

Council of the Isles of Scilly

Green House Gas Emissions

Background

The government requires local authorities to work out the quantity of greenhouse gases they emit each year and make the information available to the public. This is to monitor progress towards the UK's environmental targets in particular the 'carbon budget', which is a cap on the UK's total greenhouse gas emissions.

How are Green House Gas (GHG) emissions calculated

GHG's are calculated by collecting raw data for the usage of Oil, Gas and electricity from within the council's estate and collecting data on tons of waste disposed of. These are then turned into CO2 equivalents using emissions factors published by Defra (in line with EU emissions factors)

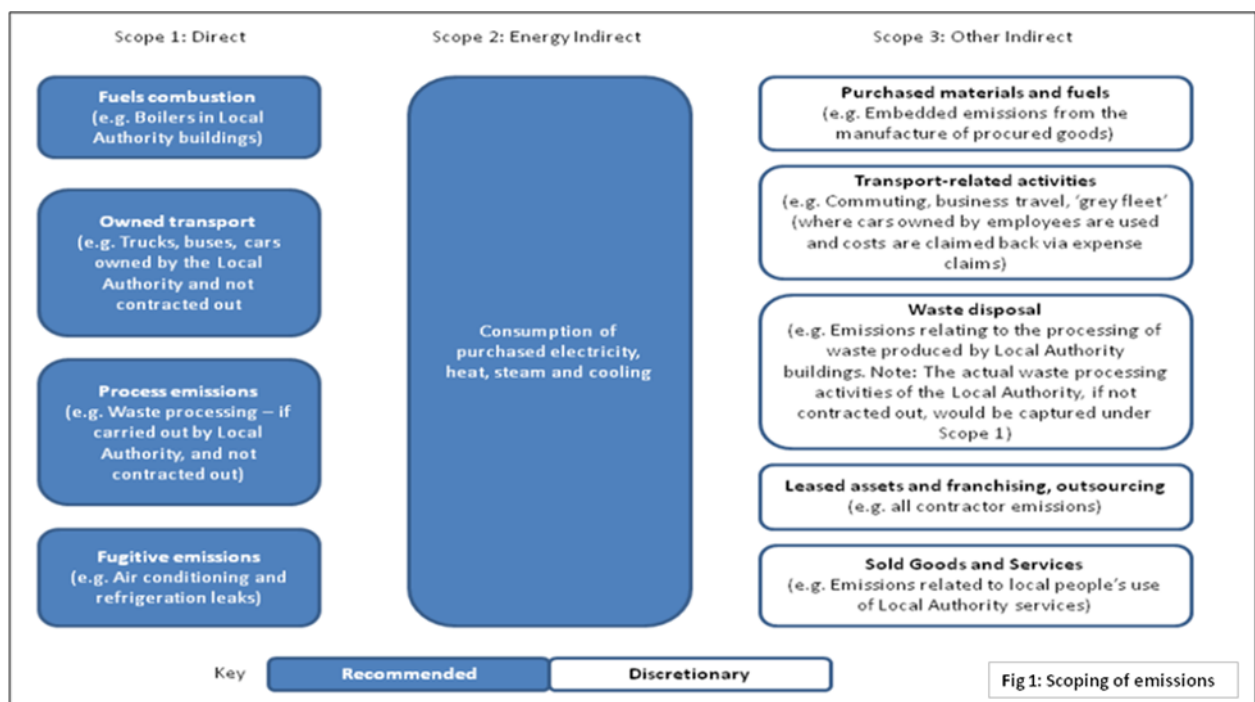


Fig 1 Allocation of emissions to different scoping groups

The result is defined within 3 different scoping parameters as shown in fig: 1. Whilst quite complicated to calculate, in general terms this means:

- Scope 1 refers to emissions directly produced by the council in its buildings, plant and vehicles and waste disposal (e.g. oil, gas and waste burnt).

- Scope 2 refers to emissions produced from energy provided by 3rd parties such as electricity.
- Scope 3 refers to emissions produced from 3rd party services such as car hire and contracted out services

Assumptions used in calculations

- Calculations are standardised emissions based on Defra's emissions factors where available.
- Data is included for all council building's energy usage (electricity / oil and gas where used)
- Data is also included for all mainland car hire travel - which is collected quarterly.
- Data has been included for employee travel to work but excludes interisland boat travel (see below)
- Data is excluded for travel by inter-island boating and air travel to the mainland on council business - the emission factors for these items are not available from Defra. It is hoped that in future years these can be included
- All heating data is weather corrected using degree day calculations (a way of standardising heating usage according to changing temperature conditions compared to a defined fixed temperature point).
For further information please visit: <http://vesma.com/ddd/index.htm>
- Insufficient information is currently available to estimate the CO2 emissions from the municipal waste incinerator, but fuel directly burnt to maintain incinerator temperatures for proper combustion is included
- Our base year to which future comparisons will be made has been set at 2008.
- Data will be published annually and made available on the councils website

Summary Emissions Table

Council of the Isles of Scilly
GHG Emissions period from 1 April 2010 - 31st March 2011
Tons of CO2
equivalents

	2010	2009	2008 Base year
Scope 1	514,571	533,019	469,011
Scope 2	604,611	502,842	533,385
Scope 3	40,816.	41,318	35,043
Total Gross Emissions	1,159,998	1,077,180	1,037,439
Total annual Net Emissions	1,159,998	1,077,180	1,037,439

Commentary

Carbon emissions from the Council have increased by 12% since 2008.

It is worth noting that compared to other councils we have a very small energy footprint and small changes can be reflected in large % swings.

Although heating oil emissions are corrected for Degree Days, electricity usage for heating is not. Many council buildings are heated by electricity and the last two exceptionally cold winters may explain the increase in electricity usage. In addition there is a general trend in increasing water demands, primarily to service the tourist industry, which is met by the Island's desalination plant. This plant accounts for some 46% of the council's annual electricity usage.