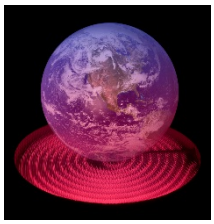
Clarefeeney
The Sustainability Strategist

Global warming



– how to make cold cash out of hot air

Climate change

Most of the world's scientists believe that the human race's increased emissions of carbon dioxide and other so-called 'greenhouse' gases are causing global warming. While this sounds great if you live in a colder climate, in reality it will mean more weather extremes; more hurricanes, more storms, more droughts and more heat waves – and yes, some areas may experience more big chills, too.

These increased emissions result from our ever-faster use of the world's fossil fuel reserves, until we reach 'peak oil' – the inevitable point at which the maximum global production rate is reached and after which the rate of production will decline. Some think we have already passed that point. The oil will not suddenly 'run out', but prices will rise, perhaps dramatically – and because everything in our global economy depends on fuel at some point in its life cycle (from extraction or growth, transport, manufacturing, use, recycling or disposal), everything will get more expensive in the future.

Carbon footprint

The amount of carbon a product or service demands is called its carbon footprint. Defined as the total amount of carbon dioxide (CO_2) and other greenhouse gases emitted over its full life cycle, it is usually expressed as grams or tonnes of CO_2 equivalents, to take into account the varying global warming effects of different greenhouse gases.

Sceptic or convert?

Climate change sceptics and converts disagree on whether global warming is happening and whether human activities are the cause. Converts think that reducing the carbon footprint of all our goods and services can slow the rate of climate change so we can avoid serious adverse effects on the planet's weather, ecological and economic systems. However, many people – sceptics and converts alike – are worried about the cost of reducing carbon emissions.

Who cares? Let's just make money!

Smart businesses that use resources efficiently and minimise the volumes of waste needing expensive disposal don't need to be climate change sceptics ***or*** converts.

They just use their carbon footprint as an indicator of wasteful practices generally, and then work out how to reduce their inputs. So many resources need oil for extraction, processing, transport and use that any saving will reduce their carbon footprint.

More efficient use of inputs saves money and grows profits.

At the same time, it benefits people and the environment in many other ways, regardless of whether or not climate change is happening, or whether we are or are not causing it.

What does this mean for manufacturing and construction companies in these tight times?

Clare Feeney is a sustainability strategist who helps organisations of all types grow their sustainability capability. She can help you grow jobs, increase profits and improve the environment – and have fun along the way!
You can find out more at www.clarefeeney.com and contact her at clare@clarefeeney.com

A smaller carbon footprint = a bigger bank balance

We can reduce the carbon footprint of our own activities, and we can help and encourage our suppliers and customers to reduce theirs.

We can reduce the carbon footprint of our own activities in many ways, large and small, in the plant, on the site and in the office. For example, we can:

- choose materials and designs that are more energy-efficient and less energy-intensive
- design for disassembly and re-use and recycling of all components
- choose the most carbon-efficient suppliers – these may or may not be local
- plan and manage plants and projects for maximum efficiency
- use recycled content materials where these are suitable
- use electricity more efficiently and reducing unnecessary use
- reduce air and other travel and support planting programs to offset residual emissions
- measure resource inputs, waste and product outputs and identifying where wastes come from – and why they come from there. See The true cost of waste: the hidden reasons why you don't know how much profit you're losing.

Construction companies can also look at how to:

- design road routes and grades so that vehicles using them reduce their fuel use
- use construction resources efficiently to minimise wastes for transport off site
- increase the fuel efficiency of plant and equipment and reducing unnecessary use, including company motor vehicles
- minimise vegetation clearance on construction projects and replanting wherever possible, ideally using locally sourced native seeds
- contribute to carbon sinks by supporting other replanting plans
- help staff to do the same in their work-related and private lives.

We all can help and encourage our suppliers and customers to reduce their carbon footprint – and hence, our own – in a number of ways to:

- reduce the embodied energy (the amount of energy used to extract, transport and process materials) in major inputs to our processes, as well as in the manufacture of our plant and equipment and construction of buildings and roads
- use renewable materials as much as possible
- use environmental engineering solutions to manage our energy, water, stormwater and wastewater needs
- design and build energy-efficient products, buildings and infrastructure that use less energy to operate and maintain over their working life, can be easily maintained to extend their working life, and can be broken down into re-usable or recyclable materials at the end of it – the cradle to cradle (not grave) approach see http://www.mbdc.com/.

Compete in this economy and build a new one that will last

Consider moving from a product-based to a service-based model, in the way that Ray Anderson did for Interface Carpets. See http://www.interfaceglobal.com/sustainability and http://missionzero.org/, and look for him on YouTube. This model truly has the potential to save the world – and as the Paris-based Matisse model shows (http://www.matisse-project.net/projectcomm/), has the potential to create not only more jobs, but more meaningful jobs. See The service-based economy – what it is and how it could save the world.

Steps like these help us protect the environment while becoming more profitable.

The money we make today is also an investment in a future we can all live in.

Clare Feeney is a sustainability strategist who helps organisations of all types grow their sustainability capability.
She can help you grow jobs, increase profits and improve the environment – and have fun along the way!
You can find out more at www.clarefeeney.com and contact her at clare@clarefeeney.com.