ADC PARTNERS

CARBON OFFSETTING: AN OVERVIEW

Objective

Define carbon offsetting and identify related opportunities and challenges posed.

Carbon Offsetting: Definition

Due to increased public and governmental attention to issues related to global warming, companies are increasingly looking for ways to reduce their greenhouse gas (carbon) emissions. This is accomplished in a variety of ways, most of them very well known: energy conservation, recycling programs, adoption of energy efficient technologies, etc.

For some companies, however, reducing this "carbon footprint" is more difficult. This is particularly true of heavy industries such as manufacturing and energy. In these cases, companies seek to "offset" their carbon output through investment in projects and businesses that counterbalance their emissions.

In short, carbon offsetting requires that a company measures its existing level of carbon emissions, and then neutralize this amount through the purchase of an equivalent amount of carbon "credits".

Offsetting Strategies

Carbon offset transactions can be grouped into two main categories[1]:

- Allowance-Based Transactions: Buyer purchases emission allowances created and allocated by regulators under cap-and-trade regimes, such as Assigned Amount Units (AAUs) under the Kyoto Protocol, or EU emission allowances (EUA) under the European Union Emission Trading Scheme (EU ETS). Examples of allowance-based transactions include trading programs in either a regulated (under the Kyoto Protocol) or unregulated (European Union) market. Transactions take place at one of several exchanges. Transaction costs currently rest at $3.40 USD per metric ton of CO2 emissions (Chicago Climate Exchange).

- Project-Based Transactions: Buyer purchases emission credits from a project that can *credibly and verifiably* demonstrate that it reduces GHG emissions compared with what would have happened otherwise. Examples of project-based transactions include reforestation initiatives and investments in green energy (e.g. wind farms). Transactions usually involve a "broker" who identifies appropriate projects.

Growth

Whichever methodology is selected, the rapid growth of carbon offsetting is undeniable. Current estimates place regulated markets at US$21.5 billion and voluntary markets at about US$100 million for the first three quarters of 2006.[2] Companies in Japan and the European Union are the most active in these markets, as legislation regarding carbon emissions in these regions is more rigorous than in the US.

This looks to change, however, as an increasing number of US companies are actively looking at carbon regulation. A recent survey of 92 companies by The Conference Board[3] found:

- 75% of respondents are actively measuring their carbon footprint;

[1] "*State and Trends of the Carbon Market 2006*," The World Bank and International Emissions Trading Association, May, 2006.
[2] "*Offsetting Emissions: A Business Brief on the Voluntary Carbon Market*," Businesses for Social Responsibility, December, 2006.
[3] "*'Carbon Footprint' an Increasing Management Concern.*" The Conference Board, October, 2006.

- 50% indicated that they have a program in place to either reduce or offset their GhG emissions;
- 15% are currently engaged in voluntary emissions trading, but 40% are currently considering doing so.

Benefits

The Conference Board survey also uncovered the following motivations for participating in a voluntary trading scheme[4]:

- Save money by drawing attention to energy and resource efficiency;
- Anticipation of potential regulation;
- Develop a track record for possible credit for prior emissions reductions;
- Reputation benefits;
- Learn the process.

Challenges

Like any rapidly growing industry, the carbon offset market is open to abuse. An investigation by the Financial Times[5] recorded a number of abuses, including:

- Widespread instances of organizations buying worthless credits that do not yield any reductions in carbon emissions.
- Industrial companies profiting from doing very little – or from gaining carbon credits on the basis of efficiency gains from which they have already benefited substantially.
- Brokers providing services of questionable or no value.
- Limited verification makes it difficult for buyers to assess the true value of carbon credits.
- Companies and individuals being charged over the odds for the private purchase of European Union carbon permits that have plummeted in value because they do not result in emissions cuts.

In a broader sense, there is a perception among some groups (more prevalent in environmental organizations) that the entire carbon offset concept gives corporations a sense of being able to "spend their way out of a problem" without having address its root issues. In extreme cases, it may even provide a disincentive to change behavior (e.g. become more energy efficient) since it may give rise to a perception that problems are being offset in any regard.

Next Steps

To discern if a carbon offsetting strategy makes sense for your organization, the following basic process is recommended:

1. Measure existing carbon emissions: A comprehensive analysis of all business operations to benchmark existing output. Includes: employee travel, fleet, raw materials use, packaging, energy use, etc.
2. Reduce emissions: Evaluate all areas of potential reductions, and then implement changes that can produce results.
3. Offset difference: Decisions become more complex in this phase (voluntary v. mandatory markets, independent v. use of intermediary, etc.)
4. Draw attention to both process and results.

In all these steps, rigorous attention to verification and measurement is highly recommended.

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[4] *Ibid*.
[5] "*Industry Caught In Carbon 'Smokescreen*,'" The Financial Times, April 25, 2007.