

Gaining competitive advantage

Measuring and managing carbon footprints can help build a sustainable business

Virtually every human activity adds a certain amount of carbon emissions into the earth's atmosphere. Technically, carbon footprint stands for a certain amount of greenhouse gaseous (GHG) emissions that are relevant to climate change and associated with human production or consumption activities. For example, watching a plasma television for three hours on a daily basis contributes to 250 kg of carbon each year. Studies at the Stockholm Environment Institute (SEI) reported that carbon footprints during the Christmas season amounted to 650 kg per person – equivalent to the weight of 'one thousand Christmas puddings' per individual!

In recent times, there has been much debate and concerns raised over the subject. Individuals and businesses the world over are adopting policies to reduce their own carbon footprint as well as those of the products they represent. Innumerable approaches to measure a carbon footprint have been proposed, ranging from basic online calculators to sophisticated life-cycle analysis or input-output-based methods. But some researchers point out that there is no clear-cut analysis on how to quantify it.

ITC, one of India's most valuable corporations with a market capitalisation of \$14 billion and turnover of \$5 billion (2008-09), is a 'Carbon Positive' corporation that consistently strives to minimise the direct and indirect environmental impact resulting from its business operations. Today, the company is in the unique position of being able to create 'Certifiable CO2 Credits, thanks to its social forestry programme that helped transform former wastelands belonging to small and marginal tribal farmers, into dense plantations.

The programme made a substantial contribution to India's green cover. Plantations of 31,120 ha created a wood asset value of ₹1,137 crore (\$197 million), provided employment for 14 million person days and unravelled the potential to sequester 4 million tonnes of carbon, reducing 14.6 million tonnes of CO2 from the atmosphere.

The goal of the leading international sportswear brand Nike is to reduce the global carbon footprint of its logistics by 30 per cent by 2020. As a first step, Nike Europe sought a detailed overview of the emissions arising from its logistics activities from Damco, an independent business activity within the A.P. Moller-Maersk group.

India's largest player in the chemical industry, Tata Chemicals, worked on multiple fronts to help



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maintain the earth's fragile ecological balance.

The process for mapping the company's carbon footprint across all its units began in 2007. The first step was to quantify CO2 equivalent emissions across manufacturing locations and measure the size and scope of its carbon footprint. With the help of Ernst & Young, this exercise was done by tracking emissions from manufacturing units including captive power plants, logistics operations and staff travel.

As a result, the Babrala plant in Uttar Pradesh managed to improve energy efficiency by 10 per cent and CO2 emissions came down by 5 per cent. At Mithapur in Gujarat, the company switched to masonry cement for its buildings, bringing down carbon emissions significantly. Several new products including the low-cost household water purifier, Tata Swach and biofuel feedstock developed as part of its overall strategy for LIFE (Living, Industry and Farm Essentials) is helping the company extend its policy of enduring care for the environment.

Trucost, the renowned environmental research organisation, has worked with innumerable companies to measure and reduce the environmental impacts of their operations, supply chains and investments.

A leading clothing and home-wear retailer entrusted Trucost to measure the environmental impacts of its international operations and help design sustainable business practices for its customers, employees and shareholders. Trucost collected comparable data on fuel and energy consumption, waste streams and refrigerant losses across the client's worldwide locations.

After receiving a detailed profile of its environmental impacts the retailer is now well-placed to develop environmental management programmes and continue its commitment to sustainable business practices. The retailer is currently working with Trucost to measure and reduce its supply chain environmental impacts.

Measuring carbon footprints is vital for organisations as well as individuals. Companies can use an understanding of their environmental performance to identify opportunities in managing carbon and other environmental impacts. In the long run, only those organisations and nations who are more environmentally efficient than their sector peers will be well-positioned to attract investment and market share, given the emphasis and importance of shifting to a low-carbon economy. ♦

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