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WHITE PAPER

PAS 2060

THE FIRST STANDARD FOR CARBON NEUTRALITY

January 2011

INTRODUCTION

Since the beginning of the last decade, companies looking for a robust response to climate change have often embraced carbon neutrality because of the simplicity of the concept. Carbon neutral means just that: no net carbon impact. It's an approach that consumers can understand, and is a useful way for companies to differentiate themselves and prove their long-standing environmental commitment.

After a number of high profile green wash cases in 2008, the concept began to suffer a crisis of confidence. Companies looking to approach carbon neutrality had no standard to follow that would ensure that their endeavours were robust against criticism, and consumers were unsure which carbon neutral claims they could trust. PAS 2060 was the response to this, developed by the British Standard Institution (BSI) to provide best-practice guidelines on how to achieve carbon neutrality in a way that is transparent and effective.

We hope this white paper will be useful for organisations considering carbon neutrality as a corporate response to climate change.

THE CONCEPT OF CARBON NEUTRALITY

Carbon offsetting provides a mechanism where greenhouse emissions produced in one place are offset by emission reductions in another. These emission reductions are achieved by preventing emissions that would otherwise have been released in a 'business as usual' scenario, for example through the implementation of energy efficient technology, or where emissions are removed from the atmosphere through the plantation of new forests.

+The term carbon neutrality in its proper use indicates that the organisation or product to which it is referring to has contributed no net greenhouse emissions to the atmosphere, i.e. its impact on climate change is zero. This is achieved by offsetting the emissions that cannot be reduced, as illustrated below:

$$\begin{array}{ccccccc} 100 & & 50 & & 50 & & \text{CARBON} \\ \text{TONNES} & \text{---} & \text{TONNES} & \text{---} & \text{TONNES} & \text{=} & \text{NEUTRALITY} \\ \text{EMISSIONS} & & \text{REDUCTIONS} & & \text{OFFSETS} & & \end{array}$$

THE JOURNEY TO STANDARD

Since the term carbon neutrality has been in use, organisations have employed a range of methodologies to claim it. For example, some have measured a wide range of emissions including those from their supply chain (scope 3), while others have chosen a narrower focus. There is also the distinction between those organisations that work to reduce their emissions and offset the net amount, and those that choose 100% offsetting with no internal reductions.

Prior to PAS 2060, the absence of regulation or a common standard outlining organisational boundaries, methodology, internal reduction requirements and type of offsets made it difficult for consumers to judge the credibility of carbon neutrality claims. This threatened to devalue the concept and in turn reduce incentives to organisations wishing to develop a carbon neutral approach.

Organisations were also finding the question “how best can I become carbon neutral?” difficult to answer. Clearly the concept of carbon neutrality had reached maturity and an independent standard was needed to provide this guidance, increase consumer confidence and lend support to carbon neutral endeavours.

Responding to this need, the BSi started the development of a Publicly Available Specification for the demonstration of carbon neutrality in 2009. It was introduced in April 2010 as PAS 2060 after a series of consultations with the private, public and third sectors.

The perils of 'green wash'

In the past many companies have learnt the hard way that green marketing is only effective if you have robust data to back your claims up.

Easy Jet told their customers that it was greener to fly with them than travel in a Toyota Prius and were subsequently ridiculed in the mainstream media. They calculated using atypical assumptions that the Prius would have just one passenger and that the flight was full. Following the criticism they removed the claim from their website.

Ryman's carbon neutral claim also suffered public scrutiny and outrage from environmental groups as a result of an incomplete scope for measuring the product footprint (only production and transportation were included), and the fact that uncertified carbon offset credits were being used to support carbon neutrality.

Fiji Water marketed their bottled water on the basis that it was carbon negative, claiming more carbon was sequestered than emitted during production and consumption. As a result of using non-best practice 'forward' offsetting (where offset credits are used that have not yet been produced and certified) the company has been taken to court in California by claimants seeking restitution for "the false claims from which [Fiji Water Company has] richly profited". The case will be heard in 2011.

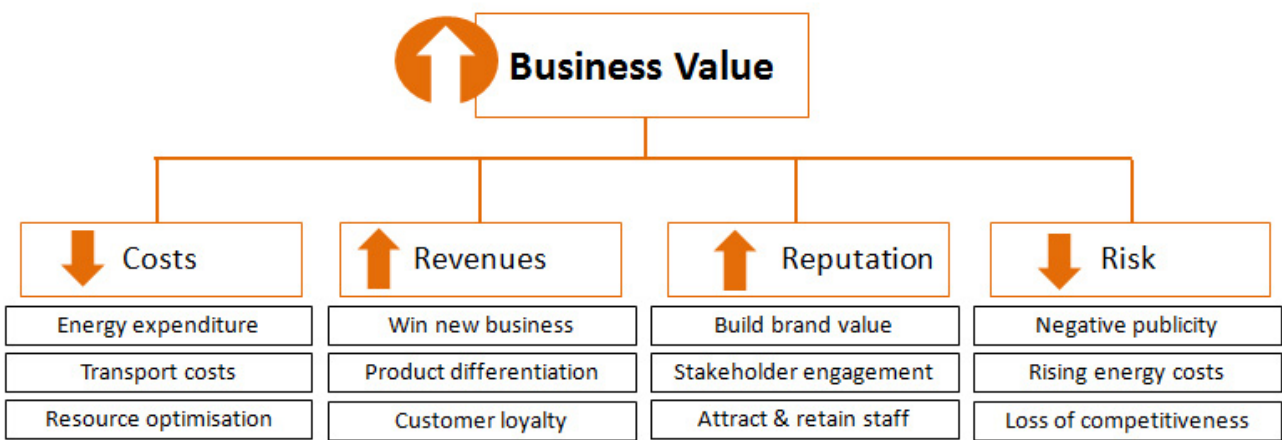
Eurostar and **BSkyB** were both reported to the Advertising Standards Authority in 2008 over their TV and newspaper ads claiming carbon neutral status. Because they could show that they had measured and reduced their impact and offset with verifiable schemes, the ASA concluded that their ads were not misleading and that companies had substantiated their claims about carbon neutrality.

The benefit of using PAS 2060 is that it combines internationally recognised methodology with transparent reporting, protecting the organisation from unfair criticism.

BENEFITS OF CARBON NEUTRALITY

The benefits of carbon neutrality are both commercial and reputational. Being carbon neutral demonstrates environmental integrity, reduces risk, creates competitive advantage and, through emissions reductions, can help organisations to cut costs.

Commercial Benefits of Carbon Neutrality

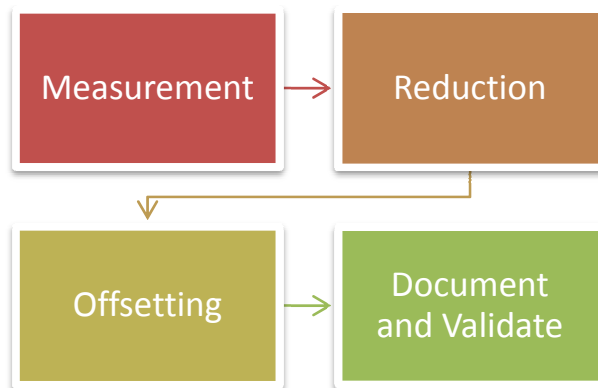


The fact that the specification was developed following recommendations from a wide range of industry and public sector players helps ensure that it is both robust and relevant. The focus is on both reductions and offsets, refuting criticism that offsetting alone is an insufficient corporate response to the threat of climate change.

PAS 2060 BASIC PRINCIPLES

The specification defines a consistent set of measures and requirements for entities (e.g. organisations, governments, communities, families, individuals) to demonstrate carbon neutrality for a product, service, organisation, community, event or building.

The standard requires the following four stages:



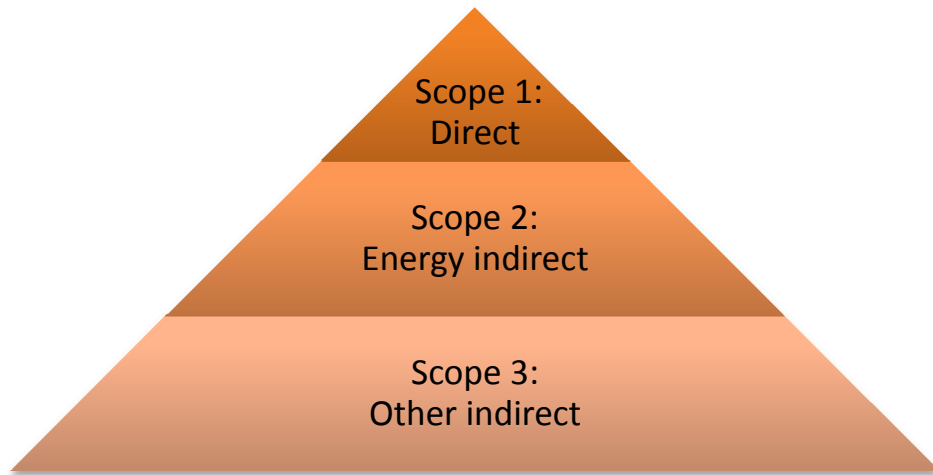
Measurement

The first step of the process is to undertake a carbon footprint of the product or organisation, using one of the allowed methodologies. For organisations the footprint standard should be either ISO14064-1 or GHG Corporate Protocol, and for products and services it should be a PAS 2050 life-cycle assessment.

The footprint measurements should include 100% of Scope 1 and Scope 2 emissions plus all Scope 3 emissions that contribute more than 1% of the total footprint. The Scopes can be defined as follows:

- Scope 1 - Direct Emissions; emissions from greenhouse gas sources owned or controlled by the organisation
- Scope 2 - Energy Indirect Emissions; emissions from the generation of imported electricity, heat or steam consumed by the organisation
- Scope 3 - Other Indirect Emissions; emissions which are consequences of an organisation's activities but arise from sources that are owned or controlled by other organisations. This includes the consumption of the product or service, and the disposal of the product at the end of use.

This can be demonstrated in the diagram overleaf:



It should be noted however that while the standard requires a robust footprint measurement process, it does provide flexibility by recognizing that it might not be technically feasible or economically viable to establish accurate emissions from all sources. In such cases, these sources can be excluded from the scope of the footprint as long as the removal is justified, well documented and reported.

Reduction

The next step is to reduce the emissions associated with the organisation or product/service. The entity must develop a Carbon Management Plan which contains a public commitment to carbon neutrality and outlines the following major aspects of the reduction strategy: a time scale, specific targets for reductions, the planned means of achieving reductions and how residual emissions will be offset.

Successful implementation of the plan should lead to carbon emission reductions, either a reduction in the total amount of carbon emitted (in absolute terms) or a reduction in carbon intensity (in relative terms), for example carbon emissions per unit output or per £ of turnover. If in relative terms, the reduction must be greater than the economic growth rate for the region in which the entity operates.

Offsetting

PAS 2060 requires that the total amount of carbon emissions at the end of a reduction period be offset by high-quality, certified carbon credits which meet the following criteria:

- From one of the PAS 2060 approved schemes (for example the Clean Development Mechanism, Joint Implementation or Voluntary Carbon Standard)
- Genuinely additional (i.e. reductions that would not have happened anyway)
- Verified by an independent third party to ensure that emission reductions are permanent, avoid leakage (so that emissions are not increased in another area as a result of the project reductions) and are not double counted
- Retired after a maximum of 12 months to a credible registry.

Documentation & Verification

The final stage is documentation and verification of carbon neutrality. This requires a standard-compliant declaration of achievement of neutrality through a set of statements known as Qualifying Explanatory Statements (QES). An example Declaration of Achievement is as follows:

“Carbon Neutrality of business activities achieved by Company A in accordance with PAS 2060 at [date] for the period commencing [date], ‘Validating Body’ certified”

To promote transparency, the standard requires public disclosure of all the documentation that supports the carbon neutrality claim. In practice this means evidence of emission reductions and retired offset credits, and a summary of the Carbon Footprint Report, Carbon Management Plan and QES.

The standard stipulates three types of validation of the achievement of neutrality: self validation, other party validation and third party independent validation.

Self-validation is simply a case of an entity validating its own carbon footprint and reduction achievements. If an organisation lacks internal expertise however it should consider the risks involved and the implications of a poorly measured or reported footprint.

Other party validation ensures that the methodology and data has been audited and verified, and is recommended for organisations who wish to market their carbon neutral status. This approach is superior to self-validation as it protects the organisation from criticism of a lack of robustness, and will strengthen confidence in the carbon neutrality claim as a result.

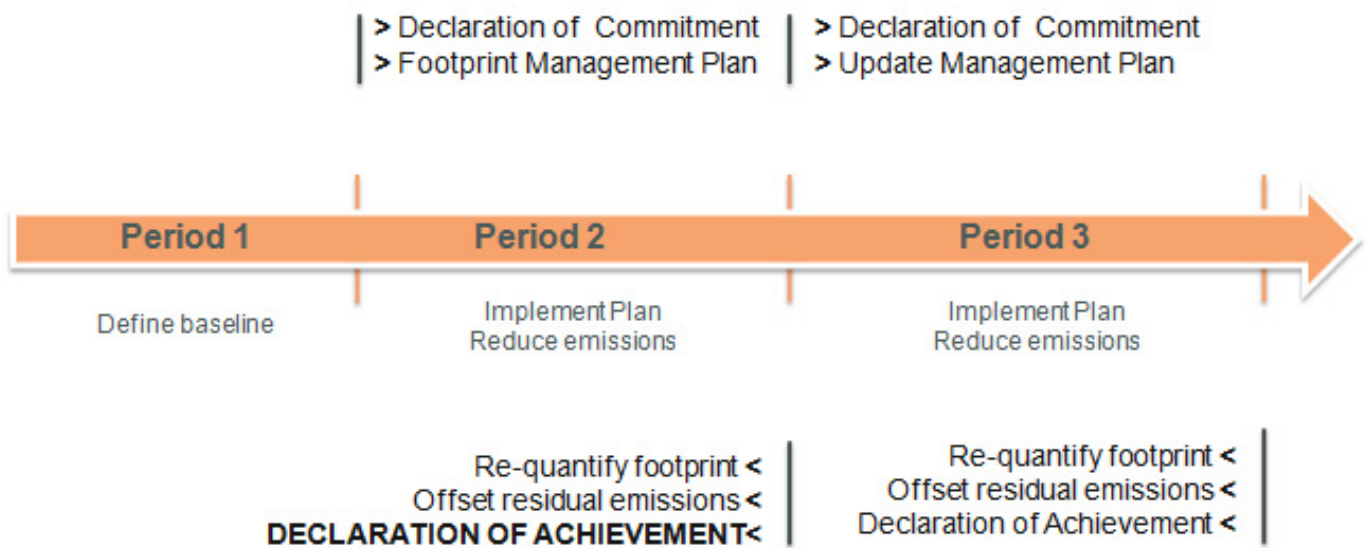
Third party independent validation can only be provided by certification agencies and is an option that will evolve as organisations gain registration with UKAS (not available for PAS 2060 at time of writing).

HOW TO ACHIEVE PAS 2060

There are three main routes for implementation of PAS 2060 which organisations can select from, depending on their past experience with carbon management and reduction achievements, and the date from which they wish to declare neutrality.

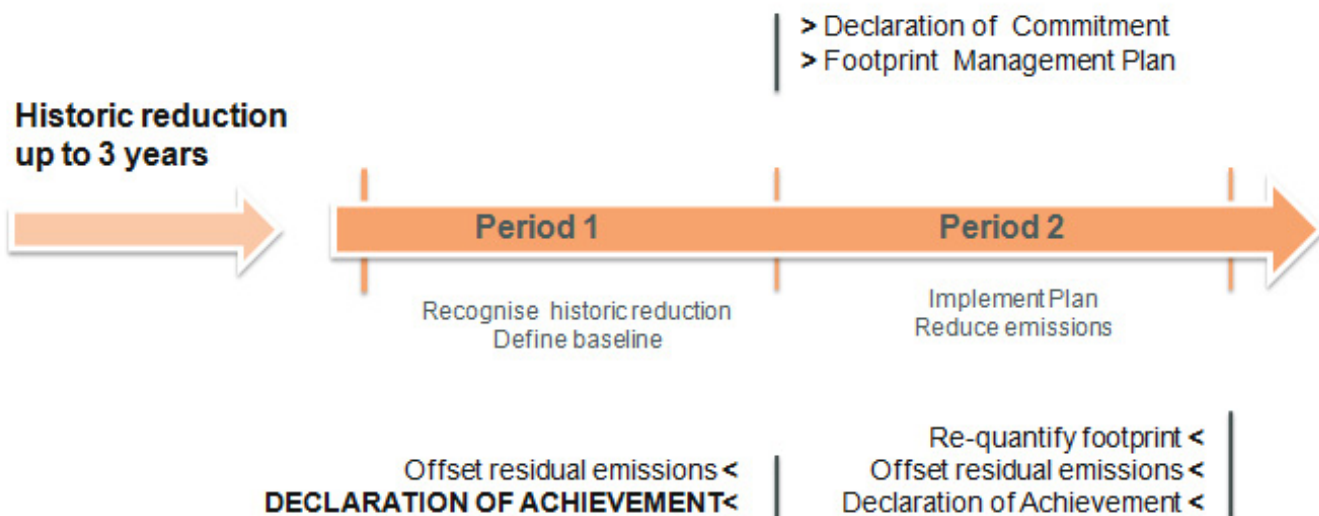
Route 1

This route allows the organisation to make a declaration of commitment to carbon neutrality at the outset, and then the declaration of achievement at the end of the first year once a footprint management plan has been implemented and reductions achieved. The same cycle is followed for all subsequent commitment years throughout which carbon neutrality is maintained.



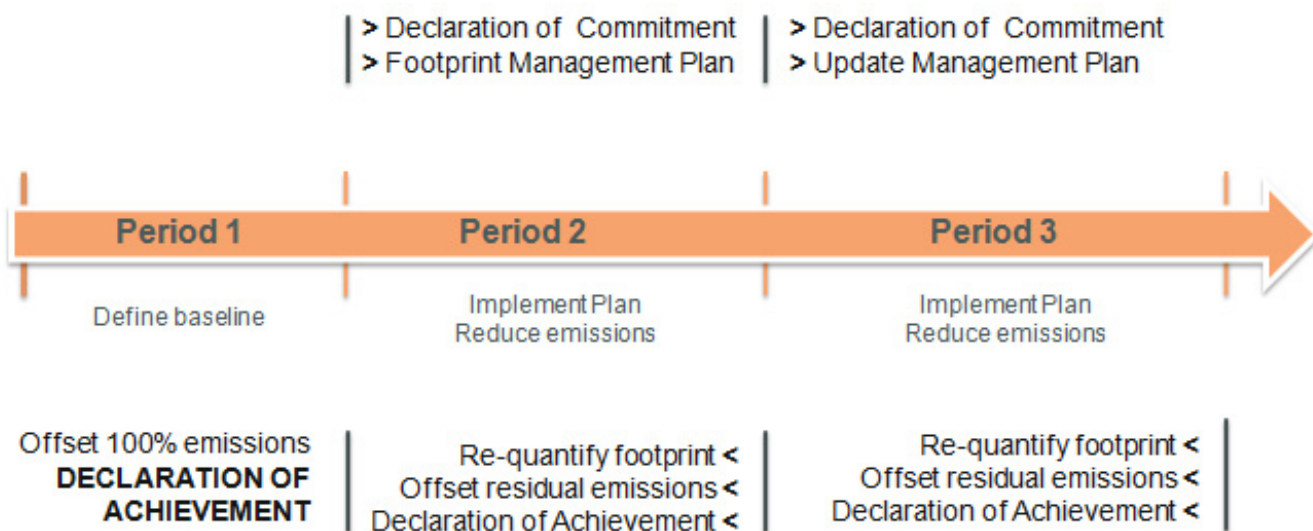
Route 2

The second route is ideal for organisations that have implemented carbon management measures in the past and wish to gain recognition for these reductions as part of their carbon neutrality status. Declaration of achievement is possible from the outset with the residual emissions for the first year offset by the end of the period.



Route 3

This route allows organisations with no historical carbon emissions to declare carbon neutrality in year 1 through 100% offsetting. The requirement to demonstrate carbon reductions applies from Year 2 onwards.



The choice of route will largely depend on the time frame in which the organisation wishes to make the carbon neutrality declaration and the availability of proof of historical reductions.

Case Studies

Here are a few examples of how Carbon Clear's clients have chosen which implementation route to take for the first year of PAS 2060 carbon neutrality, and some of the results they achieved:

Citrica is a London-based commercial cleaning company with a long history of low-carbon performance, recognised as both a 'Best Green Company' by The Sunday Times and an official London Green500 supplier. When PAS 2060 was launched it was an ideal way for Citrica to message its impressive carbon reduction achievements (a 52% reduction in absolute terms in 2009) and its offsetting commitment.



Because a carbon management plan had been in place for more than 12 months prior, they were able to follow Route 2 to recognize historic carbon measurement and reduction. By becoming the first organisation in the world to achieve PAS 2060, Citrica cemented its reputation as a leading environmentally-focused business, helping their corporate clients meet their own green supply chain commitments.



UKFast are a hosting company regularly featured in the media and awarded a position in both the 2009 'Sunday Times Tech Track 100 List' and 'Sunday Times Best Companies to Work For'. They decided to make both their organisation and their hosting products carbon neutral from October 2010 via Route 3, using Voluntary Carbon Standard offsets from a Brazilian hydro project to offset 100% of their Year 1 emissions.

After announcing their carbon neutral status they gained significant media coverage in both national and industry press for becoming the first carbon neutral hosting company in the UK.

TEP is a leading environmental consultancy based Cheshire.

Acknowledging the sustainability expectations of its customers and wanting to fulfil the company's low-carbon ethos, it became the first organisation in its field to achieve PAS 2060. The

company received positive media coverage and was featured in the industry publication "The Environmentalist", setting the standard for other organisations in the sector.

PAS 2060 was an excellent starting point for TEP's carbon management plan; within 2 months the company went from very little experience of measuring its impact to having undertaken a baseline carbon footprint, conducted a carbon reduction workshop, and developed a management plan.



CARBON CLEAR'S PAS 2060 SERVICE

Carbon Clear is an expert in the field of carbon management, having helped hundreds of companies to manage their carbon impact – including Eurostar, Aviva and PwC.

In addition to validation services, we provide a full advisory service for PAS 2060. We can assist with any aspect of achieving carbon neutrality, from a footprint assessment to developing a reduction plan and sourcing offsetting credits that meets the requirements of PAS 2060 and supports your commercial objectives.

In recognition of our market-leading carbon management expertise, Carbon Clear was a member of the steering committee developing the PAS 2060 standard. Applying our knowledge and experience, we'll work with your organisation to ensure that achieving carbon neutrality status is cost-effective and strengthens your business.

For more information on how to achieve the standard, or to download a copy of our PAS 2060 Service brochure, please visit: <http://www.carbon-clear.com> or call our team on **0845 838 7564**.

