

What is a Carbon Footprint

Your carbon footprint is a measure of your company's contribution to global warming. Almost every energy-consuming activity that your company undertakes has an associated release of greenhouse gas emissions and thus a carbon cost and a cost to the environment. The word "footprint" is an allusion to the size of the impact your company is having on the environment and climate. A toddler's foot leaves a much smaller footprint than an adult's. So the likes of BP or the Drax power station have a vast footprint or measure of harmful carbon emissions compared to a small office on a trading estate. This does not mean that both extremes of the industrial and commercial sector should not reduce their carbon emissions as much as possible.

Identifying Your Carbon Footprint

Sometimes this can be obvious: fumes from a van exhaust or flue gas and vapour from a boiler flue. Some activities that have carbon associated with them may be less obvious; for example, the food used in your canteen may have a great deal of 'food miles' associated with them when the meals could be just as well be produced from local, seasonal food.

Energy Consumption and Attendant Carbon Footprint

According to the DTI report, Energy Consumption in the United Kingdom, total energy consumption in the UK in 2001 was split as follows: Industry – 22%; Transport – 34%; Services – 14%; Domestic – 31%. In the commercial sector 64% of energy use was from space heating and hot water, 15% for lighting, 11% - 'other' and 10% on catering. It is quite clear that the most important way to reduce your carbon footprint is to save and manage your energy use for heating and hot water. There are many products and services available which are listed on the above data sheet and the Vision 21 business information sheet - Energy Management. It is also clear that one of the most effective ways to save energy here is proper insulation of buildings which can be difficult to achieve in rented commercial properties.

In the industrial sector, process is by far the largest user of energy at 55%; 'others' is 16%; drying/separation – 11% and space heating only 10%. The same data sheets as mentioned above will help in reducing these specific carbon footprints.

Corporate Action

The Carbon Disclosure Project is a corporate organisation which contacts the 500 largest worldwide companies on behalf of institutional investors to see how companies are reducing their carbon footprint. Responses and the size of the carbon footprint from companies such as Barclays Bank, BT and Heinz can be found at:

<http://www.cdproject.net/aboutus.asp>

How to Calculate Your Carbon Footprint

You can only reduce your carbon footprint once you know what your existing footprint is. This will act as the datum point from which you can reduce. It will also allow you to set a percentage target which can be monitored to see if actions implemented are having the desired effect. It is relatively easy to measure a company's direct emissions compared to its indirect ones. Direct emissions are those associated with energy use – i.e. gas, oil, electricity, petrol, diesel, and to some extent water, as there is a carbon cost to supplying this resource. These are easily identified and data is readily available from utility bills where units of energy can be converted to tonnes of carbon. Indirect

emissions are those associated with energy (and therefore carbon emissions) that is embedded in manufactured goods – i.e. anything that your company purchases. It is difficult to quantify what figures for any specific item will be. Indirect emissions are notoriously difficult to calculate as the lifecycle of a product from raw material to manufactured article is a complex process. The Carbon Trust have famously calculated the carbon footprint of a packet of Walker's crisps; it was quite an ambitious and time-consuming undertaking. Just in case you were curious, the figure printed on a packet is 74g of CO₂.

Getting Started

Please see The Carbon Trust website, <http://www.carbontrust.co.uk>, as they have made it very simple via an on-line calculator to allow your company to find out the amount of carbon emissions it produces:

<http://www.carbontrust.co.uk/solutions/CarbonFootprinting/FootprintCalculators.htm>

A basic indicator which allows you to estimate your carbon footprint in a matter of seconds, based on your approximate annual energy bill and your business sector: www.carbontrust.co.uk/solutions/CarbonFootprinting/CarbonFootprintIndicator.htm.

The second option requires a small amount of research but is well worth doing as the information will allow you to calculate your actual carbon footprint. You will need to find: your total fuel use for all building operations (e.g. gas or oil); company vehicle usage (petrol and diesel); electricity bill; employee travel ('planes, trains and automobiles'); you will need to register and login to use this facility:

<http://www.carbontrust.co.uk/publicsites/CFCcalculator/>

Vision 21 also have a separate A4 sheet that is designed for the general public to calculate their personal domestic direct carbon footprint which may also be of interest.

The Next Step

Now you know how much carbon your company emits and have perhaps seen the figures for your company's combined energy use on the same piece of paper for the first time (and possibly shocked yourself!), it's time to reduce emissions and save money. The Carbon Trusts website says that they have helped thousands of companies reduce their energy use by up to 20% with no or low-cost actions, with payback periods of a matter of a few months. After this initial payback period quite clearly you are saving money from then on. One case study they cite is a company that slashed its bills by 26%, saving more than £250,000 per year and reducing their annual carbon footprint by 1,150 tonnes.

In order to understand how to make these savings a site visit is really required and there are a number of tailored services that The Carbon Trust can provide based on your company's needs. A visit can be applied for on-line and is free of charge (subject to their terms and conditions). However there is one requirement which may unfortunately preclude many SME's: The Company needs to have annual energy bills of over £50,000. For organisations whose energy use is less than this The Carbon Trust offers a free telephone service: 0800 085 2005.

Start Now

Before you pick up the phone, you can start cutting emissions immediately by following this simple advice: http://www.carbontrust.co.uk/energy/startsaving/start_saving.htm. There is also plenty of free literature available as well.