, aiming at structuring regional and national responses. The national strategy for Adaptation to Climate Change – Health Sector will consist of a set of five Regional Strategies, supported by the Central Administration of the Health System of Portugal (ACSS) regarding energy and energetic efficiency, and by the National Health Institute Dr Ricardo Jorge (INSA) regarding the quality and disease-transmitting vectors.

Link in Portuguese

Action Plan for Adaptation to Climate Change (P-3AC)

This plan aims to achieve the second objective of ENAAC 2020: to implement adaptation measures: essentially by identifying physical interventions with a direct impact on the territory. To this end, it sets out nine lines of action and priority adaptation measures, identifying the entities involved, the monitoring indicators and potential sources of funding.

Action line 5 deals with reducing the vulnerability of urban areas to heat waves and the increase of maximum temperatures. Action line 6 concerns the prevention of the establishment and spread of invasive alien species, vector-borne diseases and agricultural and forestry diseases and pests.

Link

National Health Plan 2021-2030 (PNS 2021-2030)

This plan provides five major objectives for Portugal, one of them "Minimise the health consequences of climate change and other environmental determinants", that are translated into 15 strategic goals, in between them: a) Protecting the planet for present and future generations; b) Boost surveillance systems for environmental risks and associated problems; c) Ensure preparedness and response in public health emergencies.

Link in Portuguese

Environmental Sustainability Program at the Ministry of Health (ECO@SAÚDE)

ECO@SAÚDE was created in alignment with the commitments assumed by Portugal, set out in the National Energy and Climate Plan 2030 (PNEC 2030), as well as in the Roadmap for Carbon Neutrality 2050 (RNC 2050) and is coordinated by the Central Administration of the Health System of Portugal (ACSS).

ECO@SAÚDE established the following sustainability targets, to which the Portuguese public healthcare entities are subject, considering 2019 as the reference year: a) Energy efficiency: contribute to a 40 % reduction in primary energy consumption, between the reference year and 2030; b) Self-consumption: contribute so that 10 % of energy consumption is supplied through self-consumption solutions from renewable energy sources, by 2030; c) Water efficiency: contribute to a 20 % reduction in water consumption, between the reference year and 2030; d) Waste: contribute to a 20 % reduction in waste production between the reference year and 2030; e) Rehabilitation and improvement of buildings: contribute to achieving a 5 % rate of energy and water renovation of buildings covered by ECO@SAÚDE, by 2030.

Link in Portuguese

Carbon footprint of the Portuguese health sector and ways for mitigation

This report was produced by the Central Administration of the Health System of Portugal (ACSS). It outlines the climate footprint analysis and decarbonisation roadmap for the Portuguese health sector. Produced during their participation in the Operation Zero project, the report is the outcome of the

health system piloting Healthcare Without Harm Europe's methodology Designing a net zero roadmap for healthcare: Technical methodology and guidance.

It includes a baseline of greenhouse gas (GHG) emissions from the healthcare sector in Portugal, the target trajectory for emissions from the healthcare sector, and a projection of future emissions. The publication also includes an analysis of the impact of existing sustainability measures on future emissions and identifies action pathways to promote mitigation.

Link to document

It is also available in Portuguese.

SPAIN

National Plan for the adaptation to climate change 2021-2030

Human health is one of the 18 areas of work defined in the plan. The objectives identified under it are:

- Identify the risks of climate change on human health and develop the most effective adaptation measures by integrating climate change into national health and environment plans.
- Promote preventive action to address the health risks of excess temperatures.
- Prevent the health risks from vector-borne and non-vector-borne infectious and parasitic diseases favoured by climate change.
- Identify the impact of climate change on air quality and identify synergies between climate change adaptation and mitigation measures in this field.
- Prevent the occupational health risks of climate change.

The plan states that the human health area of work is closely related to other areas of work, particularly 3 (water and water resources), 4 (biodiversity and protected areas) and 6 (agriculture, livestock, fisheries, and aquaculture).

Annexe I details the line of actions for human health:

- 2.1. Integrating climate change into the National Health and Environment Plan

The effects of climate change that are already observed or foreseeable will be incorporated into the National Health and Environment Plan in its various dimensions: extreme temperatures, air quality, natural disasters, sanitary quality of water and food, and disease-transmitting vectors.

- 2.2. Preventive actions against the effects of excessive temperatures on health

Since 2004, the National Plan of Preventive Actions on the Effects of Excessive Temperatures on Health has organised and guided the measures aimed at avoiding the impacts of excessive heat on health in Spain.

Regionalised climate change projections for Spain suggest that heatwave episodes will become longer, more frequent and more intense, which justifies the future maintenance of this plan, introducing the necessary modifications each year to improve its effectiveness.

- 2.3. Preparation and response to infectious and parasitic diseases driven by climate change

The National Preparedness and Response Plan for Vector-borne Diseases already addresses dengue, chikungunya and zika, all of which are transmitted by Aedes mosquitoes, which are expanding in Spain due to climate change. The actions already in the plan should be applied to new diseases or vectors favoured by climate change if considered relevant threats.

- 2.4. Preventive actions against episodes of atmospheric pollution

In a large part of the Spanish territory, climate change could favour the persistence of stable atmospheric conditions that hinder the dispersion of primary pollutants in urban areas, aggravating air pollution, especially concentrations of nitrogen oxides and particulates.

This line of action aims to organise preventive actions, from a public health perspective, through the approval of a National Plan that organises responses to atmospheric pollution from an integrated perspective. In this regard, the influence of climate change on air pollution levels, especially in large cities, should be analysed, taking into account:

- The interaction between temperature and pollution, in particular during periods of extreme heat, and its impact on health.
- The climatic evolution of the blocking anticyclones is foreseen by different climate scenarios and their impact on the dispersion of pollutants and the formation of tropospheric ozone.

- 2.5. Preventive actions against the effects of climate change on workers' health

Document in English

Document in Spanish

Plan Estratégico de Salud y Medioambiente (PESMA) 2022-2026 (Strategic Plan for health and environment)

This plan aims to promote healthy environments for citizens and the reduction of diseases associated with environmental factors, as well as take measures to deal with climate challenges.

It also contemplates, from an environmental point of view, 14 thematic areas or risk factors for people's health, encompassed in 4 blocks, among which is indoor air quality:

- Climate change and health: climate risks, extreme temperatures and vectors that transmit diseases.
- Pollution: chemicals, waste, air quality, water quality, and industrial pollution.
- Radiation: natural radioactivity, electromagnetic fields and ultraviolet radiation.
- Habitat and health: environmental noise and vibrations, quality of indoor environments and healthy cities.

The 1st Action Programme of the PESMA establishes the development of a study aimed at understanding the contribution of the health sector to greenhouse gas emissions, to implement a reduction plan that contributes to achieving the objective of climate neutrality.

Document in Spanish

SWEDEN

Health consequences of climate change in Sweden – a risk and vulnerability analysis (2021) (Hälsokonsekvenser av klimatförändring i Sverige: En risk- och sårbarhetsanalys)

Summary in English on page 11

Document from the public health agency. In the report, 17 health risks are presented in descending order by risk level. For each, the following is reported:

- Health consequences: why people get sick and who is affected.
- Probability: where and on what scale the health consequences may occur during the period 2021-2050.
- Vulnerability and capacity: a comprehensive current picture of Sweden's vulnerability and capacity to face the various health consequences.

The 17 health risks are:

1. Heat waves
2. Tick-borne infections
3. Pollen allergies
4. Floods
5. Drinking water impact
6. Waterborne infections
7. Rodent-borne infections
8. Mosquito-borne infections
9. Food-borne infections
10. Zero crossing (when the day's highest temperature two metres above the ground has been above 0ºC and the lowest temperature on the same day has been below 0ºC)
11. Warmer winters
12. Air pollution
13. Forest fires
14. Drought
15. Indoor environmental impact
16. Landslides
17. Cold snaps

Link in Swedish

- The Swedish Environmental Protection Agency (Naturvårdsverket): Nitrous Oxide Destruction in Healthcare (Lustgasdestruktion i sjukvården) and Plastic in Healthcare (Plast i vården)

- The Swedish Food Agency (Livsmedelsverket): Manual for Reducing Food Waste in Healthcare, Social Care and Schools (Handbok för minskat matsvinn – för verksamheter inom vård, skola och omsorg) (2020)

- The Swedish Society of Medicine Policy for Climate, Health and Sustainable Healthcare (Svenska Läkaresällskapets policy för klimat, hälsa och hållbar sjukvård) (2020)
- SALAR's website on climate (positions, good examples, climate-smart procurement etc)
- Nordic Center for Sustainable Healthcare
- The Swedish Portal for Climate Change Adaptation (klimatanpassning.se) The portal is run by the Swedish National Knowledge Centre for Climate Change Adaptation, in cooperation with several Swedish authorities
- The Swedish Medical Products Agency (Läkemedelsverket): Knowledge Centre for Pharmaceuticals in the Environment (Kunskapscentrum för läkemedel i miljön)

SWITZERLAND

Adaptation to climate change in Switzerland: Action Plan 2020-2025

Link (to the webpage: Federal Council strategy for adaptation to climate change in Switzerland)

Health 2030 Strategy

Link

UNITED KINGDOM

Delivering a 'Net Zero' National Health Service

This report provides a detailed account of the National Health Service (NHS)'s carbon footprint, alongside a range of targets and trajectories to reach net zero. It gives an overview of workstreams, and interventions required to meet this ambition, and sets out a framework for continuous monitoring, reporting, and assurance in line with the UK Committee on Climate Change.

The first version of this report is from October 2020, it was updated in July 2022.

Two key targets are presented to deliver a net zero NHS:

- For the emissions controlled directly (the NHS Carbon Footprint), net zero will be reached by 2040, with an ambition to reach 80% by 2028 to 2032.
- For the emissions the NHS can influence (the NHS Carbon Footprint Plus), net zero will be reached by 2045, with an ambition to reach an 80% reduction by 2036 to 2039.

On 1 July 2022, the NHS became the first health system to embed net zero into legislation through the Health and Care Act 2022.

Link the report

University Hospitals Birmingham: A world first in carbon net zero surgery

In May 2022, a team at Solihull Hospital performed the world's first net zero carbon operation. It involved a range of colleagues making several changes to their standard practice, including those set out in the table below:

- Using reusable gowns, drapes, and scrub caps.
- Giving medications through the veins for general anaesthesia rather than anaesthetic gases, which have a strong greenhouse effect.
- Implementing a plan for minimising electricity use, including heating and lighting.
- Recycling of single-use equipment used in surgery, working with industry partners.
- Recycling of "clean" paper and plastic waste.
- Using individually packed equipment, and only opening items as they were required.
- One consultant surgeon jogged to hospital, and the other cycled.

Safety and efficiency were maintained for the patient throughout, carried out within a full, day-long operating list, including surgery for three other patients. At the end of the operation, the team estimated the reduction in carbon output for the operation compared to the usual output. They calculated that the carbon output was reduced by almost 80% (equivalent to a diesel car travelling around 5500 miles), with the remaining output then offset through a variety of verified carbon offsetting projects, including the planting of trees in the grounds of Solihull Hospital. This brought the total carbon output for the operation to net zero.

The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting

Link