

[youtube:<http://www.youtube.com/watch?v=6BEPUxE2ulw> auto]Every business should consider offsetting as an integral part of strategy and responsibility. It allows one business to fund energy savings in another, and to use those savings as a credit or allowance against its own energy use. It works because it is often cheaper to save a ton of carbon in another company rather than your own.

There are many challenges, not least in proving rapid, genuine benefit. Offsetting can also make corporations lazy about adding to their own energy savings. Carbon offsetting should only be carried out after taking vigorous action to reduce your own personal or corporate carbon emissions / energy consumption.

Some offsetting methods are hotly debated and should be avoided.

However offsetting has a vital part to play in fighting global warming, and will be used by most large companies.

Post / video made in 2008 - very accurate forecasting.

Carbon offsetting is a fast growing area: £7bn was spent from 2002-2007 investing in carbon-reducing schemes as companies began the offsetting stampede.

**[youtube:<http://www.youtube.com/watch?v=92j9cFz6dCE> 300 250]How Carbon Offsetting works**

Take for example a highly efficient manufacturer of office furniture. They have already made all the easiest energy savings and could save another few tons a year by installing solar panels on the roof.

For a fraction of the cost they could save five times as much carbon from being emitted into the atmosphere by paying another business in Poland to replace a very inefficient boiler – assuming of course that they were not going to replace it anyway.

Another example could be an airline which has already invested in a new fleet of energy-saving planes, is packing more customers onto every flight and has cut energy in other areas. As a result, their carbon output per passenger per mile flown is now far less than a decade ago.

But they want to go further:

for every ton of carbon burnt in jet engines, they want to save a ton elsewhere in the world from being released.

The airline forms a partnership with a carbon offsetting company which provides large grants for different energy saving schemes, and alternative power generation projects. One of these is a carbon capture project in India, where 90% of carbon dioxide from a large coal-fired power station will be piped under pressure underground into very long term storage.

It is hoped the gas will be contained there for hundreds of thousands of years.

The Indian power company could not make the project work without a grant from the airline, covering 30% of the construction costs.

Every ton of carbon dioxide captured over the next 20-30 years is a ton that would otherwise poison the atmosphere.

Each ton saved creates a credit note which the airline uses to balance the same amount of carbon they will use in flying.

## **Why carbon offsetting matters**

Carbon offsetting is a fast way to raise billions of pounds for global warming projects around the world. It is in effect a voluntary tax, where all funds raised have to be used in tackling climate change

While it may usually be preferable to invest first in direct energy saving, offsetting creates a great opportunity to go further.

We live in a world of great extremes – in wages, wealth and so on. Saving an additional ton of carbon in a country like America can cost 5-10 times the amount of saving the same amount in India or China.

Offsetting allows companies to shop around globally for the fastest and lowest cost way to have the greatest impact.

If there is no offsetting, companies will only be able to tackle their own emissions, spending huge amounts for small benefit, while outstanding carbon-saving projects in emerging nations collapse for lack of income.

Offsetting benefits often arise because they allow small businesses to combine resources, creating economies of scale. For example you could buy a small wind turbine for the roof of your office, but they are relatively inefficient compared to a large commercial turbine on a hill top.

If a number of small companies combine what they would have spent on roof turbines to invest in a borderline non-viable commercial wind farm, they could have far more impact on carbon reduction.

**[youtube:<http://www.youtube.com/watch?v=SUqmurcUeEs> 300 250]Difference carbon offsetting makes**

Offsetting can mean more than 20 times the impact for the same price. Just compare the costs of Do-It-Yourself climate action with offsetting.

**Do it Yourself:** Install solar cell panels on factory or office roof: every watt of energy produced means less coal or oil or gas is burnt at a power station.  
£10,000 spent installing solar cells will save 40 tons of carbon over the next 15 years.

Cost per ton of carbon saved: £250

**Offset:** Invest £10,000 contributing to a carbon offset scheme – maybe part of the costs of a small hydroelectric dam on a river in a rural area where local people are burning oil for central heating their homes, for hot water and cooking. The dam needs a 25% grant from offsetting to be commercially viable, but the payback is huge.  
Over the next 15 years the scheme will save around 700 tons of carbon for every £10,000 of offset grant.

Cost per ton of carbon saved: £15

**Offset:** Provide subsistence farmers in Africa with simple metal cookers which use only 25% of the charcoal normally needed to boil water or cook a meal. Prevent deforestation

around villages, towns and cities to make charcoal.

Cost per ton of carbon saved: £12

## **Carbon offsetting Challenges**

Offsetting is controversial, because many activists worry that it stops companies from actively reducing their own energy use. They also worry that many schemes are low quality or even fraudulent, and will not deliver.

Carbon trading will provide vast new funds for investment in low-carbon technologies. But could also lead to the greatest financial frauds the world has ever known: super-criminals trading non-existent virtual assets on carbon-saving exchanges. Governments will be slow to prosecute, sometimes compromised by their own fraudulent claims for high carbon use in the past, and false data on carbon savings today.

Most people accept that offsetting is a good idea once they understand what it actually means. Companies need to explain exactly what they are doing and why, take great care in choosing reliable offset partners, and strictly audit what they do. Larger corporations will create their own offsetting schemes.

## ***What carbon offsetting will cost a business***

First we need to calculate total energy consumption of the company. A complete audit should include an estimate of carbon use in making components or materials for products or processes. Here are some guidelines:

- 1 ton of carbon emitted as carbon dioxide = £10-15 to offset
- Concrete = 1 ton of carbon per ton of product
- Short haul return flight = 1 ton
- Executive car driven 12,000 miles = 4 tons

- Gas bill of £550 = 1 ton
- Electricity bill of £1350 = 1 ton

Some organisations start by partial-offsetting – offset conferences for example.

***[youtube:<http://www.youtube.com/watch?v=oEw3Z3vTba0> 300 250]How carbon offsetting benefits business***

As with all “green” action, offsetting can strengthen corporate image and brand awareness, increase customer loyalty, and help win market share in a highly competitive market where products and services increasingly look almost identical in price and quality. When companies take responsibilities to the community and environment seriously, it not only attracts customers, but also the best talent. People want to work for great companies – not just profitable ones.

A single half page of newspaper advertising can cost over £25,000, but a half page of positive editorial coverage can be worth 5-10 times as much in swaying public opinion. A half page of negative editorial can be hugely damaging.

If a business is one of the first to fully offset, it can expect significant positive media coverage, with help from a skilled media department.

So in free advertising alone the benefits can be significant - more likely if combined with consistent messaging and values.

Take for example the Belu bottled water brand. Bottles are made of biodegradable “plastic” starch made from corn. All carbon used in collecting, bottling, transporting and distributing the bottles is fully offset. For every bottle sold the company promises to provide someone in need with clean water for a month.

### ***Business potential for offsetting companies***

Many businesses will sell their carbon savings to others – or be involved in relatively informal carbon trading.

Consider a small business which sells wood-burning boilers to schools and local authorities. Fuel is low-cost waste from nearby wood cutting operations.

Each new boiler saves 10 tons of carbon in heating oil each year for 15 years.

Each ton saved will be sold online to another business as an offset credit for £15 each.

The amount raised is used to lower prices on new boilers by £2250, boosting sales.

### ***Trading carbon offsets***

Carbon trades could become the world's largest derivative market. US green-house emissions contracts grew 131% in 2006 alone. Expect the market to grow to \$50bn a year by 2012 – more than a billion tons of carbon.

[Environment videos](#)