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Getting to Zero: Defining Corporate Carbon Neutrality



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Getting to Zero:

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Executive Summary

AS CONCERNS about climate change grow, the concept of ‘carbon neutrality’ has captured the corporate imagination, being embraced by organisations as diverse as airlines, ice-cream makers and reinsurance giants. But this apparently simple concept – that a company, or one of its products or services, can have no net impact on climate – is surrounded by controversy, and a wide range of assumptions and actions lie behind the claims that have been made.

The ambition to have zero net impact on climate is a powerful one, and a goal of neutrality has the potential to drive ongoing change within an organisation – while also promoting shared responsibility with suppliers and customers for emissions beyond the organisation’s immediate control. Greater consensus about what should lie behind any claim of neutrality, and more consistent application by those companies that have made claims, is, however, required for it to reach its potential.

This report is intended to move us towards such a consensus. It explores a number of the claims that have been made so far and

makes a series of recommendations about what should lie behind any declaration of neutrality. It is intended to serve as a guide both to companies that have used – or are considering using – the language of neutrality; and to stakeholders who are trying to evaluate whether a particular claim is justified or not.

Two key questions frame the debate about neutrality. Firstly, which emissions should an organisation accept responsibility for (the ‘boundary’ question)? Should the organisation focus simply on the direct emissions caused by its operations? Or is it also responsible for neutralising some or all of the emissions that arise in its supply chain or from the use of its products?

Secondly, what strategy should an organisation use to achieve neutrality? How far must a company go in actually reducing its emissions baseline? And to what extent can neutrality be achieved through the purchase of carbon offsets or ‘green’ energy?

Related to these are further questions about if and how any claim of neutrality should be linked to the organisation’s

broader performance on climate. A claim of climate neutrality is, after all, a statement of climate leadership. Should we therefore expect organisations that claim neutrality to demonstrate broader climate leadership?

As more and more companies make claims of neutrality we can expect increasing scrutiny to be paid to all these questions. Transparency, therefore, becomes an overarching issue in determining the credibility of any statement regarding neutrality.

Setting boundaries

Determining where exactly a company’s carbon responsibilities begin and end is not easy. Regulated emission reduction schemes offer some guidance, but these tend to set boundaries as narrowly as possible, typically covering only Scope 1 and 2 emissions (see Figure 1) as defined by the Greenhouse Gas Protocol¹. The very nature of a claim of neutrality however – as an *absolute* assertion of zero net impact – implies that a broad boundary has been embraced. The boundary-setting process for a neutrality claim is, therefore, better informed by that used in

corporate sustainability reporting – where companies consider their broader indirect (or Scope 3) emissions alongside their more direct emissions. There might even be some legal risk to embracing a narrow boundary, with regulatory bodies such as the Advertising Standards Authority in the UK advising against companies making absolute claims of any kind.

Embracing a broad boundary poses a number of practical problems however. Measuring emissions up and down the value-chain remains an inexact science, and attempting to trace every last gramme of carbon uses up time and resources more valuably spent understanding – and reducing – a company's most significant emissions.

One company's Scope 3 emissions are also inevitably another company's Scope 1 emissions, and questions can be raised about the appropriateness of one company taking on responsibility for another company's direct emissions.

Unfortunately, there is no clear boundary-setting precedent to be found in the claims that have been made so far. Most companies that have embraced the concept have adopted relatively narrow boundaries (focused on Scope 1 and 2 emissions, along with business travel from Scope 3), but some have accepted responsibility for a variety of indirect emissions.

Expectations are also likely to change over time as our understanding of emissions throughout the value-chain improves and carbon footprinting methodologies develop. Rather than representing a fixed goal, therefore, it seems more sensible to view achieving carbon neutrality as a dynamic, ongoing process. Transparency about what is, and what is not, covered by any claim is, therefore, absolutely essential.

A credible strategy

Once an organisation has established an inventory of emissions and set an appropriate boundary, the next key question surrounds the strategy that should be used to achieve neutrality. Many companies have embraced the concept of a hierarchy of carbon reduction options in developing their neutrality strategies. Forum for the Future's own hierarchy prioritises the *avoidance* of emissions, their *reduction* through energy efficiency, the *replacement* of high-carbon energy sources with low- or zero-carbon alternatives, and then the use of high-quality carbon *offsets*, as the preferred means for an organisation to address its contribution to climate change.

Offsetting will play an important role in any neutrality strategy – if only for the simple fact that it's currently impossible to become carbon neutral without it. Clean Air-Cool Planet and Forum for the Future believe that *high-quality* offsets do result in genuine emissions reductions. However, the emphasis of any neutrality strategy must be to reduce baseline emissions, and organisations should, therefore, look for permanent emissions reduction options higher up the hierarchy.

Because a claim of neutrality is essentially an assertion of leadership, companies that make such claims should be able to demonstrate broad climate leadership. While it would be counterproductive to insist that only those companies that can demonstrate best-in-sector emissions relative to their peers can declare themselves carbon neutral, claims from energy inefficient companies – or from companies that are inherently carbon-intensive – will inevitably engender skepticism. Claims of neutrality should meet the spirit, as well as the letter, of the claim.

A Definition

After careful consideration of the concept of carbon neutrality, we believe that:

True corporate carbon neutrality means there is no net increase of atmospheric greenhouse gases from the existence of the company – or from a clearly-defined part of the company that accounts for a significant portion of the company's overall climate impact. If a company makes a claim regarding a specific product, then there should be no net increase of atmospheric greenhouse gases from the existence of that product.

The process for achieving neutrality should begin with an inventory of the company's entire carbon footprint (or a full life-cycle analysis of a particular product) and the setting of a clear boundary. The company should then embrace a neutralisation strategy that prioritises the avoidance of emissions, their reduction through energy efficiency, the replacement of high-carbon energy sources with low- or zero-carbon alternatives, and then the use of high-quality carbon offsets.

Every claim must be backed up by easily accessible, clearly communicated information regarding the company's full carbon footprint; the boundaries it has applied; and the strategy that has been embraced to achieve neutrality.

Recommendations

The many questions raised above, and the variety of approaches adopted by different companies, make it difficult to set out definitive guidance as to what should lie behind a claim of neutrality. Nevertheless, in an attempt to highlight best practice, we offer the following advice to companies that have made claims – or who are considering making claims.

1) Embrace a stretching boundary

The key tension surrounding any claim of neutrality remains reconciling the

absolute nature of the claim – implying zero net impact – with a practical boundary-setting process. In the spirit of the term, we recommend that companies accept that claiming neutrality implies some responsibility to consider and address broader value-chain emissions. This is not to suggest that companies accept legal responsibility for the direct emissions of others, but rather that indirect emissions be explicitly considered as part of the neutrality process.

2) Demonstrate a broad understanding of your entire carbon footprint prior to making *any* claim of neutrality – and ensure that your claim covers a relatively significant set of emissions

A transparent understanding of the company's full carbon footprint is essential as a prerequisite for *any* claim of neutrality, regardless of what boundary is set. This does not mean that companies should chase every gramme of carbon in their value-chain, but rather that they are able to broadly disclose and discuss where their biggest indirect emissions lie.

Questions remain about the appropriateness of a company making a limited claim of neutrality (i.e., regarding its 'manufacturing operations') when the associated emissions are relatively trivial compared to other emissions in its value-chain. If companies claim neutrality for relatively insignificant sets of emissions, the concept risks losing its legitimacy.

3) Exhibit caution in making *blanket* corporate-wide claims of neutrality

Any claim of neutrality brings with it some risk, but unqualified claims are riskier than others. Unless the company in question can clearly demonstrate a full understanding and subsequent 'neutralisation' of its entire climate footprint, *blanket* claims are likely to mislead and should not be made.

4) Consider whether a claim of neutrality will resonate with your stakeholders

Some companies will always find it difficult to convince stakeholders of the

sincerity of any neutrality claim – either because the use of their product or service leads to emissions that dwarf their direct emissions, or because they are seen as fundamentally unsustainable. For those companies, we recommend that they avoid the use of the language of carbon neutrality, and instead seek to show climate change leadership in other ways.

5) Use the carbon management hierarchy to inform your neutralisation strategy

The strategy used to achieve neutrality should be informed by a hierarchy that prioritises the *avoidance* of emissions, their *reduction* through energy efficiency, the *replacement* of high-carbon energy sources with low- or zero-carbon alternatives, and then the use of high-quality carbon *offsets*. Offsetting will play an important role in any neutrality strategy, but a claim of neutrality will ultimately be judged on the company in question being able to demonstrate a declining emissions baseline.

6) Be completely transparent

Given the complexity of the issues and assumptions surrounding any claim of neutrality, absolute transparency regarding all aspects of the claim is essential. Every claim should be backed up by easily accessible information regarding the company's full carbon footprint; the boundaries it has applied; and the strategy that has been embraced to achieve neutrality.

7) Exhibit and sustain broad leadership on climate change

While it would be technically feasible for a company to achieve neutrality through a strategy of 100 percent offsetting, this would not represent the spirit of leadership embedded in the term. True climate leadership is indicated by companies rethinking their business strategy; engaging deeply with their suppliers, customers and peers; and developing products and services that will thrive in, and help bring about, a low-carbon economy. While linking such actions directly to a claim of neutrality remains problematic, any company that wishes to position itself as a leader on

climate change needs to embrace them.

8) Treat neutrality as a long-term commitment – and an ongoing, dynamic challenge

As stakeholder interest in full life-cycle emissions grows – and methodologies for measuring and allocating responsibility for such emissions develop – we can expect the rules of the game for claims of neutrality to change. Companies should embrace this challenge and use any commitment, or aspiration, to neutrality to drive ongoing change. A commitment to neutrality must therefore be a long-term commitment.

Introduction

AS CONCERNS about climate change grow, the concept of 'carbon neutrality'² has captured the corporate imagination. From a few companies declaring their intention to go carbon neutral in 2003 and 2004, the idea has snowballed, with many companies now making such claims – either at the organisational level, for a part of their operations, or for a particular product or service. The concept has been embraced by organisations as diverse as airlines, ice-cream makers and reinsurance giants, with consumers now invited to buy carbon neutral train journeys and car insurance – or even to 'neutralise' the emissions from their patio heaters. Today, corporations, colleges and universities, communities, even entire countries, are saying they are or will become carbon neutral.

In 2006, the *Oxford American Dictionary* acknowledged the attention the concept was attracting by making carbon neutrality its 'Word of the Year,' defining it as "making no net release of carbon dioxide to the atmosphere." But such a simple definition conceals the wide range of assumptions and actions – some credible, some questionable – that lie behind claims of carbon neutrality.

In 2007, Clean Air-Cool Planet and Forum for the Future, in order to advise and challenge the organisations with which we work, began to consider what being truly carbon neutral should mean. Under scrutiny, carbon neutrality becomes a concept of considerable complexity, comprising two main aspects.

First, there is the question of which emissions an organisation should accept responsibility for – the issue of 'boundaries.' Should the organisation focus simply on the direct emissions caused by its

operations? Or should it also 'neutralise' the emissions associated with the use of its products and services? Or, indeed, for those that arise in its supply chain?

The answer to such questions is complicated by the fact that a claim of neutrality is an *absolute* assertion. It implies that an organisation (or a product or service) is responsible for no net increase of atmospheric greenhouse gases. This makes the omission of any significant emissions that might be attributed to the organisation problematic – and raises questions about the suitability of applying narrow regulatory or accounting boundaries to claims of neutrality.

Second, there is the question of what strategy an organisation should use to achieve neutrality. How far must a company go in actually reducing its emissions baseline? To what extent can neutrality be achieved through the purchase of carbon offsets or 'green' energy?

Related to these are further questions about if and how any claim of neutrality should be linked to the organisation's broader performance on climate. A claim of climate neutrality is, after all, a statement of climate leadership. Should we therefore expect organisations that claim neutrality to demonstrate broader climate leadership? And should the demonstration of such leadership dictate whether or not an organisation can make a claim of neutrality?

As more and more companies make claims of neutrality – and seek advantages in commercial, retail and investment marketplaces as a result – we can expect increasing scrutiny to be paid to all these questions.

Transparency, therefore, becomes an overarching issue in determining the credibility of any statement regarding neutrality, and companies should anticipate and be prepared to answer questions from stakeholders about their carbon inventory, the boundaries applied, and the strategies implemented to achieve neutrality.

A brief survey of some of the corporate neutrality claims that have been made to date (see Matrix of Corporate Claims of Neutrality, page 29) shows that the various questions raised above have been approached and answered in very different ways. And this poses considerable risk to the credibility of the concept. There is a clear danger that organisations applying the term in a minimal – or even disingenuous – fashion will not only devalue it, but also breed cynicism among stakeholders towards sincere efforts to reduce climate impact.

A consensus on what makes a claim of neutrality credible is therefore needed if the term is to gain legitimacy and traction – and this report is intended to move us towards such a consensus. It explores a number

of the claims that have been made so far, considers the questions posed above, and makes a series of recommendations about what should lie behind any declaration of neutrality. It is intended to serve as a guide both to companies that have made – or are considering making – a claim of neutrality, and to stakeholders who are trying to evaluate whether a particular claim is justified or not.

Boundary setting

THE FIRST STEP in setting boundaries for a claim of neutrality should be to review the full suite of emissions that might be attributed to the company as revealed in a carbon inventory. Having done this, a company can then grapple with the question of which emissions it should, as an organisation asserting carbon neutrality, be required to 'neutralise.'

To answer this question, it is helpful to first consider the concept of 'scopes' (see Figure 1) as outlined in the Greenhouse Gas Protocol (GHG Protocol)⁴. This protocol, developed by the World Resources Institute and the World Business Council for Sustainable Development, has become the most widely used tool for quantifying greenhouse gas emissions⁵. It classifies emissions as follows:

- Scope 1: direct greenhouse gas emissions, from sources owned or controlled by the company;
- Scope 2: indirect emissions, caused by the generation of purchased electricity consumed by the company;
- Scope 3: Other indirect emissions that are a consequence of the company's activities, but are from sources neither owned nor controlled by the company. These include business travel, outsourced activities, the extraction and processing of purchased materials, and the use of sold products and services.

The GHG Protocol states that Scope 1 and 2 emissions must be included within an organisation's boundary for the purposes of building an emissions inventory, while reporting on Scope 3 emissions is optional.

A regulatory approach to boundaries

With regulatory efforts to address greenhouse gas emissions in mind, the GHG Protocol has carefully defined Scopes 1 and 2 to ensure that two or more companies do not account for emissions in the same scope. In regulated schemes, it is essential to set boundaries in such a way that any such double-counting of emissions is avoided. A failure to do so would quickly lead to disputes about who is legally responsible for emissions and, in the case of trading systems, who can lay claim to emissions allowances or reduction credits.

The easiest way to obtain such clarity is to set boundaries as narrowly as possible – and the emissions inventories that underpin regulatory schemes usually cover only Scope 1 or Scope 2 emissions.

A narrow regulatory definition of responsibility can, however, assign emissions for which a company (or an individual) might intuitively be held responsible to other organisations. Under a 'regulatory' approach targeting Scope 1 and 2 emissions, for example, an airline would be responsible for all the emissions that arise from the burning of aviation fuel during a flight. Yet travellers must surely accept some responsibility for the emissions that arise from their decision to fly (and it has, in

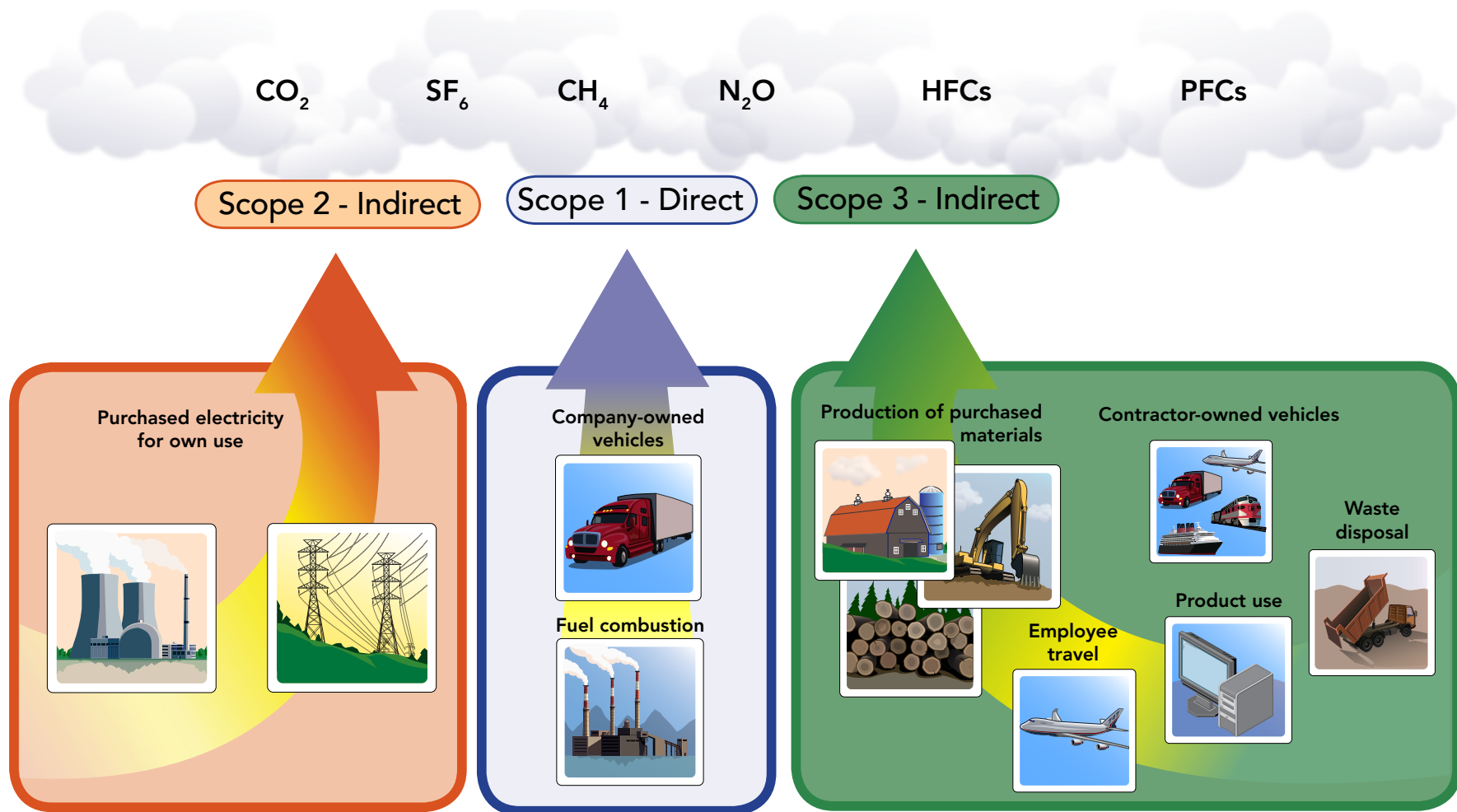


Figure 1. Greenhouse Gas Protocol Scopes

fact, become common practice for organisations – including most of those that have claimed neutrality – to accept responsibility for the emissions resulting from employee air travel).

Indeed, as stakeholders increasingly evaluate the relative performance of various organisations on climate change (and as organisations seek to demonstrate leadership), more and more attention is being paid to Scope 3 emissions. If a stakeholder wishes to evaluate a company's performance on climate, then an analysis of Scope 1 and 2 emissions only covers part of the story – they will also want to know if the company is engaging its suppliers on energy efficiency, for example, or if it is selling products and/or services that out-perform competitors in terms of climate impact.

Sustainability reporting boundaries

Sustainability reporting frameworks such as the Global Reporting Initiative typically call on organisations to explore such questions – and therefore to embrace broader boundaries than would apply under regulatory schemes. This reflects not only the growing interest in Scope 3 emissions, but also the fact that concerns about double-counting are less serious when companies are reporting voluntarily.

Consider, for example, the emissions associated with powering a computer. Under a 'regulatory' approach such as that outlined above, these emissions could be attributed to either the power company supplying the electricity, or to the company (or individual) operating the computer. Yet, in its sustainability report, we would also expect the *manufacturer* of the computer to discuss the efficiency of its products – and to accept some responsibility for reducing emissions by improving the efficiency of those products. Given the voluntary nature of reporting, and the fact that no regulatory allocation of emissions (or emissions reductions) is confused by the manufacturer 'claiming' the emissions from its products, there is no substantive problem with double-counting in this case.

Boundaries for neutrality claims

Declaring carbon neutrality, like creating a sustainability report, is a voluntary decision, making concerns about double-counting less relevant than they are in a regulatory context. More importantly, the very nature of the claim – as an *absolute* assertion of zero net impact – implies that a broad boundary has been embraced. The fundamental nature of the claim puts it in a different category to other statements of climate leadership, and sets the bar high for organisations seeking to demonstrate its attainment.

Somewhat ironically, there might even be some regulatory risk in embracing a narrow boundary. For example, the UK's Advertising Standards Authority (ASA) warns against companies making absolute claims of any kind. In a statement that specifically looks at 'green' claims in advertising, it cites a ruling against an advertisement for roof shingles that claimed the recyclable materials had "zero environmental legacy," and another where it ruled against an energy company claiming that the paper it used was "100 percent environmentally friendly".⁶ More recently, the ASA has ruled against a claim by British Gas that one of its fuel packages was "zero carbon."

While the ASA has not ruled directly on any claim of carbon neutrality, it is hard to reconcile any such claim with the following advice: "avoid sweeping or absolute claims such as 'environmentally friendly' or 'wholly biodegradable.' It's unlikely that you will be able to prove your product has no environmental impact."

Similar rulings might also start to appear elsewhere. In the US, the Federal Trade Commission (FTC) is updating and upgrading its 'Green Guide' standards for environmental claims. Addressing issues such as carbon offsets, its final recommendations may well include requirements or restrictions on making claims about "climate friendliness."

Shared responsibility

The acceptance of broad boundaries raises a different suite of questions however. One company's Scope 3 emissions are also inevitably another company's Scope 1 or 2 emissions, and questions can be raised about the appropriateness of one company taking on responsibility for another company's direct emissions. Indeed, at a time when all actors in society need to be accepting responsibility for, and significantly reducing, their direct emissions, such an approach risks diluting this message of shared responsibility.

In an ideal world, companies striving for neutrality could simply purchase materials from – and sell products or services to – entities that are themselves carbon neutral as a means to get round this problem. In the meantime, companies that claim neutrality have to find a way to balance the absolute nature of the claim with the practical problems of tackling Scope 3 emissions. While this will not mean taking full, or legal, responsibility for such emissions, it will mean understanding them – and explicitly considering them as part of any neutrality claim.

The reality so far

In trying to answer the question of where to draw boundaries, there is no clear precedent from the claims that have been made so far. Most of the companies that have made claims have adopted relatively narrow boundaries (focused on Scope 1 and 2 emissions), but a small number of companies – particularly those with reputations for broader climate leadership – have accepted responsibility for a broad suite of indirect emissions as part of their neutrality claims (see Figure 2, page 12 and Matrix of Corporate Claims of Neutrality, page 29).

The first carbon neutral claims, which began emerging in the late 1990s, most often covered events such as conferences or music concerts. The US-based Climate Neutral Network (launched in 1999) brought together forward-looking businesses with NGOs to create guidelines for climate neutral *products* and

enterprises.⁷ The financial services industry then dominated the claims made in the early 2000s, with reinsurer Swiss Re being one of the first to nail its colors to the carbon neutral mast in 2003, followed by HSBC in 2004.

Other consumer-facing brands in clothing, retail and information technology have followed. Indeed, most carbon neutral claims have come from companies with relatively minor Scope 1 and 2 emissions; heavy manufacturing and industrial companies are almost entirely unrepresented on the list of companies that have pledged to go carbon neutral.

Boundary-setting in practice

The most common approach to boundary-setting has been to include all Scope 1 and 2 emissions, along with business travel from Scope 3. Companies as varied as HSBC, Dell and News Corporation have embraced this model. For a company with few obvious supply-chain or product emissions, such a boundary might initially seem appropriate. But for a company with significant supply-chain emissions, or whose products or services result in significant emissions, a focus on Scope 1 and 2 emissions raises some immediate questions.

Determining significance

Throughout this report, we recommend that companies ensure that any claim of neutrality covers a relatively significant set of emissions. Significance, however, can be difficult to pin down. We are not suggesting that a standard numerical threshold be applied by every company to determine whether certain emissions are significant. We do want to ensure, however, that a company's biggest impacts are not ignored by any claim of neutrality. Companies will have to make judgement calls about which sets of emissions count as significant or not, and we recommend that they engage with their stakeholders to inform this process.

Scope 1 emissions

Scope 2 emissions

Scope 3 emissions

- - - - - standard boundary applied by companies claiming neutrality

- - - - - ideal boundary for companies claiming neutrality

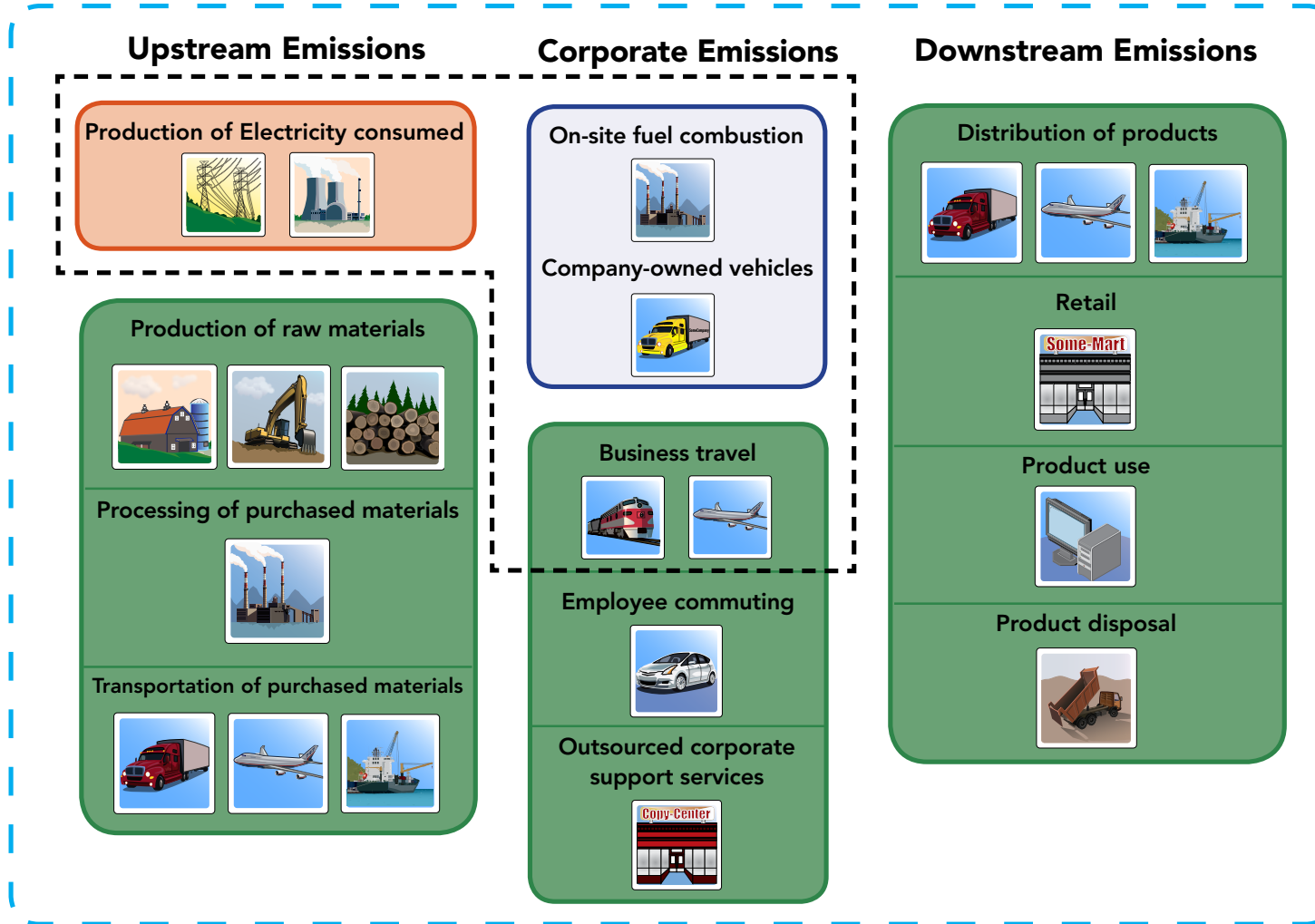


Figure 2. Setting the Boundary for Neutrality

BSkyB, a UK-based satellite television company, describes itself as the “first major media company in the world to go carbon neutral,” but its boundary excludes emissions from the manufacture and use of the set-top boxes its customers need to watch its programming. Similarly, Dell excludes emissions from the use of its products. And car hire company, Avis Europe, does not include the emissions from the use of its rental vehicles in the boundary for its claim, placing the responsibility for vehicle emissions wholly with its customers.

This approach is not universal, however. If we stick with examples from the transportation sector, Eurostar, the rail company, includes the emissions that arise from the running of its trains in its boundary (as part of its claim of providing carbon neutral journeys). Similarly, Silverjet, when it was claiming to be the world’s first carbon neutral airline, also accepted responsibility for the emissions released during its flights (although the company has since dropped its claim and now offers customers the option to opt out of its offset programme – thus switching back to a model where emissions are its customers’ responsibility).

Both Dell and Avis Europe are clear in their claims that only their *operations* have been neutralised – and BSKyB also clearly explains what is included in its boundary on its website. But by excluding the most significant life-cycle climate impacts from their claims of neutrality, they can be criticised for focusing their efforts in the wrong place.

The case for stretching boundaries

This concern becomes even more of an issue when considering companies from the sectors at the forefront of the debate about climate change. How, for example, would stakeholders react to a major automaker claiming neutrality if it didn’t include the emissions from its vehicles within its boundary – even if its claim was suitably qualified? Or to an electric utility that claimed that its offices – rather than the electricity it produced – were carbon neutral?

The commitment made by Manchester Airport in the UK to make its ‘site’ carbon

BEN & JERRY'S EUROPE

Ben & Jerry's bid to 'Lick Global Warming' began in the USA in 2002, with a target to reduce carbon dioxide emissions from manufacturing operations by 10 percent by 2007. Its operations there now produce 32 percent less carbon dioxide emissions per gallon of ice cream than in 2002. In Europe the company has achieved a 26 percent improvement in energy efficiency during production since 2004, and an 89 percent reduction of climate impact during production as a result of a switch to 'green' electricity.

In April 2007, Ben & Jerry's went "Climate Neutral from cow to cone on all our flavours produced in Europe." In analysing its associated climate 'hoofprint,' Ben & Jerry's includes emissions from dairy farming; the sourcing of ingredients; factory production; packaging; transport; and freezers with a range of reduction projects across each part of the supply chain.

The company's methodology for achieving neutrality uses a three-step approach focused on maximising energy efficiency, moving to renewable energy sources and offsetting unavoidable climate impact by investing in Gold Standard Verified Emission Reduction certificates. Having already reduced its climate impact by 10 percent, Ben & Jerry's is committing 2.4 million euros over five years to reduce it by a further 10 percent.

Ben & Jerry's has a 'Sustainable Dairy' programme that actively works to reduce the climate impact of dairy farming by reducing the use of fertilisers, concentrate and energy used on farms, as well as converting farmers to green energy. The company has also established the Ben & Jerry's Climate Change College to support young environmental entrepreneurs.

neutral by 2015 illustrates this point. The airport's boundary excludes emissions from the flights into and out of the airport, and its commitment was made alongside the announcement of a plan to increase the volume of flights at the airport by 50 percent. While the company has been clear about what is included within its boundary – and has embraced a strategy to address its Scope 1 and 2 emissions that has many strengths – the disconnect between the airport's claim and aviation's carbon 'elephant in the room' has exposed the airport to criticism (Friends of the Earth UK compared the move to a "tobacconist shop becoming smoke free."⁸) No matter how thorough the company is in tackling its own operations, the claim jars somewhat as a result of the omission of flight-related emissions.

The problem of significant indirect emissions is not restricted to those high-profile companies with 'obvious' emissions in their supply chain, however. Indeed, some of those companies that have carried out comprehensive life-cycle analyses of their emissions have thrown up some surprising findings. US clothing retailer Timberland, for example, has found that 79 percent of the life-cycle emissions associated with its footwear derive from the livestock used in the production of leather. Similarly, yoghurt-maker Stonyfield Farm found that the bulk of the emissions associated with its products resulted from milk production – again, primarily from the livestock involved.

Different rules for different sectors?

Yet, if we expect companies with high profile products to consider their product emissions when making a claim of neutrality, how can we justify different rules for those with lower climate profiles? Can there be one set of rules for automotive companies, and another for, say, financial institutions? Banks are, in fact, over-represented in the list of companies that have made statements of neutrality to date and, as with most companies that have made claims, they have typically embraced boundaries that exclude most Scope 3 emissions. Interestingly, however, increasing attention is now being paid to the climate impact of banks' lending and investment activities,⁹ and this raises questions about the future credibility of the boundaries that the financial sector has so far embraced. As attention to this aspect of banks' performance grows, we might expect the rules for claims of neutrality in the financial sector to change accordingly.

INTERFACE

Interface combines a broad commitment to its Mission Zero, which is to eliminate any negative impact the company may have on the environment by the year 2020. It has embraced the ARRO hierarchy, and has a transparent neutralisation strategy based on an inventory that uses a life-cycle assessment model to analyse its entire value chain, from raw material acquisition, product manufacture and transport and how customers use the products, and clear boundaries, including GHG emissions from manufacturing, office operations, and transportation of people and products.

Interface is also, perhaps most notably, working on greening its supply chain through support and development of raw materials, projects and processes that reduce GHG emissions. It has shown a net 82 percent reduction in CO2 emissions since 1996; introduced its first carbon neutral product (Cool Carpet™) in 1999, and made the majority of its InterfaceFLOR® products offered globally carbon neutral in 2007.

A sustainability report is available on its website, including general information on climate change programmes. Interface reports GHG emissions using GHG Protocol Corporate Accounting and Reporting Standards to track annual emissions from global manufacturing.

Extending carbon neutrality obligations to banks' investment and lending portfolios is, however, extremely problematic. On the face of it, most companies and projects rely on at least some bank funding to operate, potentially making banks 'responsible' for some proportion of all emissions.

Indeed, the more we explore the depths of corporate value-chains, the more greenhouse gas emissions we find: carbon is embedded not only in the products and services that a company sources, but also the materials and infrastructure used to create those products and services. Should a company that utilises metal in its products bear some responsibility for the historical emissions created during mining operations, or an automotive company bear some responsibility for the emissions embedded in the road infrastructure its products use?

Taken to this extreme, arguments over emissions responsibility can become absurd. All economic activity has some effect on the climate system. Calculating emissions all the way up (and down) the value-chain is impossible to any degree of accuracy. It is also unlikely to be particularly helpful. Attempting to trace every last gramme of carbon uses up time and resources more valuably spent understanding – and reducing – a company's most significant emissions.

Taking wider responsibility

Nevertheless, as noted above, a select few companies have – *within the context of their neutrality claims* – taken responsibility for certain Scope 3 emissions. Companies such as Interface have exhibited genuine leadership by accepting some responsibility for the carbon embedded in their entire value chain. And most commentators would agree that a worthwhile corporate climate strategy must involve engagement and education up and down the value-chain. What remains uncertain is how this activity should influence, or be informed by, a claim of neutrality.

Most companies currently making statements of neutrality *do* routinely include emissions from employee travel within their boundary. This particular Scope 3 emission is not inherently different from any other kind, but because it is relatively easy to measure, has been an

STONYFIELD FARM

In 1994, Stonyfield Farm evaluated the environmental impacts of the whole company with an 'Eco Audit'. One result of that exercise was that in 1997, Stonyfield Farm became the first U.S. manufacturer to offset the remaining CO2 emissions from its facility energy use and has continued to do so ever since.

In addition to the purchase of offsets, Stonyfield has worked hard to reduce energy use in its processes, and now generates renewable energy on-site with one of the largest photovoltaic solar arrays in the Northeastern US.

However, recognising that its direct emissions are only part of the GHG emissions they are ultimately responsible for, Stonyfield does not make any claims of carbon neutrality. Stonyfield has deepened its understanding of its climate impacts with two subsequent increasingly detailed inventories of corporate and manufacturing operations; supply chain including milk production, other ingredients and packaging; and product distribution.

The company has set aggressive GHG reduction goals and develops annual action plans for major areas of environmental impact, including packaging, waste, facility carbon emissions, supply chain and transportation. In addition, Stonyfield has achieved a significant reputation for engaging stakeholders on climate change through a variety of efforts, including messages on yogurt cup lids, monthly e-mail newsletters, its website and in its community marketing outreach.

established indicator for some time, and because cutting back on travel can result in significant cost savings as well as emissions reductions, it has become standard practice to include it within a neutrality boundary.

And interest in understanding and tackling the full suite of Scope 3 emissions is increasing. Multiple efforts are currently underway to develop life-cycle analysis and carbon footprinting methodologies that attempt to quantify Scope 3 emissions in a sensible manner. Assuming that this interest remains – *and that methodologies improve and consensus is reached* – such developments may well change the acceptable boundary of a neutrality claim.

A dynamic approach

Rather than representing a fixed goal, therefore, it seems more sensible to view achieving carbon neutrality as a dynamic, ongoing process. And such adaptability could, in fact, actually represent one of the strengths of the concept of neutrality. *Provided that the commitment to neutrality is ongoing*, changing expectations over time will push the company in question to continually improve its performance and to engage with its suppliers and customers to help them reduce their emissions.

Indeed, many of the companies that could be criticised for making relatively narrow claims have since instituted programmes to address their Scope 3 emissions. BSkyB has halved the energy consumption of its set top boxes, for example, and Dell has adopted a long-term strategy to work with suppliers to minimise emissions from supply-chain operations. These initiatives are not necessarily being factored into their claims – or their

boundaries – and it is difficult to ascertain if there is a direct link between their declarations of neutrality and the company thinking more systematically about its climate impacts. But such progress illustrates the potential for claims of neutrality to drive continued positive change throughout corporate value-chains.

If we accept that neutrality is a fluid target, then transparency about what is, and what is not, covered by a claim becomes absolutely essential. Companies should anticipate and be prepared for considerable scrutiny from stakeholders

Carbon positive?

If companies need to be cognisant of the emissions beyond their direct control when claiming neutrality, can they also claim some credit for emissions reductions from, for example, developing products or services that allow their customers to reduce emissions? Can the development of products whose use has a net climate benefit be brought into a boundary as part of a carbon neutrality claim?

Chemicals company BASF, electronics firm NEC, and telecommunications companies BT and Verizon, have all discussed the climate benefits associated with the use of their products. BT has estimated the reductions in transport emissions enabled by its teleconferencing service, for example.

Alcoa, a leading company in the aluminium sector, has gone so far as to claim that the entire sector could attain carbon neutrality by claiming the

emissions reductions associated with a switch from steel to aluminium in car manufacture. Such a switch, Alcoa calculates, yields 26 tonnes of CO₂ reduction per tonne of aluminium, given the greater fuel efficiency of vehicles using the lighter metal.

While Alcoa is to be applauded for considering the role its products can play in a lower-carbon economy, aluminium production remains an energy-intensive process – and the automobile remains a product that contributes significantly to climate change. If Alcoa were to consider the difference between an aluminium car and no car at all, then it would arrive at a very different result. Further, even if the emissions savings from switching from steel to aluminium are considerable, other materials (such as plastics) might offer even greater savings than aluminium.

about their carbon inventory, the boundaries applied, and the significance of any 'neutralised' emissions in terms of the company's overall carbon footprint. The dynamic, fluid nature of the concept also means that it may well be more intellectually honest to *aspire* to neutrality rather than to *claim* it.

Indeed, some of the companies that have made statements of neutrality have explicitly framed them as aspirations. Nike has set a goal of becoming carbon neutral by 2015, for example, while Marks & Spencer's Plan A gave a 2012 date. Interface has gone even further, pledging to have no net environmental impact by 2020.

A disadvantage of this approach is that an aspiration could remain just that: companies may find themselves indefinitely postponing difficult decisions. Conversely, after an initial period of tackling 'low-hanging fruit' and offsetting, a company might become discouraged by the financial burden of continuing and simply give up its claim. And, with time-bound aspirations, once the target date is reached, stakeholders will expect evidence that the aspiration has been achieved.

Nevertheless, an openness to the idea that the criteria determining neutrality will change over time – alongside an ongoing commitment to remain, or to continue to strive to become, carbon neutral – might provide the concept of neutrality with the dynamism that it needs if it is to continue to resonate with companies and stakeholders.

II. How is neutrality best achieved?

ONCE AN ORGANISATION has established an inventory of emissions and used this to set an appropriate boundary, the next key question surrounds the strategy that should be used to achieve neutrality. (The options available will in fact depend on the boundary chosen – if a company includes emissions that are beyond its direct control, then its options for neutralising them are limited.)

In tackling their emissions, many companies have embraced the concept of a hierarchy of carbon management options (such as the one developed by Forum for the Future, outlined in Figure 3)

The carbon management hierarchy

Forum for the Future developed this particular hierarchy to inform discussions about corporate climate strategy more broadly (rather than carbon neutrality per se). Intended to prompt companies to consider the actions that will have the most transformative and lasting impact on their emissions baseline, the hierarchy prioritises the *avoidance* of emissions, their *reduction* through energy efficiency, and the *replacement* of high-carbon energy sources with low or zero-carbon alternatives as the preferred means for an organisation to address their contribution to climate change. *Offsetting* – while a valuable tool for reducing greenhouse gas emissions – is placed at the bottom of the hierarchy on the basis that it does not directly reduce a company's emissions baseline.

Such a hierarchy can also be used to inform a neutrality strategy, although offsetting will play a more prominent role in such circumstances – for the

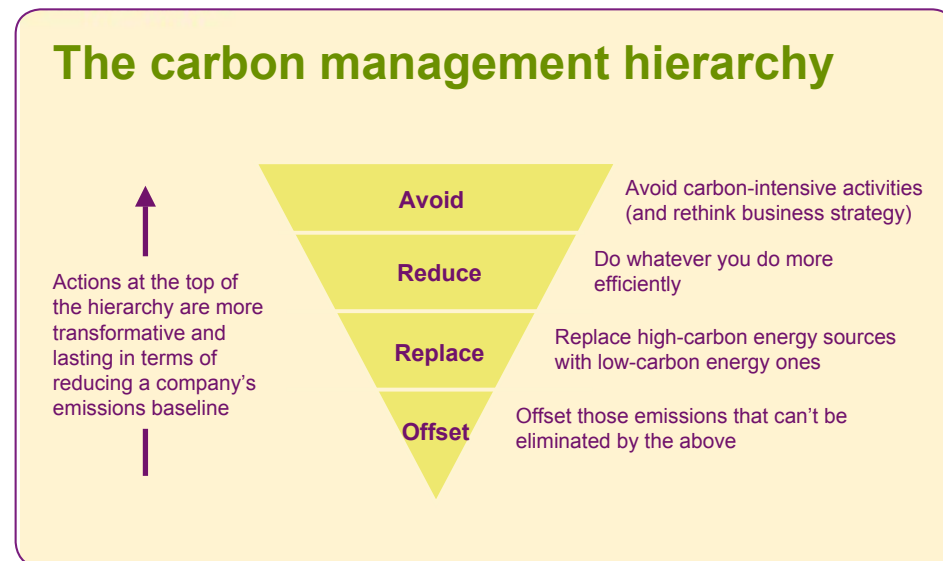


Figure 3: The carbon management hierarchy.

simple reason that it is currently impossible for any organisation to become carbon neutral without embracing offsetting.

What role should offsetting play?

As offsetting has been increasingly used as a means to reduce greenhouse gas emissions, it has generated strong feelings. Many activists feel that it enables the continuation of behaviour that is inherently unsustainable – and that it is used by companies and consumers to buy their way out of the problem. Proponents, however, argue that high-quality offsets can provide the same environmental outcome more quickly, and at substantially lower cost, than internal reductions – and that it can actually make future internal reductions more likely by placing a financial cost on emissions.

Clean Air-Cool Planet and Forum for the Future believe that *high-quality* offsets do result in genuine emissions reductions, and recognise that they will play an important role in all carbon neutrality strategies¹⁰. The exact role will be determined by factors such as the relative cost of offsetting over other options; the alternative reduction options available to the company in question; and, indeed, the boundary applied (a more expansive boundary is likely to result in the inclusion of emissions that a company does not directly control, and which can therefore only be neutralised through offsetting.)

Nevertheless, any company that over-relies on offsetting, particularly for emissions that other

The case for offsetting

If a tonne of carbon has exactly the same impact on the climate system regardless of where on the planet it is released, and it costs £100 to reduce a tonne of carbon dioxide internally, yet only £5 to reduce a tonne of carbon dioxide through offsetting, then why would a company embrace the more expensive approach? In a market-based world, finding the lowest cost way to obtain emissions reductions would seem sensible. This economic argument is perhaps the strongest justification of offsetting as a means to tackle climate change.

Judging which option is lowest cost is seldom as easy as the above example implies, however. How, for example, are potential future costs/savings factored into such a decision? Whereas offsetting might represent the cheaper one-off cost, an internal reduction is likely to be permanent – and will therefore not require ‘neutralisation’ on an annual basis. And what if the differential between an internal and an external reduction is closer – how should a company evaluate a £20, or a £10, internal reduction relative to a £5 offset?

The main argument *against* offsetting is that it does not reduce the organisation’s emission baseline. However, assuming that a commitment to neutrality is ongoing, the cost of offsetting may actually be an incentive for internal reductions over time – as an organisation that manages to reduce its internal emissions no longer has to meet that cost. And as mandatory emission reduction schemes are put in place around the world, and more companies and individuals take voluntary action, we can expect the cost of offsets to rise. Any carbon neutrality strategy that depends heavily on offsetting is therefore likely to become more expensive over time – thus making internal reductions more attractive.

Offsetting also enables companies to act quickly. Whereas internal reductions typically require the development and roll-out of new technology or management practices (and therefore take some time to manifest), offsetting can provide a big, quick ‘win’ for a company setting out on a carbon neutrality journey.

companies are reducing internally, is likely to face criticism from stakeholders. For example, if a company claims neutrality on the basis of offsetting 100 percent of one year's emissions – without making any effort to reduce its emissions baseline – it can expect to have its claim challenged.

And rightly so, as such claims show a lack of understanding of the true meaning of carbon neutrality. Any claim of neutrality is, as we have noted, a claim of climate leadership and – in a world in which significant, and rapid, emissions reductions are required if we are to avoid dangerous climate change – it is difficult for any company with a growing emissions baseline to claim leadership. Furthermore, as we look for solutions to a global problem, it is clear that we cannot offset our way out of dangerous climate change. The emphasis of any neutrality strategy must, therefore, be to reduce baseline emissions.

The need for a balanced strategy

As part of a strategy to achieve neutrality, organisations should therefore look for emissions reduction options higher up the hierarchy. And despite some of the risks noted in the text box at right, there are many credible options available – although it is as important to accurately quantify and verify the full impact of any action in the hierarchy as it is for offsetting.

The best way for an organisation to reduce its impact on the climate is to *avoid* practices and processes that cause emissions in the first place. Business travel provides an obvious opportunity for avoidance, and has been grasped by a number of companies as part of their carbon neutrality efforts. UK publishing group Pearson announced plans to bring its 'per employee' business travel below 2003 levels by the end of 2007, for example. And Timberland has set a goal to cut business travel by 20 percent by 2010.

Opportunities for 'avoidance' are not only achieved by cutting down on certain activities however, but also by rethinking the very nature of a company's

Ensuring rigour throughout the hierarchy

Because the best quality offsets have strict criteria in place to provide assurance that the associated emissions reductions are genuine, offsetting can actually provide a degree of rigour that is not always in place with other reduction options: the purchasing of 'green energy' is fraught with concerns about double-counting in markets where the environmental attributes of the energy can be sold separately (as 'green tags' or 'renewable energy certificates'), for example. And, in countries where power companies face legal obligations to generate electricity from renewable sources, questions can be raised about the environmental benefit of purchasing that electricity.

Apparently successful efforts to *reduce* or *avoid* emissions might not necessarily have a positive impact on the climate either. A company could significantly reduce its emissions baseline by selling an inefficient factory, for example. Yet, assuming that the factory remains in operation under new owners, the climate benefit of doing so is zero – it may even be negative depending on the new

owner's attitude towards environmental responsibility. The outsourcing of production raises similar concerns.

A number of companies, suspicious of the environmental benefits – or the public perception – of offsetting, have decided to invest only in 'internal' emissions reductions, with one or two actually calculating the cost of offsetting and then investing an equivalent sum in internal reductions. If such internal investments do realise significant emissions reductions, then they are to be supported, but determining whether or not this is the case – and whether or not this represents money well spent – is often very difficult. And, of course, companies that have not made claims of neutrality find it much easier to dismiss offsetting than those that have – for the simple reason that they do not have to get their net emissions down to zero.

business model to remove carbon-intensive activities. The phasing out of a company's most carbon-intensive processes or product lines would represent an avoidance technique for a company seeking to demonstrate real climate leadership, for example.

The next step in the hierarchy calls for companies to *reduce* their emissions by becoming as energy-efficient as possible. A myriad of examples exist of companies reducing emissions through process and operational efficiency and realising financial savings at the same time – with companies as varied as BP, 3M, and Wal-Mart having celebrated successes on both fronts.

This is followed by the *replacement* of high-carbon energy sources with low- and/or zero-carbon ones. There are numerous examples of organisations taking this route – many companies simply purchase green energy from the grid (or buy green energy certificates) but, as noted in the previous text box, this approach can raise concerns about additionality and double-counting. While the best green tariffs offer guarantees to prevent this, a number of companies have sought to ensure additionality by generating renewable energy onsite. Timberland's distribution centre in Ontario, California, generates power from a 400 kW photovoltaic array and Nike claims to be the first company of its size in Belgium to operate solely on on-site renewable energy.

Many companies have also begun using combined-heat-and-power (CHP) technology to capture heat from on-site electricity generation to produce steam or more electricity.

MARKS & SPENCER

Climate change is one of the 'Five Pillars' in Plan A – Marks & Spencer's five-year, 100-point 'eco' plan to tackle "some of the biggest challenges facing our business and our world." As part of this plan, Marks & Spencer has a goal to make its UK & Irish operations carbon neutral by 2012. The company also identifies developing "plans to reduce the carbon footprint of our supply chains; and to continue finding ways to engage our customers in tackling climate change" as main challenges for 2008.

Marks & Spencer has developed a carbon footprint of its entire food business. This quantifies the emissions generated by the production of raw materials, manufacturing, transport, sale, use and final disposal of the food the company sells. The company has announced it will set targets to reduce this footprint – and has committed to doubling regional food sourcing, and offsetting the CO2 emissions from air-freighted food within 12 months.

To meet its specific carbon neutral goal, the company has prioritised reducing its energy consumption and increasing its use of renewable energy, and states it will only use offsetting as a "last resort." In the last four years, the company has reduced CO2 emissions from its UK and Irish stores by 30 percent per square foot. It has also reduced emissions from its lorries by 25 percent, despite opening 130 new stores.

Marks & Spencer has goals to achieve a 20 percent improvement in fuel efficiency and in energy use in its UK warehouses; to reduce the amount of energy used in UK and Irish stores by a further 25 percent; and to buy or generate 100 percent 'green' electricity for its stores, offices and distribution centres. The company also plans to open a model 'green' clothing factory.

As well as tackling its supply chain emissions, Marks & Spencer states its intent to help its customers reduce their emissions. It has committed to developing low carbon products and encourages customers to wash clothing at 30°C by printing the message "Think Climate – Wash at 30°C" on the garment care labels of its clothing.

Neutrality strategies in practice

Most of the companies that have made claims of neutrality have embraced the concept of a carbon management hierarchy. However, while most companies state their support for the hierarchy in broad terms, few provide specific detail on the emissions reductions that have been – or will be – achieved via the different levels. Companies tend to be least specific when discussing the role that offsetting will play – typically stating that offsetting will be used to address emissions that cannot otherwise be eliminated. Marks & Spencer (M&S) states that it is “only using offsetting as a last resort,” and News Corp states that it plans “to become carbon neutral by 2010 by offsetting emissions we can’t avoid.”

Such ambition is admirable, although it remains unclear how companies are defining ‘unavoidable’ emissions. Indeed, early in 2008, M&S was taken to task in the British media for having a corporate plane that is sometimes used for travel within the EU. M&S stated that the aircraft was only being used for “essential travel” – but their definition of ‘essential’ was clearly questioned by some. This reminds us, once again, of the importance of transparency if declarations of neutrality are going to withstand the public and stakeholder scrutiny that such claims of leadership demand.

‘Unavoidable’ emissions

The debate about which emissions are essential or unavoidable cuts to the heart of many criticisms of carbon neutrality – and of the appropriateness of offsetting as a vehicle to reach neutrality. Critics would argue that offsetting enables fundamentally unsustainable economic activity to acquire a veneer of sustainability. And for some companies the concerns are more fundamental than whether corporate flying is justifiable or not.

Are luxury brands – often with higher relative carbon intensity than equivalent goods or services – justified in claiming neutrality, for example? Silverjet, a dedicated business class airline, claimed to be the first carbon neutral airline in 2006 (a claim they have since dropped). And NetJets, a private jet travel company, states that it will be “100 percent carbon neutral by 2012.” Yet business-class, not to mention private-jet, travel is inherently less efficient than economy-class. Should this be factored into any judgement on the credibility of the claim?

TIMBERLAND

Timberland has practiced a portfolio approach to reducing GHG emissions for years, adopting the avoid, reduce, replace, and then offset approach, with a particular focus on renewable energy production and purchasing of green electricity, as well as recycling and using recycled materials.

Timberland is targeting a 50 percent reduction of GHG emissions as the key to becoming carbon neutral by 2010. It has established a clear boundary for neutrality including Timberland owned and operated facilities.

The company has completed a cradle-to-grave inventory, using the World Resources Institute (WRI) protocol for measuring GHG emissions, covering its highest energy use and GHG emissions from processing raw materials for the manufacture of shoes. Timberland has also verified its GHG emissions through a third party.

In addition to thorough stakeholder outreach and education, Timberland is known for public education efforts around climate action and other environmental and social justice issues.

When there are clearly lower carbon alternatives available, a claim of carbon neutrality will inevitably be questioned by stakeholders. And a claim from an inefficient company – one with lower-than-average energy efficiency, or higher-than-average relative emissions, within its sector – would engender similar suspicion. However, it would be counterproductive to insist that only those companies that can demonstrate best-in-sector emissions relative to their peers can claim carbon neutrality. If neutrality becomes the exclusive claim of a small number of companies that are already recognised as leaders then it risks becoming irrelevant. Conversely, it's a big claim that demands an appropriate degree of effort. And for it to resonate with a sceptical public, companies that have embraced the concept will need to demonstrate how they will achieve best-in-sector performance over time.

Even this might not be sufficient for certain activities and products. Alongside private jet travel, a number of other products are often denounced by environmentalists as 'fundamentally unsustainable'. Such judgements are inherently subjective – one person's indulgence is, after all, another's necessity – but it seems unlikely that carbon-intensive activities such as Formula 1 motor racing can ever credibly claim neutrality,¹¹ or that emissions from products such as patio heaters can legitimately be neutralised.

Carbon neutrality is not for all

It is perfectly possible for such companies to measure their emissions, set a transparent boundary, buy offsets and claim 'carbon neutrality' in a manner that might be deemed 'technically correct.' But it is unlikely that such claims will ever *feel* right. To draw a legal analogy, they would meet the letter, but not the spirit, of the claim.

Neutrality is, therefore, not something that all companies should pursue. It's a contentious term, and just as some climate leaders have explicitly chosen not to make claims given the complexity of the issues involved, companies with

carbon-intensive business models should think twice before embracing the term. This is not to say that they should ignore the issue of climate change (far from it – such companies face the greatest risk from the transition to a low-carbon economy, and need to be rethinking their business strategy accordingly) but rather that the terminology of neutrality doesn't fit.

Claims that impressed us.

Interface's longstanding leadership on climate change has informed – and is enhanced by – its approach to neutrality. By accepting responsibility for – and neutralising – its entire carbon footprint, the company has set a powerful precedent for boundary-setting.

Ben & Jerry's Europe and **Fiji Water** have embraced similarly expansive boundaries, and therefore also stand out from the pack. But Ben & Jerry's Europe is a corporate division, and Fiji Water's claim raises some subjective concerns, as discussed below.

Adnams, in making its claim around a specific product, has also tackled all of the emissions in the product life-cycle. And (even if such emissions qualify as Scope 1) both **Eurostar** and **Radio Taxis** have challenged the perceived model of customers being responsible for their transportation emissions by taking responsibility for the emissions that arise from the use of their vehicles.

While most of the companies claiming neutrality have embraced the concept of a carbon management hierarchy in broad terms, few have clearly stated goals to actually reduce their carbon footprint. Exceptions include **Barclays**, **Ben & Jerry's Europe**, **BSkyB**, **Manchester Airport**, and **News Corporation** – all of which have specific targets to reduce their absolute emissions (as defined by the respective boundaries applied). **Eurostar**, **Dell** and **Fiji Water** have specific targets to reduce their carbon intensity (the measure of CO₂ per unit of gross income), but have not committed to an absolute reduction in their emissions baselines.

Even fewer companies outline exactly how they expect their reduction targets to be achieved. Quantified targets for the emissions reductions that will be achieved through specific avoidance, efficiency and/or renewable energy projects are rare. **Marks & Spencer** does better than most here, having targets to improve energy efficiency in its stores and distribution centres; for the purchase of renewable energy; and for the use of 'sustainably-sourced' biodiesel in its fleet.

Claims that distressed us.

Avis Europe's website only provides vague detail on the company's neutralisation efforts. The boundary applied is not clearly defined, there is no quantitative breakdown of its emissions, and little detail is provided on the company's strategy for neutralisation. Given that Avis Europe is a certified CarbonNeutral® company, it should have such information on file – but a visitor to the company's website is not given sufficient information to evaluate its claim.

Fiji Water is one of the most interesting companies in our matrix. In terms of meeting the technical criteria that we recommend, it does very well: its boundary includes the company's full carbon footprint; it has embraced a strategy that prioritises the reduction of this footprint (and which includes some specific targets for internal emissions reductions); and the FijiGreen.com website is informative and accessible. But is the entire idea of shipping bottled water around the world so inherently unsustainable to make its claim meaningless? Fiji Water perhaps represents an example of a claim that meets the letter, but not the spirit, of neutrality.

At the opposite end of the transparency spectrum, neither **Google** nor **Yakima** even disclose the quantity of emissions that have been 'neutralised'.

Manchester Airport's claim raises concerns about boundary setting and the significance of the emissions captured within. Although it has made a qualified claim, and been clear about the boundaries it has applied, its Environmental Plan shows that emissions from staff and passenger journeys to and from the airport outweigh those captured in the company's neutrality boundary. And the emissions resulting from the flights into and out of the airport would dwarf all the emissions tallied by the company. No matter how thorough the company is in neutralising the emissions that fall within its boundary, its claim jars somewhat as a result of the omission of flight-related emissions.

Pearson's website is uninformative, and its inconsistent use of language to describe its claim causes further confusion.

Shaklee's website also provides almost no useful information on its neutralisation efforts – and its claim to have “net zero impact on the environment” as a result of its Climate Neutral certification pushes the bounds of credibility to the extreme.

III. Recommendations

AS THIS REPORT SHOWS, the concept of carbon neutrality is surrounded by controversy. Nevertheless, Clean Air-Cool Planet and Forum for the Future are convinced that it remains a worthwhile goal for companies that seek to demonstrate climate leadership. The ambition to have zero net impact on climate is a powerful one, and a claim of neutrality has the potential to drive ongoing change within an organisation, while also promoting shared responsibility, with suppliers and customers, for emissions beyond the organisation's immediate control.

The many questions raised throughout this report, and the variety of approaches adopted by different companies, make it difficult to set out definitive guidance as to what should lie behind a claim of neutrality. Nevertheless, we believe that:

True corporate carbon neutrality means there is no net increase of atmospheric greenhouse gases from the existence of the company – or from a clearly-defined part of the company that accounts for a significant portion of the company's overall climate impact. If a company makes a claim regarding a specific product, then there should be no net increase of atmospheric greenhouse gases from the existence of that product.

The process for achieving neutrality should begin with an inventory of the company's entire carbon footprint (or a full life-cycle analysis of a particular product) and the setting of a clear boundary. The company should then embrace a neutralisation strategy that prioritises the avoidance of emissions, their reduction through energy efficiency, the

replacement of high-carbon energy sources with low- or zero-carbon alternatives, and then the use of high-quality carbon offsets.

Every claim must be backed up by easily accessible, clearly communicated information regarding the company's full carbon footprint; the boundaries it has applied; and the strategy that has been embraced to achieve neutrality.

We therefore offer the following advice to companies that have made claims – or who are considering making claims.

1) **Embrace a stretching boundary**

The key tension surrounding any claim of neutrality remains reconciling the absolute nature of the claim – implying zero net impact – with a practical boundary-setting process. In the spirit of the term, we recommend that companies accept that claiming neutrality implies some responsibility to consider and address broader value-chain emissions.

Any argument for a strict adherence to Scope 1 and 2 emissions is challenged by the established practice of including employee travel. And leading companies such as Interface have shown that it is possible to stretch established boundaries within the context of a claim of neutrality. This is not to suggest that companies accept legal responsibility for the direct emissions of others, but rather that indirect emissions be explicitly considered as part of the neutrality process.

2) Demonstrate a broad understanding of your entire carbon footprint prior to making *any* claim of neutrality – and ensure that your claim covers a relatively significant set of emissions

A transparent understanding of the company's full carbon footprint is essential as a prerequisite for *any* claim of neutrality, regardless of what boundary is set. This does not mean that companies should chase every gramme of carbon in their value-chain, but rather that they are able to broadly disclose and discuss where their biggest indirect emissions lie.

Questions remain about the appropriateness of a company making a limited claim of neutrality (i.e., regarding its 'manufacturing operations') when the associated emissions are relatively trivial compared to other emissions in its value-chain. If companies claim neutrality for relatively insignificant sets of emissions, the concept risks losing its legitimacy.

3) Exhibit caution in making *blanket* corporate-wide claims of neutrality

Any claim of neutrality brings with it some risk, but unqualified claims are riskier than others. Unless the company in question can clearly demonstrate a full understanding and subsequent 'neutralisation' of its entire climate footprint, *blanket* claims are likely to mislead and should not be made.

4) Consider whether a claim of neutrality will resonate with your stakeholders

Some companies will always find it difficult to convince stakeholders of the

sincerity of any neutrality claim – either because the use of their product or service leads to emissions that dwarf their direct emissions, or because they are seen as fundamentally unsustainable. For those companies, we recommend that they avoid the use of the language of carbon neutrality, and instead seek to show climate change leadership in other ways.

5) Use the carbon management hierarchy to inform your neutralisation strategy

The strategy used to achieve neutrality should be informed by a hierarchy that prioritises the *avoidance* of emissions, their *reduction* through energy efficiency, the *replacement* of high-carbon energy sources with low- or zero-carbon alternatives, and then the use of high-quality carbon *offsets*. Offsetting will play an important role in any neutrality strategy, but a claim of neutrality will ultimately be judged on the company in question being able to demonstrate a declining emissions baseline.

6) Be absolutely transparent

Given the complexity of the issues and assumptions surrounding any claim of neutrality, absolute transparency regarding all aspects of the claim is essential. Every claim should not only be backed up by easily accessible information regarding the company's full carbon footprint and the boundaries it has applied, but also the strategy that has been embraced to achieve neutrality.

Clear targets for avoidance, reduction, replacement and offsetting should be in

place – with detail provided on the opportunities for efficiency improvements, the type of offsetting projects used, and the nature of any green energy purchased. The company should also disclose any broader carbon management activities, providing detail on how it is educating and engaging with its employees, suppliers and customers – and, indeed with government and civil society more broadly.

emissions develop – we can expect the rules of the game for claims of neutrality to change. Companies should embrace this challenge and use any commitment, or aspiration, to neutrality to drive ongoing change. A commitment to neutrality must therefore be a long-term commitment.

7) Exhibit and sustain broad leadership on climate change

While it would be technically feasible for a company to achieve neutrality through a strategy of 100 percent offsetting, or through the purchase of a sufficient number of renewable energy certificates, such actions do not represent the spirit of leadership embedded in the term. True climate leadership is indicated by companies rethinking their business strategy; engaging deeply with – and educating – their suppliers, customers and peers; and developing products and services that will thrive in, and help bring about, a low-carbon economy. While linking such actions directly to a claim of neutrality remains problematic, any company that wishes to position itself as a leader on climate change needs to embrace them.

8) Treat neutrality as a long-term commitment – and an ongoing, dynamic challenge

As stakeholder interest in full life-cycle emissions grows – and methodologies for measuring and allocating responsibility for such

Matrix of Corporate Claims of Neutrality

The following matrix explores a number of the corporate neutrality claims that have been made to date. It is not an exhaustive list of the companies that have embraced the concept of neutrality, but is intended to illustrate the variety of approaches that have been taken.

Given the importance of transparency to the credibility of any claim, we have evaluated companies solely on the basis of information that was available on their websites, or in their Sustainability Reports. The matrix itself highlights the type of information that is made available in these fora, alongside the other two criteria that we feel are of the most importance in judging any claim: the boundaries applied by each company; and the strategy employed to 'neutralise' emissions.

We have highlighted some examples of best practice in blue within the matrix, and flagged some areas of concern in red.

Note:

Blue/italic font = positive

Red/bold font = negative

COMPANY	Adnams www.adnams.co.uk	Avis Europe www.avis-europe.com
SECTOR	Food & Beverage	Transportation
CLAIM MADE	“Our eventual aim is to become carbon neutral... Our latest project is East Green – the UK’s first carbon neutral beer.”	“Our European corporate operations and some of our licensees are CarbonNeutral®.”
BOUNDARY APPLIED	<i>CO₂ emissions from:</i> <ul style="list-style-type: none"> • <i>“Barley production</i> • <i>Malting process</i> • <i>Brewing process</i> • <i>Transport</i> • <i>Bottle process</i> • <i>Bottle manufacture”</i> 	<p>Unclear. The company’s website states its total emissions from “corporately-owned operations,” but no more detail on what this incorporates is provided.</p> <p>Although not directly linked to the company’s commitment to neutrality, Avis states that it will, “continue to introduce less polluting vehicles onto our fleet,” and that it will work with its customers to help them “reduce their carbon footprint in future years.”</p>
NEUTRALISATION STRATEGY	“From investment in our eco-distribution centre and energy efficient brewhouse, through to our lightweight bottle and Environmental Action Group we believe that Adnams is at the forefront of the environmental agenda... We will continue to push ourselves and explore opportunities to further reduce our carbon footprint... Only when we have made all the practical changes possible will we offset the remaining carbon. And only then will we use Gold Standard accredited schemes.”	<p>Beyond offsetting, this is unclear.</p> <p>The company’s website lists “a series of steps” taken in 2007 to improve environmental performance of its corporate operations. These include:</p> <ul style="list-style-type: none"> • “increasing the use of videoconferencing between our Group headquarters in Bracknell and our other country corporate head offices; and • making better use of resources and informing all staff aware of what they can do to reduce energy use.” <p>No further detail of the company’s neutralisation strategy is provided.</p>
TRANSPARENCY	<p>Adnam’s website provides a quantitative breakdown of the life-cycle emissions associated with East Green – <i>and shows how this has changed from pre-2006 to post-2006.</i></p> <p>No specific emissions reduction targets are revealed.</p> <p>The website states that Adnam’s will only use Gold Standard accredited offsets, but provides no detail on the specific projects used.</p>	<p>Vague. Avis Europe’s website states its total emissions, but provides no quantitative breakdown of the emissions that fall within its boundary – and no quantification of its broader footprint (although the company does recognise that emissions arise from its fleet, and enables its customers to offset ‘their’ emissions).</p> <p>No specific emissions reduction targets are revealed.</p> <p>The website provides a broad overview of the type of offsets purchased, and lists the specific projects used (although does not quantify the relative contribution of each).</p>

COMPANY	Barclays www.barclays.com Financial Services	Ben & Jerry's Europe www.benjerry.co.uk Food & Beverage (Wholly-owned subsidiary of Unilever)
SECTOR		
CLAIM MADE	<p>“Through our climate action strategy, we achieved carbon neutral status in our UK and European operations for 2007... We aim to make our global operations carbon neutral by 2009.”</p>	<p>“In April 2007 we went Climate Neutral from cow to cone on all our flavours produced in Europe.”</p>
BOUNDARY APPLIED	<p>CO₂ emissions from:</p> <ul style="list-style-type: none"> • “the consumption of electricity, gas and passenger air travel due to UK and European operations; • car and train travel due to UK only operations.” <p>Although not directly linked to the company’s commitment to neutrality, Barclay’s broader Climate Change Strategy identifies as key elements:</p> <ul style="list-style-type: none"> • “managing our supply chain to seek to reduce their emissions; • developing low carbon products and services; • seeking to influence the carbon and environmental impacts of our customers; • providing carbon cap and trade services which support the move to lower carbon economies by using market-based mechanisms.” 	<p><i>“the company has analysed its climate footprint, looking at the main areas such as dairy farming; ingredients; factory production; packaging; transport; and freezers with a range of reduction projects across each part of the supply chain.”</i></p>
NEUTRALISATION STRATEGY	<p>“Our priority has always been, and will continue to be, reducing emissions in the first place. We only offset what is left over after energy efficiency measures and the purchase of green energy.”</p> <p><i>Barclay’s has specific targets to:</i></p> <ul style="list-style-type: none"> • “Reduce total emissions by 20 percent by 2010 against a 2000 baseline; • Reduce energy consumption from offices and data centres per employee by 20 percent by 2010 against a 2005 baseline.” <p>And, during 2007, Barclay’s “moved to a renewable tariff to cover approximately 50 percent of our total electricity use in the UK.”</p>	<p>“The methodology uses a 3 step approach focused on maximising energy efficiency, moving to renewable energy sources and offsets of unavoidable climate impact by investing in Gold Standard Verified Emission Reduction certificates (VERs) for renewable energy projects such as wind farms, bio-gas or solar projects in the developing world.”</p> <p>“Having already reduced our climate impact by 10 percent Ben & Jerry’s is committing 2.4m over 5 years to reduce it by a further 10 percent.”</p>
TRANSPARENCY	<p>The Barclay’s Sustainability Review provides a quantitative breakdown of the emissions that fall within its boundary. The company’s Climate Change Strategy addresses aspects of its broader footprint, but this is not quantified.</p> <p>The company’s website reveals specific targets for energy efficiency.</p> <p><i>Barclay’s Protocol for Carbon Accounting and Offsetting can be downloaded from the company’s website.</i> It outlines how Barclays calculates its UK and European CO₂ emissions, and details the company’s offsetting strategy (although it does not list the specific projects used).</p>	<p><i>Ben and Jerry’s UK website quantifies, and provides a breakdown (in percentage terms) of, the company’s total footprint.</i></p> <p><i>The company has a goal to reduce its footprint by 10 percent over 5 years, although its website only provides an overview of the type of projects it has planned to achieve this goal.</i></p> <p>No detail is provided on the specific offsetting projects used, but the company states it will only use Gold Standard VERs.</p>

<p>COMPANY</p>	<p>British Land Co. www.britishland.com</p>	<p>BSkyB www.sky.com</p>
<p>SECTOR</p>	<p>Real Estate</p>	<p>Media</p>
<p>CLAIM MADE</p>	<p>"We are working towards becoming carbon neutral from 2008/09."</p>	<p>"Sky became the world's first CarbonNeutral® media company in 2006."</p>
<p>BOUNDARY APPLIED</p>	<p>"Our commitment to become carbon neutral includes emissions from all our Greenhouse Gas Protocol Scope 1 and 2 activities. It covers the emissions associated with the energy use and refrigerant losses where we have operational control, which includes from space occupied by us and our subsidiaries; the common parts of all our managed multi-let buildings; the common parts of buildings in certain property funds where we have management responsibilities; and fuel use from company owned vehicles. It excludes the operations of any joint ventures and any buildings managed for third parties where we do not have an ownership interest... From 2020 we also plan to become carbon neutral across the occupier managed parts of our buildings."</p>	<p>"Sky's carbon footprint has been established by measuring the following CO₂ emissions:</p> <ul style="list-style-type: none"> • Scope 1 – from its premises (gas, fuel, oil), and company owned vehicles (petrol, diesel, LPG); • Scope 2 – emissions from operational electricity consumption; • Scope 3 – emissions from employee business air travel." <p>Although not directly linked to the company's commitment to neutrality, BSKyB recognises that "the carbon we're responsible for extends beyond the emissions we generate and therefore the emissions we include in our footprint... We've started to identify the key areas of these indirect emissions and will continue to work with our suppliers and partners to identify, report and reduce these."</p>
<p>NEUTRALISATION STRATEGY</p>	<p>"We are working towards becoming carbon neutral by:</p> <ul style="list-style-type: none"> • Continuing to reduce energy use and associated greenhouse gas emissions; • Increasing the use of renewable energy; • Offsetting." <p>The company's specific targets for 2008/09 include the following:</p> <ul style="list-style-type: none"> • "Achieve 15 percent reduction in energy use on a like for like basis over 2004/05 baseline; • Procure 80 percent of all electricity from renewable or Climate Change Levy exempt sources; • Offset carbon emissions within the British Land direct carbon footprint using appropriately certified scheme." <p>British Land has a further goal to "reduce energy use at our properties by 20 percent by 2012."</p>	<p>"We followed these three steps to become CarbonNeutral®:</p> <p>Measure – We calculated our carbon footprint. Reduce – We then worked to reduce those emissions... We took steps to improve energy efficiency and to reduce emissions from transport. We also secured renewable electricity for our main sites across the UK. Offset – Finally, we neutralised or offset the remaining emissions by supporting renewable energy projects."</p> <p><i>The company has a specific target to reduce its CO₂ emissions by 10 percent (from 2003 baseline) by 2010.</i></p>
<p>TRANSPARENCY</p>	<p>British Land's CR Report quantifies "the majority of emissions from our Scope 1 and 2 activities." The company's total footprint is not quantified.</p> <p>The company's website reveals specific targets for energy efficiency and renewable energy</p> <p>No detail is provided on the company's planned offsetting strategy.</p>	<p>A 'CarbonNeutral® Sky' document can be downloaded from the company's website. It summarises the company's neutralisation strategy, and details the types of offsets that will be used. Separate documents provide detail on the specific offset projects used (although do not quantify the relative contribution of each).</p> <p>BSkyB's website quantifies the emissions that fall within its boundary. There is also some discussion of the company's broader footprint, although this is not quantified.</p> <p>The company's website reveals a specific target for energy efficiency.</p>

<p>COMPANY</p>	<p>Dell Computer www.dell.com</p>	<p>Eurostar www.eurostar.com</p>
<p>SECTOR</p>	<p>Manufacturing</p>	<p>Transportation</p>
<p>CLAIM MADE</p>	<p>“The first major computer manufacturer to commit to neutralising the carbon impact of its worldwide operations.”</p>	<p>“Since 14 November 2007, all Eurostar journeys are now carbon neutral at no extra cost to our travellers.”</p>
<p>BOUNDARY APPLIED</p>	<p>“Dell’s commitment to carbon neutrality in its operations primarily involves emissions impacts created by electricity use and facility heating and cooling. The company will also offset the emissions impact of employee business travel.”</p> <p>Although not directly linked to the company’s commitment to neutrality, in June 2007, “Dell announced the requirement for its major suppliers to identify and report their emissions impacts. The move is the first step in a long-term strategy to work with suppliers to minimise emissions from supply-chain operations, one of Dell’s indirect climate impacts.”</p> <p>Dell has also “committed to designing energy-efficient products... Minimising the energy needed to power its own products addresses Dell’s primary indirect climate impact.”</p>	<ul style="list-style-type: none"> • Electricity used to drive the train; • Energy used to heat and light the cars; • Any other auxiliary power required; • Emissions from onboard air conditioning and refrigeration units.
<p>NEUTRALISATION STRATEGY</p>	<p>“Carbon neutrality involves taking inventory of an organisation’s total greenhouse gas emissions, and then implementing strategies to reduce and eliminate those emissions. To meet its carbon-neutral commitment for Dell operations, the company will pursue an aggressive strategy of driving additional energy-efficiencies, maximising purchases of renewable power and offsetting remaining impacts”</p> <p><i>Dell has a specific goal to reduce its carbon intensity (the ratio between CO₂ emissions and revenue dollars) an additional 15 percent by 2012.</i></p>	<p>“Eurostar is looking at ways in which it can reduce the emissions of CO₂ and other greenhouse gases for its point to point traveller journeys. Where we cannot reduce these emissions we are purchasing carbon credits equal to the quantity of carbon emissions generated as a result of using energy to power the trains.”</p> <p><i>The company has made a “commitment to reduce our carbon dioxide emissions by 25 percent per traveller journey by 2012.”</i></p>
<p>TRANSPARENCY</p>	<p>Dell’s 2006 Sustainability Report provides a quantitative breakdown of the emissions that fall within its boundary and provides detailed information on the company’s broader carbon management strategy. This report predates the company’s commitment to neutrality, however, and information on Dell’s neutralisation strategy is therefore somewhat scattered throughout its website.</p> <p>While much of the company’s climate efforts are geared to reducing indirect emissions, the company’s total footprint is not quantified – although the company does quantify the carbon savings associated with its more efficient products.</p> <p>The company’s Sustainability report outlines a specific target for energy efficiency.</p> <p>The press release on Dell’s commitment to neutrality states that the company “is working with stakeholders to shape its offset strategy, which will help ensure that offsets are invested in projects that can be monitored and verified. Projects will be evaluated for their long-term viability and assurance that the carbon savings are real.”</p>	<p><i>Eurostar’s website provides a good discussion of methodology used to calculate the emissions associated with each journey</i> – although the only actual quantitative data provided is for the London-Paris route.</p> <p>It also outlines a specific target for energy efficiency.</p> <p>Eurostar’s website outlines it’s offsetting strategy, and highlights the specific projects used (although does not quantify the relative contribution of each).</p>

<p>COMPANY</p>	<p>Fiji Water www.fijiwater.com</p>	<p>Google www.google.com</p>
<p>SECTOR</p>	<p>Food & Beverage</p>	<p>Communications</p>
<p>CLAIM MADE</p>	<p>“We are reducing the amount of carbon in the atmosphere by cutting emissions across our products’ entire life cycle, and we are investing in forest carbon and renewable energy projects to take us beyond carbon neutral, to carbon negative.”</p>	<p>“Google has committed to being carbon-neutral for 2007 and beyond.”</p>
<p>BOUNDARY APPLIED</p>	<p><i>“We counted emissions for everything it takes to get FIJI Water into our consumers’ hands – starting at production of our raw materials and all the way through consumption.”</i></p>	<p>Unclear. No direct statement of boundary applied, although the company’s discussion of its carbon footprint specifically mentions its data centres and offices.</p>
<p>NEUTRALISATION STRATEGY</p>	<ul style="list-style-type: none"> • <i>“We will continue to reduce CO₂ emissions across the entire life cycle of our products, and by 2010 our products will require 25 percent fewer emissions to produce and deliver.</i> • By 2010, 50 percent of our energy will come from renewable sources like wind to power our bottling facility in Fiji and bio-diesel to replace traditional fuels used in transportation; • We are investing in forest carbon (e.g. reforestation) and renewable energy projects that prevent the release of carbon into the atmosphere; these add up to at least 120 percent of our remaining product life-cycle emissions.” 	<p>“We’re taking a three-step approach.</p> <ul style="list-style-type: none"> • First, we’re increasing the energy efficiency of our own operations; • Second, we’re actively pursuing the use and creation of clean and renewable sources of electricity; • Third, for the emissions we can’t reduce directly at this time, we’re investing in projects that help offset carbon generated.”
<p>TRANSPARENCY</p>	<p><i>FijiGreen.com provides a quantitative breakdown of the company’s total footprint.</i></p> <p>It also reveals specific targets for energy efficiency and renewable energy.</p> <p>The website reveals Fiji Water’s broad offsetting strategy, but does not list – or quantify the relative contribution of – the specific projects used.</p>	<p>Vague. Google’s website does not disclose its total emissions, and provides no breakdown of the emissions that fall within its boundary.</p> <p>Planned initiatives for efficiency improvements are discussed on Google’s website, but no quantitative targets provided. Targets for new renewable energy infrastructure are in place, although the specific contribution that this will make to the company’s achievement of neutrality is unclear.</p> <p>Some detail is provided on the type of offset projects used (although the total quantity of offsets purchased – and the relative contribution of each project – is not revealed).</p>

<p>COMPANY</p>	<p>Green Mountain Energy www.greenmountainenergy.com</p>	<p>HSBC www.hsbc.com</p>
<p>SECTOR</p>	<p>Energy</p>	<p>Financial Services</p>
<p>CLAIM MADE</p>	<p>“100 percent carbon neutrality for our business operations through our membership in the EPA Climate Leaders programme.”</p> <p>The company has committed to remaining carbon neutral through 2010.</p>	<p>“In 2005, HSBC was the first major bank – and FTSE 100 company – to become carbon neutral.”</p>
<p>BOUNDARY APPLIED</p>	<p>“The sources of carbon dioxide that contribute to Green Mountain’s carbon footprint are natural gas use, electricity use, refrigerant use, corporate air travel, employee commuting, and other mobile sources like company vehicles.”</p>	<p>“HSBC’s operations produce carbon dioxide from the energy used to heat and cool our buildings and power our lighting and office equipment.</p> <p>Almost all of HSBC’s 315,000 employees work in branches, offices or data centres around the world where energy use and carbon dioxide production are measured and reported publicly through HSBC’s environmental reporting system.</p> <p>We also measure the distances travelled by employees for business purposes in order to estimate our carbon footprint from travel.”</p>
<p>NEUTRALISATION STRATEGY</p>	<p>“We estimate the CO₂ emissions from all of our key business activities and act to reduce or offset them. We pledge to offset 100 percent of our corporate emissions with green power purchases for the EPA Climate Leaders programme, a commitment we’ve made through 2010.”</p>	<p>“Being carbon neutral for HSBC is, first and foremost, about reducing our carbon footprint. There are four key steps we follow to be carbon neutral:</p> <ol style="list-style-type: none"> 1. Measure our carbon footprint; 2. Reduce energy consumption; 3. Buy green electricity; 4. Offset our remaining CO₂ emissions.” <p>“In 2005, we set three-year targets to reduce our energy consumption by 7 percent and our carbon dioxide emissions by 5 percent... In July 2007, HSBC committed to spend US\$90 million over the next five years to continue to reduce our carbon footprint.”</p>
<p>TRANSPARENCY</p>	<p>Green Mountain Energy’s 2007 Ceres Report provides a quantitative breakdown of the emissions that fall within its boundary. There is little discussion of any further indirect impacts (although the nature of Green Mountain’s Energy’s business means that its product-related impact on climate is likely to be positive.)</p> <p>No specific emissions reduction targets are revealed.</p> <p>The company sells offsets to customers and its Ceres Report provides detail on the type it sells. It is not clear what specific projects have been used to offset Green Mountain Energy’s emissions however.</p>	<p>A document summarising HSBC’s commitment to neutrality can be downloaded from its website. This provides a quantitative breakdown of the emissions that fall within its boundary. The company’s broader footprint is not quantified.</p> <p>This document also contains specific targets for energy efficiency (albeit 3-year targets set in 2005).</p> <p>And it outlines HSBC’s offsetting strategy, and highlights the specific projects used (although does not quantify the relative contribution of each).</p>

COMPANY	Interface Carpet www.interfaceinc.com	Manchester Airports Group www.manchesterairport.co.uk/
SECTOR	Manufacturing	Transportation
CLAIM MADE	<p>“Mission Zero is our promise to completely eliminate the negative impact our company may have on the environment by 2020.”</p> <p>Cool Carpet, Interface’s first carbon neutral product was launched in 1999.</p> <p>100 percent of North American InterfaceFLOR products carbon neutral as of 2007.</p>	<p>“We will be carbon neutral for energy use and vehicle fuel, across the site, by 2015.”</p> <p>“We will develop plans over the next few years to become carbon neutral for the products and services that we buy.”</p>
BOUNDARY APPLIED	<p>“‘Climate neutral’... means that any greenhouse gases which are emitted during the life-cycle of the product are offset, or balanced. By product life-cycle, we mean a true ‘cradle to grave’ approach, covering raw material acquisition, manufacturing, transport, use and maintenance and final disposal or recycling.”</p>	<ul style="list-style-type: none"> • Energy use – heating, cooling, lighting and mechanical systems; • Operational vehicles across the whole site.
NEUTRALISATION STRATEGY	<p>“Interface has two simple goals related to energy: decrease total energy usage, especially nonrenewable energy, and increase our use of renewable energy.” It:</p> <ul style="list-style-type: none"> • “is proceeding toward eliminating all its emissions into the ecosphere, striving to create factories with no smokestacks.” • “seeks to ensure that by 2020, all fuels and electricity to operate our manufacturing, sales and office facilities will be from renewable sources.” <p><i>Interface recognises that “90 percent of the emissions associated with the company’s products occur outside the Interface manufacturing process” and offsets these emissions.</i></p>	<p>“Our aim of carbon neutrality is based on the principles of reducing our need for energy in the first instance, then using that energy as efficiently as possible, moving to renewable energy sources and finally, off-setting any remaining emissions. We will also work with our Service Partners to reduce their CO₂ emissions.”</p> <p><i>Manchester Airport has specific targets to achieve:</i></p> <ul style="list-style-type: none"> • a 25 percent reduction in energy consumption on 2000 levels by 2015; • 100 percent renewable electricity by 2010.
TRANSPARENCY	<p><i>Interfacesustainability.com quantifies, and provides a breakdown – in percentage terms – of, the life-cycle emissions associated with carpet.</i></p> <p>It also reveals a specific target for renewable energy.</p> <p>The website outlines the company’s offsetting strategy, and lists specific projects used – although does not quantify the relative contribution of each.</p> <p>Information on Interface’s climate strategy is somewhat scattered throughout its websites. Both interfacesustainability.com and interfaceflor.eu contain pertinent information.</p>	<p>Manchester Airport’s Environment Plan provides a quantitative breakdown of the emissions that fall within its boundary.</p> <p>It also reveals specific targets for energy efficiency and renewable energy.</p> <p>No detail is provided on the company’s planned offsetting strategy.</p>

<p>COMPANY</p>	<p>Marks & Spencer www.marksandspencer.com</p>	<p>News Corporation www.newscorp.com</p>
<p>SECTOR</p>	<p>Retail</p>	<p>Media</p>
<p>CLAIM MADE</p>	<p>“By 2012, we aim to become carbon neutral.”</p>	<p>“We will become carbon neutral by 2010.”</p>
<p>BOUNDARY APPLIED</p>	<p>“All UK and Republic of Ireland operations (stores, offices, warehouses, business travel and logistics).”</p> <p>Although not directly linked to the company’s commitment to neutrality, Marks & Spencer have developed a “carbon footprint of our entire food business.” This quantifies the CO₂e generated by “the production of raw materials, manufacturing, transport, sale, use and final disposal of the food we sell.” The company identifies developing “plans to reduce the carbon footprint of our supply chains; and to continue finding ways to engage our customers in tackling climate change” as main challenges for 2008.</p>	<p>“We included in our carbon footprint:</p> <ul style="list-style-type: none"> • All fuels used directly by our companies; • All electricity used in our facilities; • The impacts of business air travel.” <p>Although not directly linked to the company’s commitment to neutrality, News Corp has made a commitment to engage its employees, its business partners and its audiences on climate change.</p>
<p>NEUTRALISATION STRATEGY</p>	<p>“Our goal is to become carbon neutral by 2012. We’re doing this by both reducing our energy consumption and increasing our use of renewable energy, only using offsetting as a last resort.”</p> <p><i>Strategy includes specific goals such as:</i></p> <ul style="list-style-type: none"> • “Reducing the amount of energy we use in our stores by 25 percent per square foot of floor space; • Sourcing or generating 100 percent “green” electricity for M&S stores, offices and distribution centres; • Having 20 percent on-site energy generation from renewables in all new builds where practicable; • Conducting trials and move towards the use of 50 percent bio-diesel in our lorries as sustainable sources become available.” 	<p>“We want to make energy efficiency part of our everyday operations and switch to renewable sources of energy wherever economically feasible.</p> <p>We intend to reduce our use of energy and find energy from renewable sources – <i>enough to decrease our carbon footprint in 2012 by 10 percent compared with 2006.</i></p> <p>We plan to become carbon neutral by 2010 by offsetting emissions we can’t avoid.”</p>
<p>TRANSPARENCY</p>	<p>Marks & Spencer’s “Plan A” website states its total emissions, but provides no quantitative breakdown of the emissions that fall within its boundary.</p> <p><i>The website also quantifies the total footprint of the company’s “entire food business” – but provides no breakdown of the emissions that comprise this total.</i></p> <p><i>The website reveals specific targets for energy efficiency and renewable energy – and many others initiatives to reduce emissions.</i></p> <p>No detail is provided on the company’s offsetting strategy</p>	<p>News Corporation’s website provides a quantitative breakdown of the emissions that fall within its boundary. The company recognises it has indirect emissions beyond those captured in its inventory – and discusses efforts to engage its employees, business partners and audiences – but does not quantify them.</p> <p>The company has a specific target to reduce its footprint by 2012.</p> <p>The website outlines the company’s offsetting strategy, and lists specific projects used – although does not quantify the relative contribution of each.</p>

COMPANY	Nike www.nike.com	Pearson www.pearson.com
SECTOR	Retail	Media
CLAIM MADE	Nike has “a target to be climate-neutral in Nike-owned facilities and business travel by 2011. By 2015, we aim to be climate neutral in all Nike Inc. facilities.”	To become “climate neutral across all of our operations by the end of 2009.”
BOUNDARY APPLIED	<p>Energy use in Nike-owned facilities (offices, distribution centres, retail) and business travel by 2011. Will expand to include energy use in all Nike Inc. facilities by 2015.</p> <p>Outside of its neutrality commitments, <i>Nike has a goal to deliver a 30 percent absolute reduction in its inbounds logistics footprint by 2020</i> (from a 2003 baseline). The company is also exploring ways to tackle emissions from footwear manufacturing (which it calculates is responsible for 35 percent of its overall footprint).</p>	<p>Emissions data on website implies that the company has included Scope 1 and 2 emissions, plus employee air travel, but this is not explicitly stated – and is confused by inconsistent use of language to describe claim:</p> <ul style="list-style-type: none"> • “climate neutral across all of our operations by the end of 2009” (2007 Annual Report); • “carbon neutral company” (2007 Annual Report); • “climate neutral global business” (2007 CSR Report).
NEUTRALISATION STRATEGY	<p>Nike’s CR Report provides good detail on emissions reductions already achieved (covering avoidance, efficiency measures, and renewable energy) and outlines the company’s broad approach to CO₂ reduction across its supply chain. This includes the following commitments:</p> <ul style="list-style-type: none"> • We will increase energy efficiency projects in owned facilities and operations; • We will increase green power purchases; • We will explore the carbon trading market; • Working with our footwear contract manufacturing partners we will establish stretch targets for reducing emissions. We anticipate achieving reductions first through energy efficiency projects and subsequently through process or product design changes and ultimately through deployment of renewable energy sources where feasible. <p>However, little detail is provided regarding the company’s specific neutralisation strategy.</p>	<p>Little detail available, although company states that it is in the process of mapping its path towards neutrality.</p>
TRANSPARENCY	<p><i>Nike’s CR Report quantifies, and provides a breakdown (in percentage terms) of, the company’s total footprint.</i></p> <p>It provides no specific detail on the company’s neutralisation strategy – and no discussion of the role that offsetting will play.</p>	<p>Pearson’s 2006 Environment Report provides a quantitative breakdown of the emissions that fall within its boundary (although this information is difficult to locate – and not explicitly linked to the claim of neutrality).</p> <p>The company also identifies (although does not quantify) its indirect environmental impacts and recognises that these are more significant than its direct impacts.</p> <p>Pearson’s website provides no detail on the company’s neutralisation strategy.</p>

<p>COMPANY</p>	<p>Radio Taxis Group LTD www.radiotaxis.net</p>	<p>Reckitt Benckiser www.reckittbenckiser.com</p>
<p>SECTOR</p>	<p>Transportation</p>	<p>Manufacturing</p>
<p>CLAIM MADE</p>	<p>“The world’s first CarbonNeutral® Taxi Company.”</p>	<p>The company has a vision “to make the more than 8 billion products we will produce globally during 2006 and 2007 ‘carbon neutral’.”</p>
<p>BOUNDARY APPLIED</p>	<p><i>“Radio Taxis Group is the first major transport business to commit to cover not only the emissions produced by offices and operations – but also to take responsibility for all emissions created by the 3.8 million passengers who order, or hail, one of our cabs every year.”</i></p>	<p>The company’s Sustainability Report states that “all of the products currently manufactured at Reckitt Benckiser factories... are carbon neutral in terms of manufacturing energy use.”</p> <p>The company now appears to be focused on its ‘Carbon 20’ initiative rather than on its neutrality claim; “Carbon 20 is a major new initiative to reduce our products’ Total Carbon Footprint by 20 percent by 2020.” It tackles “not only the carbon impact of raw and packaging materials, manufacturing, logistics and distribution, but also consumer use of products.”</p>
<p>NEUTRALISATION STRATEGY</p>	<p>“The Group has embarked on a comprehensive programme to measure and reduce its Carbon Dioxide (CO₂) emissions – and to offset the remaining unavoidable emissions through renewable energy projects in India, Sri Lanka and Bulgaria and sustainable forestry projects in the UK and Germany.”</p>	<p>The company states that it will achieve its neutrality vision by planting “more than two million trees in over 15 square kilometres of new forests,” but it has also adopted a three-part approach to tackling its direct carbon footprint:</p> <ul style="list-style-type: none"> • “Reducing the amount of energy we use, through energy efficiency measures in our factories and by avoiding unnecessary consumption in our offices and business travel; • Replacing existing low-efficiency fossil fuel energy sources with highly efficient Combined Heat & Power energy systems and renewable energy sources, where possible; • Renewing what is left by offsetting the greenhouse gas emissions from our global manufacturing energy use.”
<p>TRANSPARENCY</p>	<p>Radio Taxis’ website states its total emissions, but provides no quantitative breakdown of the emissions that comprise this total.</p> <p>No specific reduction targets are revealed.</p> <p>The website outlines the company’s offsetting strategy, and lists the specific projects used – although does not quantify the relative contribution of each.</p>	<p><i>The ‘Carbon 20’ section of the website quantifies, and provides a breakdown (in percentage terms) of, the company’s total footprint.</i></p> <p>No specific reduction targets are revealed – although ‘Carbon 20’ estimates the savings that the company thinks are possible through a variety of initiatives.</p> <p>The company’s 2006 Sustainability Report discusses many aspects of climate performance and strategy, but an explicit link between these efforts and the company’s neutrality claim is lacking.</p> <p>The company currently uses reforestation projects to offset its emissions, and has created a dedicated website for its ‘Trees for Change’ project. Information on the number of trees planted thus far, and the associate carbon savings, is lacking, however.</p>

COMPANY	Shaklee Corporation	STMicroelectronics
SECTOR	www.shaklee.com Retail	www.st.com Manufacturing
CLAIM MADE	<p>“the first company in the world to obtain Climate Neutral™ certification [in 2000] and totally offset our CO₂ emissions, resulting in a net zero impact on the environment.”</p> <p>“Shaklee... pledges to maintain net zero US greenhouse gas emissions through 2009.”</p>	“Progressively achieve carbon neutrality.”
BOUNDARY APPLIED	Unclear. No information on boundary applied available on website – despite the fact that Climate Neutral certification requires that company create a detailed inventory of emissions.	<p>There is no clear statement of the boundary applied on STMicroelectronics’ website, or in its 2007 CR Report, although the company’s quantitative ‘Summary of net CO₂ emissions’ covers:</p> <ul style="list-style-type: none"> • CO₂ emissions from direct and indirect energy use; • Direct emissions due to PFCs; • Transportation emissions (employees and goods).
NEUTRALISATION STRATEGY	“In 2006, Shaklee became the first consumer products company to offset 100 percent of CO ₂ emissions through the EPA Climate Leader’s programme, and use 100 percent Green Power [for electricity].”	<p>“Our ‘Carbon Roadmap’ supports us in working towards our ambitious target of becoming CO₂ neutral by 2010. This roadmap consists of our energy management programme to reduce consumption; the use of alternative and renewable energy; our Perfluorinated Compounds (PFC) management programme to reduce CO₂ emissions from PFCs; and our carbon offset programme and emission reduction trading programme.”</p> <p>The company has a specific goal to increase use of renewable energy to 15 percent of total energy use by 2010 (from 3 percent in 2007).</p>
TRANSPARENCY	<p>Vague. Shaklee’s website states its total emissions, but provides no quantitative breakdown of the emissions that comprise this total. The company’s broader footprint is not quantified.</p> <p>No specific emissions reduction targets are revealed.</p> <p>The company purchases renewable energy credits to offset its emissions (although the total quantity of credits purchased – and the specific projects used – is not revealed).</p>	<p>STMicroelectronics’ 2007 CR Report provides a quantitative breakdown of the following emissions:</p> <ul style="list-style-type: none"> • CO₂ emissions from direct and indirect energy use; • Direct emissions due to PFCs; • Transportation emissions (employees and goods). <p>This report also includes a 2-page ‘life-cycle view of ST’s efforts to reduce carbon emissions’ that discusses the company’s efforts to engage its suppliers, product design opportunities, and waste management. While the associated emissions are not estimated, STMicroelectronics does quantify the potential carbon savings associated with its more efficient products.</p> <p>The company has a specific target to increase its use of renewable energy by 2010.</p> <p>The company currently uses reforestation projects to offset its emissions, but its CR Report does not list the specific projects used – or the relative contribution of each.</p>

<p>COMPANY</p> <p>SECTOR</p>	<p>Timberland</p> <p>www.timberland.com</p> <p>Retail</p>	<p>Whole Foods</p> <p>www.wholefoodsmarket.com</p> <p>Food & Beverage</p>
<p>CLAIM MADE</p>	<p>“By 2010, count on Timberland owned and operated facilities to be carbon neutral.”</p>	<p>No specific claim of neutrality has been made, but the company describes itself as, “the only Fortune 500 Company purchasing wind energy credits to offset 100 percent of its electricity use.”</p>
<p>BOUNDARY APPLIED</p>	<p>Timberland owned and operated facilities and employee travel.</p> <p>Although not directly linked to the company’s commitment to neutrality, Timberland has developed “an industry-first nutritional label on every one of our 100 percent recyclable shoe boxes. The label provides consumers with detailed measures of our impact on the planet.... The next step in this initiative is the Green Index™ rating, which will provide product-specific environmental impact information on the actual shoe... The Green Index™ rating will rate the shoe on three key environmental factors: climate impact, chemical use and resource consumption... Our goal is to have it on all of our shoes by 2010.”</p>	<p>“In January, 2006, we made a landmark purchase of renewable energy credits from wind farms to offset 100 percent of the electricity used in all of our stores, facilities, bakehouses, distribution centres, regional offices and national headquarters in the United States and Canada.”</p>
<p>NEUTRALISATION STRATEGY</p>	<p>Timberland has a five-step plan to help it achieve its goal of becoming carbon neutral by 2010:</p> <ol style="list-style-type: none"> 1. Verify our greenhouse gas inventory by a third party; 2. Reduce energy demand through improved efficiencies; 3. Purchase whatever clean, renewable energy we can; 4. Generate our own renewable energy on-site when we can’t purchase clean energy; 5. Purchase renewable energy credits to offset emissions and help develop renewable energy projects.” <p>The company also states that, “In preparation for meeting our carbon neutral goal... we spent most of 2006 exploring renewable energy opportunities for our facilities... Our goal for 2007 is to convert our manufacturing operations in the Dominican Republic to 100 percent renewable energy, and to purchase as much renewable energy off the grid as we can to power our retail stores.”</p>	<p>“Stores from all our operating regions have embraced the 3 R’s [Recycle, Reuse, Reduce] mantra at every level.”</p> <p>A variety of initiatives with potential carbon benefits are in place (ranging from on-site renewables to ‘green’ building design and fleet biofuels) but no formal carbon management or climate change strategy is in place.</p>
<p>TRANSPARENCY</p>	<p>Timberland’s 2006 CSR Report provides a quantitative breakdown of the emissions that fall within its boundary. <i>The company also quantifies emissions associated with the transportation (although not the contract manufacture) of its products.</i></p> <p>The company’s CSR report reveals a specific (albeit short-term) target for on-site renewable projects.</p> <p>The company’s planned offsetting strategy is unclear. The company’s CSR Report reveals that Timberland has purchased renewable energy credits to offset the emissions associated with specific events, and that it has also engaged in reforestation projects, but the type of offsets that will be used to achieve neutrality is not disclosed.</p>	<p>Vague. Whole Foods’ website does not disclose its total emissions, and provides no breakdown of the emissions that fall within its boundary.</p> <p>No specific emissions reduction targets are revealed.</p> <p>The company purchases renewable energy credits to offset its emissions (although the total quantity of credits purchased – and the specific projects used – is not revealed).</p>

COMPANY	World Bank www.worldbank.org	Yahoo www.yahoo.com	Yakima www.yakima.com
SECTOR	Financial Services	Communications	Manufacturing
CLAIM MADE	"On June 5, 2006, the World Bank Group announced it was carbon neutral in fiscal year (FY) 2006... The Bank Group continues to be carbon neutral for FY 2007 and FY 2008. It is the first multilateral development bank to reach this milestone."	"By the end of 2007, we'll be carbon neutral."	"Planet Payback" – 100 percent carbon neutral by end of 2007."
BOUNDARY APPLIED	<p>"All direct and most indirect GHG emissions associated with facilities operations in Washington, DC, and surrounding areas, including emissions associated with:</p> <ul style="list-style-type: none"> • fuel and electricity consumption, • Spring and Annual Meetings, and • operational travel tracked from Washington, DC headquarters." 	"In our carbon footprint, we included energy use in our global offices and data centres, plus the impact of our employees commuting to work and flying for business."	Unclear. Press release from March 2007 states that the company will offset "the carbon footprint of all operations, products and their distribution, as well as Yakima's field marketing team," but no more detail on what this incorporates is provided.
NEUTRALISATION STRATEGY	<p>"The World Bank Group has invested in projects that make up for, or 'offset', the amount of carbon it releases into the atmosphere. In other words, carbon neutrality is the point at which the emissions from an activity or series of activities have been:</p> <ul style="list-style-type: none"> • estimated or inventoried; • reduced, where possible; and • the remaining emissions offset through investments in renewable energy, energy efficiency or carbon sequestration projects." 	"we're measuring our impacts, reducing within Yahoo! where we can, and, for what remains, investing in projects elsewhere that reduce greenhouse gases in amounts equal to what we are emitting."	The company states that it is "constantly looking for new ways to reduce energy demands in manufacturing," and that it is tackling climate change by "finding ways to reduce our waste, aggressively recycle and change our distribution strategy to limit fossil fuel consumption." It then offsets its "remaining carbon footprint."
TRANSPARENCY	<p>The World Bank's website states its total emissions, but provides no quantitative breakdown of the emissions that fall within its boundary (beyond noting that air travel makes up 'the majority'). The company's broader footprint is not quantified.</p> <p>The Bank has a specific target to reduce GHG emissions from its DC offices by 7 percent by FY 2011 (compared with FY 2006).</p> <p>The Bank lists two specific offsetting projects, but does not disclose the quantity or type of credits associated with these.</p>	<p>Yahoo's website states its total emissions, but provides no quantitative breakdown of the emissions that fall within its boundary – and no quantification of its broader footprint.</p> <p>No specific emissions reduction targets are revealed.</p> <p>The website outlines the company's offsetting strategy, and lists specific projects used – although does not quantify the relative contribution of each.</p> <p><i>Yahoo has made an explicit commitment "to being... as transparent as possible in our carbon neutral approach."</i></p>	<p>Vague. No breakdown of the emissions that fall within its boundary is provided – and the company does not even disclose its total emissions (although it does equate its footprint to 1,675 cars, or the yearly energy consumption of 993 homes).</p> <p>No specific emissions reduction targets are revealed.</p> <p>Yakima's website enables customers to vote on their preferred offsetting projects, but the types of credit available from each is not revealed.</p>

Glossary

Additionality: Emissions reductions are ‘additional’ if they occurred because of the presence of incentives associated with the existence of GHG markets, voluntary or mandatory. Demonstrating the additionality of a carbon offset means showing that the emissions reductions being used as offsets are not ‘business as usual’.

Baseline: The emissions (usually expressed as an annual amount in metric tonnes) in existence at a given point in time before an organisation begins reduction strategies; the amount of emissions against which reductions are measured; total amount of emissions for which an organisation could be held responsible under regulations or agreements, and from which credits for reductions or offsets are subtracted.

Boundary: For the purposes of carbon management, the boundary is the area of emissions included in a company’s carbon footprint. Areas of emissions are usually described in terms set forward by the WRI Greenhouse Gas Protocol: Scope 1, direct emissions resulting from energy and materials use from facilities and vehicles owned by the company; Scope 2, indirect emissions from creation of energy used by the company; Scope 3, emissions from energy and materials used in the supply chain, by customers, or in maintenance or disposal of products (see Scopes and Boundaries, Figure 1, page 9).

Carbon Footprint: The estimated emissions of carbon dioxide (CO₂) and other GHGs associated with a particular company. The scope of carbon footprint

analyses can vary, and may or may not include all GHGs or reflect a ‘life cycle’ approach to quantifying ‘upstream’ and ‘downstream’ GHG emissions. When it includes all GHGs, the footprint is commonly expressed in ‘CO₂ equivalent’ (CO₂e) units.

Carbon Offsetting: The act of reducing or avoiding GHG emissions in one place in order to ‘offset’ GHG emissions occurring somewhere else. Unlike most conventional pollutants, GHGs mix well in the atmosphere and can travel around the planet quickly. As a result, it doesn’t really matter from the standpoint of global warming mitigation where a reduction takes place. Carbon offsets are intended to take advantage of the radically different costs and practicalities of achieving GHG emission reductions by sector and geography.

Double Counting: The same unit of emissions or emissions reductions counted by more than one entity.

Greenhouse Gas (GHG): The primary gases (both naturally existing and man-made) that contribute to global warming by trapping more energy in the earth’s atmosphere than would occur in their absence. Greenhouse gases covered by the Kyoto Protocol are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs). Chlorofluorocarbons are also powerful GHGs, but are regulated separately as a means of addressing stratospheric ozone depletion. Water vapour is a powerful GHG that responds automatically to changes in temperature and other

conditions, but it cannot be directly influenced by human activities. It is therefore not generally considered a greenhouse gas for global warming mitigation purposes.

Inventory: The process of determining emissions, in this case of greenhouse gases, for a company, operation, process, or product or other entity or division, through the accounting of fuels and energy used, and the calculation of the resulting release of carbon dioxide, methane, and other gases cited in the definition above.

Renewable Energy Certificate (REC): A certificate that represents the environmental attributes of 1 MWh of electricity from a renewable energy source. RECs can be used to satisfy regulatory mandates (e.g. renewable portfolio standards) or to supply voluntary green energy markets.

Transparency: The ready availability to stakeholders and the public of clear information on a company's energy use, footprint, carbon management strategy and other emissions-related information.

Endnotes

1. The Greenhouse Gas Protocol has become the most widely used tool for quantifying greenhouse gas emissions. It defines Scope 1 emissions as “direct greenhouse gas emissions, from sources owned or controlled by the company,” and Scope 2 emissions as “indirect emissions caused by the generation of purchased electricity consumed by the company.”
2. As is often the case in an emerging field, the lexicon of carbon or climate neutrality is yet to become firmly established. Climate neutrality appears to be the preferred phrase in US, while carbon neutral is more common in Europe. We consider the two terms to be essentially interchangeable, but have chosen carbon neutrality for the purposes of this report.
3. This is not intended as a complete list of companies making claims, but rather a representative review of companies making claims across a spectrum of sectors. Information contained in the matrix is a snapshot of what was publicly (i.e., transparently) available from annual and sustainability reports by this selection of companies making claims, and on their websites.
4. See www.ghgprotocol.org
5. ISO 14064, under development by the International Standards Organisation, takes a very similar approach to the GHG Protocol.
6. See www.asa.org.uk/asa/news/news/2007/ASA+Gets+Tough+On+Advertising+Green+Claims.htm
7. Although the Climate Neutral Network no longer exists as an organisation, the protocols it designed are available at <http://climatenetwork.org/protocols.php>.
8. “Campaigners scoff at airport plans.” *Manchester (England) Evening News*, November 15, 2007.
9. In a recent report, Friends of the Earth argued that Royal Bank of Scotland was responsible for more emissions in 2006 than the whole of Scotland as a result of its lending to the oil and gas sector. And the World Bank announced in April 2007 that it was developing a methodology to track the carbon footprint of its core development activities in energy and transport. In the US, in early 2008, a number of lenders announced they would no longer invest in coal-fired power plants. And, in March 2008, a coalition of banks and NGOs announced a set of “Carbon Principles” by which banks can judge the climate-friendliness of energy-related lending.
10. This report does not explore what makes a high-quality offset. See the Clean Air-Cool Planet report, *A Consumer’s Guide to Retail Carbon Offset Providers*, <http://www.cleanaircoolplanet.org/ConsumersGuidetoCarbonOffsets.pdf> for a fuller discussion.
11. Although no information is available on the FIA website, a number of press articles in early 2007 asserted that the governing body of Formula 1 racing had bought sufficient offsets to make F1 racing carbon neutral since 1997.



www.cleanair-coolplanet.org



www.forumforthefuture.org.uk

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