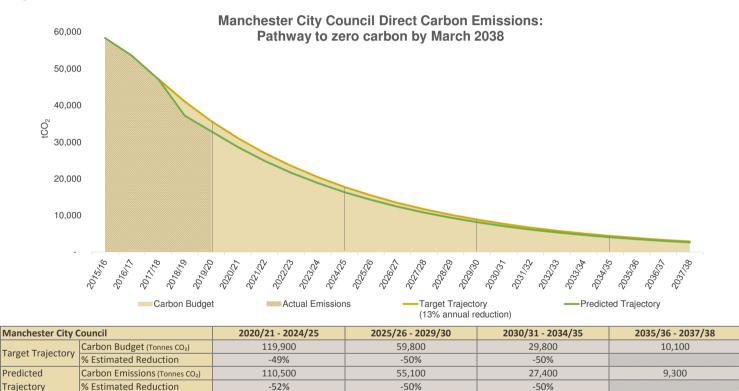
## Manchester City Council Direct Carbon Emissions: Pathway to zero carbon by 2038

The pathway below is based on the Tyndall Centre for Climate Research definition of zero carbon - at least a 95% reduction in emissions. The reference year used in the Manchester and GM carbon budget reports to track relative emissions reductions aligned with the budgets is 2015 (the year the Paris Agreement was first declared), therefore 2015/16 is the baseline used here. To achieve a 95% reduction in 2015/16 emissions and therefore become zero carbon by March 2038, an average year-on-year reduction of 13% is required starting from 2018/19 (shown as the target trajectory and carbon budget). The remaining 5% of emissions will continue at a diminishing level to 31st March 2100.

In order to meet the Paris Agreement objective to keep global temperature increases to well below 2°C there is a limited amount of CO<sub>2</sub> that can be emitted between 2018 and 2100 which is refered to as a carbon budget. If we overspend our carbon budget at any point, that means we will have less CO<sub>2</sub> remaining for future years. The predicted trajectory factors in the actual carbon emissions to date before applying the required 13% year-on-year reductions. An adjusted predicted trajectory will make adjustments to subsequent years if the actual year on year reductions are off target, by making deeper cuts than the year-on-year reductions that are currently required to keep within budget.



Source: Manchester City Council, Carbon Budget (Tonnes CO<sub>2</sub>) in the table above is rounded to the nearest 100 tonnes.

% estimated reduction represents the mean average emissions of each 5 year carbon budget period compared against the previous 5 year carbon budget period average, for example the emissions for the period 2020/21 - 2024/25 are compared to the period 2015/16 - 2019/20.