



Do you know the true environmental impact of your products?

Laura Timlin of Carbon Trust Business Advice on the challenges of assessing indirect emissions across the whole value chain.

It is a cause for concern that many companies are not fully aware of what happens to their products after the point of sale. This lack of insight makes it challenging for a company to estimate the true environmental impact of their products and can mean that opportunities to enhance the full lifecycle potential of their products are missed.

Both of these issues can be addressed by analysing a product's lifecycle carbon footprint. This leads to an accurate picture of the indirect emissions across the whole value chain of a product, and to do this a company must ensure that it reviews how a product is used, as well as how it is sourced and manufactured.

For many companies, the 'downstream' emissions - those generated by a product or service when they are used and disposed of by a consumer - are far more significant than those produced 'upstream' when the product is manufactured. Deciding which part of the value chain to focus on is a challenging task and the work undertaken by Carbon Trust Business Advice to help companies understand the indirect emissions in their value chain often results in some surprising revelations.

PepsiCo Quaker Oats found that by cooking its oats for longer on its own premises, i.e. in the upstream phase, it reduced the cooking time required downstream when the product is used by consumers, resulting in a significant reduction in the product's lifecycle carbon footprint. This highlights how decisions that may seem counter-intuitive can actually make the product more economical to use and more environmentally friendly, and this ultimately makes products a more appealing choice for consumers.

To lower indirect emissions and to capitalise on the potential commercial upside of low carbon products and services, businesses need to do more to engage consumers and to fully understand, both at the point of sale and throughout the use and disposal of their products, whether there is more they can do to further enhance products in a way that meets consumers' current needs (price, quality, availability). Businesses also need to work to reduce both the 'cost of ownership' and its lifecycle environmental impact. Understanding how consumers use products will help businesses discover new ways of communicating the value of their products. With TVs, for example, 50-70% of emissions come from the use phase. This means that while, from a cost/benefit point of view, plasma TVs tend to be the greenest and most cost-effective choice for casual viewers, in fact it would be better for the environment and for their pockets for frequent viewers to use LED TVs, despite the upfront cost difference. It is these sorts of insights that can influence choice and deliver economic and environmental benefits for all parties, businesses and their customers alike.

Looking ahead, consumer demand and government pressure are likely to drive more companies to explore all methods to reduce carbon footprints, so understanding where emissions arise and how they can be reduced will be critical. The companies that have a full understanding of their carbon emissions, including the indirect emissions associated with the use and disposal phases,

lifetimes and maintenance, will be better able to measure, manage and reduce them in an environment where carbon emission reduction is an increasingly important issue.

Tackling the indirect emissions associated with the use phase needs to be assessed accurately and rigorously, and partnering with an expert with proven experience in carbon management is a logical first step in reducing the carbon emissions in the value chain.

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