

IRELAND

2026 CITY DATA INSIGHTS



The 2026 Europe Cities Report of the Lancet Countdown presents a systematic, policy-relevant set of climate change and health indicators for European cities. This document highlights key Ireland-specific city-level findings.

As the world's fastest-warming continent, Europe faces an escalating public health crisis. Cities sit on the front line of this threat, with dense populations, heat-trapping infrastructure and limited cooling due to inadequate green space. All of this multiplies the dangers from climate-related heatwaves, floods, droughts and wildfires. These environmental hazards directly harm human health and disproportionately affect the most vulnerable, including children, older adults, outdoor workers and low-income communities. Cities also offer substantial opportunities for effective climate action.

In 2023, about 37% of Ireland's population (1.9 million out of 5.3 million people) lived in five cities. These residents are spread across cities of varying sizes: 289,200 in three small cities, 206,000 in one medium-sized city (Cork) and 1.5 million in Ireland's largest city (Dublin). This high population density exacerbates the health risks of climate change for urban populations. Among these, 268,000 (14%) were aged over 65 and 383,700 (20%) were children under 15, meaning over a third of the urban population is at higher risk from climate change.

Heat and Health

Urban populations are increasingly exposed to extreme heat, contributing to rising heat-related illness and mortality and undermining livelihoods and wellbeing.

Heat-related mortality

Across Ireland's cities, average annual heat-related deaths increased by 3.6 per million between 2015 and 2024 as compared to 1991 to 2000 (indicator 1.1.2).

Dublin recorded the largest increase in average annual heat-related deaths per million people (104.6%), rising from 4.4 per million in 1991–2000 to 9.0 in 2015–2024 (indicator 1.1.2).

Average Heat-related mortality rates in Irish cities.

City	Rate in 1990-2000	Rate in 2015-2024	Percentage difference
Cork	21.2	21.3	+0.4%
Dublin	4.4	9.0	+101.9%
Galway	4.4	6.8	+54.0%
Limerick	11.2	10.5	-6.5%
Waterford	12.7	15.1	+18.9%

Mean difference across cities:
+3.6 deaths per million

Ambient urban heat island intensity in Irish cities, from 2003-2020.

City	Mean UHI	Total days UHI>1.5°C	Annual average days UHI>1.5°C
Cork	0.57	49	2.72
Dublin	0.70	43	2.39
Galway	0.37	5	0.28
Limerick	0.49	47	2.61
Waterford	0.61	25	1.39
Cities average	0.55	33.8	1.88

Heat exposure in cities

Most cities trap heat, creating an "urban heat island" (UHI) effect that makes urban areas significantly hotter than nearby rural areas. As climate change raises global temperatures and intensifies heatwaves, the UHI effect worsens health risks, driving increases in a range of heat-related health impacts, including heat exhaustion, cardiovascular strain and mortality, particularly among vulnerable populations.

Irish cities record comparatively few days of strong urban heat island effect. Between 2003 and 2020, Cork ranked highest nationally, averaging 2.7 days per summer on which urban temperatures exceeded those of surrounding rural areas by more than 1.5°C, around 40% higher than the Irish urban average of 1.9 days (indicator 1.1.1).

Sustainable urban cooling

To safeguard public health and prevent heat-related deaths, cities must adapt to extreme heat. Expanding tree cover offers a practical and effective means of cooling urban environments and building community resilience.

Urban tree cover

To support urban cooling, reduce air pollution and protect public health, the UN Economic Commission for Europe recommends that cities maintain at least 30% tree cover.

Irish cities had an average tree cover of 1,477.7 hectares in 2020, equivalent to 3.4% of total urban land area. No Irish city met or exceeded 30% tree cover in 2020 (indicator 2.2.4).

Dublin had the largest tree cover by area (5,214 hectares, or 5.6% of total area), while Galway had the smallest (46.7 hectares, 0.9%). Waterford recorded the largest percentage increase since 2000 (74%), from 515.5 to 896.5 hectares (indicator 2.2.4).

Heat-reflecting surfaces

Darker, heat-absorbing materials contribute to rising urban temperatures. Replacing them with lighter, reflective or natural materials can help to lower land surface temperatures, for example, by replacing concrete with soil or vegetation. In Ireland, however, the extent of such surfaces has decreased, leaving considerable scope to expand their use for urban cooling (indicator 2.2.2).

Sustainable and Healthy Transport

Active travel and public transport

Active and healthy transport, such as walking and cycling, and the use of public transport support urban decarbonisation and improve air quality by reducing vehicle emissions. It also builds daily physical activity into everyday journeys, significantly lowering the risk of chronic disease and improving mental health and wellbeing.

The Sustainable Transport Score measures how easily residents can walk, cycle or use public transport in a city, with 7 out of 10 considered a good score. In 2022, Irish cities fell short, with an average score of just 5.2 out of 10. On average, cities had 31% of their total area within 250 metres of at least one public transport stop and 36.4% of roads supported walking, while dedicated cycling infrastructure covered only 4.9% of roads (indicator 3.3.1).

In 2022, Dublin achieved the highest overall score (4.7 out of 10), though performance varied across cities (indicator 3.3.1):

- Dublin: led on walkability (45.5% pedestrian paths) and public transport access (53% of its area within 250 metres of a stop).
- Cork: ranked highest for cycling infrastructure, with 8% of roads having dedicated cycle lanes.
- Waterford: scored lowest across all metrics, with 23% walkable paths, 2.45% cycle lanes and 14% of its area within 250 metres of a stop.

Heat-resilient cycling infrastructure

Climate change is bringing increasingly frequent and prolonged periods of extreme heat to cities, limiting when people can safely walk or cycle outdoors. Building heat-resilient pedestrian and cycling infrastructure, particularly through natural tree shading, is becoming vital to protect urban residents and keep communities moving safely.

In Ireland, 8.3% of cycling paths and shared cycling and pedestrian paths were shaded by tree cover between 2018 and 2020 (indicator 2.2.5).

Of the Irish cities exposed to moderate to high heat stress, Dublin and Cork had the highest proportions of shaded cycling infrastructure, at 11.2% and 10.5% respectively (indicator 2.2.5).

City scores for sustainable transport dimensions in 2022.



Energy, Air Pollution and Health

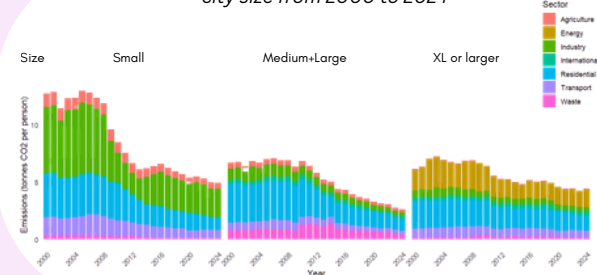
Fossil fuel combustion is a primary driver of both rapid global heating and fine particulate pollution (PM_{2.5}), each of which poses severe risks to human health. Household solid fuel combustion is a further major source of PM_{2.5} and short-lived climate pollutants. Moving away from these polluting fuels by decarbonising energy systems and electrifying household heating removes these pollutants and greenhouse gas emissions at source, substantially reducing premature deaths and chronic illness attributable to PM_{2.5}.

Sectoral sources of greenhouse gas emissions

Between 2000 and 2024, greenhouse gas emissions per person across Irish cities declined by 35.3%, with the largest reduction in the residential sector (53.4%) and a smaller reduction in the energy sector (20.2%) (indicator 3.1.1).

In the residential sector, Limerick recorded the greatest reduction in emissions between 2000 and 2024 (81.1%, from 5.22 to 0.99 tonnes of CO₂ per person), followed by Waterford (72.2%, from 3.54 to 0.98 tonnes) and Cork (70.4%, from 3.38 to 1.00 tonnes) (indicator 3.1.1). These reductions are possibly linked to policies curbing the use of polluting fuels and a wider transition to cleaner energy sources.

Greenhouse gas emissions by sector and city size from 2000 to 2024



PM_{2.5} attributable mortality

Expanding renewable energy incentives has delivered major public health co-benefits across Ireland. Between 2000 and 2023, PM_{2.5} mortality attributable to power generation and household solid fuel use declined by 96% and 56% respectively, contributing to an overall 69% decline in premature deaths attributable to PM_{2.5} from dirty fuel use across sectors (indicator 3.2.1).

In 2023, Dublin saw 18.5 PM_{2.5}-attributable premature deaths per 100,000 people linked to dirty fuels, with transport (46%) identified as the leading sectoral contributor (indicator 3.2.1).

Between 2000 and 2023, Limerick achieved Ireland's largest reduction in PM_{2.5}-attributable premature deaths, falling by 83.3% (65.5 fewer deaths per 100,000 people) (indicator 3.2.1).

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