# 5 Year Environment Plan Performance Overview

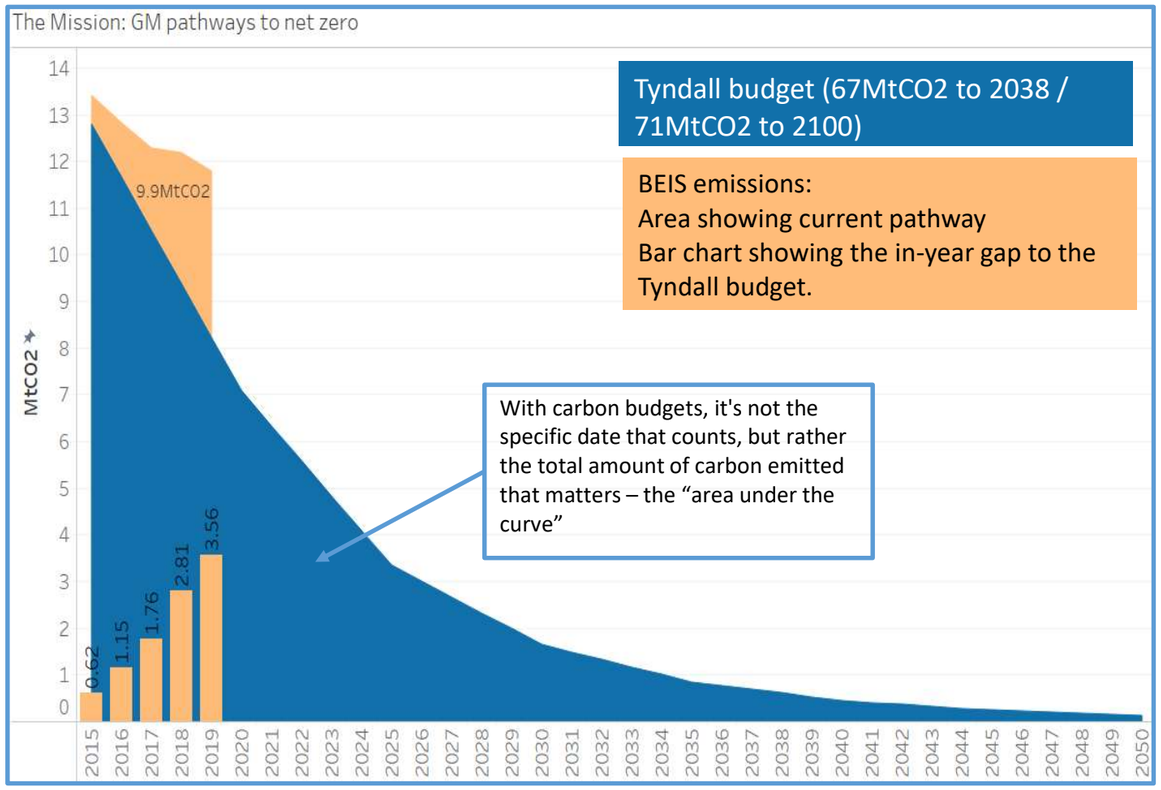
| Priorities/KPIs | | | |
|---|---|---|---|
| **Ref** | **Priorities (2024)** | **Status** | |
| Energy | Add at least 45MW of local renewable energy by 2024 | ↑ | Green |
| | Additional 10TWh of low carbon heating by 2024 | ↑ | Red |
| Buildings | Retrofit 61,000 homes per year (target 305,000 by 2024, 887,000 in [illegible]) | ↑ | 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 |

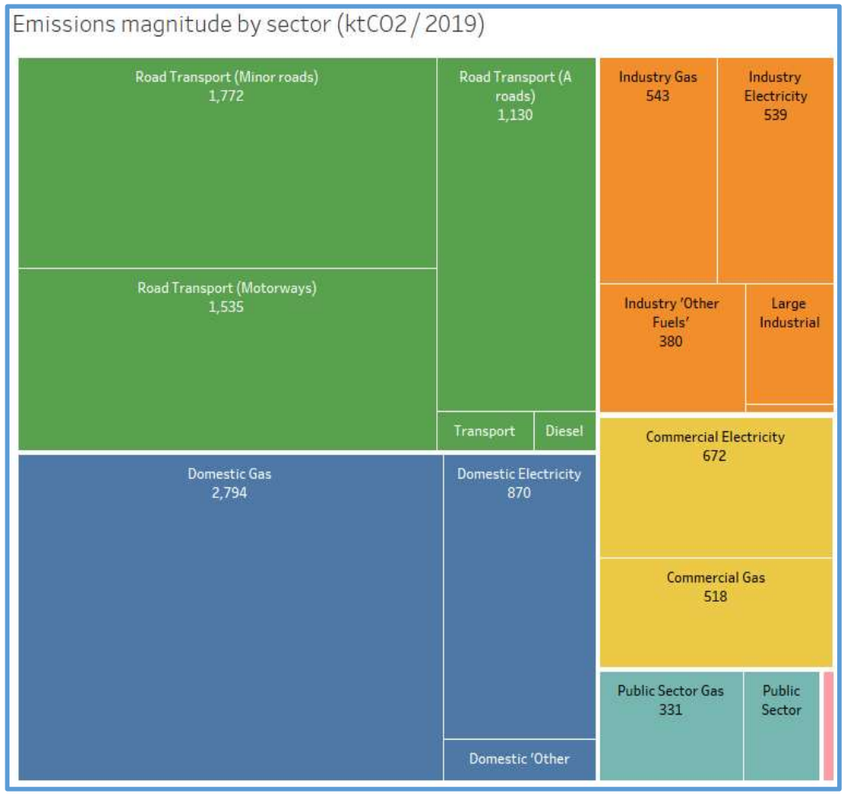
## The Mission: Carbon Neutral by 2038




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 9.9MtCO2 **above** the Tyndall budget, i.e. an additional 9.9MtCO2 savings need to be made **on top of** the Tyndall budget. **This gap has been increasing year on year.**

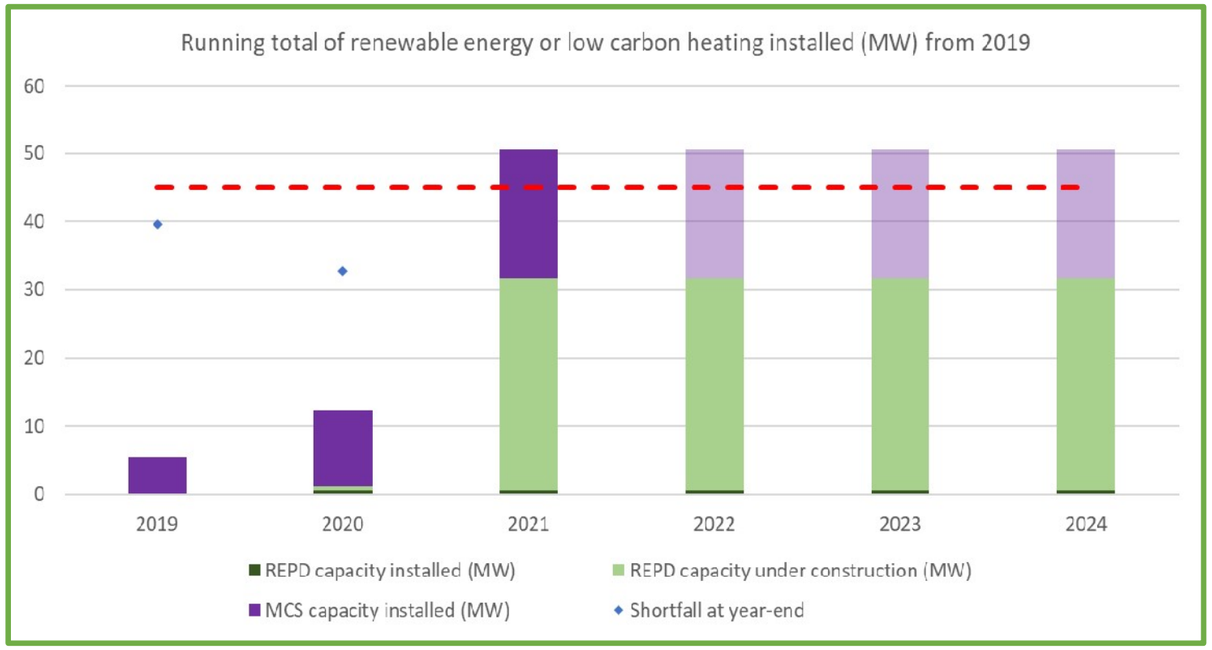
**Key point** is that significant cuts must happen now. Action to reduce emissions is already being taken but under our current level of activity we will have exhausted our carbon budget in 6 years.

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

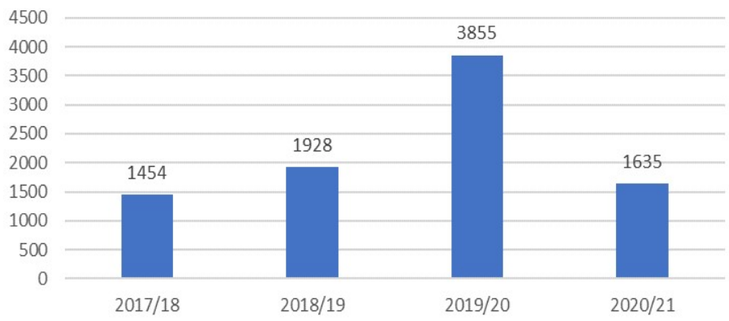


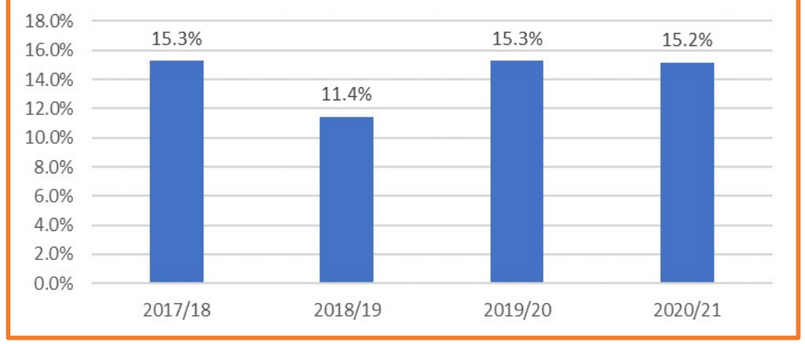

**Progress**
- **50.5MW** installed capacity since 2019 (including under construction), against a target of 45MW.
- **31.7MW** large scale installations incl.
- 0.5MW large scale installations operational (>150kW)
- 1.2MW large scale solar PV installations under construction (Tesco sites)
- 30MW battery installation under construction at Moston Vale (10MW) and Rochdale (20MW)

- **15.8MW** of small scale installations (MCS data) incl.
- 9.9MW of solar PV
- 7.5MW via air source and ground source heat pumps)
- Progress being made with policy work, e.g. Retrofit Accelerator / Go Neutral, with evidence and insights being developed to support these
- Continued work with Distribution Network Operators to leverage local data in a timely fashion and to support grid reinforcement

## 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

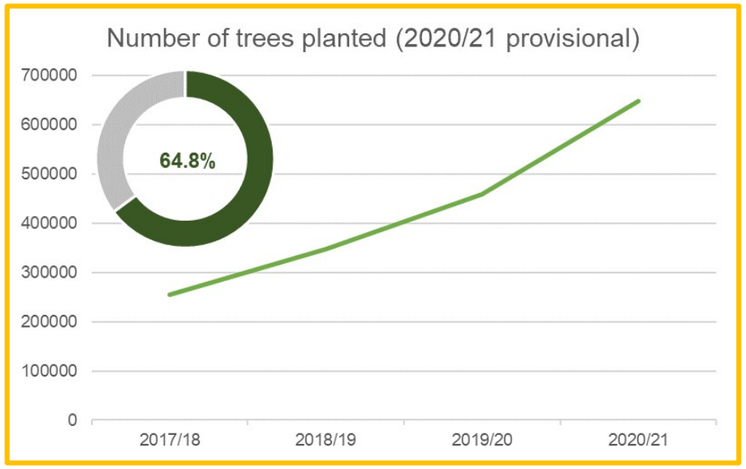


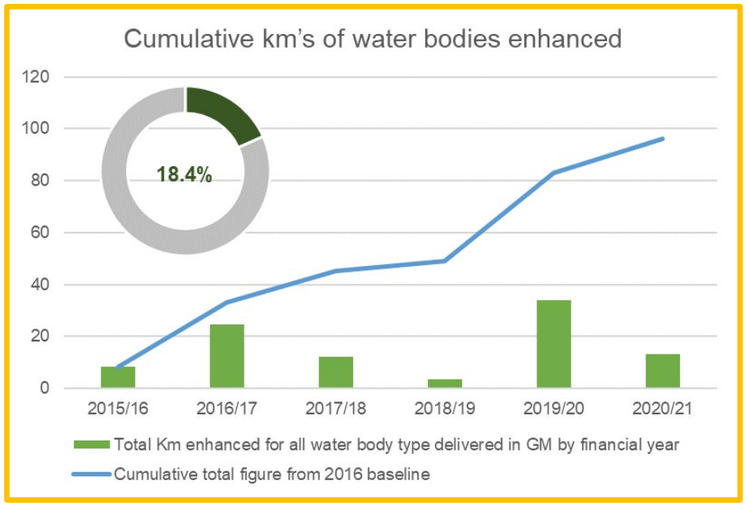




**Progress**
EPC data being used as a proxy measure for retrofit of homes. EPC grades are a measure of energy affordability and is affected by heating fuel
GMCA have consulted and deem EPC C to be suited to low carbon heating
EPC data only known where change in property ownership or tenure status → EPC data will be an underestimation of progress
10,769 EPCs were updated in 2020/21. Of these, 1,635 recorded a change to EPC grade C or better (Circa 40,000 house sales annually in GM in years before the pandemic. Number of properties let will be in addition to those 40,000 sale)
5,490 EPC grade C improvements recorded since April 2019

## 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

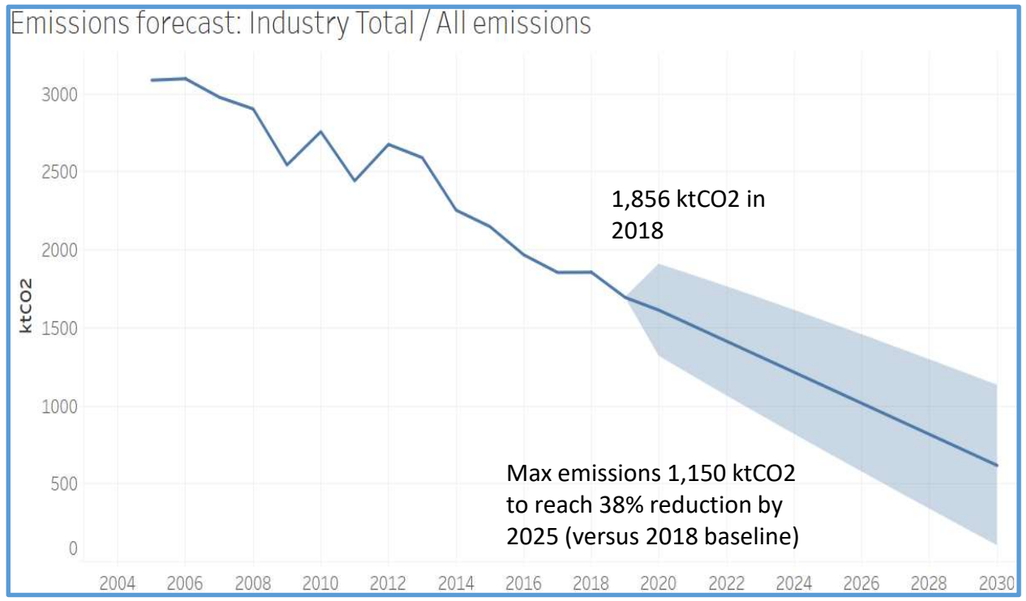



**Progress**
- As of January 2021, 64.8% progress made towards 2024 target of 1million trees planted. Provisional 2020/21 figures is at 75%.
- £2,523,016 of funding secured up to 2020/21
- 36,970 volunteer hours spent in nature from 2018/19 to 2020/21. 85% decrease in the number of volunteers due to the pandemic.
- 43.3% of GM homes with access to 2 ha of greenspace within 300m of home in 2020/21
-14% of GM Parks achieved green flag status in 2020/21

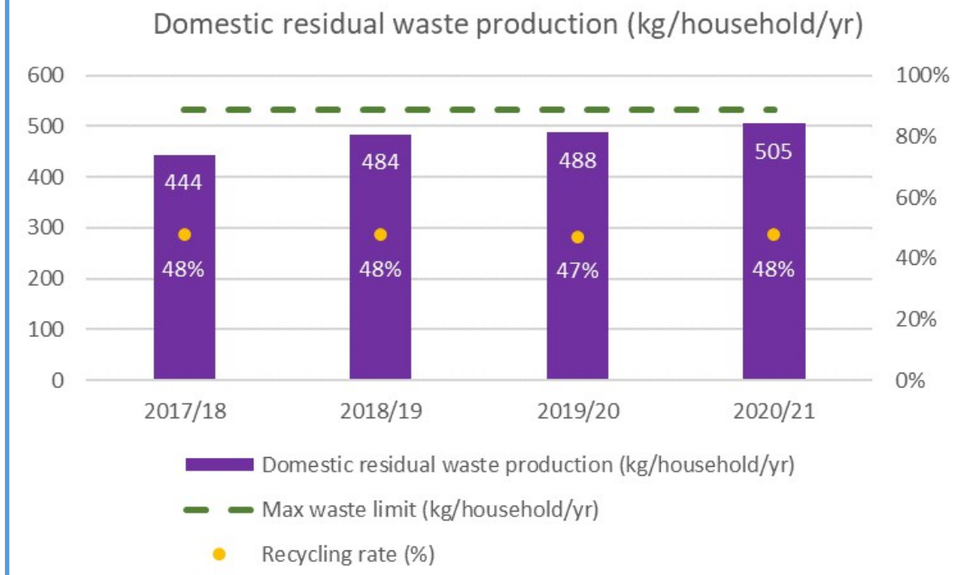
# Consumption and Production

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

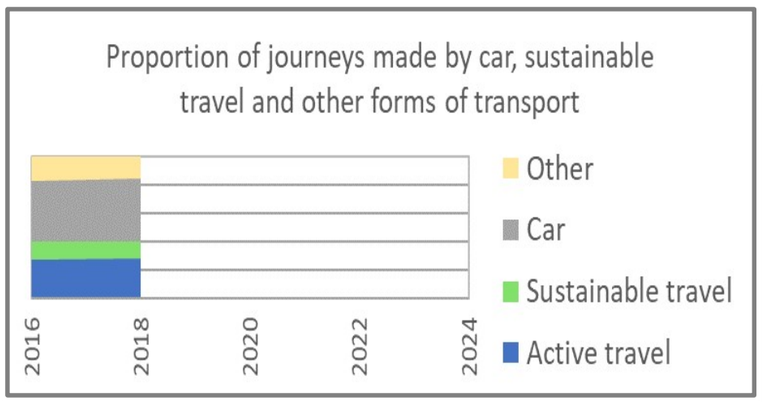


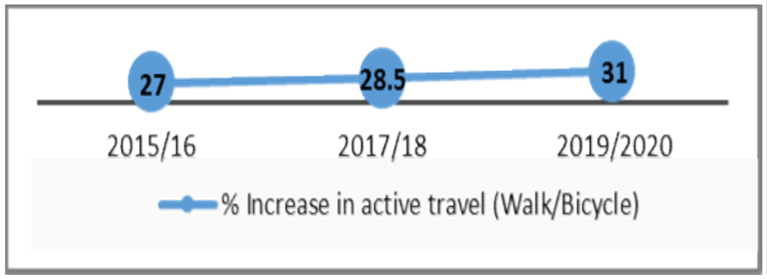

**Progress**
61kg increase in domestic waste per household since 2017/18. Target is to limit growth to 20% maximum (to 532kg). Rate is now 27kg beneath the maximum waste limit
Recycling rate has remained static at 47-48%.

# Transport

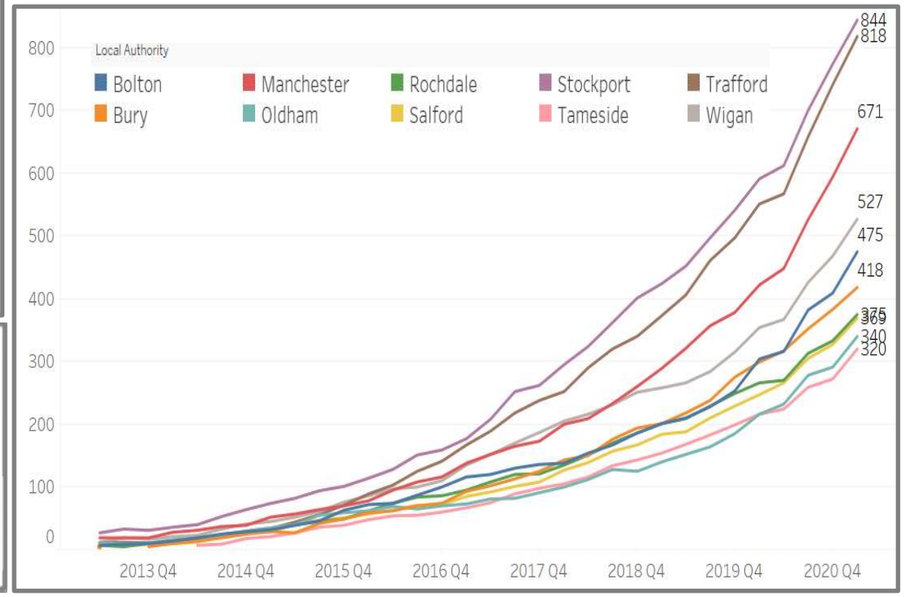
T1: Reduce car use to no more than 50% of daily GM trips, by 2040 (remaining 50% to be public, or active travel)
T2/T3: Support expansion to 200,000 EVs in city region by 2024.
T4: 100% of all busses to be zero emissions (at tailpipe) by 2035
T5: Decarbonising freight transport and shifting freight to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

**Progress**
- 6,040 privately owned EVs within GM. (EV ownership greater in affluent areas)
- 5,405 EV charging point grants given to GM households
- 447 publicly available charging points (July 2021).
- 90% of buses retrofitted to date through clean bus technology fund. 756 buses approved for retrofit funding awarded through clean bus fund (target 900+ buses). 35 electric buses deployed (3 TfGM, 32 Stagecoach).




Privately registered EVs by local authority




EVs registered by postcode district (Q4 2020)