Guidance on carbon neutrality

30 September 2009

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Introduction

Climate change is the greatest challenge facing the world today. It is within this context that 'carbon neutral' has become an increasingly used term in recent years. Users of the term range from Government and large organisations to small businesses, communities and even individuals. There are also carbon neutral products (both goods and services) on the market, including events and national and international travel journeys.

The general lack of transparency about the term[1] has emerged as an issue and the idea that the Government should provide guidance has been welcomed. Addressing the lack of transparency on what carbon neutrality means should increase the potential effectiveness of the term, ensure a level playing field and provide both the motivation and an indicator of action on greenhouse gas emissions.

There are many reasons why the concept of carbon neutrality appeals to organisations and others, including:

- To identify and minimise carbon impacts, thereby demonstrating a commitment to tackle climate change
- To engage employees on environmental issues
- To promote a product or service

At present, organisations, individuals and communities make a variety of statements about carbon neutrality based on their own preferred definition of the term. For example, some carbon neutral companies (or companies with carbon neutral products) have measured a wide range of emissions, while others have chosen a narrower focus. Some have developed challenging targets to reduce greenhouse gas emissions, viewing such reductions as integral to the concept. Others making similar claims to carbon neutrality might not have sought to reduce emissions, preferring to balance them through the purchase of carbon offsets, with often different approaches being taken towards the quality of the offsets purchased. Without a more uniform basis for making statements of carbon neutrality, users of the term are open to accusations of 'greenwash'. Claims of carbon neutrality could be genuinely misleading in themselves and therefore further engender consumer cynicism.

There are essentially three issues which cause confusion:

[1] This refers to the practical use of the term 'carbon neutral' and not to any trademarks in existence.

[2] Although it would not count as carbon neutrality under this guidance the acquisition of 100% offsets remains an option for those wishing to address their climate change impact in other ways.

- Vagueness about the type and coverage of greenhouse gas emissions that users of the term refer to (different greenhouse gases and the different sources – direct or indirect – of those emissions).
- Lack of clarity around the degree to which emissions have been reduced internally, for example by using energy efficient light bulbs or reducing overseas travel, than offset (i.e. reduced externally).
- The amount of emissions that have been offset and whether genuine carbon savings have been made elsewhere.

Making sure that these issues are avoided is essential if the public is to understand and have confidence in declarations of carbon neutrality. There is no requirement to make a claim about carbon neutrality. However, where claims are made, this guidance recommends that they be characterised by full transparency and disclosure of the basis for their calculation and delivery. For promotional claims, it is also important to refer to Defra's Green Claims Code, which this guidance supports.

About this document

The aim of this document is to provide those who wish to achieve carbon neutrality with the information and guidance they need to help them do so. Following the guidance is voluntary – indeed, those pursuing carbon neutrality may wish to go further in certain areas.

This guidance does not set new or rewrite existing standards. Instead it provides an overview of the process that should be followed to achieve carbon neutrality as well as pointers to existing recognised standards and guidance. In addition, Defra is currently reviewing its Green Claims Code. This guidance makes a contribution to that revision.

The guidance includes three sections providing information on how to calculate emissions, on what constitutes and how to report a reduction in emissions and on carbon offsetting.

Annex A sets out the information that should be made available when making a carbon neutrality declaration. This section also contains links to further guidance and standards that are available offering more detailed information.

A glossary of terms can be found at Annex B.

What is meant by the term carbon neutral?

Under the Government's definition, achieving carbon neutrality entails the completion of the following three separate stages:

Calculating emissions

This stage requires the determination of what emissions will be calculated, including setting a clear boundary for emissions covered (in terms of the gases

included, the organisational context and the sources of emissions). Once the boundary has been set, emissions can be calculated by collecting activity data (for example, the amount of electricity and gas consumed) and applying the appropriate emissions factors.

Reducing emissions

This stage involves assessing what internal emissions reductions can be made through e.g. energy efficiency measures. These will usually be carried out because they are cost effective over time, helping to save money at the same time as reducing emissions. Reductions can be based on absolute emission reductions or emission reductions relative to a common business metric or unit of output. Those seeking to become carbon neutral should decide how to reduce emissions, how to calculate reductions and how to communicate this.

Offsetting residual emissions

This third stage requires the acquisition of carbon credits to offset any residual emissions after calculating emissions and achieving internal reductions. The precise amount of offsets required needs to be calculated, with enough credits bought to reduce emissions to net zero. When offsetting, consideration should be given to the type of offsets bought to be sure they are good quality and represent a real (tonne for tonne) emissions reduction.

Taking these three stages together, carbon neutrality can therefore be defined as:

"Carbon neutral means that – through a transparent process of calculating emissions, reducing those emissions and offsetting residual emissions – net carbon emissions equal zero."

Communicating carbon neutrality

In making a carbon neutral statement, the business or individual should provide clear information on the emissions measured, the reductions made and the offsets purchased. The same applies for products. Taking this approach will allow consumers and interested parties to view each claim on its own merits.

A claim of carbon neutrality should always be linked to a particular and specified period of time because doing so will ensure the claim is understandable and transparent. It also helps ensure that carbon neutral efforts are regularly reviewed and updated. See figure 1 below.

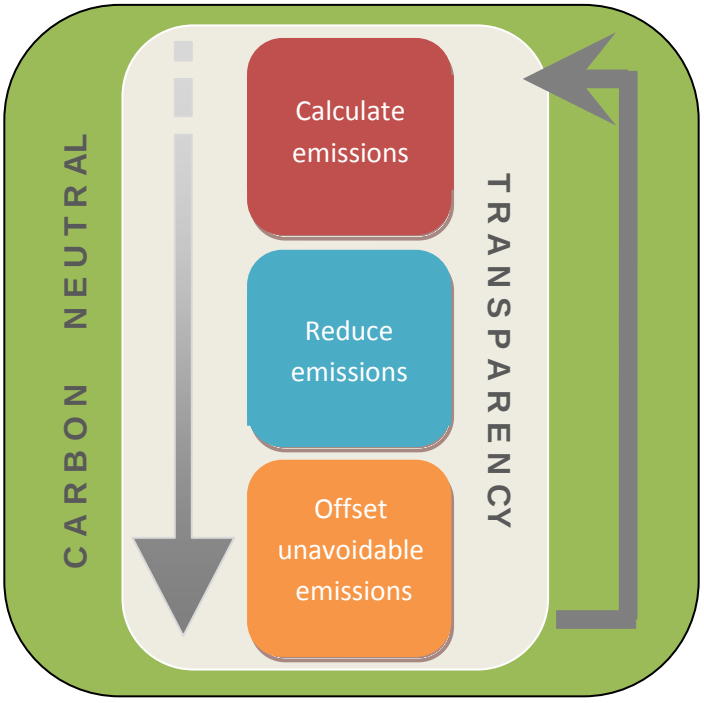
When making promotional claims please refer to Defra's Green Claims Code. This Code provides principles for best practice on the content of claims including accuracy, truthfulness, relevance, use of unambiguous terminology, presentation of claims and comparative claims.

It is recommended that carbon neutral statements should be reviewed yearly. This period of review aligns with existing reporting systems such as annual and corporate reporting.

It is also recommended that organisations, groups and individuals should be clear about the emissions measured. An organisation that measures emissions from only limited sources must be clear that this is the case. For example, if a carbon neutral taxi business has calculated emissions from owned transport but not from energy use in office premises, it should be clear that the term carbon neutral only applies to its vehicle fleet.

Carbon offsets representing genuine, additional emissions reductions made elsewhere have a role in helping groups and individuals to become carbon neutral by addressing residual emissions and ensuring that overall net emissions are equal to zero. Offsetting should, however, be viewed within the hierarchy of action to tackle climate change referred to above. In other words, always seek to reduce emissions to minimise the emissions that need to be offset. A carbon neutral claim consisting only of calculating emissions and offsetting should not be made.[2]

Fig 1: Graphical representation of carbon neutrality



It is recommended that users of the term verify their carbon neutral statements. Verification would reinforce efforts to make transparent claims. Such verification could be undertaken to confirm emissions reductions achieved or the quality of

[2] Although it would not count as carbon neutrality under this guidance the acquisition of 100% offsets remains an option for those wishing to address their climate change impact in other ways.

carbon offsets bought as well as the carbon neutral statement in its entirety. There are many organisations that provide a verification service. For guidance on self/internal verification relating to products please refer to the PAS2050 document section entitled ‘validating results’. Organisations may wish to refer to ISO 14064-3.

Calculating emissions

The foundation to any carbon neutrality claim is calculating emissions in an accurate, consistent and transparent way.

Categorising your emissions

The most common and internationally accepted approach to categorising emissions is through the Greenhouse Gas Protocol.

The GHG Protocol groups emissions into three different 'scopes'.

Scope 1 (Direct emissions): Activities that are owned or controlled that release emissions straight into the atmosphere. They are direct emissions. Examples of scope 1 emissions include emissions from combustion in owned or controlled boilers, furnaces, vehicles owned or controlled; emissions from chemical production in owned or controlled process equipment.

Scope 2 (Energy indirect): Emissions being released into the atmosphere associated with consumption of purchased electricity, heat, steam and cooling. These are indirect emissions that are a consequence of activities which occur at sources not owned or controlled.

Scope 3 (Other indirect): The final category is all other activities that release emissions into the atmosphere as a consequence of actions taken, which occur at sources that are not owned or controlled and which are not classed as scope 2 emissions, i.e. they do not result from the purchase of electricity, heat, steam and cooling. Examples of scope 3 emissions are business travel by means which are not owned or controlled, waste disposal, and use of sold products or services.

Setting boundaries

When looking to achieve carbon neutrality, you should first set the boundary for the emissions you are going to address and to which any carbon neutrality declaration you make will relate.

The scope of the emissions included in the footprint is up to you as an individual, community or organisation. (Please see below for guidance for products.) The boundary of any carbon neutral declaration can be set at the most appropriate point for you. However, to avoid claims' being misinterpreted, you should clearly communicate information on what emissions have been included.

In line with Government guidance for organisations, it is recommended that, as a minimum, emissions within both scopes 1 and 2 should be included in any calculation of emissions. In addition, it is recommended that organisations include their significant scope 3 emissions. Calculating scope 3 emissions will mean

developing a more complete understanding of the total impact on climate change. However it is acknowledged that it can be difficult to measure and calculate scope 3 emissions. The following criteria have been set out in the Government's guidance for organisations to help identify those scope 3 emissions that are significant:

- **Scale**: What are the largest indirect emissions-causing activities with which the organisation concerned is connected?
- **Importance to business/activity:** Are there any sources of GHG emissions that are particularly important to the business/activity in question or that increase climate change risks (e.g. electricity consumption in the case of consumer use of energy using products or emissions from vehicle use for motor manufacturers)?
- **Importance to stakeholders**: which emission causing activities do interested parties (e.g. customers, suppliers, investors) expect to see reported?
- **Potential for reductions:** Where is there potential to influence or reduce emissions from indirect emission activities?

..

Once the boundaries have been set for a given period, you can calculate total emissions from the relevant sources. The most common approach used is to apply documented emissions factors to known activity data from the organisation. Activity data is information used to calculate GHG emissions from combustion and other processes e.g. the litres of fuel consumed by a car or electricity use in kilowatt hours. Most activity data is easy to obtain, accurate and can be found on bills, invoices and receipts. The period for which data is collected can vary to suit any reporting needs. However we recommend that the period for reporting or reviewing carbon neutrality should be 12 months. Once gathered, the activity data is converted into CO_2e for business and community claims by multiplying the activity data by the relevant emissions factors.

Individuals and families who use the Act on CO_2 calculator to measure their household or individual emissions will have the final measurement presented to them in tonnes of CO_2.[3] In such instances, no further calculations are required.

The boundary set for one carbon neutral period may change for a second carbon neutral period. This can be through choice (perhaps to include the calculation of more emissions), or because of factors such as business expansion. If the scope of

[3] The Act on CO2 calculator does not involve the calculation of emissions of non-CO2 greenhouse gases.

emissions being addressed through the carbon neutrality claim changes over time then this should be communicated clearly.

Example:

An internet company selling out-of-print books wishes to be carbon neutral in 2009. It takes steps to quantify its emissions from its gas and electricity use (scope 1 and 2) at its head office. However the company chooses to go further and address its 'significant' scope 3 emissions. Using the criteria set out in the Government's 'Guidance on how to measure and report your greenhouse gas emissions' the company concludes that its significant scope 3 emissions include fuel used by the courier firm that the company has contracted to deliver the goods to their customers. The company therefore uses data from quarterly gas and electricity bills and works with the courier company to deliver data on fuel use. It then uses published Government conversion factors to calculate its annual footprint.

Categorising emissions and setting the boundaries for products

If the statement on carbon neutrality is to be associated with a product then it is recommended that PAS2050 should be used. PAS2050 requires more detailed measurement of emissions and looks further into the scopes set out above. In particularly the PAS requires a lifecycle approach to be taken and for all embodied emissions to be calculated. (For further information about PAS2050 please see Annex A.) Alternatively, ISO standard 14040 can be used.

Reducing emissions

Reducing emissions internally is a vital part of achieving carbon neutrality. Reductions in emissions e.g. through energy efficiency measures or cutting back travel can deliver cost savings as well as helping the UK to meet its emission reduction targets.

When using the term carbon neutral you may wish to set an internal reduction target to be achieved over a given time-frame. This guidance does not include specific recommendations on the nature of the reduction target you should set, nor the period in which you should deliver it. However, it is important to stress that reducing emissions internally is a continuous process, not least because innovation is likely to increase the ways in which you will be able to make internal emissions reductions over time. Recognising the need to take internal action as much as possible if UK targets are to be met, and the fact that there is a wide range of cost-effective reduction measures available, it is recommended that any internal reductions or reduction plans be as ambitious as possible.

Internal emissions reduction measures include:

- Carrying out/completion of projects such as energy efficiency measures, through e.g. installation of on-site renewable, behaviour change programmes and supplier engagement strategies.
- Generation and consumption of electricity from renewable sources backed by Renewable Energy Guarantees of Origin (REGOs) certificates.
- The purchase of green tariffs which comply with OFGEM's Independent Certification Scheme.

Please see the Annex A for references to sources of further information on the above reduction measures.

When reporting a reduction in emissions, it is possible to choose whether the reduction will be reported as an absolute reduction or an intensity based reduction. An example of the former would be a 5% reduction from one year to the next in the total emissions from gas use. An example of the latter would be a 5% reduction from one year to the next in emissions per cubic metre of office space. If you choose an intensity based reduction it should be relevant to your situation. For example, a suitable intensity measurement for reductions in emissions from office premises would be per metre squared. The Government's guidance on measuring and reporting your greenhouse gas emissions includes further examples of possible measures.

Example:

A company commits itself in a statement on Corporate Responsibility to a reduction of 25% in the amount of corporate travel undertaken. As a result, employees have reduced the number of flights taken and, where possible, carried out teleconferencing. The company finds that this increases the productivity of its staff because of time saved, and also results in a 6% reduction of CO_2e in corporate travel.

Once you have established your approach to reducing emissions, it is important that this remains consistent across the life span of the carbon neutral declaration so that the data is comparable from one year to the next. If, however, the reduction approach changes it should be made clear why the change has taken place and what impact the change may have on the data.

Carbon offsetting

Carbon offsetting should be seen as complementary to efforts to reduce emissions internally. When conducted correctly, carbon offsetting can reduce the impact of activities that cause greenhouse gas emissions. Carbon offsetting can also help raise awareness of climate change issues.

Carbon offsetting involves the funding of projects which reduce or avoid emissions, with the carbon credits then generated used to offset the equivalent amount of emissions emitted elsewhere. These carbon credits represent savings against a business-as-usual assessment. The carbon savings made must be in addition to the savings that would have happened anyway without the funding from the sale/purchase of carbon credits. Examples of projects reducing or avoiding emissions include the development of hydro-electric power stations, biomass-fuelled CHP plant and wind farms where more carbon intensive power generation would otherwise have taken place.

Types of carbon credit

There are currently two recognised carbon markets – the compliance market (involving the trade of credits that are compliant with the mechanisms set out in the UN's Kyoto Protocol) and the non-compliance market (involving the trade of credits that are non-Kyoto compliant).

Kyoto-compliant credits are generally issued through one of two mechanisms[4] – the Clean Development Mechanism (CDM) or Joint Implementation (JI):

- The CDM allows so-called Annex I countries (which are the most developed countries in the world – listed on the Kyoto Protocol website) to offset their emissions in emissions reductions projects in non-Annex I countries (the emerging or developing countries). The idea behind the mechanism is that it allows developing countries to 'develop cleanly' i.e. particularly to invest in renewable energy and energy efficiency technology. The CDM process issues Certified Emissions Reductions (CERs). 1 CER equates to 1 tonne of CO_2e saved.
- JI is a mechanism for Annex I countries to offset within other Annex I countries. The United Kingdom does not currently host JI projects but companies participate in projects similar to those under the CDM, usually in 'economies in transition' such as Russia and the Ukraine. JI uses units called ERUs (Emission Reduction Units). As with CERs, 1 ERU equates to 1 tonne of CO_2e saved.

[4] In addition, the European Union has established an Emissions Trading System (the EU ETS) which issues credits – European Union Allowances (EUAs) – that are Kyoto-compliant.

Non-compliant credits are issued by unregulated bodies and cannot be exchanged for compliant credits. These types of credits are usually known as Voluntary Emissions Reductions[5] (VERs) and purchasing 1 VER should equate to 1 tonne of CO_2e saved.

In recent years a number of voluntary standards have emerged to help 'regulate' this market, such as the Voluntary Carbon Standard (VCS) and the Gold Standard for VERs (GS VERs).

Good quality criteria for carbon offsetting

Where carbon credits meet the following good quality criteria they can be used as part of an effort to become carbon neutral. The criteria are:

- **Additionality** – Projects must demonstrate that they have produced a saving in carbon that would not have happened otherwise i.e. the project could not take place without the carbon finance from selling credits. The project must not be required by legislation or to demonstrate compliance against legally binding targets. This should be demonstrated via a project methodology developed by a recognised body.

- **Avoiding leakage –** The project must demonstrate that it has not caused an increase in carbon emissions elsewhere. Leakage is when the carbon saving made at a project/location/time increase emissions elsewhere. An assessment must be made of any effects from the project whether up stream or downstream. This must be taken into account in determining the total emissions that can be sold from that project.

- **Permanence -** If the project could be impermanent, (e.g. forestry projects are at risk of disease or fire) then this must be addressed by the project developer or offset provider. To achieve this, impermanent projects must be periodically independently reviewed and, if necessary, credits must be replaced when they expire or cease to be valid.

- **Validation and verification -** The project must receive **independent verification**. The verifier must be an accredited and recognised independent third party. Purchasers of credits should also ensure that robust, independent validation and verification procedures were in place to check project were implemented according to the methodology and subsequently monitored to ensure that emission reductions were properly measured.

[5] Also known as Verified Emission Reductions.

- **Timing –** Carbon credits should be ex-post, that is, they must only have been issued from the project **after** the emissions reduction has taken place.

- **Avoiding double counting –** A registry must be used to register, track and permanently cancel credits to avoid **double counting** or double selling. Project must not be double counted against another policy or mandatory targets.

- **Transparency -** Credits should be supported by publically available project documentation on a registry to set out the underlying projects (when they were considered approved and implemented), the quantification methodology applied and independent validation and verification procedures and reports for project and credits.

The Government's Quality Assurance Scheme (QAS) for carbon offsetting

The Government's quality assurance scheme for carbon offsetting provides consumers with confidence that the offset credits they purchase genuinely mitigate the effect of their emissions. The quality assurance scheme currently only allows approval of Kyoto-compliant international credits (CERs, EUAs and ERUs) and not VERs. When purchasing credits through an offset provider, it is recommended that you look for offsets carrying the quality mark.

If purchasing carbon credits directly from a broker the Government recommends the purchase of Kyoto-compliant credits, such as CERs, because these offer the highest level of assurance that the above criteria have been met.

Domestic offsets

There is often an interest in funding UK-based projects to help tackle climate change. Such projects, for example the installation of small-scale renewable energy generators and energy efficiency measures in households (e.g. insulation, boiler upgrades), do exist and some of them purport to provide 'offsets'. However, despite the obvious attraction of purchasing credits from UK-based projects, there is a real challenge in ensuring that domestic projects used for offsetting do actually create emissions reductions compared to the business-as-usual scenario.

Because there is no mechanism in place for UK-based projects to generate Kyoto-compliant carbon credits, any credits that emanate from such projects are, by definition, VERs. However, the internationally-available standards for VERs do not tend to recognise carbon credits from domestic projects because of the difficulties

inherent in proving the additionality of the carbon savings achieved.[6] This is because the UK has national and international emission reduction targets and has introduced a number of policies and measures to achieve them. There are also financial incentives available (such as woodland grants, subsidies for insulation and the creation of a market for renewables) that might cover some or all of the costs of projects. As a result of this, UK-based projects may result in emissions savings that would have happened anyway, rather than delivering additional savings that lead to a genuinely lower concentration of greenhouse gases in the global atmosphere.

This means that carbon credits from such projects cannot normally meet the criteria of a good quality offset. In such cases, domestic carbon credits cannot be used as part of an effort to become carbon neutral. It is clear, however, that providing funding for domestic projects could bring a number of other benefits, including helping the UK to meet its emission reduction targets at a lower cost and easing the UK transition to a low-carbon economy.

If supporting UK projects is a priority, it is recommended that carbon neutral status is not sought and an alternative means found of communicating a commitment to tackling climate change. Forr companies funding UK projects, the Government's guidance on how to measure and report your greenhouse gas emissions includes some suggestions for recording this.

Information about carbon offsetting

You should make the following information available about your carbon offsetting:

- If you buy Kyoto-compliant credits you should say which external GHG programme has approved them (e.g. the Clean Development Mechanism, Joint Implementation), provide the name of the supplier and a hyperlink to the project documentation where possible.

- If you buy non-Kyoto compliant credits you should make available the name of the provider of the credits, along with a hyperlink to the project documentation where possible, details of who developed the quantification methodology, how the project was validated and verified, and how other 'good quality' criteria were met.

[6] Some internationally-available standards require the cancellation of Assigned Amount Units (AAUs) to ensure additionality. However this is not possible in the UK context.

Example

A small business chooses to offset its residual emissions using Kyoto-compliant credits. It purchases 6,000 Kyoto compliant credits (CERs) from CarbonOffsets Ltd, which has gained accreditation for the offsets under the Quality Assurance Scheme for carbon offsetting. The offset provider has acquired the credits from the Cucaú bagasse cogeneration project (CBCP), which is listed on the CDM website at: **http://cdm.unfccc.int/Projects/DB/SGS-UKL1151532941.41**.

Annex A: Summary of the recommendations on carbon neutrality and sources of additional information

<table>
<tr><th>Recommendation</th><th>Further information</th></tr>
<tr><td colspan="2">GENERAL</td></tr>
<tr><td>Provide information on the time period to which carbon neutral status relates</td><td rowspan="2">Government's Guidance on how to measure and report your greenhouse gas emissions:
http://www.defra.gov.uk/environment/business/reporting/index.htm

PAS2050: 2008 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services
http://www.bsigroup.com/en/Standards-and-Publications/Industry-Sectors/Energy/PAS-2050/

Defra's Green Claims Code:
http://www.defra.gov.uk/environment/business/marketing/glc/code.htm

ISO 14064-3
http://www.iso.org/iso/catalogue_detail?csnumber=38700</td></tr>
<tr><td>Provide information on how carbon neutrality has been verified, including the type and subject of verification.
If no verification has been undertaken this should be clearly explained.</td></tr>
<tr><td colspan="2">CALCULATING EMISSIONS</td></tr>
<tr><td>Set your boundary using the Greenhouse Gas Protocol and state the emissions calculated</td><td rowspan="6">Government's Guidance on how to measure and report your greenhouse gas emissions (including, as Annex A, a worked small business example)
http://www.defra.gov.uk/environment/business/reporting/index.htm

Small Business User Guide: Guidance on how to measure and report your greenhouse gas emissions
http://www.defra.gov.uk/environment/business/reporting/index.htm

ACT ON CO_2
http://www.direct.gov.uk/actonco2

CALM (Carbon Accounting for Land Managers) tool produced by the CLA
http://www.calm.cla.org.uk/</td></tr>
<tr><td>State the emissions factors used</td></tr>
<tr><td>State the size of your footprint in CO_2e (or CO_2 if appropriate)</td></tr>
<tr><td>State the time period covered by your emissions data</td></tr>
<tr><td>Use PAS 2050 or ISO 14040 for products</td></tr>
<tr><td>State the reason for any significant changes to the size of the footprint</td></tr>
</table>

Recommendation	Further information
	Defra / DECC's greenhouse gas conversion factors[7] http://www.defra.gov.uk/environment/business/reporting/conversion-factors-update.htm ISO 14044 http://www.iso.org/iso/catalogue_detail.htm?csnumber=38498 ISO 14064-1:2006 http://www.iso.org/iso/catalogue_detail?csnumber=38381 World Resource Institute GHG Protocol 2004: A Corporate Accounting and Reporting Standard http://www.ghgprotocol.org/standards/corporate-standard PAS 2050: 2008 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services http://www.bsigroup.com/en/Standards-and-Publications/Industry-Sectors/Energy/PAS-2050/ Carbon Trust Standard http://www.carbontruststandard.com/Default.aspx?tabid=165
REDUCING EMISSIONS	
State your reduction measurement (absolute or intensity) and the reason for the choice	Carbon Trust http://www.carbontrust.co.uk ACT ON CO_2 http://www.direct.gov.uk/actonco2 CALM (Carbon Accounting for Land Managers) tool produced by the CLA http://www.calm.cla.org.uk/ Government's Guidance on how to measure and report your greenhouse gas emissions http://www.defra.gov.uk/environment/business/reporting/index.htm
State the time period of the reduction	
Set out the reduction activities undertaken	
State the reason for any change of the measurement and any implications this change may have	

[7] Note that these emission factors are only used for UK emissions and overseas electricity use. For global operations, products or residencies, overseas emissions factors should be used. The total GHG emissions reported should be reported in CO_2e (CO_2 equivalent).

Recommendation	Further information
	Defra's Guidance on how to measure and report your greenhouse gas emissions - Annex A: Small business worked example http://www.defra.gov.uk/environment/business/reporting/index.htm Carbon Trust Standard http://www.carbontruststandard.com/Default.aspx?tabid=165 ISO 14064-1:2006 http://www.iso.org/iso/catalogue_detail?csnumber=38381 World Resource Institute GHG Protocol 2004: A Corporate Accounting and Reporting Standard http://www.ghgprotocol.org/files/ghg-protocol-revised.pdf OFGEMs Final Green Supply Guidelines http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=322&refer=Sustainability/Environment/Policy
OFFSETTING EMISSIONS	
State the amount of offsets purchased State the type of offsets purchased and include: **For Kyoto-compliant credits:** • The external GHG programme used • The name of the supplier • Hyperlink to the project documentation **For other credits:** • The name of the provider • Hyperlink to the project documentation • Details of the quantification methodology • How the project was validated and verified • How other 'good quality' criteria were met	Stockholm Environment Institute offset report http://www.co2offsetresearch.org/Review-of-Offset-Programs.html Voluntary Carbon Standard http://www.v-c-s.org/ Clean Development Mechanism website http://cdm.unfccc.int/about/index.html APPROVED CO2 CARBON OFFSETTING Government assured offsetting direct.gov.uk/offsetting

ANNEX B Glossary

Additionality	In the context of carbon offsetting, this means achieving carbon savings that go beyond any that would occur in the absence of project activity. This definition may include financial, investment, technological and environmental additionality.
Carbon emissions	For this document, this term is taken to refer to emissions of either CO_2 or the six Kyoto greenhouse gases (CO_2e).
Carbon footprint	For this document, this term is taken to mean those emissions of greenhouse gases that have been measured relating to an individual, organisation or product. In other contexts, a carbon footprint is the **total** greenhouse gas emissions relating to an individual entity or product.
CER	Certified Emissions Reduction. In the context of the Kyoto Protocol these are tradable units generated by projects in developing countries (non-Annex 1 Parties) under the Clean Development Mechanism (CDM). They may be counted by Annex 1 Parties towards compliance with their UN and EU emissions target and are equal to one tonne of CO_2e.
CO_2	Carbon dioxide. The most important greenhouse gas. CO_2 emissions result from the combustion of fuel, from land use changes and from certain industrial and other processes.
CO_2e	Carbon dioxide equivalent. There are six main greenhouse gases that cause climate change limited by the Kyoto protocol. Each gas has a different global warming potential. For simplicity of reporting, the mass of each gas emitted is commonly translated into CO_2e so that the total impact from relevant emissions sources of all Kyoto greenhouse gases can be summed to one figure.
Direct emissions	Emissions caused directly by an entity, mostly through on-site combustion of fuels for electricity and heat and company-owned vehicles but also through process emissions and fugitive emissions.
Double-counting	Counting carbon savings twice (or more). This can either happen at a project level when credits are sold to more than one purchaser (because of insufficient controls) or at a national level where the same saving is counted or claimed more than once (for example where voluntary reductions used to offset CO_2 emissions are also counted against national mandatory targets).

EUA	EU Allowance. These carbon units are specific to the EU Emission Trading Scheme (EU ETS) which started in 2005. One EUA equals one tonne CO_2e. EUAs are valid for meeting obligations within the EU trading scheme and wherever there is a legal agreement to link the EU ETS with another greenhouse gas emissions trading scheme.
Fugitive emissions	Emissions of greenhouse gases attributable to such causes as equipment leaks and evaporative processes.
GHG Protocol	Greenhouse Gas Protocol. The most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions. It was developed through a partnership between the World Resources Institute and the World Business Council for Sustainable Development.
Greenwash	A term used to describe the perception of consumers that they are being misled by a company regarding the environmental practices of the company or the environmental benefits of a product.
Indirect emissions	Emissions caused indirectly by an entity, covering a range of activities from the consumption of electricity and heat through to travel by third-party means and emissions relating to product use and distribution.
Kyoto Protocol	The Kyoto Protocol to the United Nations Framework Convention on Climate Change is the first ever international treaty to set legally binding emissions reduction targets on developed countries that have ratified it. It strengthens the international response to climate change. The Protocol was adopted by consensus at the third session of the Conference of the Parties (COP3) in December 1997.
Carbon offset	The purchase and cancellation of the appropriate number of carbon credits to balance the total emissions measured in CO_2 or CO_2e that result from a defined activity.
PAS 2050	Publicly Available Standard 2050. A method for measuring the embodied greenhouse gas emissions from goods and services across their lifecycle.
Process emissions	Emissions that are a by-product of industrial and other processes ranging from cement production and coal mining to metal production and organic waste management.
SME	Small- and medium-sized enterprise. An SME is a company with fewer than 250 employees **and** either annual turnover not exceeding €50M **or** a balance sheet totalling €43M.