North Tyneside Council's Annual Greenhouse Gas Report: 2018-19

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Introduction

Company information

North Tyneside Council, Quadrant, The Silverlink North, Cobalt Business Park, North Tyneside, NE27 0BY.

Reporting period

1st April 2018 to 31st March 2019 (unless otherwise stated).

North Tyneside Council recognises that carbon emissions must be tackled at a number of different levels, with the combined effort of government, businesses and individuals. Therefore, we have established a holistic approach to carbon management and reduction, and have developed a number of plans and strategies to deliver our commitment to tackling climate change and carbon reduction in our own operations and across the Borough. North Tyneside Council's Low Carbon Plan outlines our approach to reducing our carbon footprint and can be found at http://my.northtyneside.gov.uk/category/539/sustainability

In the plan you will find facts and figures on climate change, our approach to working with partners and stakeholders and our action plan to reduce our carbon footprint.

In July 2019 North Tyneside Council declared a Climate Emergency. This sees us bring forward our 50% carbon reduction targets from 2027 to 2023. It also sees a commitment to make the Council and the Borough carbon neutral by 2050.

The Council report declaring the climate emergency can be found here.

The Council's Carbon Footprint

This is North Tyneside Council's ninth annual Greenhouse Gas (GHG) Report. Our baseline year is 2010/11.

Approach

We have followed the guidance issued by DEFRA on how to measure and report greenhouse gas emissions. We have used the relevant 2018 conversion factors. The Guidance provided by DEFRA can be found here.

Organisational boundary

We have used the financial control approach as recommended within the DEFRA guidance above. All operational and non-operational buildings, for which the Council pays the energy bills are included within our organisational boundary. Social housing is excluded other than where the Council supplies energy directly, such as to sheltered accommodation schemes and shared usage in housing blocks, such as stairwell lighting and door entry and alarm systems. School building emissions are excluded from our organisational boundary to reflect the increased autonomy schools have from the Local Authority, including the establishment of Academies and the North Tyneside Learning Trust.

Geographical breakdown

All North Tyneside Council's operations fall within the UK and therefore the reported emissions are not broken down further.

Base year

Our base year for GHG reporting is 1st April 2010 to 31st March 2011. The base year has been recalculated to show the organisational boundary excluding school buildings.

Operational scope

We have measured scope 1, 2 and significant scope 3 emissions.

	GHG emissions 2018/19 in tCO ₂ e
Scope 1	
Gas consumption	6,882
Owned transport (fuel consumption)	1,956
Process emissions	0
Fugitive emissions	0
Total scope 1	8,838
Scope 2	
Purchased electricity (Generation)	6,470
Total scope 2	6,470
Significant scope 3	
Electricity (Transmission & Distribution)	552
Water consumption and treatment	211
Business travel	360
Total significant scope 3	1,123

We have included emissions from our natural gas consumption, which heats our buildings and is used in some locations for cooking. We have also included the emissions from purchased electricity that powers our buildings and street lights.

We do not have any process emissions. We have excluded fugitive emissions due to the nature and cost of data collection. We estimate that these account for less than 0.5% of total scope 1 emissions.

Emissions associated with our owned transport (Diesel, Gas Oil and Petrol) are included in scope 1.

We have included significant scope 3 emissions where data is available and robust. This includes our business travel (journeys made by employees using their own vehicle) and the supply of water.

GHG emissions data for period 1 April 2018 to 31 March 2019			
	Tonnes of CO ₂ e		
	2018/19	Base year 2010/11	
Scope 1	8,838	10,152	
Scope 2	6,470	17,489	
Scope 3	1,123	2,313	
Total gross emissions	16,431	29,954	
Outside of scopes	37	N/A	
Carbon offsets	0	0	
Green tariff	0	0	
Total net emissions	16,431	29,954	

Change in emissions

Overall, North Tyneside Council's absolute CO₂e emissions have decreased by 45% between 2010/11 and 2018/19.

The Council is delivering a programme of carbon emission reduction, following the hierarchy of energy reduction, energy efficiency and implementing low carbon / zero carbon technology.

This approach has enabled us to deliver energy and carbon emission savings through a behaviour change campaign, improved energy management, investment in energy efficient technology and building asset and fleet rationalisation. We have implemented a programme to install more energy efficient bulbs into our street lights,

including converting 7,200 columns to LED, and have trimmed the hours they are operational, dimmed them during the night and following a successful trial, introduced a part night switch off scheme for circa 3,100 non-residential lights.

The natural gas carbon footprint of our buildings has reduced by 7% since the baseline year 2010/11.

The electricity carbon footprint of our building portfolio has reduced by 56% since the baseline year of 2010/11.

The electricity carbon footprint of our street lighting has reduced by 70% since the baseline year of 2010/11.

The carbon footprint of fuel (diesel, red diesel, petrol) in operational vehicles has reduced by 28% and the carbon footprint of business miles travelled by staff has reduced by 45% since the baseline year of 2010/11.

Intensity Measurement

The Council does not use an intensity measurement. The overall aim is to become carbon neutral, so an intensity measurement is not relevant.

The Borough's Carbon Footprint

For the first time this report also includes information on the carbon footprint of the Borough of North Tyneside.

Approach

In June each year the Department for Business, Energy and Industrial Strategy (BEIS) produces a breakdown of carbon dioxide emissions by Local Authority area as a subset of its annual inventory of greenhouse gas emissions. Publications can be found here. 2017 is the most recent available data.

Two datasets are provided. One containing all emissions assigned to Local Authority boundaries. A second containing emissions "within the scope of influence of Local Authorities." The latter set excludes large industrial sites, railways, motorways and land-use. There is little difference in emissions between the two datasets and although not all emissions are in the control of the Council, to fully address the climate emergency it is important that the Council reports against all emissions.

Base year

Our base year for reporting the carbon footprint of the Borough is 1st January 2005 to 31st December 2005. This is the earliest data provided by BEIS.

Scope

The Borough's carbon footprint is made up of the power and heat used in the commercial, industrial and domestic buildings across the whole of the Borough, emissions from road and rail transport, and land use and forestation activities, which can result in either a release into or removal of emissions from the atmosphere.

CO ₂ emissions data for North Tyneside (kilotons)			
	2017	Base year 2005	
Commercial and Industrial	246	565	
Domestic	321	505	
Transport	303	353	
Land Use, Land Use Change and Forestry	-1	0.2	
Total net emissions	869	1,423	

Change in emissions

Overall, The Borough of North Tyneside's absolute CO₂ emissions have decreased by 39% between 2005 and 2017.

The Authority has fewer levers to deliver carbon emission reductions across the Borough compared to in its own estate, however there have still been significant achievements, including;

- Working in partnership with E.On to install solar panels on over 1,500 Council homes, providing free electricity to tenants. At the time this was the biggest social housing Solar PV project in the country.
- Working in partnership with Warm Zones Community Interest Company between 2008 and 2018 to install over 20,000 energy efficiency measures in resident's homes, including loft, cavity wall and solid wall insulation, replacement boilers and brand-new central heating systems.
- Installing a range of energy efficiency measures in the Authority's housing stock, raising the average Standard Assessment Procedure (SAP 2009) rating for the past 5 years from 69.8 to 71.4 in 2018.
- Working with partners on a 'Green Board' to engage businesses and community and voluntary organisations across the Borough to reduce energy consumption and carbon emissions.
- Annual data from cycle counters indicates growth in cycling trips ahead of our target, and the Authority is supporting increased participation in everyday cycling, e.g. by delivering Bikeability training in schools across the borough.

If you require any further information relating to this report or North Tyneside Council's approach to carbon management, please contact Paul Nelson paul.nelson@northtyneside.gov.uk (0191) 643 6467.

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