

Blackburn with Darwen Borough Council Greenhouse Gas Report 2021/22



Introduction

This report outlines the greenhouse gas emissions arising from the activities of Blackburn with Darwen Borough Council and some of the schools within its administrative boundaries. It is for the financial year 2021/22 and follows the Environmental Reporting Guidelines¹ set out by the Department for the Environment, Food and Rural Affairs at June 2013.

Summary Emissions for the reporting period, the previous year and baseline year

	Tonnes CO ₂ e			
	2021/22	2020/21	2019/20	2009/10 Reset Baseline Year
Scope 1	5,782	5,790	5,574	9,107
Scope 2	4,459	4,168	5,336	14,365
Scope 3	6,312	3,868	13,624	18,266
Total	16,552	13,822	24,535	41,738
Out of Scope	605	466	332	-
<i>Council-only Scope 1 & 2</i>	<i>7,515</i>	<i>5,760</i>	<i>6,738</i>	<i>15,169</i>
<i>Intensity Measure: Tonnes of CO₂e per headcount^{2*}</i>	<i>3.3</i>	<i>2.6</i>	<i>3.2</i>	<i>4.4</i>

* Calculated for Scope 1 & 2 emissions from Council activities only

Supporting Explanations

Reporting period: This report covers emissions in the period 1st April 2021 to 31st March 2022.

Organisation information: This report describes the emissions arising from the activities of Blackburn with Darwen Borough Council, a unitary authority in the northwest of England. The address is Town Hall, King William Street, Blackburn BB1 7DY. The report includes emissions from schools with which either the Authority or Capita has a service level agreement to provide energy bureau services or where the Authority manages a PFI contract.

The structure of the organisation has not changed since the previous report. There has been a small increase in the number of schools with an SLA for energy bureau services with the Council and a change in the composition of those with an SLA with Capita. The scope of Outsourced services data remains unchanged following the bringing in-house of kerbside recycling in 2020/21. Data for travel by public transport is again available and included in the figures for 2021/22.

The scope of the report is otherwise the same as previous years. 2019/20 data is shown to allow comparison with a pre-Covid business period.

Measuring & reporting approach: The Council has followed HM Government's Guidelines on how to measure and report greenhouse gas emissions. Emissions are reported in tonnes of CO₂ equivalents (CO₂e)³.

Chosen Approach: We have used the financial control approach, meaning we have identified and reported on emissions from the operations over which we have financial control.

Operational Scopes: We have measured our scope 1, 2 and significant scope 3 emissions

¹ HM Government, Environmental Reporting Guidelines: Including streamlined environmental energy and carbon reporting guidance March 2019

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/791529/Env-reporting-guidance_inc_SECR_31March.pdf

² Excludes non BwD posts (e.g. Councillors) and casually paid roles and includes post holders in more than one position.

³ A universal unit of measurement used to indicate the global warming potential of a greenhouse gas, expressed in terms of the global warming potential of one unit of carbon dioxide

- **Scope 1: Direct Emissions**
 - From heating fuels for buildings – natural gas and wood pellet and chip;
 - From managed transport fleet vehicles – diesel and gas oil;
 - From meter reads from roof-mounted solar arrays
- **Scope 2: Indirect Emissions**
 - From grid electricity used in buildings and for street lights, traffic signals, signs, bollards, car parks, CCTV and outdoor recreation facilities;
- **Scope 3: Other Indirect Emissions**
 - Released through the use of heating and transport fuels (natural gas, diesel and gas oil) and grid electricity by significant outsourced service providers delivering waste collection and disposal services;
 - From staff business travel by car and public transport;
 - Emissions from the disposal of household and municipal waste;
 - Water supply to the Council and some schools and disposal therefrom;
 - Well to tank emissions associated with extraction, refining and transportation of the raw fuel sources to the organisation prior to combustion;
 - Transmission and distribution losses between power station and point of use

Data is derived from gas, electricity and water bills, oil and biomass invoices, manual solar meter reads, fuel cards, business mileage payments and waste recording procedures. Energy Manager Systems Link is used to log all data relating to electricity, gas, biomass and heating oil consumption and Waste Data Flow is used to record household and municipal waste data. Outsourced service data are generated by the service provider. Some school data has been provided by Capita and Engie.

Exclusions: Excluded from the report, due to a lack of reliable data, are emissions arising from:

- Staff commuting
- Supply chain
- Embedded carbon in goods and services acquired
- Construction
- Fugitive emissions from air conditioning and refrigeration

Summary emissions with baseline year

		Tonnes CO2e			
		2021/22	2020/21	2019/20	2009/10 Baseline Year
Scope 1	Natural Gas	4,681	4,458	4,519	6,613
	Heating Oil	-	216	106	856
	Wood Pellet/Chip	23	19	13	-
	Fleet Transport (all fuels)	1,077	1,098	935	1,638
Scope 2	Grid Electricity	4,459	4,168	5,336	14,365
Significant Scope 3	Business Travel	233	178	447	567
	Outsourced Services	617	420	1,901	626
	Water Supply & Treatment	51	102	149	182
	Household & Municipal Waste	2,434	1,148	8,494	12,279
	WTT & T&D - all scopes, all fuels	2,976	2,020	2,633	4,612
Total All Scopes		16,552	13,822	24,535	41,738
Out of Scope		605	466	332	-

Commentary: All figures for all years have been calculated in line with the guidance published by HM Government in March 2019. Household and municipal waste figures reflect only transportation and minimal preparation, not full life-cycle emissions, in compliance with the GHG Protocol Scope 3 Standard⁴.

Total emissions are based on a similar dataset as the previous years. Emissions are higher than 2020/21, but lower than in 2019/20.

The main reasons for the increase compared with 2020/21 are:

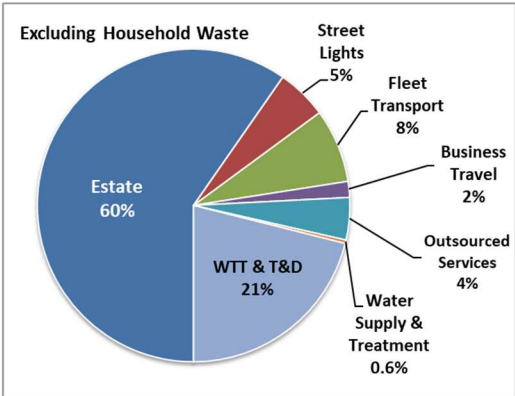
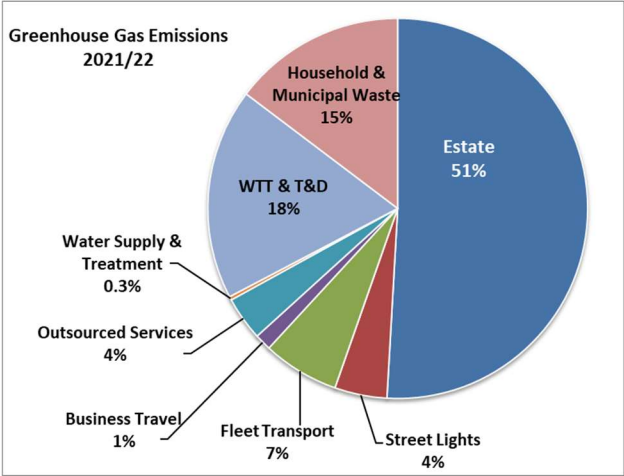
- Buildings and services began to re-open after the Covid-19 pandemic, increasing the amount of electricity and fuel used for heating;
- More schools are included in the data set;
- An increase in the amount of household and municipal waste collected and a rise in the amount sent to landfill;
- More miles travelled by car for business

Emissions are down markedly compared with 2019/20 because:

- The carbon conversion factor for electricity has fallen;
- Business mileage haven't returned to normal;
- Waste sent to landfill is much lower, in spite of an increase in waste collected;

The intensity measure is based on Scope 1 & 2 emissions from Council activity only, i.e. excludes schools and street lighting.

Operational Footprint by Activity



*WTT: Well to tank - emissions associated with extraction, refining and transmission
T&D: Transmission & Distribution losses of electricity purchased, which occur between power station and site*

Conversion Tools Used: The conversion tool used is the Government’s Greenhouse Gas Conversion Factor Repository⁵. Conversion factors are applied to annual activity data compiled by the Council to provide emissions figures.

Baseline Year: The baseline year was re-set from 2006/07 to 2009/10 in line with guidance issued by the Department of Business, Energy & Industrial Strategy in July 2018⁶. The baseline and the dataset for the intervening years now includes only those schools with which the Council

⁴ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard: Revised Edition <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>
⁵ BEIS, Defra, 2020 UK Government GHG Conversion Factors for Company Reporting <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>
⁶ BEIS, Emissions Reduction Pledge 2020: Guidance for emissions reporting in the public and higher education sectors in England 2018-20 <https://www.gov.uk/government/publications/emissions-reduction-pledge-2020-emissions-reporting-in-public-and-higher-education-sectors>

or Capita had a relationship in 2018 to avoid exaggerating the emissions reduction made since 2009/10. The number of schools included in the dataset since 2018 varies year on year depending on take up of service level agreements between the school and the Council or Capita.

Target: The Council declared a Climate Emergency and committed to being carbon neutral by 2030. With respect to emissions from its own estate the reduction target has been increased from 10% to 13% of the previous year for Council activity only i.e. excluding out-sourced services, water and waste and all Scope 3 emissions.

There was an increase in emissions of 1% compared with 20/21 as business returned to normal after the pandemic, but a reduction of 10% compared with 19/20.

The Council implemented energy efficiency and renewable energy schemes funded by the Public Sector Decarbonisation Scheme and is keeping opportunities for future such measures under review through its Climate Emergency Action Plan. The full impact of the PSDS measures will be felt in 2022/23.

Responsible Persons: The elected member responsible for the Council's carbon target is Councillor Quesir Mahmood, Executive Member for Growth & Development, supported by Martin Kelly, Strategic Director of Place.

Intensity measurement: Our intensity measure is tonnes of CO₂e per employee as it is the most relevant measure for this organisation. The intensity ratio is for Scopes 1 & 2 **only**. The staff figure used is Headcount, meaning a count of the number of people per job. If someone has multiple posts, the person will be counted as many times as they have jobs. Casual staff and school staff are excluded.

External Assurance: There has been no external verification of the Council's carbon emissions. Internal verification may be undertaken by the Policy & Partnerships Team, following Corporate Minimum Standards for Quality Assurance policy and procedure.

Carbon offsetting: The Council's carbon management strategy does not include offsetting.

On-Site Energy Generation: Seven solar arrays on Council buildings generated 56 MWh of electricity. Biomass generated at least 1,540 MWh of heat at Turton Tower, a Grade 1 listed building and three high schools.

Water consumption: This report includes emissions from water supply and treatment to Council and school properties for which data are available.

Contact: For more information about Blackburn with Darwen Borough Council's greenhouse gas emissions contact: Environment & Sustainability Manager, Blackburn with Darwen Borough Council, Town Hall, Blackburn BB1 7DY (01254) 585394 climatechange@blackburn.gov.uk

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