



**Carbon Reduction Awareness  
YOUR CARBON FOOTPRINT  
Toolbox Talk**

**What is a Carbon Footprint?**

The term carbon footprint means the total amount of carbon dioxide (CO<sub>2</sub>) and greenhouse gas (GHG) emissions you (as a person or organisation) are responsible for. These gases are produced every time energy is used from a fossil fuel source i.e. coal, oil or natural gas.

**What are the causes of CO<sub>2</sub> and GHG emissions?**

- Using electricity made at a coal or oil fueled power station
- Burning gas, e.g. for heating & cooking at home, heating materials at work
- Driving a petrol or diesel vehicle, including Plant at Work
- The production, transport and disposal of raw materials and consumer goods.

**Why do we need to reduce our carbon footprint?**

The main reason is to slow the rate of climate change, at present the average person's carbon footprint in the UK is 9.3 tons of CO<sub>2</sub>. Emissions of CO<sub>2</sub> and GHGs contribute to climate change and businesses are responsible for nearly half of all these emissions each year.

Since April 2013 it has become mandatory for all businesses listed on the Main Market of the London Stock Exchange to report their levels of Greenhouse Gas Emissions.

Other advantages of reducing your carbon footprint are to save money (by cutting energy bills), to improve business reputation and to meet Government targets.

A carbon footprint can be calculated from various utility usage data, and then targets set and measures implemented to reduce it. The carbon footprint calculation can also be verified.

**Measures to reduce energy use include:**

- Lighting -
  - switch lights off in empty rooms
  - light only the part of a room where it is needed
  - use natural light where possible
  - maintain lighting systems so they work efficiently
  - select energy saving light bulbs.
- Heating -
  - keep thermostats at a maximum of 19°C
  - leave space around heaters/radiators to let warm air circulate
  - do not heat unused space – eg empty rooms, or offices at night or at the weekend when closed
  - keep doors and windows closed and draught proofed
  - maintain heating systems so they can work efficiently.

- Reduction/Substitution of travel  
using carbon efficient methods of transport  
replacing car journeys with cycling  
limiting air travel.
- Waste/recycling/purchasing  
reduce the amount of waste you produce  
implement the waste hierarchy and reduce, reuse and recycle • select local materials, products and services  
use eco-friendly options where available  
select low energy, easily recyclable goods.

### **What can you do! Everyone in the Company!**

Everyone needs to consider each individual practice regarding: -

1. Transport – can we car share once a week (reduction of 20% in their footprint) even more would be better
2. Vehicle Use, better planning, make sure we are not making any unnecessary journeys due to forgetting materials etc
3. Plant Maintenance, make sure that all equipment, hired or owned, is running as effectively as it can be, tyres, engine etc
4. Electrical equipment operatives use – are they all needed? Switch them off as soon as they are no longer used, do not leave vehicles running when they are not in use
5. How much do we throw away? Can any be reused/recycled/avoided? Can we measure how much we throw away, waste on each job, materials cost money and money is important
6. Become an 'Energy Champion' – identify where money, energy, fuel, waste, raw materials are wasted and feed back to the supervisors and managers
7. Ensure that all equipment, lights and heating are turned off (not just left on standby) when not in use
8. reuse and recycle waste wherever possible; value the resources of the company
9. Suggest ideas to improve products and process management

**Questions – Please answer the following questions.**

**Q: What does carbon management include?**

**Q: What could you do to help with the carbon management process?**

**Q: What is the average person's carbon footprint in the UK?**

**Q: List three measures which can be taken to reduce the carbon produced from travel.**

**Do you have any questions for me?**

