

NOTTINGHAMSHIRE COUNTY COUNCIL

Greenhouse Gas Emissions Annual Report

2019-2020

The urgent need for action on climate change has been recognised by over 170 countries globally. The 2015 Paris Agreement signed countries up to work together in limiting global temperature rise to well below 2°C, with the aim of achieving a 1.5°C limit. This is the recognised level established by the Intergovernmental Panel on Climate Change to limit the risks and impacts of climate change to within safe levels. In response to this the UK government set a legally binding greenhouse gas emission reduction target of 100% by 2050, achieving net zero, with an interim target of 78% by 2035.

In March 2020 the Council approved a new Corporate Environmental Policy and Corporate Environment Strategy which reaffirmed its commitment to protecting and enhancing the environment for current and future generations. It has subsequently committed to becoming carbon neutral in all its activities by 2030. The Council is also committed to achieving a net zero Nottinghamshire by 2050 in line with the national target.

Since 2014-15 the County Council has made good progress in reducing carbon emissions from energy use across its properties and highways assets by 69%. However, it recognises the need for further urgent action and formalised this by declaring a Climate Emergency in May 2021 and has sought to ensure the environment will be considered throughout all its activities and decision making in the new Council Plan, 2021-2031.

Date report produced: **November 2021**

1. Introduction

The term greenhouse gas refers to gases that trap heat in the Earth's atmosphere, increasing the atmospheric temperature and therefore contributing to climate change. These gases include carbon dioxide, methane, and nitrous oxide, which are produced when fossil fuels are burned, and fluorinated gases which are used in refrigeration and air conditioning.

Nottinghamshire County Council's activities contribute to greenhouse gas emissions through the direct consumption of fossil fuels such as gas, oil, petrol, and diesel or indirectly through the use of electricity supplied via the national grid, and, in the case of fluorinated gases, from any gas leakage from units they are used in.

2. Operational Scope and Organisational Parameters

As suggested by the [Government's Environmental Reporting Guidelines](#), Scope 1 and Scope 2 emissions have been included in this report, along with Scope 3 emissions where reliable data exists. A description of the three scopes taken from the guidelines is shown below:

Scope 1 (Direct emissions) includes emissions released straight into the atmosphere by activities owned or controlled by Nottinghamshire County Council. Examples of scope 1 emissions include those released from combustion in NCC owned or controlled boilers and vehicles.

Scope 2 (Energy indirect) includes emissions released into the atmosphere associated with the consumption of purchased electricity, heat, steam, and cooling, which are a consequence of the Council's activities, but occur at sources the Council does not own or control. The most common type of Scope 2 emission is electricity purchased for our own consumption via the National Grid or a third party.

Scope 3 (Other indirect) emissions are discretionary to include and are a consequence of the Council's actions, which occur at sources which are not owned or controlled by NCC, and which are not classified as scope 2 emissions. Examples of Scope 3 emissions include those from private cars driven on Council business (grey fleet) or the emissions from procurement.

All emissions are expressed as CO₂ equivalent tonnes i.e., tCO₂e.

This report contains details of emissions related to activities within the Council's operational control. As such some activities the organisation has influence but no control over, for example those provided by some partners, have been excluded. Other exclusions may have been made due to the difficulty associated with gathering the data, and these exclusions will be reviewed on a year-by-year basis.

Appendix 1 lists each source and scope and briefly describes the basis for inclusion or exclusion in this report.

3. Base Year and Target

The baseline year set for the Council's Greenhouse Gas Reporting is 2019-20 and will be used as the fixed base year for future reports.

The Council's target is to achieve carbon neutrality in all its activities by 2030.

4. Calculation Methodology

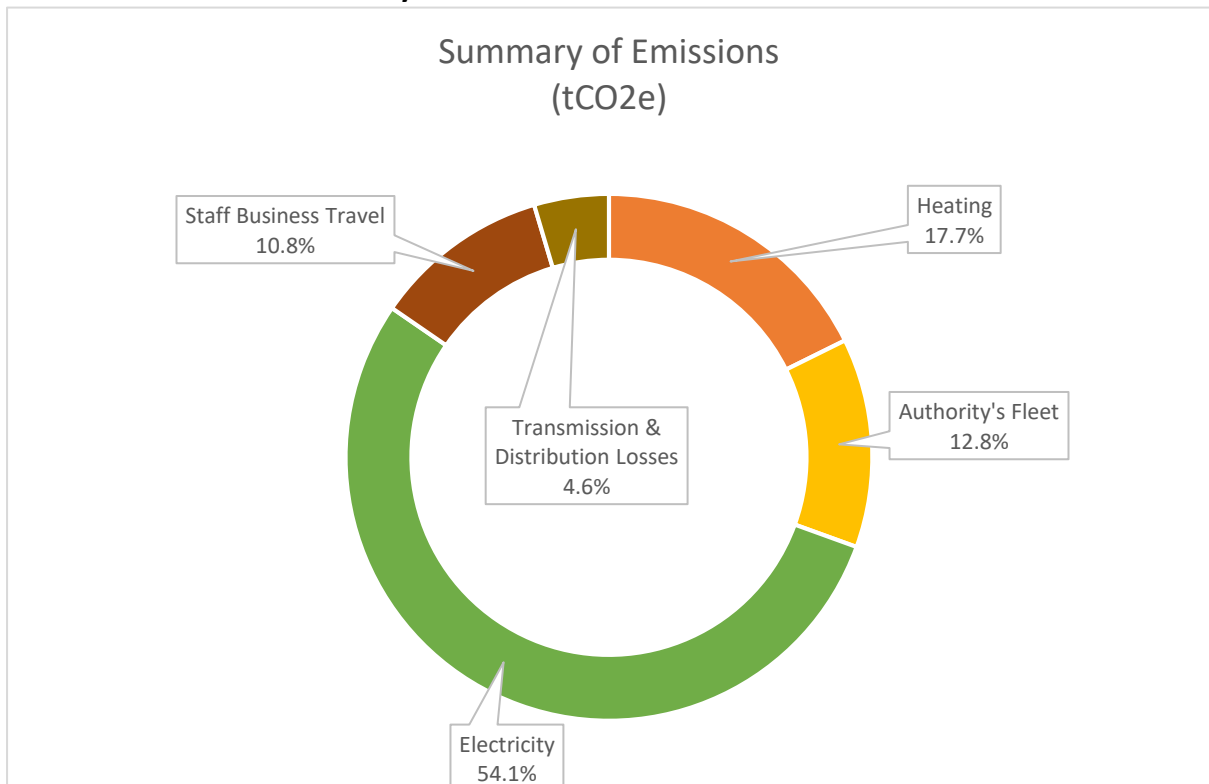
The Greenhouse Gas Accounting Tool developed specifically for local authorities [by Local Partnerships](#) working with the Local Government Association, has been used to calculate emissions from activities within the scope of this report. This tool ensures the appropriate conversion factors for the reporting year are used.

5. 2019-2020 Emissions

Table 1: Summary table of emissions for Nottinghamshire County Council activities 2019-2020 baseline year.

Scope	Emissions source	Emissions per tonne (tCO ₂ e)	Percentage of Total Emissions
Scope 1	Heating fuels used in NCC buildings (excluding schools)	2,970.46	17.7%
	Fuel used by Authority's Fleet	2,158.31	12.8%
Scope 2	Electricity used in buildings	2330.18	13.9%
	Electricity used by Highway assets (this includes street lighting, traffic signs and signals, lit bollards, subway pumps and other miscellaneous equipment)	6749.55	40.2%
Scope 3	Fuel used by Staff Business Travel	1,818.53	10.8%
	Transmission & Distribution Losses	770.82	4.6%
Total Emissions		16,799.87	100%

Table 2: Summary pie chart of emissions in % for Nottinghamshire County Council activities 2019-2020 baseline year.



6. Carbon Offsets

Nottinghamshire County Council has not purchased any carbon offsets.

7. Renewable Energy Generation

PV Solar panels on over 40 Council buildings, generated 888,151 kWh over 2019-20.

8. Green Tariffs

The Council has not purchased any green tariff energy.

Appendix 1 – Operational Scopes

IN SCOPE	Definition
Scope 1	
Gas	Emissions from fuel consumed for heating purposes in the Council's property assets, excluding its schools and buildings operated by alternative service delivery models, Inspire and Via, and leased or other non-operational properties.
Kerosene	As above
Burning Oil	As above
Biomass	As above
Core Fleet (Authority's Fleet of diesel/petrol vehicles)	Emissions from fuel consumed by Council owned or leased fleet covering all services directly operated by the Council, including some Adult Social Care services, school transport, special needs travel and local bus transport, and maintained by Via EM.
Scope 2	
Electricity - Streetlighting	Emissions associated with electricity consumed by the Council's highways assets including street lighting, traffic signs and signals, lit bollards, subway pumps and other miscellaneous equipment.
Electricity -Buildings	Emissions associated with electricity consumed by the Council's property assets, excluding its schools and buildings operated by alternative service delivery models, Inspire and Via, and leased or other non-operational properties.
Core Fleet (Electric Vehicles)	Emissions associated with electricity consumed by Council owned or leased fleet covering all services directly operated by the Council, including some Adult Social Care services, school transport, special needs travel and local bus transport, and maintained by Via EM.
Scope 3	
Business Travel (private vehicles)	Emissions arising from staff business travel in private vehicles.
Transmission & Distribution Losses	Emissions associated with the delivery component of getting electricity from point of generation to point of supply - involving National Grid's high voltage transmission network and local district network operators (DNOs)

OUT OF SCOPE	Definition
Scope 1	
Refrigerant and other fugitive emissions	Excluded due to lack of data, preliminary assessment indicates these emissions are negligible.

Scope 3	
Staff travel to and from work	Excluded as the authority does not have direct control over the methods used for travel and there is a lack of robust available data. NCC can influence through flexible working policies and various support schemes for greener options
Business Travel (public transport)	Journeys by modes other than private vehicles such as air, train and bus excluded. Preliminary assessment suggests this is not significant.
Water	Emissions arising from water supply and treatment to Council property assets is excluded as the data available for this is low quality due to infrequency of meter readings and subsequent level of estimates used for billing.
Nottinghamshire County Council Schools	Excluded as NCC can only influence the choices made by schools in relation to activities and actions that may affect greenhouse gas emissions.
Waste disposal	The emissions released by waste disposal from our operations and those associated with collections as we currently have insufficient data for inclusion.
School transport (Mainstream & SEND Home to School)	Excluded for this reporting year as the system used for transport planning does not currently save the data. Routes are updated each school term, which may result in changes in greenhouse gas emissions throughout the year, as well as between academic years. School transport is contracted so whilst the authority can influence actions and activities relating to greenhouse gas emissions, they are not under our direct control, however we will seek to improve this data.
Contracted travel relating to Adult Social Care and other ad-hoc travel	Excluded contracted journeys, such as Special Educational Needs Home to School transport. NCC does not have direct control over actions relating to greenhouse gas emissions.
Items we purchase	Greenhouse gas emissions relating to items purchased by the authority are covered under the delivery of the Procurement Strategy. The authority can only influence this.
ASDMS (Via, Arc, Inspire, Country Parks)	Excluded as such organisations are considered outside of the Council's operational control. They will be encouraged to produce their own GHG emissions reports, where they don't already so. NCC are committed to support partners through the Corporate Environment Strategy's action plan.