City of ManchesterUnited Kingdom

The local carbon budget of the City of Manchester

According to the city's 2020 Annual Report released in July 2020 by the Manchester Climate Change Agency (MCCA) – the body responsible for overseeing and championing climate change action at city level, Manchester's emissions have fallen by 4% in 2019. However, the city's has already spent 26% of its 2018-2100 local carbon budget in just 2 years.

The MCCA was established in 2015 by the City council and the Steering Group of the city's first climate change strategy (2010-2020) adopted in 2009 under the name "Manchester: A Certain Future". The MCCA is now responsible for overseeing and championing climate change action at city level. In 2018, the MCCA created the Manchester Climate Change Partnership (MCCP), "a stakeholder group established to help advise the City on the actions required to reduce its emissions, mitigate the effects of climate change, and act as a focus for businesses, organisations and individuals wishing to take their own action." It comprises all sorts of non-state actors, including businesses, a faith group, citizen associations and public actors.

In July 2018, the Tyndall Centre for Climate Change Research, a multidisciplinary research centre, provided the MCCA with a carbon budget aligned with a 2°C scenario to support Our Manchester's Strategy 2016-2015, the city's overarching long-term vision. The carbon budget set three main goals to Manchester to stay within the 2°C carbon budget:

• Hold cumulative dioxide emissions from homes, workplaces, and ground transport (direct emissions) at under 15 million tonnes for 2018-2100

• Delivering an annual average of 13% cuts in emissions.

· Reducing emissions from LULUCF to zero by 2038.

Periodic 5-year, gradually decreasing carbon budgets were recommended and then formally adopted by the City Council in November 2018 (**fig. 6**), and Net Zero target was set for 2038 few months later for Greater Manchester.

A carbon budget is compelling tool as its key parameter is to settle an absolute limit to long-term emissions that requires immediate, ambitious actions from policymakers to find low-carbon pathways to drive its economy. Currently Manchester is on track to reach its 2020 targets of cutting emissions by 40% against a 2005 baseline. Yet, the 2020-2025 targets should be harder to achieve, as the city will need to halve emissions to avoid overshooting its 2023-2028 budget.

Which is why in February 2020, Manchester adopted the <u>Climate Change Framework 2020-2025</u> to drive transformative action in seven areas: Buildings (existing and new), Renewable energy, Transport and flying, Food, "The things we buy and throw away", Green infrastructure and naturebased solutions; Supporting and enabling residents and organisations to act. On the advice of Tyndall Centre, the CCF also includes "commensurate action on aviation" CO₂ emissions and [addresses] indirect /consumption-based carbon emissions".

Besides, Manchester is cooperating with other European cities to share its experience as part of *Zero Carbon Cities,* a project financed by EU's <u>URBACT</u> program. By 2022, at the end of the 2-year long project, the cities of Frankfurt (Germany), Vilvoorde (Belgium), Zadar (Croatia), Bistrita (Romania), Modena (Italy) and Tartu (Estonia) are to set up alike local carbon budgets (<u>Energy Cities, 09/10/2019</u>).

LEFT: EMISSIONS PROJECTIONS CONSISTENT WITH THE 15 MTCO₂ BUDGET STARTING FROM COMMON YEAR (2017) RIGHT: MANCHESTER'S 15 MTCO₂ BUDGET BY TIME PERIOD - *Source: MCCP. MCCA, 2020*



Time period	CO ₂ budget (MtCO ₂)
2018-22	6.93
2023-27	3.59
2028-32	1.95
2033-37	1.10
2038-42	0.64
2043-47	0.38
2048-20100	0.59
Total	15.17