



MERSEYSIDE RECYCLING & WASTE AUTHORITY

MRWA Carbon Emissions Report

2020/21



ZERO
WASTE
MERSEYSIDE RECYCLING AND WASTE AUTHORITY

Context

In the previous decade, the average annual global greenhouse gas emissions were at their highest levels in human history. Without immediate and deep emissions reductions across all sectors, limiting global warming to 1.5C is beyond reach (latest Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6, April 2022)).

In 2019, MRWA recognised that people, the economy, and the planet were suffering from the escalating effects of human induced climate change. In response, we declared a 'climate emergency' and committed to reduce the climate change impacts associated with our activities.

Over the last two years we have made good progress against our commitments including completion of a carbon emissions baseline study and created a tool to measure our emissions. Across our estate we have assessed opportunities to increase renewable energy generation and reduce our energy usage and working with nature where we can to minimise and better mitigate emissions from our closed landfill sites.



Introduction

MRWA services and operations

MRWA is a single function Authority responsible for the management and treatment of the household waste generated by 630,000 households across Merseyside and Halton. To deliver our services, we operate from a central office with shared utilities. We are accountable for staff commuting and other transport impacts associated with our operations.

Our responsibilities also extend to Household Waste and Recycling Centres, Waste Transfer Stations, a Rail Transfer Loading Station, an Energy from Waste Facility and the aftercare of Closed Landfill Sites. Household waste management and treatment are contractually arranged and delivered by third party organisations. To ensure that we are a part of the global goal to reduce CO₂e emissions, we declared a Climate Emergency in 2019 and produced a Climate report and action plan. This report establishes the carbon footprint of MRWA in 2020/21.

Carbon related activities are based on operational and contractual control and includes:

1. MRWA administration activities at One Mann Island
2. MRWA legacy landfill maintenance activities.
3. MRWA staff business travel and commute to work.
4. General public journeys made visiting the Educational Centre and Materials Recovery Facilities open days.
5. Household waste delivery transportation to Waste Transfer Stations and Material Recovery Facilities.
6. Veolia and Suez Household Waste Recycling Centres, Waste Transfer Stations site operational activities and transportation of waste.

The calculation for this period did not include the greenhouse gas emissions associated with:

- Kerbside collection of household waste by the six local waste collection authorities.
- The transportation of domestic and trade waste delivered by the public and tradespeople to the Household Waste Recycling Centres.
- The recycling and thermal treatment of wastes. (Under UK Government guidelines for environmental reporting these emissions belong to the organisations processing the wastes as feedstocks).

CO2e emissions

CO2e emissions for 2020/21 are calculated using the Greenhouse Gas Emissions Protocol (20-21) devised by the Department of Environment, Food and Rural Affairs (Defra,). The conversion factors that have applied can be found at;

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021>

The operations covered by this footprint include;

Scope 1	Direct emissions relating to MRWA.
Scope 2	Indirect emissions relating to MRWA and contracts.
Scope 3	Indirect emissions MRWA supply chain and contracts.
Outside of scope	All fuels with biogenic content (diesel, petrol biofuel blend), landfill gas, and thermal treatment.

Findings

We have established that the emissions associated with operational activities are approximately 27,127 tonnes of CO₂e for 2020-2021 (see Chart 1). MRWA is committed to reducing its carbon footprint from all its activities and has reviewed and updated the Climate Action Plan to reflect this.

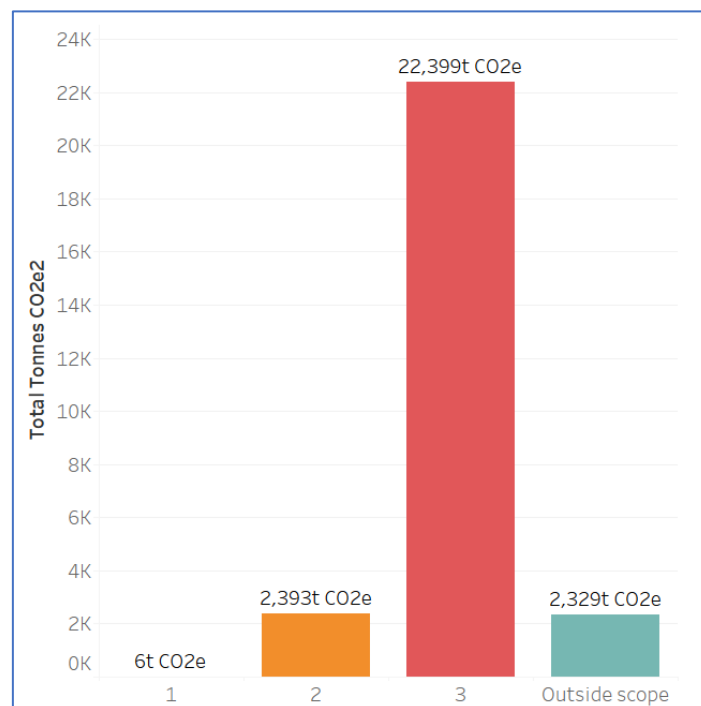


Chart1. Emissions by scope

Next Steps

There are several opportunities to identify and steer our actions in the updated Climate Action Plan, in support of UN SDGs and the Zero Waste strategic action plan. This data will also influence our work in several areas including a community fund, measuring social value, procurement, education, communications and operations. The data demonstrates the importance of our behavioural change programme, and we will continue to develop this with the main aim of reducing the amount of residual household waste. The outcomes of implementing a targeted reduction in carbon emissions associated with our activities are opportunities for the development of a new skills programme along with green jobs, resource conservation and nature recovery. These opportunities will enable the city region to become a low carbon, zero waste and circular economy place to live and work.

Carbon Reduction Objectives for 2021/2022

- Landfill – Continue to seek alternative solutions to avoid landfill during periods of shut-down for maintenance at Wilton.
- Prepare to review MRWA’s Climate Action Plan.
- Raise awareness of the carbon impact of waste on global warming through the behavioural change programme.
- Identify interventions that will assist the Authority on a path to achieving zero carbon by 2040 using 2020/21 as the baseline year.
- Switch to a Green Tariff for the energy supplied to closed landfill sites.

