

Energy transition readiness profile

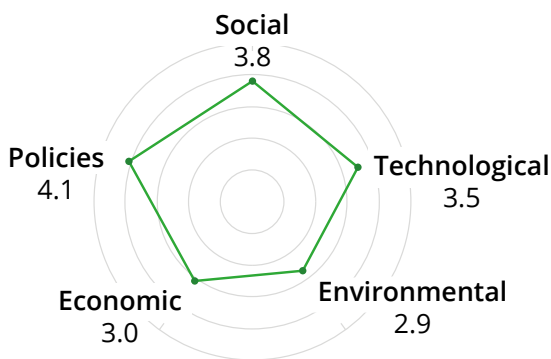
Manchester | United Kingdom

Population 66.8m	Land area 241 ('000 sq.km)	Industrial sector 17.5 (% of GDP)	GDP per capita \$42,330
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KEY FOCUS AREAS

- + Ambitious targets for cleaner transport: e-mobility, green public transport.
- + Plan for low-carbon retrofitting of residential houses.
- + Localised renewable generation and energy storage.
- + Encourage public services and private businesses to use low-carbon solutions.

STEEP SCORE



STRENGTHS

- Plans for Local Energy Market project to create a smarter local energy system and low-carbon infrastructure.
- Greater Manchester Environment Fund (GMEF) for funding low-carbon and sustainability projects.
- Better access to wind energy owing to proximity to Scout Moor onshore wind farm and Irish Sea.

CHALLENGES

- Poor air quality and climate risks such as rainfall flooding and high temperature in recent years (30°C).
- Residential heating and presence of large number of commercial buildings contribute to carbon emissions.
- Road schemes make up the largest share of transport investment and add to congestion and pollution.

TRANSITION SCOREBOARD

	SOCIAL	<ul style="list-style-type: none"> Information flow Standard of living Energy access
	TECHNOLOGICAL	<ul style="list-style-type: none"> Innovation ability Smart grid Clean electricity capacity
	ENVIRONMENTAL	<ul style="list-style-type: none"> Air quality Renewable potential Climate impact
	ECONOMIC	<ul style="list-style-type: none"> Fossil fuel independence Green econ potential Financing capability
	POLICIES	<ul style="list-style-type: none"> Institutional quality Decarbonisation pledges Regulatory

City-level Intelligence

Manchester | United Kingdom



The Greater Manchester region has set a target to become carbon-neutral by 2038 and has committed to halving its emissions by 2025 in its Climate Change Action Plan 2020-25. To achieve its goal, projects that focus on low-carbon transport, decarbonisation of heat, energy storage and network flexibility are prioritised. The transport policies focus on reducing pollution primarily through an increase in public transport use. Greater Manchester's 2040 Transport Strategy Delivery Plan looks to expand new walking and cycling

infrastructure and the electric vehicle charging network. Yet, a more ambitious plan to decarbonise the transport sector would help. The recent announcement by the mayor to integrate private bus services under public control provides an opportunity to introduce environmental standards for a green bus fleet. Lowering emissions from heat can be achieved by retrofitting homes and installing energy efficiency technologies. Decarbonising the gas supply aligns with the national strategy but is likely to take longer.

SOCIAL



Smart city priorities

- Manchester city struggles with road congestion owing to the predominance of private cars for travel. Concrete policies such as congestion charges and the electrification of public transport could decongest the city further and result in cleaner air.
- The Mayor announced plans for 95 electric vehicle charging points to be delivered by end of 2021, with a further 200 by the end of 2022; the creation of a bike hire scheme; and £160 million allocated for 100km of new walking and cycling infrastructure across all ten cities.
- The construction of new houses provides an opportunity for energy efficient and low-carbon buildings.

TECHNOLOGICAL

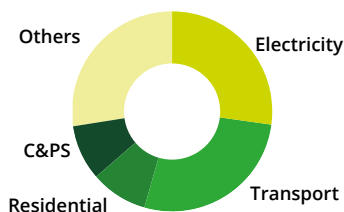


13% Renewable energy share
(National avg. 13%)

- The region's use of renewable energy could benefit from its proximity to offshore wind farms in the Irish Sea, onshore wind farms, and a 5MW liquid air energy storage demonstration plant in Bury.
- The introduction of the Greater Manchester Energy Switching Scheme is helping residents to switch to renewable energy suppliers.
- Manchester city and four other local authorities are collaborating to achieve carbon neutrality through the £17.2 million Unlocking Clean Energy in Greater Manchester project. It will develop solar and hydro-electric generation, battery storage, electric vehicle charging, and smart energy management systems.

POLICIES

CITY PLEDGES SCORE **11/22**



- Manchester City Council plans to reduce carbon emissions from its buildings, energy use and transport by 50 per cent before 2025.
- The Homes as Energy Systems project plans to retrofit homes with smart and flexible energy technologies such as solar panels, new heating systems and heat recovery ventilation.
- Manchester city, in partnership with waste management company Biffa, transformed 27 of its waste collection vehicles to electric refuse vehicles.
- Greater Manchester supports businesses in carbon reduction, resource efficiency and innovation through the Business Growth Hub's Green Growth programme and the Green Growth Pledge initiative.



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