

BELGIUM

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE DATA SHEET 2025

Health and climate change in Belgium

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 Belgium, showing that:



Extreme heat is increasingly threatening health and livelihoods, with older people and outdoor workers most affected as heat exposure and labour productivity losses rise sharply.



Worsening drought and wildfire risks are putting ecosystems and air quality under pressure, underscoring the growing vulnerability of Belgium's environment and population to compound climate hazards.



Progress toward decarbonisation is advancing but uneven, with coal towards being phased out but fiscal incentives still favouring fossil fuels and healthcare emissions remaining substantial.

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.

Rising Heat with Labour Impacts

Exposure to extreme heat continues to threaten people's health and livelihoods in Belgium, as climate change drives more frequent and intense heatwaves. Older adults and infants are especially vulnerable to heat-related illnesses, while outdoor workers face increased risks of dehydration, heat exhaustion, and reduced productivity. These impacts not only strain public health systems but also undermine economic stability, particularly in sectors reliant on manual labour.

LIMITED HEAT-RELATED MORTALITY IN 2023

National mortality monitoring reported only limited excess mortality during Belgium's 2023 heatwave episodes, which occurred in June and September rather than the usual July–August period.**

This pattern suggests that existing prevention measures and early-warning systems may have reduced heat impacts that year, even as long-term exposure and heat-stress risks continue to rise.

10.3

In 2024, people in Belgium were exposed to 10.3 heatwave days each, on average. Of these, 7.1 (69%) would not have been expected to occur without climate change. (Indicator 1.1.1).

50.4

In 2024, people were exposed to 50.4 hours during which ambient heat would have posed a moderate or higher risk of heat stress if undertaking moderate outdoor physical activity, up by 66% from 1990-1999. (Indicator 1.1.2).



Heat exposure resulted in 5,122,930 potential labour hours lost in 2024, a 97.1% increase from the 1990–1999 baseline. Workers in the construction sector were hit hardest, accounting for 57% of all heat-related labour hour losses, followed by the service sector (20%), manufacturing (12%), and agriculture (10%). (Indicator 1.1.3).



The losses in productivity translate into substantial economic costs, particularly for workers in outdoor sectors. In 2024, lost earnings in the construction sector reached US\$ 110 million, representing 0.017% of GDP, while agriculture, manufacturing, and services together added another US\$ 80 million in losses. (Indicator 4.1.3).

Intensifying Drought and Wildfire Risks

Drought and wildfire hazards are increasingly shaping Belgium's environmental and health landscape. Once considered low-risk, the country now faces repeated dry spells and rising wildfire exposure, contributing to degraded air quality and ecosystem stress.



From 2020–2024, 40% of Belgium's land area on average experienced at least one month of extreme drought per year. (Indicator 1.2.2).



On average, wildfire smoke (PM_{2.5}) was responsible for 131 deaths per year in Belgium during 2020–2024. (Indicator 1.2.1).

INCREASING PM_{2.5} CONCENTRATIONS

Increasing wildfire-related fine particle pollution experienced by the population in Belgium compared with the early 2000s, reflects shifting weather patterns and drier conditions that heighten both ecosystem and public-health vulnerabilities.



Population-weighted PM_{2.5} concentrations from wildfire smoke reached 0.138 µg/m³, up from 0.100 µg/m³ in 2003–2012. (Indicator 1.2.1).

Decarbonisation Progress and Remaining Gaps

Belgium has made clear progress in phasing out coal, yet fossil-fuel emissions and misaligned fiscal incentives continue to slow the transition to a low-carbon, health-promoting economy.



In 2022, CO₂ emissions from fossil-fuel combustion reached 78,815 kilotonnes. As of 2022, coal makes up 4.3% of total energy and less than 0.1% of electricity energy. As of 2022, renewable energy made up 3.3% of total energy supply, up from 1.4% in 2016; and 20% of total electricity, up from 10% in 2016. (Indicator 3.1.1). This near-elimination of coal reflects major structural change in Belgium's power mix but also underscores the continued dominance of other fossil-fuel sources.



\$3.7B

Despite these advances, fiscal alignment remains a challenge. In 2023, Belgium still provided net subsidies to fossil fuels, for a total of US\$3.70 billion that year alone, the equivalent to 5% of its health expenditure (Indicator 4.3.2). This fiscal imbalance limits the financial resources available to strengthen climate-resilient and low-emission health systems.

Air Pollution, Diet, and Health Co-benefits

Air pollution and unhealthy diets continue to impose a heavy toll on health and the economy in Belgium. Shifting toward cleaner energy and more sustainable diets offers opportunities for simultaneous improvements in population health and emission reductions.



In 2022, the monetised value of premature mortality from air pollution reached US\$27.14 billion (2024 USD), equivalent to 4.38% of GDP. (indicator 4.1.4). This burden highlights the ongoing health costs of fossil-fuel dependence and underscores the potential economic gains from a clean-energy transition.



Dietary patterns also contribute significantly to preventable disease. In 2022, 3,500 deaths in Belgium were associated with insufficient consumption of nutritious plant-based foods and 5,700 deaths attributable to excess consumption of dairy, red meat, and processed meat. (Indicator 3.3.2) In 2022, red meat and dairy accounted for 39% of all emissions coming from the consumption of agricultural products in Belgium, although emissions from the consumption of those products fell by 26% since 2000. (Indicator 3.3.1) Together, these diet-related risks represent a major opportunity for co-benefits between public health and climate mitigation through dietary change.

Romanello M, Walawender M, Hsu S-C, et al. The 2025 report of the Lancet Countdown on health and climate change. Lancet 2025; published online Oct 29. [https://doi.org/10.1016/S0140-6736\(25\)01919-1](https://doi.org/10.1016/S0140-6736(25)01919-1).

**Sciensano. Be-MOMO: Surveillance de la mortalité pendant l'été 2023. Brussels: Sciensano; 2023

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For further information, visit lancetcountdown.org