

Worcestershire County Council Annual Greenhouse Gas (GHG) Emissions Report 2021/22

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** Please note this report supersedes previous GHG reports published by Worcestershire County Council.*

Organisation Information

Address: Worcestershire County Council, County Hall, Spetchley Road, Worcester, WR5 2NP

Introduction

Worcestershire County Council approved their first [Net Zero Carbon Plan](#) in October 2020. The plan sets out how the Council will aim to reach net zero emissions by 2050. Progress towards this target is reported on an annual basis through the Council's Greenhouse Gas Emissions Report. Updates to the plan are in progress and due to be published towards the end of 2022.

Baseline Year

The baseline year for the Council's GHG reporting is from 1st April 2009 to 31st March 2010

Reporting Period

This report includes GHG data for 2009/10 baseline year and 2021/22 (financial year from 1st April to 31st March). This is a dual GHG report to include absolute emissions reduction, and also net emissions reduction.

Targets

Worcestershire County Council reports GHG emissions in terms of CO₂ equivalent¹ (CO₂^e).

The Council has set a target to achieve net zero GHG emissions by 2050 from 2009/10 (baseline year).

Conversion Factors

For the purpose of GHG reporting, WCC has used the UK Government's conversion factors for the relevant years available from: <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

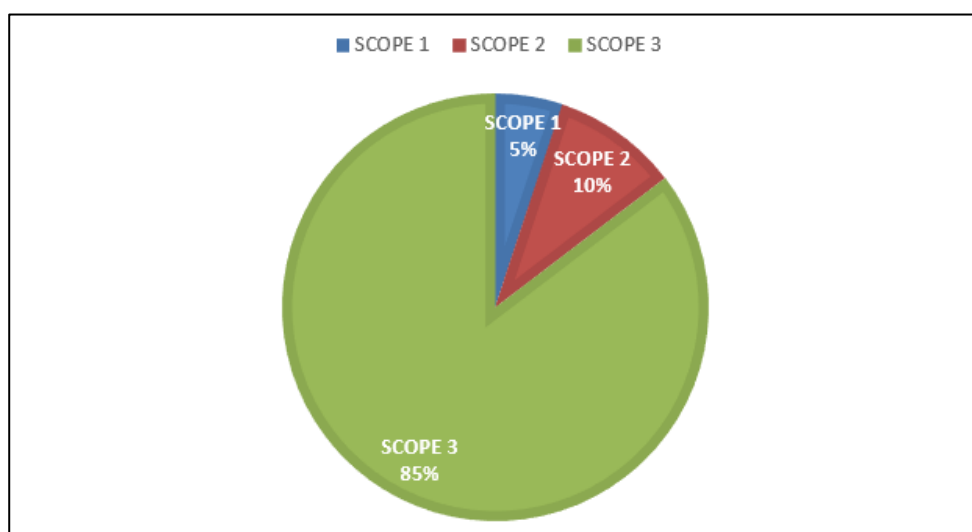
¹ Emissions are reported in CO₂ equivalent – CO₂^e – to include the basket of greenhouse gases which include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆) and nitrogen trifluoride (NF₃)

Organisational Boundary

WCC include GHG emissions from the following sources:

SCOPE 1 – DIRECT EMISSIONS <i>Direct emissions from Council activities and operations under the Council's control including:</i>	SCOPE 2 – INDIRECT EMISSIONS <i>(but WCC has direct control over how much electricity we use and what type we purchase)</i>	SCOPE 3 – INDIRECT EMISSIONS Other indirect emissions for which WCC can access data for, including:
<ul style="list-style-type: none"> - Natural gas use in WCC buildings (excluding schools) - Fuel use in WCC vehicle fleet - Residual fuel use (e.g., burning oil, LPG etc.) consumed at WCC sites (excluding schools) 	<p>Electricity use in WCC buildings (excluding schools) and street lighting (grid generation)</p>	<ul style="list-style-type: none"> - Electricity (grid transmission and distribution) - WCC staff business mileage and air travel - Electricity/gas use in buildings operated by Council's main outsourced contractors for Waste Management and Highways - Fleet/staff mileage undertaken by main outsourced contractors for Waste Management and Highways - Contracted fleet vehicle fuel use - Emissions from county-wide municipal waste disposal

2021/22 WCC Absolute GHG Emissions by Scope



2021/22 Absolute Greenhouse Gas Emissions Data

The data table below highlights the GHG emissions data for WCC in tonnes of CO₂^e broken down by year and scope². Figures have been rounded up accordingly.

WCC has realised a 41% reduction in absolute GHG emissions since 2009/10.

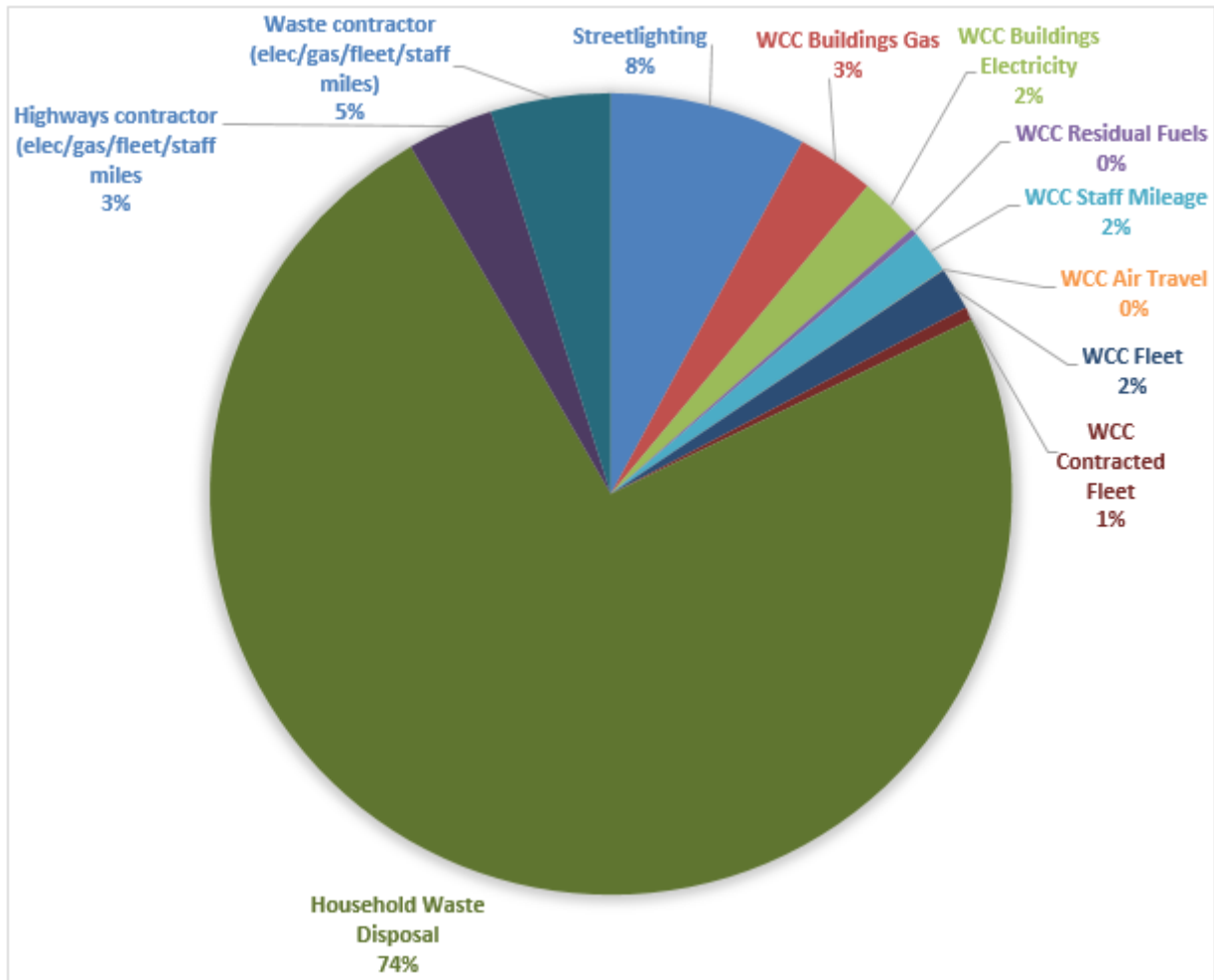
There has been a significant reduction in GHG emissions under Scope 3 since the 2009/10 baseline in part due to the move from waste disposal via landfill, to energy from waste in the County.

WCC is working to improve data quality and availability across all scopes, and in particular looking to progress and widen Scope 3 emissions reporting where possible.

	Absolute GHG (tonnes/CO ₂ ^e)	Absolute GHG (tonnes/CO ₂ ^e)	Absolute % Change from baseline
	2009/10	2021/22	Percentage change <i>(non- Degree Day corrected)</i>
Scope 1	4,598	2,300	50%
Scope 2	16,672	4,286	74%
Scope 3	55,266	38,342	31%
Total Greenhouse Gas Emissions (tonnes/CO₂^e)	76,536	44,928	41%

In 2021/22 Worcestershire County Council was responsible for absolute emissions of 44,928 tonnes of carbon dioxide equivalent (CO₂e) from the following sources:

² Please note the data includes preliminary calculations on GHG emissions from municipal waste disposal in 2021/22 which are yet to be verified by the Environment Agency. For this reason, these figures are subject to change. If there is an amendment the GHG report will be updated and re-issued.



2021/22 Net Greenhouse Gas Emissions Data

During 2021/22 WCC purchased REGO³ accredited green electricity for all corporate sites and street lighting. All scope 2 emissions associated with the generation of REGO accredited electricity can be classed as a net benefit, or carbon offset, for reportable purposes.

WCC has realised a 47% reduction in net GHG emissions since 2009/10.

	Net GHG Emissions (tonnes/CO ₂ ^e)	Net GHG Emissions (tonnes/CO ₂ ^e)	Net % Change
	2009/10	2021/22	Percentage change (<i>non-Degree Day corrected</i>)
Scope 1	4,598	2,300	50 %
Scope 2	16,672	-	100 %
Scope 3	55,266	38,342	31 %
Total Greenhouse Gas Emissions (tonnes/CO₂^e)	76,536	40,642	47 %

The Council has direct control over emissions under Scope 1, and to an extent has some direct control over how much electricity it uses and what type of electricity it purchases under Scope 2.

When accounting for scopes 1 and 2 alone, the Council has achieved a net emissions reduction of 89% since 2009/10.

³ Renewable Energy of Guarantees of Origin

Full 2021/22 WCC GHG Emissions Data by Source and Scope

Absolute GHG Emissions 2021/22 (Tonnes CO ₂ ^e)						Net GHG Emissions 2021/22 (Tonnes CO ₂ ^e)				
Category	Scope 1 (Direct)	Scope 2 (Electricity Indirect)	Scope 3 (other indirect)	Total (Tonnes CO ₂ ^e)	% Change from baseline	Scope 1 (Direct)	Scope 2 (Electricity Indirect)	Scope 3 (other indirect)	Total (Tonnes CO ₂ ^e)	% Change from baseline
CORPORATE BUILDINGS & UTILITIES										
WCC buildings - electricity		1,016	90	1,106	-83%		-	90	90	-99%
WCC buildings - gas	1,407			1,407	-52%	1,407			1,407	-52%
WCC buildings - residual fuels (e.g. oil, LPG, biomass)	118			118	-64%	118			118	-64%
Street lighting		3,270	289	3,559	-69%		-	289	289	-97%
TRANSPORT										
WCC Fleet Transport	775			775	-42%	775			775	-42%
WCC Staff Mileage			799	799	-72%			799	799	-72%
WCC Air Travel			7	7	433%			7	7	433%
Fleet Contractors (transport)			238	238	-90%			238	238	-90%
WASTE										
Municipal Waste Disposal			33,182	33,182	-24%			33,182	33,182	-24%
Waste Contractors (transport, buildings)			2,176	2,176	-5%			2,176	2,176	-5%
HIGHWAYS										
Highways Contractors (transport, buildings)			1,561	1,561	-43%			1,561	1,561	-43%
TOTAL CO₂^e EMISSIONS:	2,300	4,286	38,341	44,927	-41%	2,300	-	38,341	40,641	-47%