5 Year Environment Plan Performance Overview

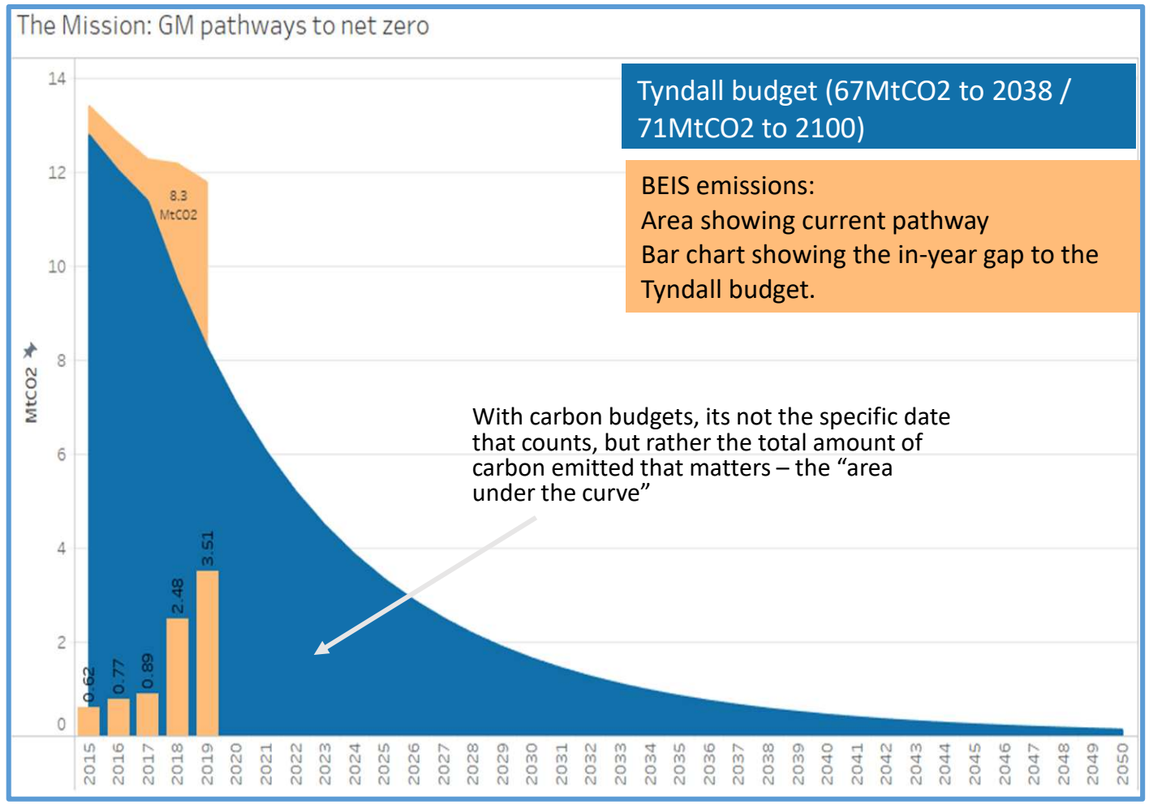
Priorities/KPIs			
Ref	**Priorities (2024)**	**Status**	
Energy	Add at least 45MW of local renewable energy by 2024	↑	Green
	Additional 10TWh of low carbon heating by 2024	↑	Red
Buildings	Retrofit 61,000 homes/year (target 305,000 by 2024, 887,000 in total)	↑	Red
	Reduce heat demand from existing commercial and public buildings	↑	Amber
SCP	38% reduction in industrial emission by 2025.	↑	Green
	Limiting any increase in waste to 20%.	↓	Amber
	Achieve a recycling rate of 55% by 2024, and 65% by 2035.	↔	Red
Natural Env.	Plant 3 million trees by 2035; interim target of 1 million by 2024.	↑	Green
	% of parks achieving green flag awards	↓	Amber
	524km of water bodies enhanced	↓	Amber
	Funding secured	↑	Green
	Number of volunteer hours	↑	Green
	% of GM homes with access to 2ha of greenspace within 300m of home	↓	Amber
Transport	Reduce car use to no more than 50% of daily GM trips	↔	Green
	Support expansion to 200,000 EVs in city region by 2024	↑	Amber

2038 Carbon Target	Costs	Resources	Overall Delivery	Risk
Red	Green	Green	Amber	Amber

Key Risks

Risk Event	Risk	Mitigation Plan	Post Risk
Failure of Environment Plan to achieve a step change in carbon emissions.	Red	Regular reporting to Greater Manchester Green City Region Partnership Board and WLT.	Red
Level and depth of retrofit required to meet our overall ambitions is highly challenging.	Red	Focus on retrofit accelerator proposals as way of overcoming these barriers in a coordinated way.	Amber
Failure to meet recycling and diversion targets.	Red	New contract in place. Waste and Resource strategy to be developed.	Amber
Failure to deliver Green Homes Grant (LAD).	Red	Agreement from BEIS to extend the Green Homes Grant for phase 1B and phase 2 delivery to June 2022. Procurement exercise completed for additional delivery partners for Phase 2.	Amber

The Mission: Carbon Neutral by 2038



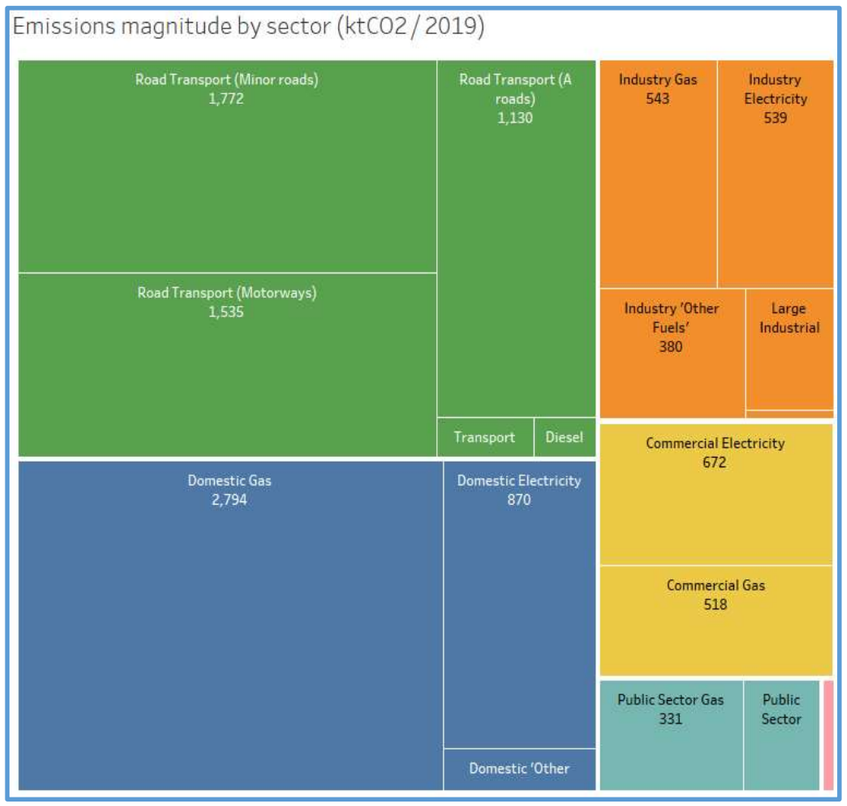
To achieve the 2038 mission, the GM 5-Year Environment Plan outlines our 'fair' carbon budget contribution of **67 mega tonnes for 20 years (2018-2038).** The critical focus is not exceeding our total budget (67MtCO2).

Across 2015-19, GM's emissions are 8.3MtCO2 **above** the Tyndall budget, i.e. an additional 8.3MtCO2 savings need to be made **on top of** the Tyndall budget. **This gap has been increasing year on year.**

Key point is that significant cuts must happen now.

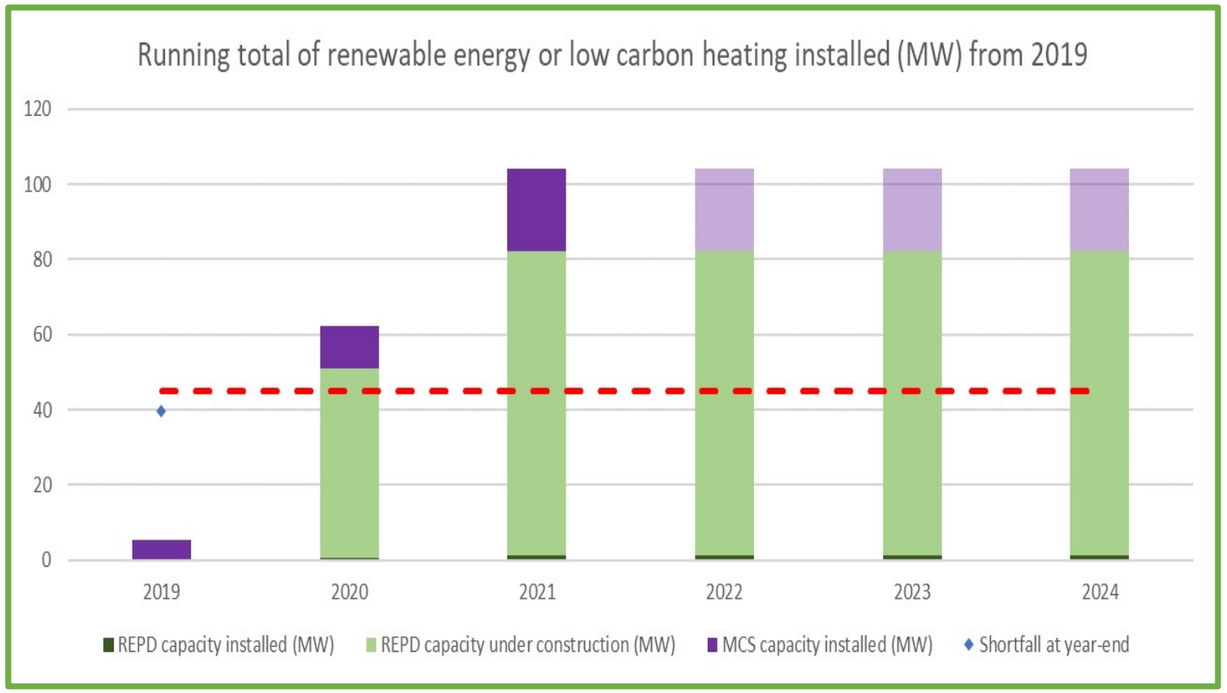
Action to reduce emissions is already being taken but under our current level of activity we will have exhausted our carbon budget in 6 years.

Decarbonisation of the electricity grid has shifted emissions shares since 2005. Continued decarbonisation and local renewable energy should continue to reduce emissions. Transport (38.7%) and gas (35.5%) account for over 2/3rd of GM's total emissions at 2019.



Energy

E1: Add at least 45MW of diverse and flexible load by 2024
E2: Additional 10TWh of low carbon heating by 2024
E3: Add at least 45MW of local renewable electricity by 2024



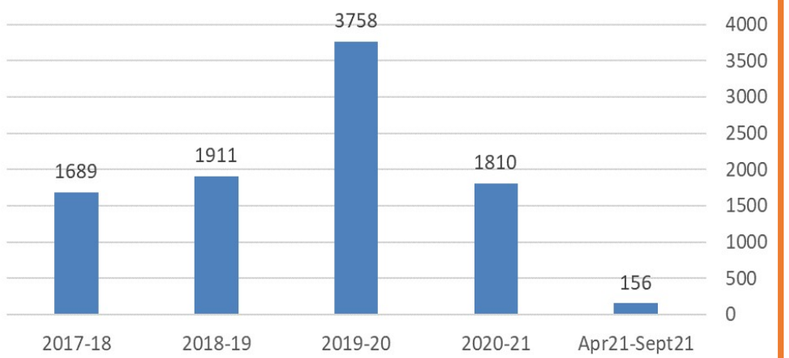
Progress
104MW installed capacity since 2019 (including under construction), at end of 2021.
82.37MW large scale installations incl:
- 1.1MW large scale installations operational (>150kW)
- 1.37MW large scale solar PV installations under construction (Tesco sites 1.2MW)
- 30MW battery installation under construction at Moston Vale (10MW) and Rochdale (20MW)
- 49.9MW Liquid Air Energy storage under construction at Carrington Power Station.

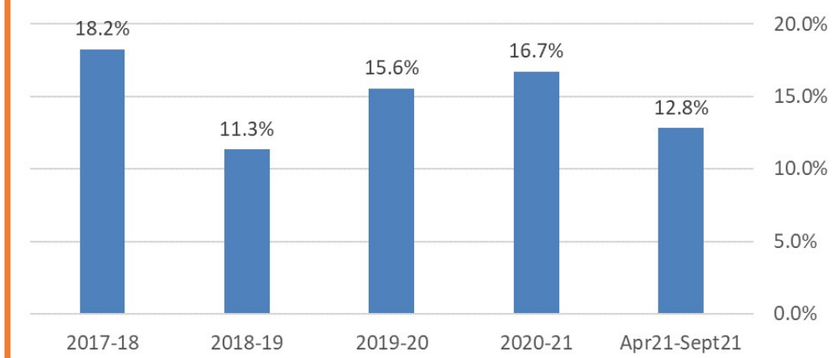
21.6MW of small scale installations (MCS data) incl:
- 10.9MW of solar PV
- 8.8MW via air source and ground source heat pumps
- Continued work with Distribution

Network Operators to leverage local data in a timely fashion – current delay on data and resume conversations early 2022. Progress being made with policy work, e.g. Retrofit Accelerator and Go Neutral.

Buildings

B1: Retrofit 61,000 homes per year, achieving 57% reduction in heat loss
B2: Reduce heat demand from existing commercial and public buildings by 10% by 2025
B3: Reduce heat demand in new buildings

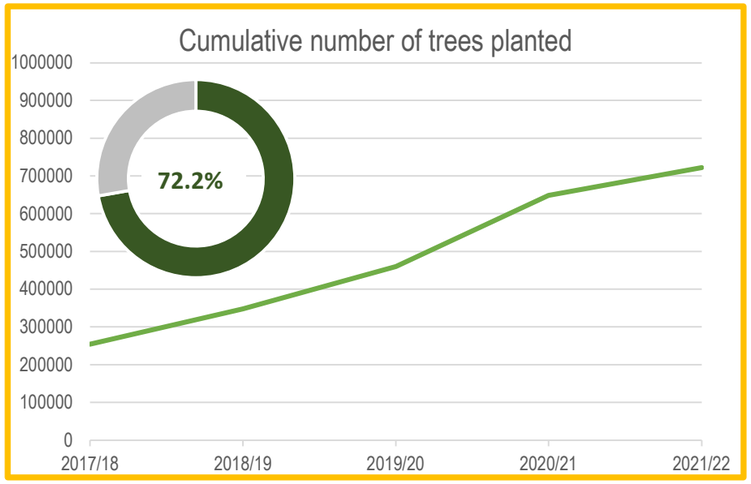


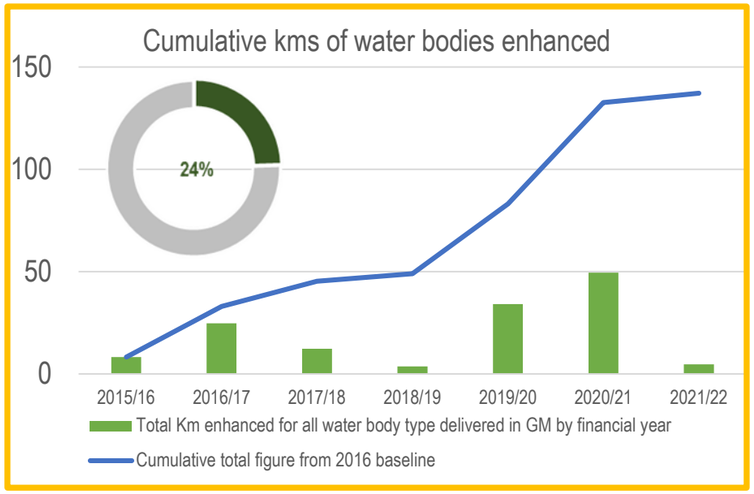


Progress
EPC data being used as a proxy measure for retrofit of homes. EPC grades are a measure of energy affordability and is affected by heating fuel GMCA have consulted and deem EPC C to be suited to low carbon heating.
EPC data only known where property requires updated certificate (valid for 10 years) → EPC data will be an underestimation of progress
10,848 EPCs were updated in 2020/21. Of these, 1,810 recorded a change to EPC grade C or better
5,724 EPC grade C improvements recorded since April 2019 (as of September 2021)
Data for first six months of 21/22 available, suggests much lower numbers of certificates updates, but the proportion of these resulting in a net movement to EPC C similar to other years.

Natural Capital

NE1: Plant one million trees by 2024 and manage land sustainably
NE2: Sustainable water management
NE3: Net gain in biodiversity for new developments
NE4: Increasing investment in our natural environment
NE5: Increasing engagement with our natural environment

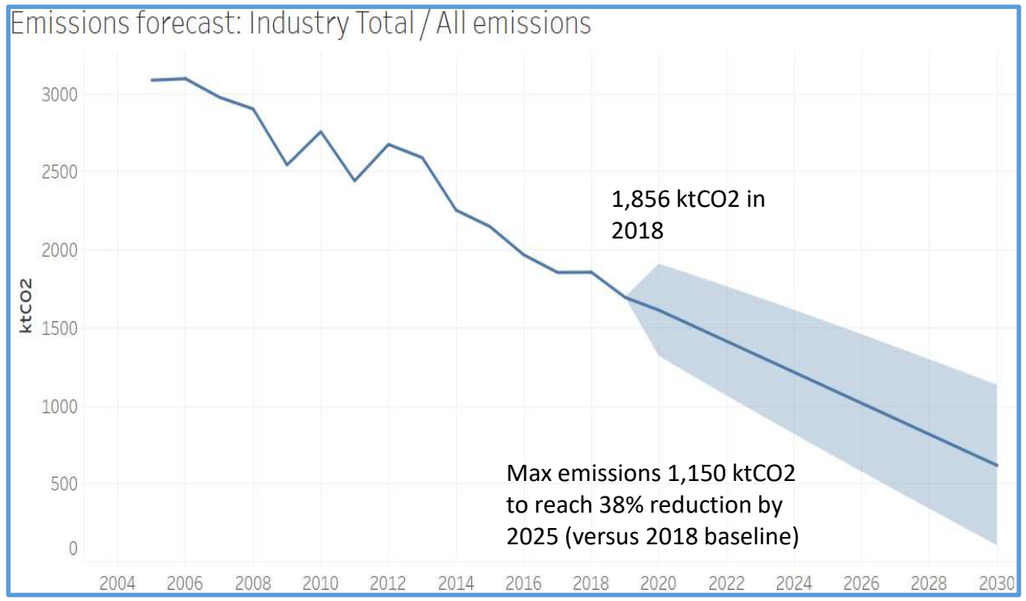




Progress
- 72.2% progress made towards 2024 target of 1million trees planted.
- £2,523,016 of funding secured in 2020/21. £1,400,000 secured to date for 2021/22.
- 53,517 volunteer hours spent in nature from 2018/19 to date with 16,059 individual volunteers.
- 43.3% of GM homes with access to 2 ha of greenspace within 300m of home in 2020/21
-16% of GM Parks achieved green flag status in 2020/21 (compared to 18% in 2017/18).

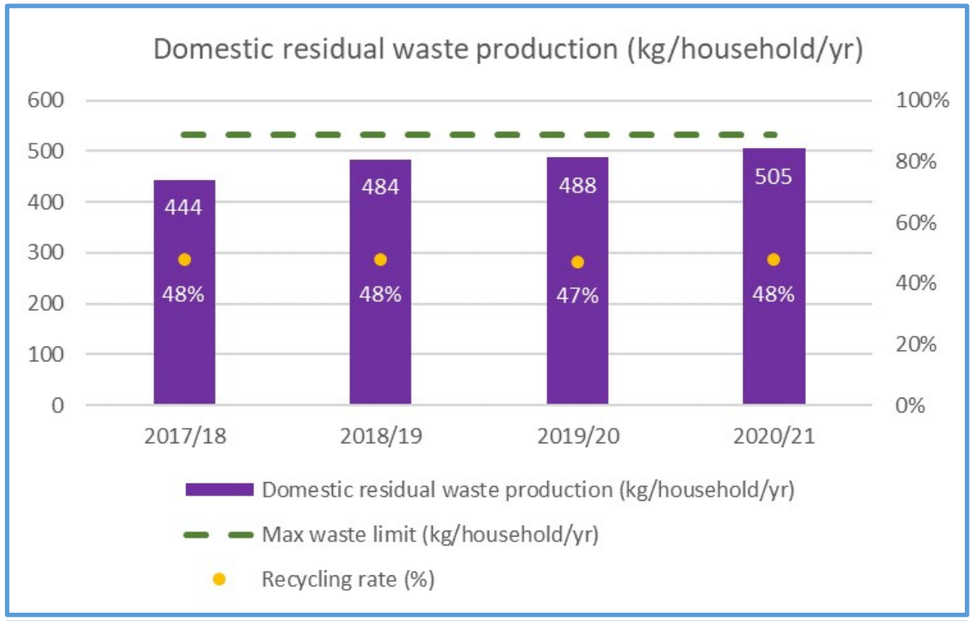
Consumption and Production

SCP1: 38% reduction in industrial emissions by 2025
SCP2: Limit any increased waste to 20%
SCP3: 55% recycling rate by 2024 and 65% by 2035
SCP4: Reduce unnecessary food waste



Progress
1,856 ktCO2 industrial emissions at 2018. 38% reduction to 2025 is 1,150 ktCO2. Forecast at 2025 set to be 1,115 ktCO2, i.e. GM will exceed its current target

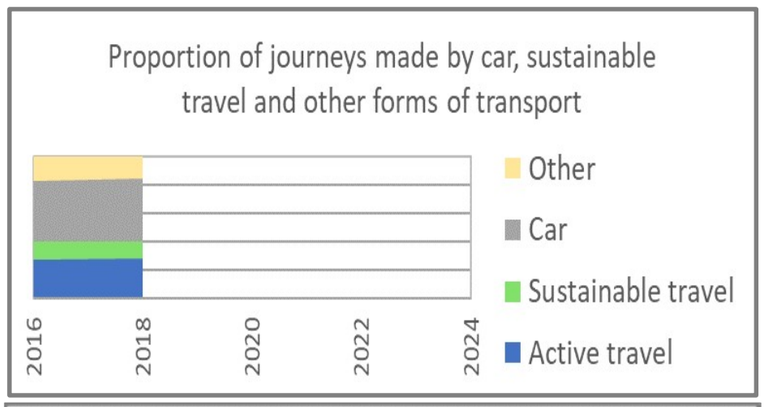
Industrial emissions fuel breakdown (2019):
- 37.1% gas
- 36.9% electricity
- 26.0% 'other' fuels
- Industrial emissions may be impacted on electricity grid decarbonisation. Rate of reduction may slow as grid becomes increasingly decarbonised

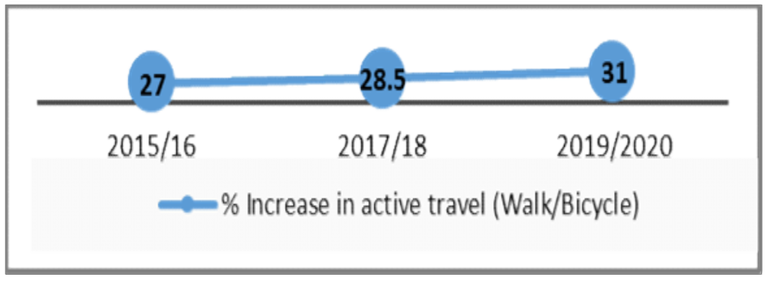


Progress
61kg increase in domestic waste per household since 2017/18. Target is to limit growth to 20% maximum (to 532kg). Rate is now 27kg beneath the maximum waste limit
Recycling rate has remained static at 47-48%.

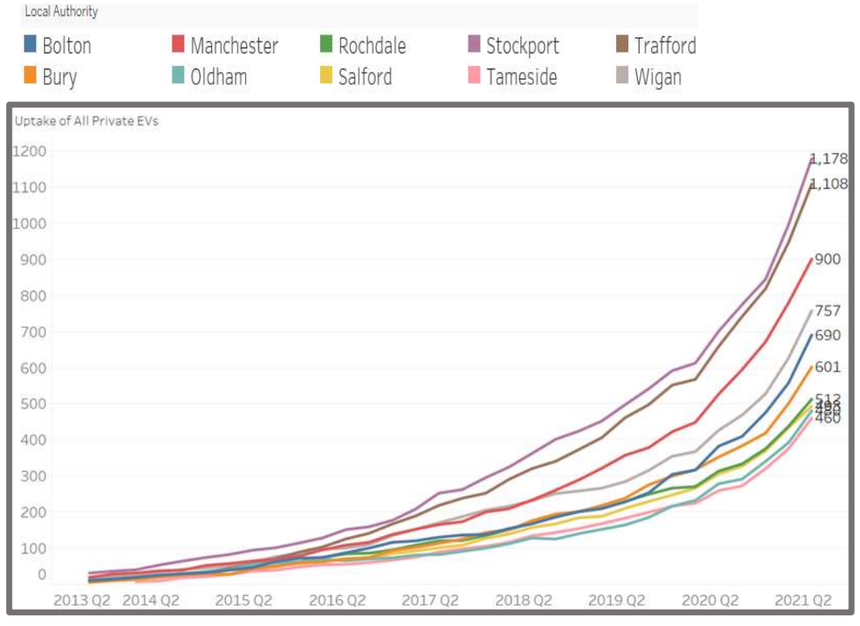
Transport

T1: Reduce car use to no more than 50% of daily GM trips, by 2040 (remaining 50% to be public, or active travel)
T2/T3: Support expansion to 200,000 EVs in city region by 2024.
T4: 100% of all busses to be zero emissions (at tailpipe) by 2035
T5: Decarbonising freight transport and shifting freight to rail and water transport





Privately registered EVs by local authority



Progress
- 7,179 privately owned EVs within GM. (EV ownership greater in affluent areas)
- 5,405 EV charging point grants given to GM households
- 473 publicly available charging points (Jan 2022).

EVs registered by postcode district (Q3 2021). Red area in Stockport due to leasing company registering nationwide EVs from an SK postcode.