

Greenhouse Gas Emissions

Annual Report 2021-22

Introduction

This report presents the latest greenhouse gas (GHG) emissions resulting from Waverley Borough Councils operations for the year 2021-2022 and includes our approach to reducing emissions as part of our commitment to be carbon neutral by 2030.

Council Information

In 2021/22 Waverley Borough Council served a population of 128,200 up from 122,426 in 2015/16. The council provides a number of services to residents including waste and recycling collections, social housing provision with 4,742 properties available to residents in need of housing. Waverley also owns 5 leisure services, 4 of which have swimming pools.

In 2021/22 these services were provided by 364 Full Time Equivalent (FTE) employees compared to 374 FTEs in 2015/16.

Baseline year and reporting period

The baseline year identified in the Climate Neutrality Action Plan is the financial year 2015-2016, which runs from 1st April to 31st March each year. This is the most recent year for which accurate data was available prior to the council's declaration of a climate emergency in September 2019 and the approval of the Carbon Neutrality Action Plan in December 2020.

Approach and operational scopes

The Government has published guidance¹ on how to measure and report greenhouse gases and the format follows the internationally recognised Greenhouse Gas protocol² for adoption by all local authorities and the private sector.

This includes emissions deriving from electricity and gas use **non-domestic** Council owned or managed properties as well as transport. Figure 1 outlines the included scopes and reported activities

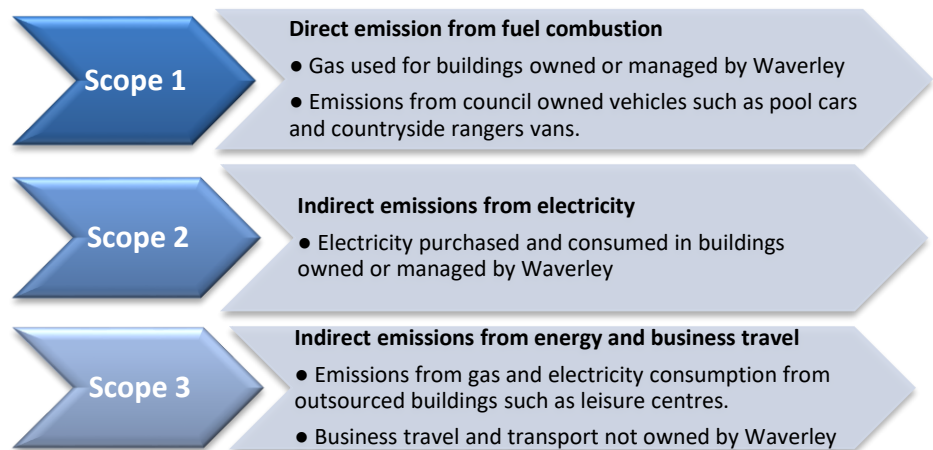


Figure 1. – Scope outline and reported activities

¹ [Guidance on how to measure and report your greenhouse gas emissions](#)

² [GHG Protocol Corporate Accounting and Reporting Standard](#)

Baseline GHG emissions

In 2015/16 the largest contribution came from outsourced services (scope 3 emissions) such as leisure centres (47%) and transport emissions arising from contractors (38%).

Annual GHG emissions

Results for 2021/22

The total net absolute GHG emission for 2021/22 was 3500 tonnes CO₂e. The overall emissions compared to the baseline year 2015/16 have dropped by 34%. Scope 2 and Scope 3 accounting for the more significant drops.

Table 1 below shows a summary of the GHG emissions under each of the Scopes in terms of GHG emissions presented in tonnes of carbon dioxide equivalents (tCO₂e).

	2015/16 Base year (tCO ₂ e)	2019/20 (tCO ₂ e)	2020/21 (tCO ₂ e)	2021/22 (tCO ₂ e)
Scope 1 (direct emissions):	223	196	280	200
Scope 2 (energy indirect):	402	196	161	153
Scope 3 (other indirect):	4,672	3446	2436	3146
Total annual net emissions	5,297	3838	2877	3500

Table 1: Annual GHG emissions

Although significant efficiency improvements have been achieved over the years the level of services provided has increased as well as the number of people that Waverley now reaches out to. There are also uncontrollable circumstances that affect GHG emissions.

Growth and uncontrollable circumstances

Fluctuation in service delivery and demand: There are a number of factors that can restrict the reduction of net GHG emissions, and they very much relate to natural growth of the organisation and improvement of our services. Natural growth in population and social housing means that Waverley services now reach over 5,774 more people than in 2015/16.

Covid Pandemic: 2020-21 was an unusual year and emission reductions during that year were more a reflection of the change in the way people worked and the restricted service provision (i.e. leisure centre closures) due to restrictions under Covid19 than any deliberate acts to reduce emissions. The current reporting year provides a more accurate picture of the council's emissions.

Council owned and managed sites – Scope 1 & 2 emissions.

Across council owned and operated sites 364 FTE employees deliver the Council's core functions and services. A majority of staff were based at The Burys, Godalming in 2015/16, but as a result of the success of hybrid working during the pandemic an average of 103 staff are in on any one day. The lack of staff in the building has contributed to the 32% reduction in scope 1 and 2 emissions from 2015/16. This could be a long-term emission reduction.

Between 2015/16 and 2021/22 eleven properties were either sold, leased, or converted to housing and therefore now out of scope. The loss of these properties contributed to the 46% reduction in Scope 1 and 2 emissions from the baseline year.

Council Service Provision – indirect Scope 3 emissions

The majority of Waverley's emissions (90%) are generated by services provided to local residents, particularly waste collection and leisure services. These services are outsourced and therefore restrictive in terms of the influence Waverley might have over energy efficiency. Two of our contractors are in the process of switching their vehicles from diesel to electric and hybrid reducing their emissions.

Waste & Recycling Collections: Emissions from the provision of waste and recycling collection services contribute significantly to the total GHG emissions, and in 2015/16 represented 30%. The service has been expanded in recent years due to the increasing number of properties and take up of the additional green waste collection. In 2021/22 8277 tonnes of green waste was collected compared to 4527 in 2015/16 which resulted in additional mileage.

Despite the increase in properties and an increase in waste collected due to homeworking there appears to be a 26% reduction in emissions from the baseline year.

Leisure Centres: These accounted for approximately 47% of Waverley's total GHG emissions in the baseline year and in 2021/22. The sites re opened on 12th April 2021 following the pandemic however services did not fully resume until August and the number of visitors are still down by 39% from the baseline year. The Council, in partnership with Places Leisure, is continually seeking energy reduction opportunities. This has resulted in a 34% reduction in emissions.

Energy generation from renewable and low carbon sources

Energy generated from renewable sources has been recorded. Four photovoltaic solar (P.V.) arrays supply the equivalent of 7% of the overall electricity demand. Biomass boiler is generating renewable heat for Godalming Leisure Centre.

Biomass fluctuations are affected by usage. The closure of the leisure centres and some technical issues with the biomass boiler accounts for the reduction in 2020/21 and 2021/22.

Solar PV generation is dependent on meteorological conditions however in 2020 the lack of inverter for a period of time at Haslemere LC affected the recording of the data. All readings have been recorded accurately for 2021.

Renewables generation	2015/16	2019/20	2020/21	2021/22
Biomass (kWh heat)	29,671	231,765	65,882	116,471
Solar P.V. (kWh electricity)	28,739	34,055	35,184	49,338

Table 2: Total energy generation from renewables