

Climate Change in Wirral



Written by LGA Research from Local Government Association

LG Inform

Climate Change in Wirral

The UK has set a legally binding target to bring carbon emissions to net zero by 2050, and many councils have set their own ambitious targets as part of climate change action plans. In addition to this a growing number of councils have declared a climate emergency. This report is designed to allow the viewer to see a number of indicators related to climate change in their area, compared with other similar areas.

Contents

Highways

- Electric vehicle charging devices
- Electric vehicle rapid charging devices
- Electric Vehicle Homecharge Scheme: charging devices installed
- Electric Vehicle Homecharge scheme: grant value
- Workplace Charging Scheme: sockets installed
- Workplace Charging Scheme: grant value

Refuse, recycling and waste disposal

- Total household waste
- Percentage of household waste recycled
- Total household waste in tonnes (annual) per 1000 households
- Household waste sent for recycling/composting/reuse
- Household waste sent for dry recycling/reuse
- Household waste sent for green recycling/reuse

Housing

- Energy Efficiency of LA owned stock: Replacement of windows
- Energy Efficiency of LA owned stock: Replacement of boilers
- Energy Efficiency of LA owned stock: Installation of insulation
- Energy Efficiency of LA owned stock: Installation of insulation: solid walls
- Energy Efficiency of LA owned stock: Installation of insulation: cavity walls
- Energy Efficiency of LA owned stock: Installation of renewable technologies

Emissions

- Fraction of mortality attributable to particulate air pollution
- Total greenhouse gas emissions
- Total CH4 emissions
- Total N20 emissions

Consumption

- Consumption of domestic and non-domestic gas (GWh)
- Total consumption of gas (GWh)
- Consumption of domestic and non-domestic electricity
- Number of households in fuel poverty
- % of households in fuel poverty

Jobs

- Total jobs in low carbon and renewable energy sector
- Total jobs in low-carbon electricity
- Total jobs in onshore wind
- Total jobs in offshore wind
- Total jobs in solar PV





Highways and Transport

The way we travel has a huge impact on the extent to which an area contributes to, and can tackle, climate change. Schemes to reduce reliance on diesel and petrol cars through, for instance, road charging or improvements to alternative modes of transport can reduce the emissions of greenhouse gases.

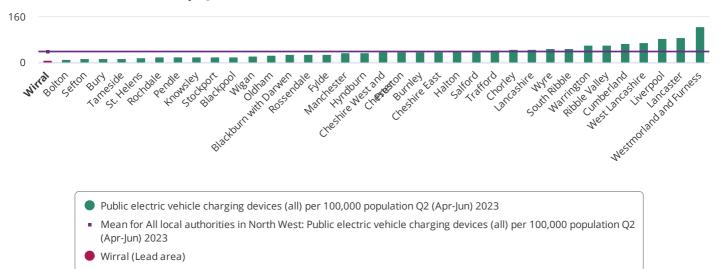
When looking at transport indicators, it is important to view them in the context of the area. If your area has major roads or an airport, for example, it is important to recognise that this could have a significant effect on greenhouse gas emissions that would be more difficult for the council to address.

Electric vehicle charging devices

In Q2 (Apr-Jun) 2023, the number of publicly available electric vehicle charging devices at all speeds per 100,000 population in Wirral was 9.7, which is below the All local authorities in North West mean number of publicly available electric vehicle charging devices at all speeds per 100,000 population of 39.6.

This data is sourced from the Department for Transport. Location data is sourced from the electric vehicle charging platform Zap-map. Charging devices not open to the public, i.e. private or domestic chargers, are excluded.

Publicly available electric vehicle charging devices at all speeds per 100,000 population (Q2 (Apr-Jun) 2023) for All local authorities in North West



Source:

Department for Transport, Electric vehicle charging infrastructure statistics, Publicly available electric vehicle charging devices at all speeds per 100,000 population, **Data updated:** 01 Aug 2023

Electric vehicle rapid charging devices

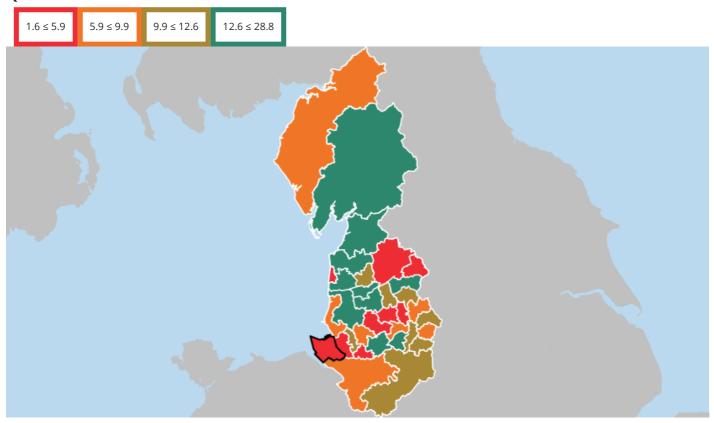
In Q2 (Apr-Jun) 2023, the number of public electric vehicle charging rapid devices per 100,000 population in Wirral was 2.5, which is below the All local authorities in North West mean number of public electric vehicle charging rapid devices per 100,000 population of 10.4.

Rapid charging devices are those rated at 43kW or above, including 'ultra rapid' chargers of more than 100kW.

This data is sourced from the Department for Transport. Location data is sourced from the electric vehicle charging platform Zap-map. Charging devices not open to the public, i.e. private or domestic chargers, are excluded.

Publicly available electric vehicle charging rapid devices per 100,000 population (Q2 (Apr-Jun) 2023) for All local authorities in North West

Quartiles for All local authorities in North West



Source:

Department for Transport, Electric vehicle charging infrastructure statistics, Publicly available electric vehicle charging rapid devices per 100,000 population, **Data updated:** 01 Aug 2023

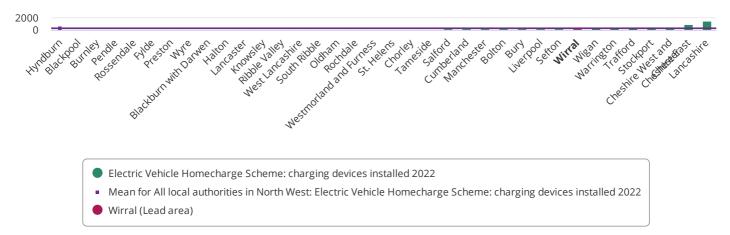
Electric Vehicle Homecharge Scheme: charging devices installed

In 2022, the number of charging devices installed under the Electric Vehicle Homecharge Scheme (EVHS) in Wirral was 342, which is above the All local authorities in North West mean number of charging devices installed under the Electric Vehicle Homecharge Scheme of 242.

The main requirement for the EVHS is that a person owns, leases, or has ordered a qualifying vehicle and has dedicated off-street parking at their property. A person may apply for 2 chargepoints at the same property if they have 2 qualifying vehicles.

This data is sourced from the Department for Transport.

Electric Vehicle Homecharge Scheme: number of charging devices installed (2022) for All local authorities in North West



Source:

Department for Transport, Electric vehicle charging infrastructure statistics, Electric Vehicle Homecharge Scheme: number of charging devices installed, **Data updated:** 05 Sep 2023

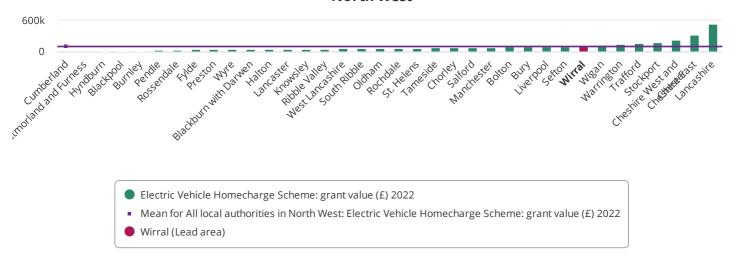
Electric Vehicle Homecharge Scheme: grant value

In 2022, the total value of grants issued for installations under the Electric Vehicle Homecharge Scheme (EVHS) in Wirral was £120,022, which is above the All local authorities in North West mean total value of grants issued for installations under the Electric Vehicle Homecharge Scheme (EVHS) of £85,283.

This data is taken from a database held by the DVLA which records grant applications for administrative purposes. Grants can take several months to process. Dates refer to when the charging device was installed, not when the grant was paid.

The data is sourced from the Department for Transport.

Electric Vehicle Homecharge Scheme: total grant value (£) (2022) for All local authorities in North West



Source:

Department for Transport, Electric vehicle charging infrastructure statistics, Electric Vehicle Homecharge Scheme: total grant value (£) , **Data updated:** 05 Sep 2023

Workplace Charging Scheme: sockets installed

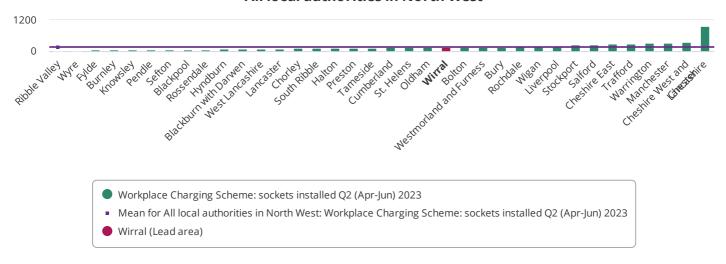
In Q2 (Apr-Jun) 2023, the cumulative number of sockets installations under the Workplace Charging Scheme (WCS) in Wirral was 150, which is below the All local authorities in North West mean cumulative number of sockets installations under the Workplace Charging Scheme of 151.

WCS is a voucher-based scheme that provides support towards the up-front costs of the purchase and installation of electric vehicle chargepoints. Any business, charity or public authority is eligible to claim the grant towards the cost of installing electric vehicle chargepoints, providing they have dedicated off-street parking for staff or fleet use only.

The WCS is designed to provide eligible organisations with support towards the upfront costs of the purchase and installation of electric vehicle charging devices. If an application is successful, applicants are issued with a unique identification voucher, which can then be used to install multiple charging devices. In these statistics, the number of sockets installed is counted as sometimes there is one grant for up to four charging devices in the same workplace carpark.

The data is sourced from the Department for Transport.

Workplace Charging Scheme: cumulative number of sockets installed (Q2 (Apr-Jun) 2023) for All local authorities in North West



Source:

Department for Transport, Electric vehicle charging infrastructure statistics, Workplace Charging Scheme: cumulative number of sockets installed, **Data updated:** 05 Sep 2023

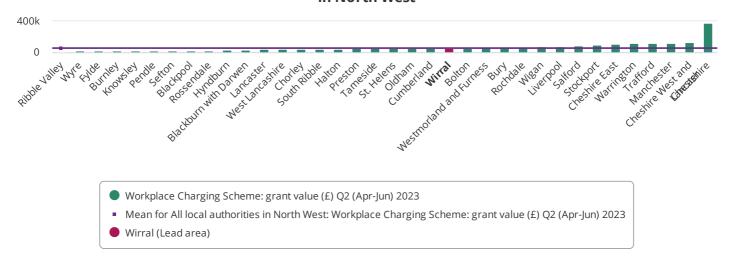
Workplace Charging Scheme: grant value

In Q2 (Apr-Jun) 2023, the cumulative value of grants issued for installations under the Workplace Charging Scheme (WCS) in Wirral was £56,500, which is above the All local authorities in North West mean cumulative value of grants issued for installations under the Workplace Charging Scheme of £56,295.

Data is taken from a database which records grant applications for administrative purposes. Grants can take several months to process and the most recent months are most likely to be undercounted.

The data is sourced from the Department for Transport.

Workplace Charging Scheme: total grant value (£) (Q2 (Apr-Jun) 2023) for All local authorities in North West



Source:

Department for Transport, Electric vehicle charging infrastructure statistics, Workplace Charging Scheme: total grant value (£) , **Data updated:** 05 Sep 2023

Refuse, recycling and waste disposal

Waste management has become increasingly important in the fight against climate change, as improved waste disposal can lower carbon emissions.

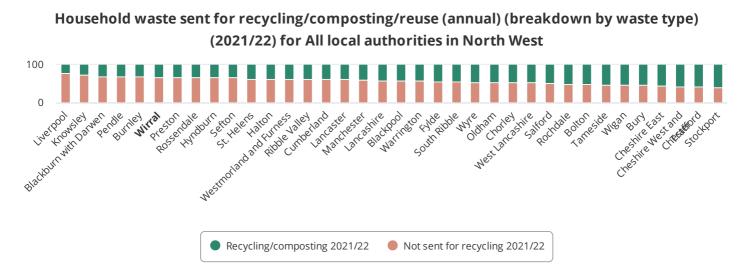
Each year tons of waste is generated, much of which will be landfilled, dumped, or burned. This is not only a waste of vital resources and a health hazard, but also a major source of greenhouse gas emissions. Irresponsible waste management contributes directly to climate change by adding carbon-based particles into the air, which are produced during the burning of petroleum products.

Total household waste

In 2021/22, the total household waste in tonnes (annual) in Wirral was 127,683, which is above the All local authorities in North West mean total household waste in tonnes (annual) of 94,414.

Regular household collection' means wastes within Schedule 1 of the Controlled Waste Regulations 1992. Small amounts of commercial and industrial wastes may also be included in the case of collections that include mixed domestic and commercial hereditaments. 'Household recycling' contains materials sent for recycling, composting or reuse by local authorities as well as those collected from household sources by 'private/voluntary' organisations.

The data is sourced from the Department for Environment, Food and Rural Affairs.



Source:

Department for Environment, Food and Rural Affairs, Local authority collected waste management, Household waste sent for recycling/composting/reuse (annual), **Data updated:** 11 May 2023

Department for Environment, Food and Rural Affairs, Local authority collected waste management, Household waste not sent for recycling (annual), **Data updated:** 11 May 2023



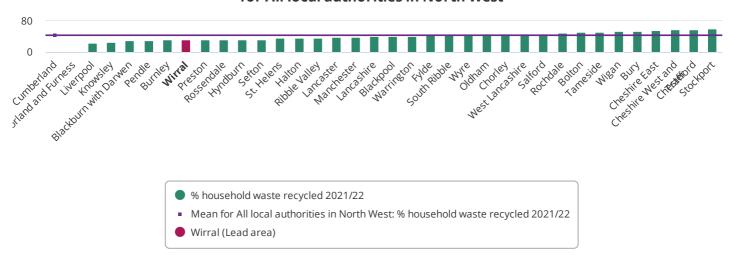
Percentage of household waste recycled

In 2021/22, the percentage of household waste arisings which have been sent by the authority for reuse, recycling, composting or anaerobic digestion in Wirral was 32.30%, which is below the All local authorities in North West mean percentage of household waste arisings which have been sent by the authority for reuse, recycling, composting or anaerobic digestion of 42.37%.

This is calculated by the total tonnage of household waste collected which is sent for reuse divided by the total tonnage of household waste collected.

The data is sourced from the Department for Environment, Food and Rural Affairs.

Percentage of household waste sent for reuse, recycling and composting (annual) (2021/22) for All local authorities in North West



Source:

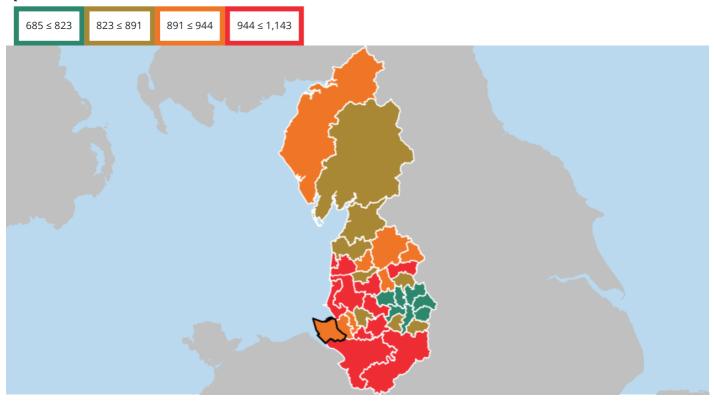
Department for Environment, Food and Rural Affairs, Local authority collected waste management, Percentage of household waste sent for reuse, recycling and composting (annual), **Data updated:** 24 Mar 2023

Total household waste in tonnes (annual) per 1,000 households

In 2021/22, the total household waste in tonnes per 1000 households in Wirral was 891, which is below the All local authorities in North West mean total household waste in tonnes per 1000 households of 899.

The data is sourced from the Department for Environment, Food and Rural Affairs.

Total household waste per 1,000 households (annual) (2021/22) for All local authorities in North West Quartiles for All local authorities in North West



Source:

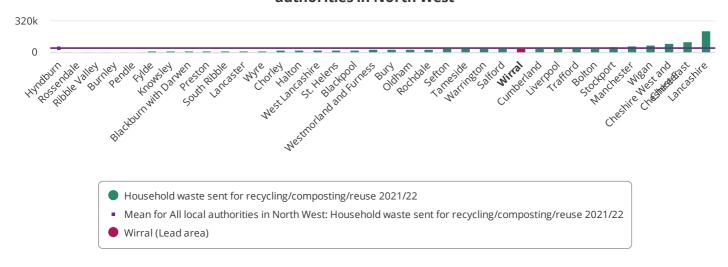
Department for Environment, Food and Rural Affairs, Local authority collected waste management, Total household waste per 1,000 households (annual), **Data updated:** 27 May 2023

Household waste sent for recycling/composting/reuse

In 2021/22, the total household waste sent for recycling/composting/reuse in Wirral was 41,252 tonnes, which is above the All local authorities in North West mean total household waste sent for recycling/composting/reuse of 40,534 tonnes.

The data is sourced from the Department for Environment, Food and Rural Affairs.

Household waste sent for recycling/composting/reuse (annual) (2021/22) for All local authorities in North West



Source:

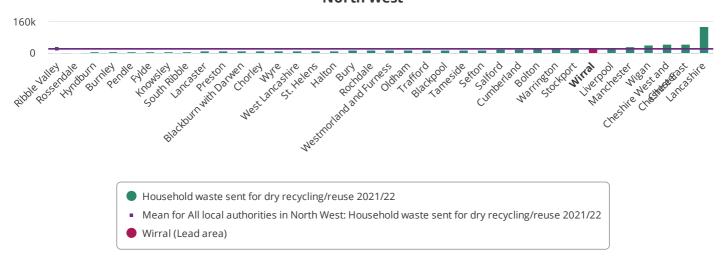
Department for Environment, Food and Rural Affairs, Local authority collected waste management, Household waste sent for recycling/composting/reuse (annual), **Data updated:** 11 May 2023

Household waste sent for dry recycling/reuse

In 2021/22, the total household waste sent for dry recycling/reuse in Wirral was 26,191 tonnes, which is above the All local authorities in North West mean total household waste sent for dry recycling/reuse of 21,945 tonnes.

The data is sourced from the Department for Environment, Food and Rural Affairs.

Household waste sent for dry recycling/reuse (annual) (2021/22) for All local authorities in North West



Source:

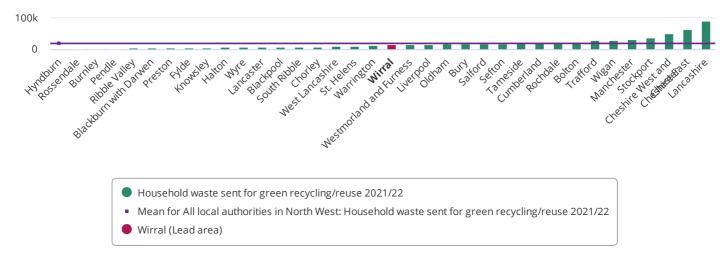
Department for Environment, Food and Rural Affairs, Local authority collected waste management, Household waste sent for dry recycling/reuse (annual), **Data updated:** 13 May 2023

Household waste sent for green recycling/reuse

In 2021/22, the total household waste sent for green recycling/reuse in Wirral was 15,061 tonnes, which is below the All local authorities in North West mean total household waste sent for green recycling/reuse of 18,589 tonnes.

The data is sourced from the Department for Environment, Food and Rural Affairs.

Household waste sent for green recycling/reuse (annual) (2021/22) for All local authorities in North West



Source:

Department for Environment, Food and Rural Affairs, Local authority collected waste management, Household waste sent for green recycling/reuse (annual), **Data updated:** 06 Jun 2023

Housing

Currently the UK built environment will struggle to deal with the impacts of climate change. Around 1.8 million people in the UK already live in areas of significant flood risk and roughly 20% of homes in England already experience overheating issues, even during cooler summers.

The need to retrofit our existing homes to reduce emissions offers an opportunity to address overheating and resilience concerns. Adapting our built environment to cope with the impacts of climate change will require a fundamental shift in the way we approach development. The relevant considerations will have to be integrated comprehensively across associated government policy, both locally and nationally. As we move forwards how we build, and what materials to use, will become ever-more pertinent as the UK's climate changes the demands placed on our buildings.

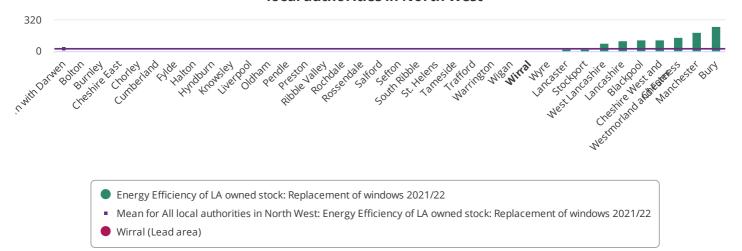
Energy Efficiency of LA owned stock: Replacement of windows

In 2021/22, the number of dwellings owned by the local authority where windows have been replaced, either with single glazing or double glazing windows, in Wirral was 0, which is below the All local authorities in North West mean number of dwellings owned by the local authority where windows have been replaced, either with single glazing or double glazing windows, of 28.

This refers to dwellings owned by the local authority, whether they are located within the local authority area or not.

The data is sourced from the Department for Levelling Up, Housing & Communities.

Energy Efficiency of Local Authority owned stock: Replacement of windows (2021/22) for All local authorities in North West



Source:

Department for Levelling Up, Housing & Communities, Local Authority Housing Statistics (LAHS), Energy Efficiency of Local Authority owned stock: Replacement of windows, **Data updated:** 28 Jun 2023



Energy Efficiency of LA owned stock: Replacement of boilers

In 2021/22, the number of dwellings owned by the local authority where boilers have been replaced, regardless of the energy efficiency rating of the boiler, in Wirral was 0, which is below the All local authorities in North West mean number of dwellings owned by the local authority where boilers have been replaced of 83.

This refers to dwellings owned by the local authority, whether they are located within the local authority area or not.

The data is sourced from the Department for Levelling Up, Housing & Communities.

Energy Efficiency of Local Authority owned stock: Replacement of boilers (2021/22) for All local authorities in North West



Source:

Department for Levelling Up, Housing & Communities, Local Authority Housing Statistics (LAHS), Energy Efficiency of Local Authority owned stock: Replacement of boilers, Data updated: 28 Jun 2023

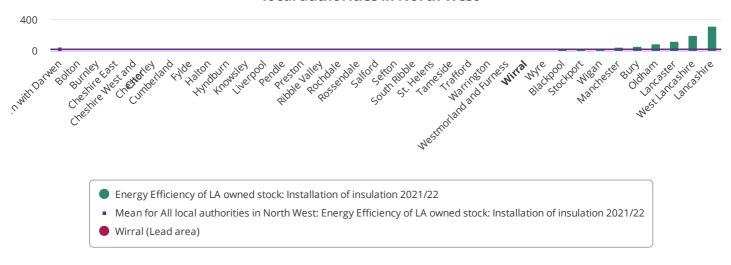
Energy Efficiency of LA owned stock: Installation of insulation

In 2021/22, the number of dwellings owned by the local authority where there has been installation of insulation in Wirral was 0, which is below the All local authorities in North West mean number of dwellings owned by the local authority where there has been installation of insulation of 18.

This includes solid walls, cavity walls, lofts, and floors. An individual dwelling may be counted under more than one category of works.

The data is sourced from the Department for Levelling Up, Housing & Communities.

Energy Efficiency of Local Authority owned stock: Installation of insulation (2021/22) for All local authorities in North West



Source:

Department for Levelling Up, Housing & Communities, Local Authority Housing Statistics (LAHS), Energy Efficiency of Local Authority owned stock: Installation of insulation, **Data updated:** 28 Jun 2023

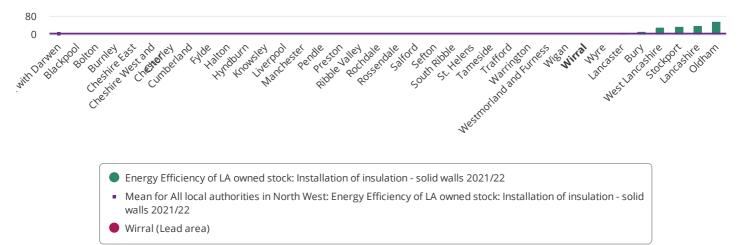
Energy Efficiency of LA owned stock: Installation of insulation: solid walls

In 2021/22, the number of dwellings owned by the local authority where there has been installation of insulation via solid wall insulation in Wirral was 0, which is below the All local authorities in North West mean number of dwellings owned by the local authority where there has been installation of insulation via solid wall insulation of 4.

Solid walls have no cavity so there is no barrier to reduce heat flow through the walls. They can be insulated with internal insulation (from the inside) or external insulation (from the outside). Solid wall insulation may also be used for cavity walls that cannot be treated with cavity wall insulation (e.g. due to risk of damp penetration).

The data is sourced from the Department for Levelling Up, Housing & Communities.

Energy Efficiency of Local Authority owned stock: Installation of insulation - solid walls (2021/22) for All local authorities in North West



Source:

Department for Levelling Up, Housing & Communities, Local Authority Housing Statistics (LAHS), Energy Efficiency of Local Authority owned stock: Installation of insulation - solid walls, **Data updated:** 28 Jun 2023



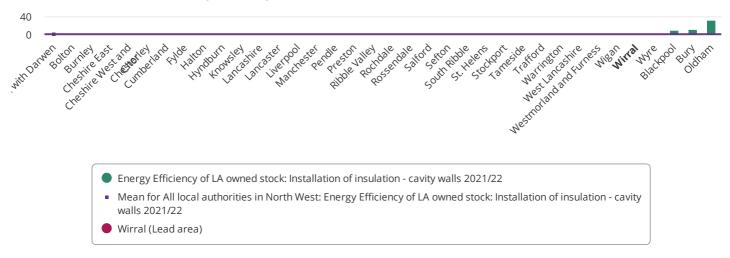
Energy Efficiency of LA owned stock: Installation of insulation: cavity walls

In 2021/22, the number of dwellings owned by the local authority where there has been installation of insulation via insulation of cavity walls in Wirral was 0, which is below the All local authorities in North West mean number of dwellings owned by the local authority where there has been installation of insulation of cavity walls of 2.

Cavity walls are made of two layers with a small gap or 'cavity' between them. This cavity acts as a barrier to reduce heat flow through the wall. Insulation of cavity walls fills the gap between the inner and outer layers of external walls with an insulating material, reducing heat loss.

The data is sourced from the Department for Levelling Up, Housing & Communities.

Energy Efficiency of Local Authority owned stock: Installation of insulation - cavity walls (2021/22) for All local authorities in North West



Source:

Department for Levelling Up, Housing & Communities, Local Authority Housing Statistics (LAHS), Energy Efficiency of Local Authority owned stock: Installation of insulation - cavity walls, **Data updated:** 28 Jun 2023

Energy Efficiency of LA owned stock: Installation of renewable technologies

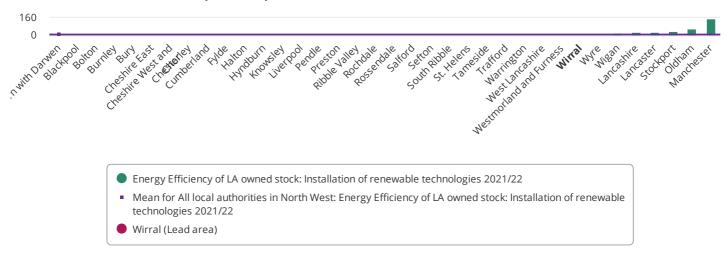
In 2021/22, the number of dwellings owned by the local authority where there has been installation of renewable technologies in Wirral was 0, which is below the All local authorities in North West mean number of dwellings owned by the local authority where there has been installation of renewable technologies of 9.

Renewable technologies are defined as being powered by abundant, free sources of energy such as the sun, the wind or even plant and animal matter, as opposed to generating energy from non renewable sources like fossil fuels.

It also includes low carbon technologies such as heat pumps which are not completely renewable because they still require input of electrical energy but at much smaller scale than conventional technologies.

The data is sourced from the Department for Levelling Up, Housing & Communities.

Energy Efficiency of Local Authority owned stock: Installation of renewable technologies (2021/22) for All local authorities in North West



Source:

Department for Levelling Up, Housing & Communities, Local Authority Housing Statistics (LAHS), Energy Efficiency of Local Authority owned stock: Installation of renewable technologies , **Data updated:** 28 Jun 2023



Emissions

Human emissions of carbon dioxide and other greenhouse gases are a primary driver of climate change and present one of the world's most pressing challenges. This link between global temperatures and greenhouse gas concentrations, especially CO2, has been true throughout Earth's history.

To slow down rising global temperatures, we need to stabilize concentrations of CO2 and other greenhouse gases in Earth's atmosphere.

Fraction of mortality attributable to particulate air pollution

In 2021, the fraction of annual all-cause adult mortality attributable to anthropogenic (human-made) particulate air pollution (measured as fine particulate matter, PM2.5*) in Wirral was 4.9%, which is below the All local authorities in North West mean fraction of annual all-cause adult mortality attributable to anthropogenic (human-made) particulate air pollution (measured as fine particulate matter, PM2.5*) of 5.2%.

This is defined as mortality burden associated with long-term exposure to anthropogenic particulate air pollution at current levels, expressed as the percentage of annual deaths from all causes in those aged 30+. Caution is needed when considering apparent trends over time.

The data is sourced from the Office for Health Improvement and Disparities (OHID).

Fraction of mortality attributable to particulate air pollution (new method) (2021) for All local authorities in North West



- Fraction of mortality attributable to particulate air pollution (new method) 2021
- Mean for All local authorities in North West: Fraction of mortality attributable to particulate air pollution (new method) 2021
- Wirral (Lead area)

Source:

Office for Health Improvement and Disparities (OHID), Public Health Outcomes Framework, Fraction of mortality attributable to particulate air pollution (new method), **Data updated:** 13 Jun 2023



Total greenhouse gas emissions

In 2021, the estimate in kilotonnes of carbon dioxide equivalent (kt CO2e) emissions for all sectors in Wirral was 1,110.7, which is above the All local authorities in North West mean estimate in kilotonnes of carbon dioxide equivalent (kt CO2e) emissions for all sectors of 1,047.2.

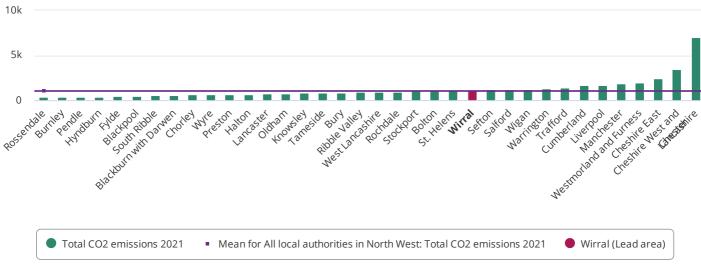
This is defined as is the grand total of industry, commercial, public sector, domestic, transport, land use, land use change and forestry (LULUCF), agriculture, and waste management.

The purpose of these estimates is to assist those using local emissions accounting as a tool in developing emissions reduction strategies. It should be noted that circumstances vary enormously between authorities, and local authorities have relatively little influence over some types of emissions, and for theses reasons these statistics should be interpreted with caution.

Carbon dioxide is reported in terms of net emissions, which means total emissions minus total removals of carbon dioxide from the atmosphere by carbon sinks. Carbon sinks are any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas from the atmosphere.

The data is sourced from the Department for Energy Security and Net Zero.

CO2 emissions estimates - Total (2021) for All local authorities in North West



Source:

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, CO2 emissions estimates - Total, **Data updated**: 30 Jun 2023



CO2 emissions estimates - Total (breakdown by sector) (2021) for All local authorities in North West

	CO2 emissions broken down by sector (kilotonnes)									
Area	Agriculture	Commercial	Domestic	Industry	Land use; land use change and forestry (LULUCF)	Public sector	Transport			
	2021									
	Kilotonnes									
Blackburn with Darwen	2.9	32.1	211.0	184.3	-5.9	34.0	136.0			
Blackpool	0.4	37.6	211.8	76.9	2.7	40.4	101.6			
Bolton	3.0	51.5	404.0	154.5	-5.1	51.2	427.0			
Burnley	2.8	21.8	134.3	74.6	-5.9	21.7	121.1			
Bury	2.4	36.7	280.3	103.3	-6.3	38.7	352.6			
Cheshire East	85.6	108.5	672.3	475.7	-36.7	67.5	1,078.1			
Cheshire West and Chester	63.5	108.2	530.6	1,725.8	-2.7	89.8	852.2			
Chorley	9.3	19.1	174.8	71.4	-4.3	27.1	320.4			
Cumberland	139.4	73.1	457.9	626.7	-175.6	40.6	486.8			
Fylde	13.2	12.8	136.4	85.8	40.9	14.9	156.8			
Halton	1.5	44.4	164.5	245.1	2.2	12.2	220.9			
Hyndburn	2.6	20.0	119.9	114.7	-5.3	8.8	130.2			
Knowsley	2.6	14.2	195.9	245.7	1.7	22.1	312.0			
Lancashire	186.6	253.8	1,854.3	1,890.6	269.0	243.8	2,281.5			
Lancaster	32.2	24.2	206.1	100.8	25.9	45.4	328.8			
Liverpool	2.2	136.3	604.8	266.9	2.7	187.0	456.3			
Manchester	1.4	216.9	615.7	209.6	1.6	280.1	548.2			
Oldham	2.2	45.0	314.1	146.5	-5.1	51.3	220.7			
Pendle	7.7	13.5	142.3	87.8	-7.6	11.7	118.9			
Preston	9.4	56.3	202.4	101.3	-3.3	50.0	264.1			
Ribble Valley	28.7	5.8	109.3	681.7	-47.4	6.3	112.2			
Rochdale	3.2	37.1	302.3	149.6	-5.3	33.1	396.4			
Rossendale	3.0	8.6	114.3	94.0	-2.8	7.0	111.1			
Salford	2.4	88.5	334.7	122.4	40.3	93.2	494.4			
Sefton	6.4	106.4	411.6	269.6	17.0	127.8	231.3			
South Ribble	7.2	19.9	159.8	121.6	3.0	9.3	215.0			
St. Helens	3.7	49.5	247.7	455.4	13.5	58.6	281.6			
Stockport	5.4	43.3	447.0	167.5	-5.6	47.3	380.7			
Tameside	2.3	34.3	311.3	171.7	-6.3	33.5	248.2			
Trafford	1.9	91.7	352.4	650.0	11.6	34.1	300.0			
Warrington	4.8	53.0	295.1	350.1	13.9	34.3	585.9			
West Lancashire	51.9	14.6	176.7	229.2	203.9	26.1	199.1			



Westmorland and Furness	142.4	69.1	407.3	791.8	-210.2	30.5	760.1
Wigan	4.5	50.1	442.0	262.9	1.2	39.5	415.7
Wirral	4.4	52.7	461.8	196.3	-1.3	58.2	338.3
Wyre	18.5	37.1	178.0	127.7	71.9	15.5	203.7
Mean for All local authorities in North West	19.3	52.4	300.9	284.0	-2.5	50.0	340.2

Source:

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, CO2 emissions estimates - Agriculture, **Data updated**: 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, CO2 emissions estimates - Commercial, Data updated: 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, CO2 emissions estimates - Domestic, Data updated: 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, CO2 emissions estimates - Industry, Data updated: 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, CO2 emissions estimates - Land use, land use change and forestry (LULUCF), **Data updated:** 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, CO2 emissions estimates - Public sector , **Data updated:** 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, CO2 emissions estimates - Transport, **Data updated:** 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, CO2 emissions estimates - Waste management, **Data updated:** 30 Jun 2023



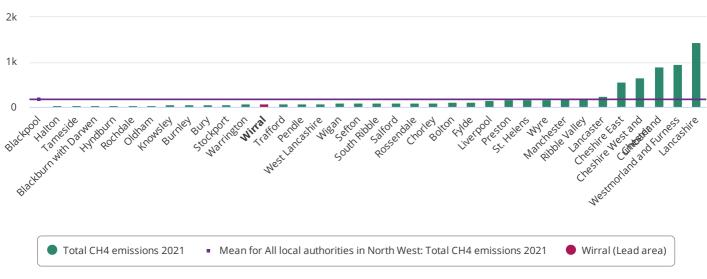
Total CH4 emissions

In 2021, the methane (CH4) emissions estimate in kilotonnes of carbon dioxide equivalent (kt CO2e) emissions for all sectors in Wirral was 69.3, which is below the All local authorities in North West mean methane (CH4) emissions estimate in kilotonnes of carbon dioxide equivalent (kt CO2e) emissions for all sectors of 172.3.

This is defined as is the grand total of industry, commercial, public sector, domestic, transport, land use, land use change and forestry (LULUCF), agriculture, and waste management.

The data is sourced from the Department for Energy Security and Net Zero.





Source:

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, Methane emissions estimates - Total , **Data updated:** 30 Jun 2023



Methane emissions estimates - Total (2021) for All local authorities in North West

	Total CH4 emissions				
Area	2021				
	Kilotonnes				
Blackburn with Darwen	44.4				
Blackpool	19.8				
Bolton	111.3				
Burnley	55.2				
Bury	57.9				
Cheshire East	563.3				
Cheshire West and Chester	658.7				
Chorley	92.8				
Cumberland	902.6				
Fylde	112.2				
Halton	36.8				
Hyndburn	44.7				
Knowsley	49.5				
Lancashire	1,440.3				
Lancaster	251.7				
Liverpool	158.3				
Manchester	193.0				
Oldham	46.0				
Pendle	78.8				
Preston	159.3				
Ribble Valley	205.5				
Rochdale	45.1				
Rossendale	91.9				
Salford	91.4				
Sefton	89.1				
South Ribble	89.1				
St. Helens	173.5				
Stockport	63.0				
Tameside	36.9				
Trafford	69.6				
Warrington	67.1				
West Lancashire	82.9				
Westmorland and Furness	956.6				
Wigan	86.3				
Wirral	69.3				
Wyre	176.0				
Mean for All local authorities in North West	172.3				

Source

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, Methane emissions estimates - Total , **Data updated:** 30 Jun 2023



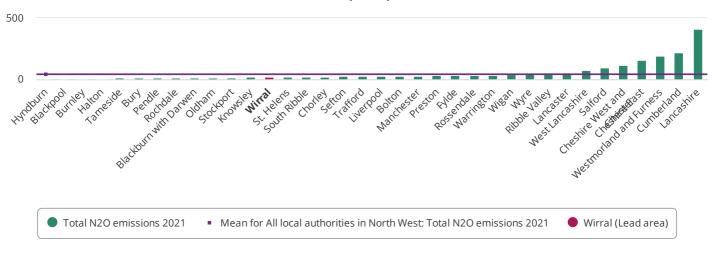
Total N20 emissions

In 2021, the the nitrous oxide (N2O) emissions estimate in kilotonnes of carbon dioxide equivalent (kt CO2e) emissions for all sectors in Wirral was 17.7, which is below the All local authorities in North West mean nitrous oxide (N2O) emissions estimate in kilotonnes of carbon dioxide equivalent (kt CO2e) emissions for all sectors of 44.3.

This is defined as is the grand total of industry, commercial, public sector, domestic, transport, land use, land use change and forestry (LULUCF), agriculture, and waste management.

The data is sourced from the Department for Energy Security and Net Zero.

Nitrous oxide emissions estimates - Total (2021) for All local authorities in North West



Source:

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, Nitrous oxide emissions estimates - Total , **Data updated:** 30 Jun 2023

Nitrous oxide emissions estimates - Total (breakdown by sector) (2021) for All local authorities in North West

	N2O emissions broken down by sector (kilotonnes)									
Area	N2O emissions broken down by sector (kilotonnes)									
	Agriculture	Commercial	Domestic	Industry	Land use; land use change and forestry (LULUCF)	Public sector	Transport			
	2021									
	Kilotonnes									
Blackburn with Darwen	5.1	0.1	0.5	4.5	0.5	0.1	1.2			
Blackpool	1.5	0.2	0.8	3.0	0.2	0.1	1.0			
Bolton	5.4	0.2	1.0	3.2	0.7	0.1	3.8			
Burnley	4.0	0.1	0.4	1.4	0.3	0.1	1.0			
Bury	3.0	0.2	0.7	2.0	0.4	0.1	3.2			
Cheshire East	108.3	0.4	2.4	5.4	2.9	0.2	10.0			
Cheshire West and Chester	83.1	0.5	1.9	10.8	3.2	0.2	7.4			
Chorley	16.0	0.1	0.7	1.0	0.6	0.1	2.7			
Cumberland	183.0	0.3	1.7	9.7	12.4	0.1	4.1			
Fylde	22.7	0.1	0.5	0.9	0.6	0.0	1.2			
Halton	3.2	0.1	0.5	1.9	0.5	0.0	2.1			
Hyndburn	3.7	0.1	0.3	0.5	0.2	0.0	1.1			
Knowsley	2.7	0.1	0.7	6.3	0.5	0.1	2.7			
Lancashire	285.9	1.1	6.0	33.2	6.8	0.6	19.0			
Lancaster	48.1	0.1	0.8	2.8	1.1	0.1	2.9			
Liverpool	0.6	0.7	1.6	10.9	0.7	0.4	4.4			
Manchester	0.8	1.0	1.7	11.3	0.8	0.8	5.0			
Oldham	2.9	0.2	0.8	3.4	1.2	0.1	2.0			
Pendle	9.5	0.1	0.4	0.8	0.3	0.0	1.0			
Preston	18.2	0.3	0.6	3.8	0.4	0.1	2.3			
Ribble Valley	36.8	0.0	0.4	17.1	0.8	0.0	0.8			
Rochdale	3.9	0.2	0.8	1.6	0.5	0.1	3.8			
Rossendale	5.5	0.0	0.3	1.2	0.3	0.0	1.0			
Salford	4.8	0.3	0.9	61.8	0.7	0.2	4.6			
Sefton	11.5	0.3	1.4	2.3	0.6	0.2	2.1			
South Ribble	11.0	0.1	0.4	1.4	0.5	0.0	1.8			
St. Helens	13.1	0.2	0.7	1.5	0.7	0.1	2.6			
Stockport	2.4	0.2	1.1	3.2	0.6	0.1	3.3			
Tameside	1.8	0.2	0.8	3.2	0.5	0.1	2.2			
Trafford	3.7	0.3	0.9	3.0	0.7	0.1	2.7			
Warrington	12.5	0.3	0.9	3.2	1.0	0.1	5.4			



West Lancashire	69.6	0.1	0.6	1.6	1.1	0.1	1.6
Westmorland and Furness	166.5	0.3	1.7	9.0	6.5	0.1	7.1
Wigan	7.2	0.2	1.4	3.2	1.1	0.1	3.8
Wirral	4.2	0.3	1.2	4.0	0.8	0.1	2.9
Wyre	40.8	0.1	0.6	0.6	0.6	0.0	1.7
Mean for All local authorities in North West	26.2	0.2	0.9	5.8	1.3	0.1	3.0

Source:

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, Nitrous oxide emissions estimates - Agriculture, **Data updated:** 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, Nitrous oxide emissions estimates - Commercial, **Data updated:** 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, Nitrous oxide emissions estimates - Domestic , **Data updated:** 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, Nitrous oxide emissions estimates - Industry, **Data updated:** 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, Nitrous oxide emissions estimates - Land use, land use change and forestry (LULUCF), **Data updated:** 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, Nitrous oxide emissions estimates - Public sector , **Data updated:** 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, Nitrous oxide emissions estimates - Transport, **Data updated:** 30 Jun 2023

Department for Energy Security and Net Zero, UK local authority and regional greenhouse gas emissions national statistics, Nitrous oxide emissions estimates - Waste management, **Data updated:** 30 Jun 2023



Consumption

Generating electricity and heat by burning fossil fuels such as coal, oil, or gas causes a large chunk of the greenhouse gases, such as carbon dioxide and nitrous oxide, that blanket the Earth and trap the sun's heat.

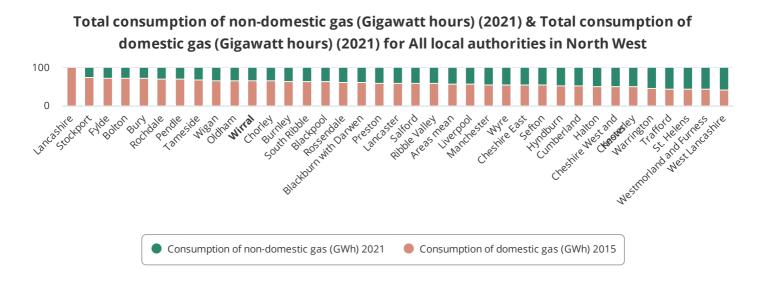
Consumption of domestic and non-domestic gas (GWh)

In 2021, the total consumption of domestic gas in Gigawatt hours (GWh) in Wirral was 1,788, which is above the All local authorities in North West mean total consumption of domestic gas in Gigawatt hours (GWh) of 1,097 whilst the total consumption of non-domestic gas (commercial and industrial) in Gigawatt hours (GWh) in Wirral was 894, which is above the All local authorities in North West mean total consumption of non-domestic gas (commercial and industrial) in Gigawatt hours (GWh) of 766.

This data is annualised and weather corrected. The consumption period is normally between mid-May to mid-May.

This data includes all gas distributed through all Local Distribution Zones (LDZ), and gas consumers whose consumption data is recorded daily and are known as Daily Metered (DM) customers.

The data is sourced from the Department for Energy Security and Net Zero.



Source:

Department for Energy Security and Net Zero, Sub-national gas consumption data, Total consumption of non-domestic gas (Gigawatt hours), **Data updated:** 03 Jan 2023

Department for Energy Security and Net Zero, Sub-national gas consumption data, Total consumption of domestic gas (Gigawatt hours), **Data updated:**11 May 2023



Total consumption of gas (GWh)

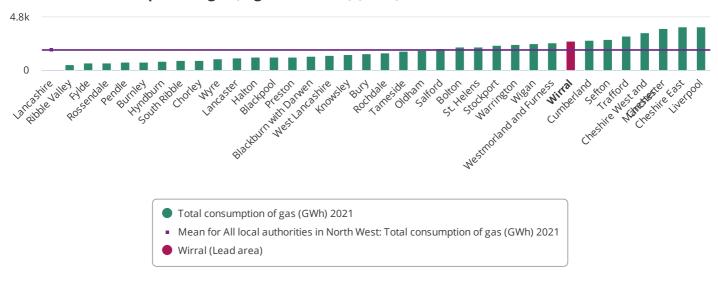
In 2021, the total consumption of both domestic and non-domestic (commercial and industrial) gas in Gigawatt hours (GWh) in Wirral was 2,682, which is above the All local authorities in North West mean total consumption of both domestic and non-domestic (commercial and industrial) gas in Gigawatt hours (GWh) of 1,863.

This data is annualised and weather corrected. The consumption period is normally between mid-May to mid-May.

This data includes all gas distributed through all Local Distribution Zones (LDZ), and gas consumers whose consumption data is recorded daily and are known as Daily Metered (DM) customers.

The data is sourced from the Department for Energy Security and Net Zero.

Total consumption of gas (Gigawatt hours) (2021) for All local authorities in North West



Source:

Department for Energy Security and Net Zero, Sub-national gas consumption data, Total consumption of gas (Gigawatt hours), **Data updated:** 03 Jan 2023



Consumption of domestic and non-domestic electricity

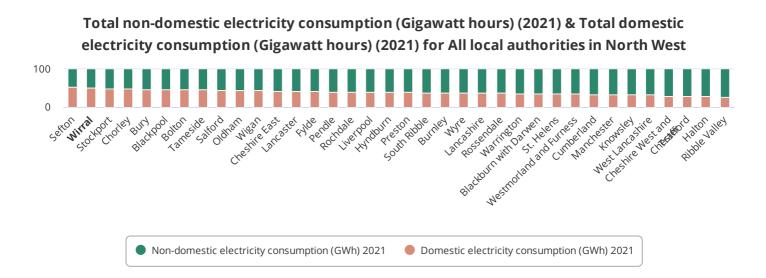
In 2021, the total consumption of both Economy 7 and standard domestic electricity consumption in Gigawatt hours (GWh) in Wirral was 477.8, which is above the All local authorities in North West mean total consumption of both Economy 7 and standard domestic electricity consumption in Gigawatt hours (GWh) of 319.3 whilst the total consumption of all non-domestic (commercial and industrial) electricity in Gigawatt hours (GWh) in Wirral was 458.7, which is below the All local authorities in North West mean the total consumption of all non-domestic (commercial and industrial) electricity in Gigawatt hours (GWh) of 501.3.

The data is annualised and is not weather corrected. The consumption is based on Non-Half Hourly (NHH) meters (these are the standard domestic and Economy 7 type tariffs) and is for a time period normally of 31st January to 30th January.

The dataset also includes an aggregated total of consumption for unallocated, that is, consumption that was not able to be matched to an area due to incomplete or a lack of postcode information (this usually accounts for less than 1 per cent of consumption).

As a note, Economy 7 meters differ from standard meters in that they have a separate (cheaper) off-peak rate. Economy 7 meters still measure all household consumption however, meaning a household on an Economy 7 tariff will still have only one meter.

The data is sourced from the Department for Energy Security and Net Zero.



Source:

Department for Energy Security and Net Zero, Sub-national electricity consumption data, Total non-domestic electricity consumption (Gigawatt hours), **Data updated:** 09 May 2023

 $Department for \ Energy \ Security \ and \ Net \ Zero, \ Sub-national \ electricity \ consumption \ data, \ Total \ domestic \ electricity \ consumption \ (Gigawatt \ hours) \ , \ \textbf{Data}$

updated: 20 May 2023



Number of households in fuel poverty

In 2021, the total number of households in fuel poverty using the Low Income Low Energy Efficiency (LILEE) measure in Wirral was 22,426, which is above the All local authorities in North West mean total number of households in fuel poverty using the Low Income Low Energy Efficiency (LILEE) measure of 13,394.

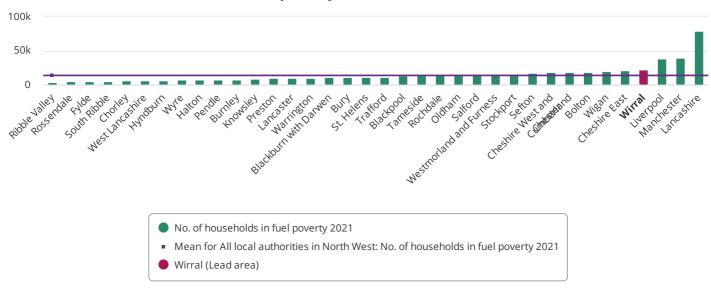
Since 2021 the LILEE indicator considers a household to be fuel poor if: (i) it is living in a property with an energy efficiency rating of band D, E, F or G as determined by the most up-to-date Fuel Poverty Energy Efficiency Rating (FPEER) methodology; and (ii) its disposable income (income after housing costs (AHC) and energy needs) would be below the poverty line.

The Government is interested in the amount of energy people need to consume to have a warm, well-lit home, with hot water for everyday use, and the running of appliances. Therefore, fuel poverty is measured based on required energy bills rather than actual spending. This ensures that those households who have low energy bills simply because they actively limit their use of energy at home.

Fuel poverty statistics are based on data from the English Housing Survey (EHS). Estimates of fuel poverty at the regional level are taken from the main fuel poverty statistics. Estimates at the sub-regional level should only be used to look at general trends and identify areas of particularly high or low fuel poverty. They should not be used to identify trends over time.

The data is sourced from the Department for Energy Security and Net Zero.





Source:

Department for Energy Security and Net Zero, Fuel poverty sub regional statistics, Number of households in fuel poverty, **Data updated:** 27 Apr 2023



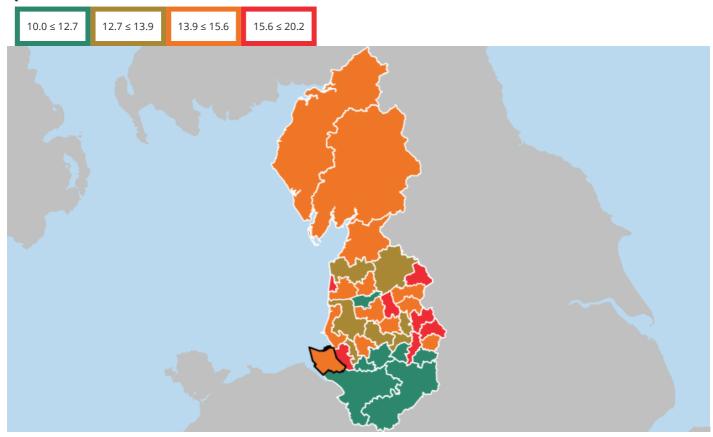
% of households in fuel poverty

In 2021, the fuel poor households as a proportion of all households in the geographical area (modelled) using the Low Income Low Energy Efficiency (LILEE) measure in Wirral was 15.3, which is above the All local authorities in North West mean fuel poor households as a proportion of all households in the geographical area (modelled) using the Low Income Low Energy Efficiency (LILEE) measure of 14.6.

Since 2021 the LILEE indicator considers a household to be fuel poor if: (i) it is living in a property with an energy efficiency rating of band D, E, F or G as determined by the most up-to-date Fuel Poverty Energy Efficiency Rating (FPEER) methodology; and (ii) its disposable income (income after housing costs (AHC) and energy needs) would be below the poverty line.

The data is sourced from the Department for Energy Security and Net Zero.

Percentage of households in fuel poverty (2021) for All local authorities in North West Quartiles for All local authorities in North West



Source:

Department for Energy Security and Net Zero, Fuel poverty sub regional statistics, Percentage of households in fuel poverty, **Data updated:** 27 Apr 2023

Jobs

Looking forwards, the number of jobs in climate-friendly sectors will be a key indicator of how areas are adapting to meet the UK legally binding target of bringing carbon emissions to net zero by 2050. Whilst some data may not be immediately available currently for some areas, it is expected that as we move forwards more data will become readily available in the following section.

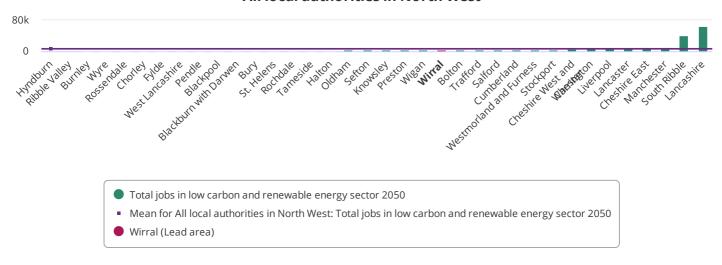
Total jobs in low carbon and renewable energy sector

In 2050, the estimated total number of direct jobs in the low-carbon and renewable energy sector in Wirral will be 3,881, which is below the All local authorities in North West mean estimated total number of direct jobs in the low-carbon and renewable energy sector of 6,548.

The analysis was produced using existing and credible precedents for estimating employment based on employment multipliers and demand uptake for a range of low-carbon and renewable energy sectors.

The data is sourced from the Local Government Association.

Estimated total number of direct jobs in low-carbon and renewable energy sector (2050) for All local authorities in North West



Source:

Local Government Association, Local Government Association Local Metrics, Estimated total number of direct jobs in low-carbon and renewable energy sector, **Data updated:** 24 Jun 2022

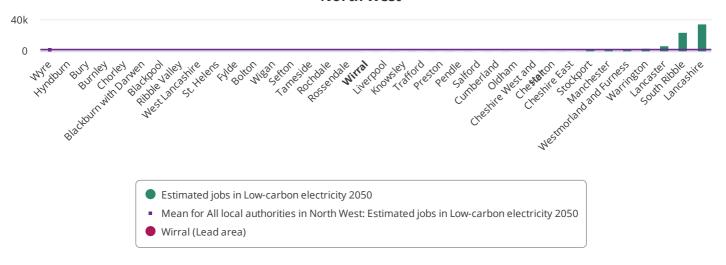
Total jobs in low-carbon electricity

In 2050, the estimated total number of direct jobs in the low-carbon electricity sector in Wirral will be 555, which is below the All local authorities in North West mean estimated total number of direct jobs in the low-carbon electricity sector of 2,587.

The analysis was produced using existing and credible precedents for estimating employment based on employment multipliers and demand uptake for a range of low-carbon and renewable energy sectors.

The data is sourced from the Local Government Association.

Estimated number of direct jobs in Low-carbon electricity (2050) for All local authorities in North West



Source:

Local Government Association, Local Government Association Local Metrics, Estimated number of direct jobs in Low-carbon electricity, **Data updated:** 24 Jun 2022

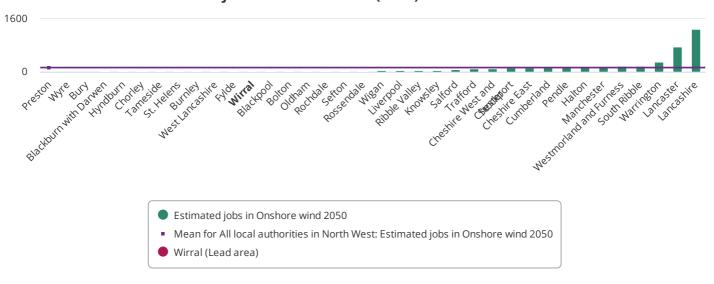
Total jobs in onshore wind

In 2050, the estimated total number of direct jobs in the onshore wind sector in Wirral will be 27, which is below the All local authorities in North West mean estimated total number of direct jobs in the onshore wind sector of 122.

The analysis was produced using existing and credible precedents for estimating employment based on employment multipliers and demand uptake for a range of low-carbon and renewable energy sectors.

The data is sourced from the Local Government Association.

Estimated number of direct jobs in Onshore wind (2050) for All local authorities in North West



Source:

Local Government Association, Local Government Association Local Metrics, Estimated number of direct jobs in Onshore wind , **Data updated:** 24 Jun 2022

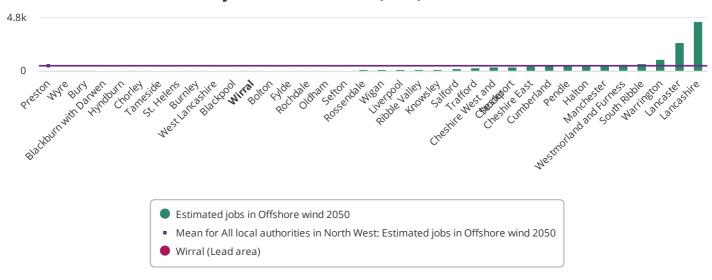
Total jobs in offshore wind

In 2050, the estimated total number of direct jobs in the offshore wind sector in Wirral will be 94, which is below the All local authorities in North West mean estimated total number of direct jobs in the offshore wind sector of 424.

The analysis was produced using existing and credible precedents for estimating employment based on employment multipliers and demand uptake for a range of low-carbon and renewable energy sectors.

The data is sourced from the Local Government Association.

Estimated number of direct jobs in Offshore wind (2050) for All local authorities in North West



Source:

Local Government Association, Local Government Association Local Metrics, Estimated number of direct jobs in Offshore wind , **Data updated:** 24 Jun 2022

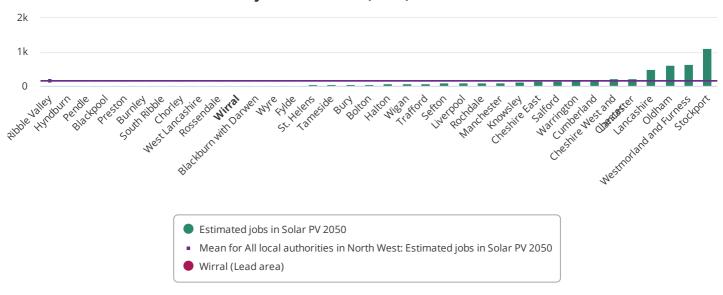
Total jobs in solar PV

In 2050, the estimated total number of direct jobs in the solar PV sector in Wirral will be 31, which is below the All local authorities in North West mean estimated total number of direct jobs in the solar PV sector of 146.

The analysis was produced using existing and credible precedents for estimating employment based on employment multipliers and demand uptake for a range of low-carbon and renewable energy sectors.

The data is sourced from the Local Government Association.

Estimated number of direct jobs in Solar PV (2050) for All local authorities in North West



Source:

Local Government Association, Local Government Association Local Metrics, Estimated number of direct jobs in Solar PV, Data updated: 24 Jun 2022

This report was generated using data from:

- Department for Energy Security and Net Zero Fuel poverty sub regional statistics
- Department for Energy Security and Net Zero Sub-national electricity consumption data
- Department for Energy Security and Net Zero Sub-national gas consumption data
- Department for Energy Security and Net Zero UK local authority and regional greenhouse gas emissions national statistics
- Department for Environment, Food and Rural Affairs Local authority collected waste management
- Department for Levelling Up, Housing & Communities Local Authority Housing Statistics (LAHS)
- Department for Transport Electric vehicle charging infrastructure statistics
- Local Government Association Local Government Association Local Metrics
- Office for Health Improvement and Disparities (OHID) Public Health Outcomes Framework

