

DENMARK

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE DATA SHEET 2025

Health and climate change in Denmark

The Lancet Countdown on Health and Climate Change tracks the evolving relationship between climate and health through 50+ peer-reviewed indicators. Since 2016, it has provided peer-reviewed annual assessments, published in *The Lancet*. The 2025 report reveals the grave health toll of climate change inaction: fossil fuel dependence, rising emissions, and delayed adaptation are costing millions of lives. Recent climate policy rollbacks further threaten our ability to respond to the accelerating crisis, undermining progress towards a healthy future.

This document highlights key country-level findings from the 2025 Lancet Countdown report for Denmark, showing that:



While Denmark remains a leader in renewable energy, **continued fossil fuel dependence and negative carbon revenues** underscore the need to close policy and fiscal gaps in the energy transition.



Extreme heat and drought are intensifying across Denmark, threatening health and wellbeing and livelihoods.



The **healthcare system and natural ecosystems both face sustainability challenges**, with rising emissions and environmental degradation calling for accelerated action toward resilient, low-carbon solutions.

With the threats of climate change growing, protecting people's health and survival demands simultaneous and unprecedented efforts to advance adaptation and mitigation, and requires an "all hands on deck" approach.

Energy Transition and Fossil Fuel Dependence

Denmark remains a European frontrunner in renewable energy, yet continued fossil fuel use and negative carbon revenues point to persistent fiscal and policy barriers. Addressing these gaps will be key to achieving a fully sustainable energy system and reinforcing Denmark's climate leadership.



Between 2016 and 2022, CO₂ emissions from fossil fuel combustion in Denmark declined by 21% (Indicator 3.1.1)



In 2022, 12.6% of Denmark's electricity was still generated from coal. While coal's share in total energy supply fell from approximately 12% to 7% between 2016 and 2022, renewables increased by 67%, from 7.3% to 12.3%, marking continued, but incomplete, progress in decarbonising the energy mix. (Indicator 3.1.1)



In 2022, approximately 17% of household energy in Denmark came from liquid fossil fuels and natural gas, highlighting persistent dependence in the residential sector despite major advances in district heating and renewables. (Indicator 3.1.2)



In 2022, over 2,500 deaths were attributable to anthropogenic outdoor air pollution (PM_{2.5}). This is a 41% reduction from 2010. In 2022, fossil fuels caused 49.4% of these deaths, however agriculture contributed to nearly 20%. (Indicator 3.2.1)

BRIDGING THE FISCAL GAP

Despite Denmark's strong record in renewable investment, its negative carbon revenue reveals that subsidies for fossil fuels still outweigh the benefits of carbon pricing. Aligning fiscal incentives with health and climate goals could accelerate the shift toward a cleaner, more equitable energy system.



In 2023, fossil fuel subsidies outweighed carbon pricing revenues in Denmark, with a total net subsidy of US\$ 80 million. (Indicator 5.1)

Rising Exposure to Extreme Heat and Drought

Exposure to high temperatures and drought threatens health, livelihoods, and ecosystems across Denmark. Vulnerable populations face particularly high health risks from extreme heat, while prolonged dry periods strain agriculture and water resources.

INTENSIFYING DROUGHT ACROSS DENMARK

This pattern underscores the country's growing exposure to summer dryness, with potential consequences for health, agriculture and ecosystems.



In 2024, people in Denmark were exposed to 13 heatwave days each, on average. Of these, 8 (62%) would not have been expected to occur without climate change. (Indicator 1.1.1)



From 2020–2024, an average of 20% of Denmark's land area experienced at least one month of extreme drought per year, representing an increase of nearly triple the area since 1951–1960.

Healthcare System Emissions and Sustainable Transformation

Denmark's healthcare system continues to deliver high-quality services but remains a notable contributor to greenhouse gas (GHG) emissions. Strengthening low-carbon practices in healthcare operations, procurement, and infrastructure is essential for aligning with Denmark's national climate goals.



In 2022, healthcare sector emissions totalled 3.12 million tonnes of CO₂ equivalent, equivalent to 531 kilograms per person. This places Denmark among the higher-emitting healthcare systems per capita in Europe. (Indicator 3.5)



With 17% of household energy still derived from fossil fuels, wider energy system dependence indirectly sustains emissions from healthcare facilities and supply chains, underscoring the need for cross-sector decarbonisation efforts. (Indicator 3.1.2)

Ecosystem and Land Use Pressures

Environmental degradation and sea warming continue to affect Denmark's ecosystems, with implications for biodiversity, flood resilience, and community wellbeing. Land and marine indicators show a clear trend of natural resource loss and climate-driven change across the country.



In 2023, tree cover loss reached 3,978 hectares in Denmark. Sustained forest decline reduces natural carbon sinks and weakens landscape resilience to flooding and heat. (Indicator 3.4)



In 2024, average sea surface temperatures along Denmark's coasts reached 10.81 °C, increasing by 1.25 °C since 1981–2010, contributing to marine ecosystem stress and coastal vulnerability. (Indicator 1.4)

RISING COASTAL TEMPERATURES

Denmark's coastal waters have warmed to their highest recorded averages, reflecting regional oceanic trends across Northern Europe. Persistent sea surface temperature increases can disrupt fish populations, damage marine ecosystems, and heighten the risks of coastal erosion and flooding; all of which carry long-term health and economic implications.

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