# WAVERLEY BOROUGH COUNCIL

# EXECUTIVE – 4 NOVEMBER 2014

## Title:

# WAVERLEY CARBON AND GREENHOUSE GAS EMISSIONS ANNUAL REPORT 2013/14

## [Portfolio Holder: Cllr Tom Martin] [Wards Affected: All]

## Summary and purpose:

It is a mandatory requirement for Local Authorities to report the greenhouse gas emissions (GHG) produced due to their operational activities across their estates.

This report has been produced for Waverley Borough Council to comply with this requirement and covers the financial year 2013 -14.

## How this report relates to the Council's Corporate Priorities:

Waverley is committed to the protection and enhancement of the environment within its core values. This report details one aspect of our environmental impact, energy consumption and the associated GHG emissions.

The report provides estimates for Waverley's GHG emissions for the year 2013-14, its historical GHG emissions to 2008-09 and progress made towards reducing these emissions.

## Financial Implications:

No direct finance implication identified.

#### Legal Implications:

Publication of this report and its submission to the Department for Energy and Climate Change is a mandatory requirement. However there are no legal implications.

#### Introduction

1. The Government is requiring Local Authorities to report on their carbon dioxide emissions as a result of their operations. As of July 2011 there is a requirement to report greenhouse gas (GHG) emissions rather than just carbon dioxide (CO<sub>2</sub>). This takes into account other greenhouse gases such as methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). The greenhouse gas (GHG) emissions resulting from Waverley Borough Council's operations for the year 2013-2014 are presented in this report.

2. The following sections present a summary of Waverley's Carbon and Greenhouse Gas Emissions Report for 2013-14 and the key findings. The report is attached in full in <u>Annexe 1</u> for reference.

# Report Summary

## Approach

- 3. To calculate Waverley's GHG emissions, an 'Operational control' approach has been adopted and used to define the organisations boundaries and reportable sources of GHG emissions. This includes our direct and indirect emissions arising from the buildings and vehicles owned or managed by the Council. These are reported as Scope 1 and 2 emissions.
- 4. Waverley Borough Council serves an increasing population, reaching 122,426 in 2013-14, providing residents with waste and recycling collections, social housing through 5000 tenanted residential properties and leisure provision through 5 leisure centres. To account for these activities, significant emissions arising from outsourced buildings, services and business transport are also included and reported under Scope 3 emissions.

# **Baseline Year**

5. The baseline year provides a reference point to compare future years GHG emissions and evaluate the progress made in reducing these emissions. Waverley's baseline year is set at 2008-09, with a total of 5,093 tCO<sub>2</sub>e estimated to have been emitted. The largest contributors came from outsourced services e.g. leisure centres and contractors transport emissions. These account for 73% of Waverley's baseline emissions collectively.

# Annual GHG emissions: Results for 2013-14

- 6. The results for the year 2013-14 represent a 12.9% reduction in GHG emissions compared to the baseline year. Reductions in emissions have been achieved across the organisation.
- 7. Waverley has reduced its emissions from council-owned and managed sites, reported under Scope 1 and 2 emissions, by 25% compared to the baseline year. The main Council Offices at the Burys have shown the greatest improvement in energy performance. The Burys supports 377 FTE's who deliver the Council's core functions and services. The installation of energy efficiency technologies at this site, such as voltage optimisation, LED lighting, the introduction of IGel thin clients and the removal of work place appliances such as desk lamps and fans have each contributed to achieving these reductions.
- 8. Overall Waverley's outsourced emissions, under Scope 3, which includes the provision of leisure and waste services have seen a reduction in GHG emissions of 10% compared to the baseline of 2008-09.

- 9. As part of the leisure centre refurbishment process the energy performance of the leisure centres has also improved. Refurbishment works have been made to Cranleigh and Farnham, improving their energy performance. Coupled with the redevelopment of the Godalming Leisure Centre providing a more energy efficient building and the installation of a biomass boiler at this site, Waverley has achieved an estimated reduction of 15% in GHG emissions across the sites over the last four years.
- 10. The emissions arising from providing waste and recycling collection services accounted for 22% of Waverley's total GHG emissions during 2013-14. Despite the expansion of this service to collect co-mingled recycling, food waste and now green waste, in addition to a standard waste collection, the emissions per capita arising from this service have remained consistent. Emissions rose slightly to 8.1 kgCO<sub>2</sub>e per capita in 2013-14 from 8.0 kgCO<sub>2</sub>e in 2008-09.
- 11. Operational routes have been optimised to ensure the maximum quantity of waste is collected by each vehicle per trip. Drivers have also received a *Driving efficiently and safely'* programme to encourage safe, efficient driving practices. The potential for further emissions reductions are being investigated. Two collection vehicles have trialled the use of biodiesel. The vehicles in this trial consumed 18,354 litres of biodiesel, emitting 24,673 kgCO<sub>2</sub>e. This is approximately 50% less emissions than an equivalent vehicle operating on diesel fuel.
  - 12. As well as reducing its energy consumption, Waverley has installed renewable technologies allowing it to generate its own energy. 4.5% of Waverley's electricity and heating demand is now generated from these renewable sources which include a biomass boiler and two photovoltaic solar arrays.

# **Conclusion**

- 13. The estimated GHG emissions for 2013-14 show Waverley's continued progress on reducing the emissions arising from its activities.
- 14. A number of energy efficiency projects have contributed to the achievement of this reduction. Within this year improvements to the collection of energy consumption data, the insulation of LED lighting in the council offices and car parks, and increased output from the biomass boiler at the Godalming leisure centre have all contributed to reductions in the council's reported energy demand and GHG emissions.
- 15. Looking forward to 2014 -15, additional generational capacity is planed with the installation of a Combined Heat and Power unit and two additional solar P.V. arrays as part of the Council's Carbon Management Plan.
- 16. Waverley's Carbon Management Plan will be updated to cover the period 2015-2020 and will outline future energy use, GHG emission reduction targets, and potential projects to meet these targets. To prepare for this and

ensure continued compliance within our GHG report, the potential need to recalculate the baseline year is being assessed.

## **Recommendation**

It is recommended that the publication of the report and its submission to the Department for Energy and Climate Change be approved.

## Background Papers

There are no background papers (as defined by Section 100D(5) of the Local Government Act 1972) relating to this report.

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