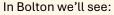
Climate emergency

Overview¹



There is **clear evidence** that climate change is already happening. If we act now to reduce greenhouse gas emissions, we can limit, adapt to and manage the changes





- Milder, wetter winters
- **Hotter drier summers**
- More extreme weather events e.g. flooding and storms.



Direct health impacts - deaths or ill health because of heatwaves. wildfires, flooding, or air pollution



Indirect health impacts - leading from actions we take to respond

- **Positive** e.g. if we eat less meat so eat more fruit and veg instead
- **Negative** e.g. if carbon taxation weighs heaviest on those with least, worsening cost of living issues

Energy & buildings



Electricity generation has decarbonised but gas usage is still a major emitter of carbon dioxide equivalent (CO₂e) in Bolton²

- 2022 electricity emitted 180kt CO2e; gas 360kt
- 2012 electricity emitted 560kt CO₂e; gas 450kt



Buildings emissions can be reduced through energy efficiency measures and switching to low-carbon heat sources3



In 2023, Bolton generated⁴:

- 22,000MWh of electricity from solar
- **40MWh** of electricity from **wind**
- Power for ~8,000 homes for a year⁵



Energy performance certificates in Bolton⁶

- 41% of homes assessed rated A C
- 43% of non-domestic properties assessed rated A+ - C

Transport & travel



Road transport is responsible for 38% of carbon dioxide equivalent emissions in Bolton²



Road vehicles are a major source of air pollutants. Tailpipe emissions have fallen but improvements in **fine particulate matter** from tyre and brake wear have stalled7



5.2% of Bolton **deaths** from all causes are due to fine particulate matter8



Many residents' journeys are short9

- 47% are no more than 2km 25 mins walk or 10 mins cycle
- 74% are no more than 5km 20 mins cycle



Bolton's Weston St bus depot has charging for 155 electric busses¹⁰

Natural environment



The last 50 years has seen a **drastic loss** in global wildlife populations. But nature can recover11



• 33% drop in skylark numbers in GM 1980-2011



• 24% drop in hedgehog numbers in GM 1995-2021



The biggest risks to the UK's natural landscapes and **wildlife habitats** are from higher temperatures, changes in rainfall, sea level rise and ocean acidification.12



Sustainable drainage using plants stores uses, and transports **rainfall** – stopping drains overflowing. It also **greens streets**, provides biodiversity and shades and cools in hotter summers¹³

Climate emergency

Circular economy



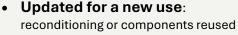
In a circular economy waste is designed out with a plan for its end of use. This gives space for nature to thrive14



Products and materials are circulated at their highest value14



 Kept in working order: maintenance, repair, finding a new user



 Raw materials recycled or composted



Each year, Bolton Council collects

300kg of waste per person¹⁵



Waste disposal has changed 15

- **2003/04** 80% landfill; 2% incinerated; 18% recycled/ composted
- **2013/14** 40% landfill; 9% incinerated; 46% recycled/ composted
- **2023/24** 8% landfill; 43% incinerated; 45% recycled/ composted

Business & skills

8% increase in green jobs 2021-22

across the UK¹⁶



- 32,000 in waste
- 16,000 in low carbon transport
- 13,000 in renewable energy
- 10,000 in environmental consultancy



Bolton has **few jobs** in the UK's **biggest** emitting sectors per job: Electricity & gas; Mining & quarrying; Agriculture forestry & fishing16, 17



Public admin education & health has at **50,200 jobs** the most jobs in Bolton – a **lower emitting** sector^{16,17}



Transport & storage; and Manufacturing are important emitting sectors. Bolton has: 16,17

- 21,900 jobs in Distribution, hotels & restaurants
- 8,500 jobs in manufacturing

References

Produced April 2025

- [1] Bolton JSNA: Climate emergency https://www.boltonjsna.org.uk/climate-emergency
- [2] Department for Energy Security and Net Zero (2024). UK greenhouse gas emissions: local authority and regional 2022 figures.

https://www.data.gov.uk/dataset/723c243d-2f1a-4d27-8b61-cdb93e5b10ff/local_authority_carbon_dioxide_emissions

- [3] Committee on Climate Change (2015) Fact sheet: Buildings. Fact-sheet-buildings-updated-July-2015.pdf
- [4] Department for Energy Security and Net Zero (2024). Renewable electricity by local authority, 2014 to 2023. Regional Renewable Statistics GOV.UK
- [5] Ofgem. Average gas and electricity usage | Ofgem Typical annual electricity use (kWh) for a 2-3 bedroom house with 2 to 3 people: 2700kWh
- [6] MHCLG (2025) Live tables on Energy Performance of Buildings Certificates. Table D1- Domestic Properties by Local Authority by Energy Efficiency Rating in each Year/Quarter to 31 December 2024; Table A: Non-domestic Energy Performance Certificates by energy performance asset rating. Live tables on Energy Performance of Buildings Certificates - GOV.UK
- [7] Chief Medical officer's report 2022 on air pollution Chief Medical Officer's annual report 2022: air pollution GOV.UK
- [8] Fingertips (2025). Your indicator lists
- [9] GM Travel diary survey (2022) Physical activity Bolton JSNA
- [10] MEN (2023) More than 150 new charging points set for bus depot as network moves to '100 % electrification'

https://www.manchestereveningnews.co.uk/news/greater-manchester-news/more-150-new-charging-points-27220853

- [11] GMCA (2024). Greater Manchester state of nature. Understanding the state of nature in Greater Manchester Greater Manchester Combined Authority
- [12] UK Climate Change Risk Assessment 2017 Evidence Report. Natural environment and assets Climate Change Committee 3[] Elllen Macarthur Foundation https://www.ellenmacarthurfoundation.org/
- [13] Greater Manchester's sustainable drainage design guide Streets for All | Bee Network | Powered by TfGM
- [14] Ellen Macarthur Foundation. What is a circular economy? What is a circular economy? | Ellen MacArthur Foundation
- [15] Defra (2025). Local authority collected waste management annual results. Change over time: NW, incineration includes waste to energy. Local authority collected waste management - annual results - GOV.UK
- [16] ONS (2024). Experimental estimates of green jobs, UK: 2024. Experimental estimates of green jobs, UK Office for National Statistics
- [17] Nomis. Annual Population Survey Oct 2023-Sep 2024. Age 16-64, Employment by age and industry (SIC 2007). https://www.nomisweb.co.uk/

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