

## Carbon Offsetting

### The Voluntary Carbon Concept

**Overview** As the climate change agenda continues to gain precedence, the attraction for organisations to cut their CO<sub>2</sub> emissions and use offsetting services in response to stakeholder, client, staff and political pressure, has increased exponentially.

The concept is relatively simple; an organisation voluntarily pays a third party to remove a quantity of GHG (greenhouse gas) from the atmosphere equal to their emissions (or a percentage thereof) over a given period. Numerous projects exist, from tree planting to various initiatives in the third world.

Many view the carbon offset market as a minefield in terms of its validity and question whether it is an effective way to tackle climate change. Conversely, those offsetting their emissions are measuring their output and are therefore taking the first steps towards reduction; the cost of offsetting being an incentive in itself to reduce emissions.

The first steps towards offsetting are to identify and measure those emissions that cannot, for whatever reason, be eliminated. The next step is to review and select an accredited carbon offsetting project having first verified its credibility and effectiveness.

### Reasons for offsetting

Today, organisations choose to offset for numerous reasons, principally:

- where it is not cost effective to reduce emissions
- to achieve carbon neutrality for PR purposes
- to cater for unavoidable travel
- to meet current, or in anticipation of future, legislation

The large range of offsetting projects allows companies to choose a programme that compliments the ethos of the organisation

### The first steps to offsetting

Today, most carbon offset companies, environmentalists and EU Governments agree that while offsetting is not the solution to climate change, it is a significant sign of commitment while the associated cost of offsetting serves to motivate organisations towards emissions reduction.

For any carbon offsetting plan to be successful, an organisation should first measure its own emissions via an environmental audit. Once measured, an organisation can develop a GHG management plan to set realistic objectives and targets for reducing emissions over a set time scale where possible. For those emissions not eliminated, carbon offsetting can be considered as part of the management plan.



### Offsetting project type and standards

Once measured, the next stage is for an organisation to identify the offset project type. To make this decision, the following should be considered:-

- Accreditation Standard: CDM/JI Standards, Voluntary Gold Standard, Voluntary Carbon Standard, Climate Community and Biodiversity Standards (CCB), Plan Vivo or a self-developed standard

- Project Type: renewable energy, energy efficiency, fuel switching, gas recovery or destruction, carbon capture and storage or biological sinks - Land Use, Land Use Change and Forestry (LULUCF)
- Project Location: Developing country, developed country outside Kyoto or developed country inside Kyoto
- Additional benefits: Environmental/ conservation benefits, social benefits, or technological transfer
- Aggregation: credits from a portfolio of projects or credits from individual projects
- Guarantees: Provide guarantees against non-delivery, performance issues or changes in base line

In most circumstances, the Accreditation Standard is likely to be the most important consideration. These standards were developed with the aim of regulating offsetting services and defining the characteristics that projects should comply with to guarantee their integrity.

Initially, this did not solve the problem as the majority of the standards were proprietary to each offset provider. However in the last year, various 'Gold' standards, developed with greater levels of integrity and robustness, are now starting to create a greater level of confidence in the market. Among the gold standards, the recent 'Voluntary Gold Standard' developed by The Climate Group, is largely perceived to be the most robust.



## Due diligence?

Once an offsetting solution has been decided, it is imperative that a process of due diligence is undertaken to ensure that any potential offsets are credible and of high quality. This is often undertaken by testing to assure they retain the 'VALID' characteristics outlined below:

- Verification: Potential offsets must be verifiable by an accredited third party according to an established protocol or standard.
- Additional: Offsets must be additional to what would have happened in the absence of the offsetting project.
- Leakages: Offsets must take into account any possible negative impacts that an offsetting project may have e.g. the displacement of local people from an area.
- Impermanency: Reductions achieved must be maintained over time, particularly for projects using carbon sinks.
- Double Accounting: Offsets must not be used or counted more than once.

## Summary

The very concept of carbon offsetting will always be open for debate. For example, it is difficult to guarantee that a tree planting scheme will absorb a specific quantity of CO<sup>2</sup> as mankind does not yet fully understand the complex role of the natural carbon cycle. Furthermore, technological solutions, such as renewable energy projects and energy efficiency measures, tend not to directly absorb green house gases from the atmosphere but abate the effects from other sources. While this system is clearly going to be a quick fix for some, deterring them from the preferable carbon management systems and energy efficiency initiatives, annual offsetting totals are starting to show that offsetting services can still be a part of moving to a low emission society.