

How to Use Carbon Emissions Data.

Introduction

Except for a limited number of companies there is no legal requirement to limit or report carbon dioxide or other greenhouse gas emissions. The reporting of emissions by companies is thus predominantly voluntary and is undertaken for a wide variety of reasons including, amongst others, CSR reporting, risk management, business opportunities and client demand. Whatever the stimulus to reporting, an understanding of the correct application of data and its use is essential. This short guide is designed to assist users of data.

Methodologies

There are a wide variety of calculation methodologies available and none is accurate to the last gram of carbon dioxide emissions. There are two reporting standards, which are recommended for UK and International reporting. These are respectively the standards produced by DEFRA and the GHG Protocol. Both use available data to deliver average emissions values by weight, distance and energy use and will continue to be updated to try and reflect as closely as possible emissions created by power and transport use. Outside of these two standards are methodologies for power and transport that aim to increase the accuracy of emissions values based upon usage data. These can often be specific to individual sectors and are very useful in determining corporate policies that will reduce actual not average emissions.

Refined Data

The refined emissions data that is available from The Carbon Consultancy and other sources is valuable in helping to determine reductions that can be made through policy implementation and to support carbon efficient procurement. This data may be reported alongside national and international values, but are not a substitute for them.

Online Calculators

There are many online calculators for general and sector specific use. To correctly use the output from such calculators it is essential to establish the methodology used. A recent study by The Carbon Consultancy found that there was a 300% variance in values returned for the same flight across a given range of online calculators. When using online data that is non DEFRA or GHG Protocol based, do not base policy or decisions on these results without contacting the data provider to establish the methodology used.

Corporate Reporting

To help advance carbon management and reduction, adherence to and support for available standards is vital if we are to improve these standards and enable global and national quantification of emissions with greater accuracy. For this reason a company that is reporting its emissions to shareholders, clients, investors and other stakeholders is advised only to use a DEFRA or GHG Protocol methodology in such reporting. The methodology used should be clearly stated in any report and must specify whether it is for CO₂ (only carbon dioxide emissions) or CO₂e (carbon dioxide equivalent), the latter being the preferred method of representing the value of other greenhouse gases.

Overview

Measuring carbon emissions is a critical first step to management and reduction of emissions. It helps to support client and employee engagement and establish carbon emissions as criteria for purchasing and decision making. However all carbon emissions data are best estimates based upon the research and methodology that support them. They should always be treated as estimates and represented as estimates as this most accurately reflects their status. Each year there are advances in data available to researchers and this will help national and international standards to become more accurate. It is however, highly unlikely that there will be last gram accurate emissions values for all activities, and so data should be used responsibly and as estimated values.

Important Links

[DEFRA](#)
[GHG Protocol](#)

