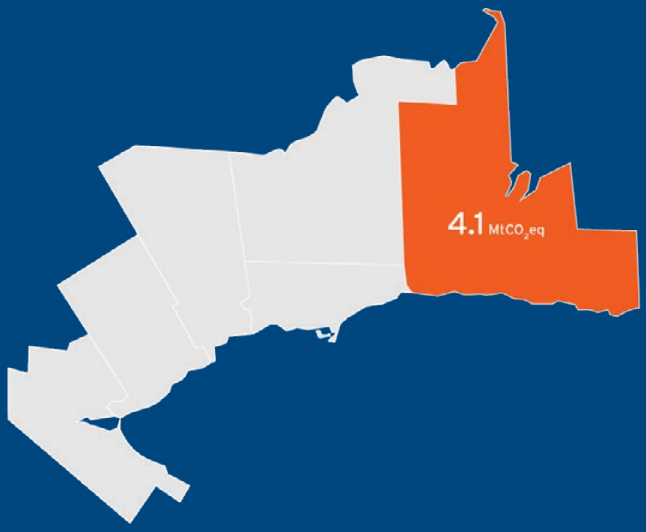
REGIONAL PROFILE
Durham

The Regional Municipality of Durham is home to the cities of Oshawa and Pickering, the towns of Whitby and Ajax, the Municipality of Clarington, and the townships of Scugog, Uxbridge, and Brock.



Population (2017): 656,331
Land Area: 2,524 km²
Population Density: 260 people per km²
GTHA emissions: 8 per cent
GTHA population: 9 per cent

2015	2016	2017
4.3 Mt	4.1 Mt	4.1 Mt

Durham has high agricultural emissions and low waste emissions

Agricultural emissions in Durham are higher than anywhere else in the GTHA. But with over seven million residents in the GTHA, Durham's agriculture only produces a small fraction of what it takes to sustain the region. So, Durham's higher agricultural emissions only represent a small part of the agricultural emissions that actually go into feeding the GHTA.[iii]

Durham has one of the highest waste diversion rates in Ontario. This reduces the quantity of emissions from waste, as does the waste-to-energy incinerator in Durham.

Despite these notable regional characteristics, as in the rest of the GTHA most of Durham's emissions are from the transportation and buildings sectors.

[iii] We hope to incorporate Scope 3 emissions, which consider the emissions from goods and services imported into the region, in future editions of this inventory. They are not incorporated into this edition due to data availability constraints.

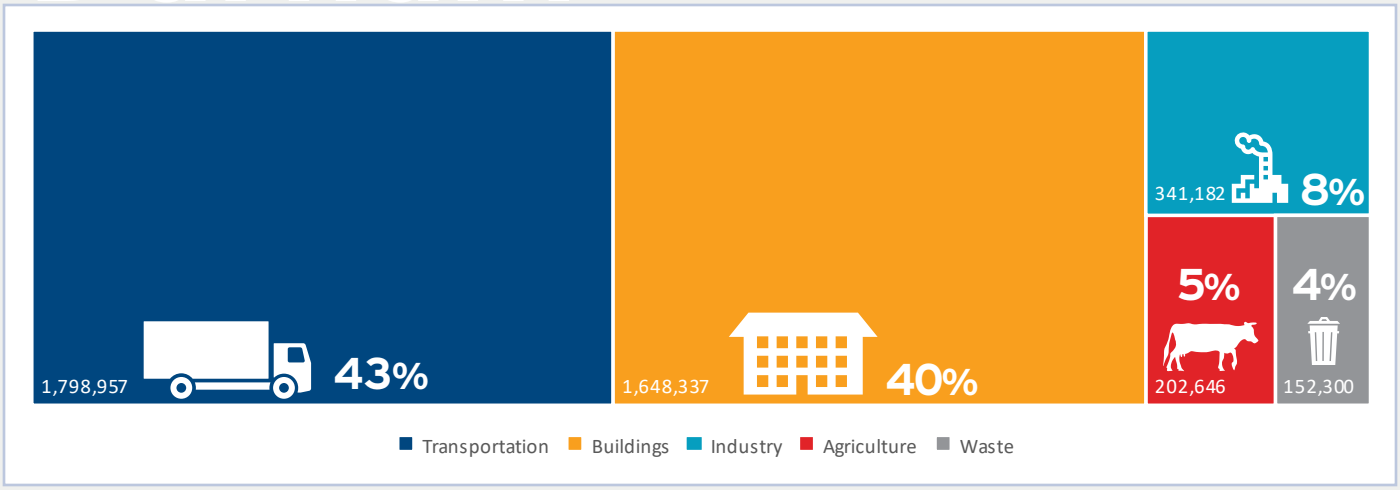


Figure 8: Durham's 2017 carbon emissions by sector, in tCO_2eq

Durham's Pathway to Carbon Neutrality

Durham has the lowest population density of the GTHA regions, and Durham residents have the highest percentage of long distance commutes (22.4 per cent spend more than an hour each way to get to work [City of Toronto, 2017]), some using the GO train but most taking their car (in the GTHA, about 80 per cent of commutes are made by car). Investments in public transit and electrification of transportation need to take density and travel patterns into consideration.

Residential buildings in Durham are predominantly single-family homes, so building retrofit policies and programs need to prioritize these buildings to improve their efficiency.

To achieve carbon neutrality, Durham's strategy will need to include local measures to address emissions from agriculture. On the other hand, by working regionally, with other GTHA jurisdictions with similar building and transport considerations, such as York, highly applicable solutions can be rapidly tested and scaled.

SCALABLE SOLUTION FROM DURHAM, FOR THE GTHA

Waste Emissions Reductions

Durham achieved a 65 per cent waste diversion in 2017 – the third best rate in Ontario and higher than any other GTHA municipality (Durham Region, 2018). Sustaining this strong rate will help the region to achieve carbon neutrality.

Durham is also home to a waste-to-energy plant that reduces landfill emissions by processing 140,000 tonnes of residential garbage from Durham and York each year (Durham York Energy Centre, A). The electricity generated from this process powers about 10,000 homes.

Though waste is only responsible for about four per cent of GTHA emissions, getting to carbon neutrality will require addressing waste diversion rates in all GTHA municipalities, and Durham is a leader in this area.