CARBON DISCLOSURE PROJECT

Carbon Disclosure Project
Supply Chain Report 2010

Report written for
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CDP Supply Chain Program 2010
The CDP Supply Chain Program is designed to promote information sharing and innovation between CDP Supply Chain Members – companies that have begun to integrate carbon management strategy into their supply chains – and the companies that provide goods and services to them as we transition to a low-carbon economy. To learn more about becoming a member, please contact us or visit the CDP Supply Chain section of www.cdproject.net.

Member companies	Country of incorporation
Acer	Taiwan
BAE Systems	United Kingdom
Banco Bradesco	Brazil
Bank of America	United States
Baxter International	United States
Boeing	United States
Cadbury	United Kingdom
Carrefour	France
Cathay Pacific Airways	Hong Kong
Colgate-Palmolive	United States
ConAgra Foods	United States
Dell	United States
Eaton Corporation	United States
EMC	United States
ENEL	Italy
Fiji Water	United States
Fujitsu	Japan
GlaxoSmithKline	United Kingdom
Google	United States
H.J. Heinz Company	United States
Hewlett-Packard Company	United States
Imperial Tobacco Group	United Kingdom
IBM	United States
Johnson & Johnson	United States
Johnson Controls	United States
Juniper Networks	United States
Kao	Japan
Kellogg Company	United States
L'Oréal	France
Logica	United Kingdom
National Australia Bank Group	Australia
National Grid	United Kingdom
Newmont Mining Corporation	United States
PepsiCo	United States
Procter & Gamble Company	United States
Rautaruukki	Finland
Reckitt Benckiser	United Kingdom
Rolls-Royce	United Kingdom
Royal Mail Group	United Kingdom
SKF	Sweden
Sony Corporation	Japan
Unilever	United Kingdom
Vivendi Universal	France
Vodafone Group	United Kingdom

Executive Summary

A common agreement on climate change
There is compelling scientific evidence from bodies such as the Intergovernmental Panel on Climate Change[1] showing that climate change is caused by human activity and is more serious than ever before. Climate model projections indicate that the global surface temperature will rise significantly by 2100 if 'business as usual' continues and "… the consequences could vary from disruptive to catastrophic"[2]. The first commitment period of the Kyoto Protocol ends in 2012 and while negotiations at The United Nations Climate Change Conference in Copenhagen (COP 15) in December 2009 did not agree the next framework for an international agreement to reduce Greenhouse Gas (GHG) emissions some progress was made and it is only a matter of time before we have one.

The pathway to long-term emissions reductions
Business is increasingly seeing climate change in terms of opportunity and return on investment. This indicates that governments must agree a robust, international, legally binding agreement that will create the right incentives and structures in order for them to invest in the transformation to a low-carbon global economy, unlocking the power of business to be an integral part of the solution to climate change. This emerging framework will need to include long-term and medium-term targets for the world and for individual countries, setting a pathway to global emissions reductions that are in accordance with the science. Clearly, reluctance to act on climate change – or worse, a lack of awareness about it – can bring devastating short and long-term risks to any company. In this context, CDP works with key stakeholders to encourage companies all over the world to measure, manage, disclose and ultimately reduce their GHG emissions and related climate change risks.

The CDP Supply Chain Program – assessing Member and Supplier performance
The CDP Supply Chain is a collaboration of global corporations who have extended their climate change and carbon management strategies beyond their direct corporate boundaries to engage with their Suppliers via CDP's annual Information Request. Member companies use CDP's standardized format to communicate with their Suppliers in a streamlined, unified, annual request. This year, 44 Member companies reached out to 1402 of their Suppliers, and 710 (51%) responded to the request. 95 (7%) formally declined to participate and 597 (42%) did not respond.

This report synthesizes the key findings that have been extracted from the 2009 CDP Supply Chain Information Request responses and is structured in three main sections:

- How are CDP Supply Chain Member companies – referred to as **Members** in this report – driving climate change strategies with their Suppliers?
- How well are their **Suppliers** – referred to as Suppliers in this report – currently performing?
- How will CDP Supply Chain Members and Suppliers use the work to drive further improvement?

The report also includes sections containing perspectives from A.T. Kearney and highlights from Members.

Members are at the forefront of carbon emissions management
All CDP Members now have a strategic approach to deal with climate change. A majority (63%) have a formal, documented corporate climate change strategy and the remaining (37%) have general guidelines. They have integrated a carbon policy into their procurement organization, and a large majority of them (90%) have a reduction plan in place.

While defining their reduction objectives, Members realize that beyond reducing their Scope 1 and 2 emissions[3], they also have to reduce their Scope 3 emissions. In particular, their supply chain emissions usually represent a significant part of their total emissions and need specific focus. Members cite several reasons for measuring supply chain emissions, the four most important being:

1. Increased customer interest that creates opportunities for differentiated products;
2. Risks facing Suppliers that ultimately threaten sourcing activities;
3. Increased public, investor and stakeholder pressure to integrate carbon management within Corporate Social Responsibility programs that usually involve Suppliers;
4. Joint process improvement to improve collaboration and efficiency, reduce carbon emissions and ultimately generate cost savings for Members and Suppliers.

However, we find that member companies face significant challenges when it comes to putting their good intentions into practice. Only a small number of companies have extensive knowledge about the availability of green products for their major spend categories, and most members do not currently have the tools they need to track their Suppliers' climate change performance appropriately.

1 Intergovernmental Panel for Climate Change (IPCC) Fourth Assessment Report, 2007 (www.ipcc.ch).
2 http://unfccc.int/essential_background/feeling_the_heat/items/2905.php.
3 See glossary for detailed definition of Scope 1, 2 & 3 emissions.

The good news is that Members are eager to collaborate with their Suppliers, and are taking steps to move forward and overcome these issues. 89% already have a strategy in place to engage with Suppliers on GHG emissions and climate change. Within the next 12 months, the use of supplier relationship management processes will increase significantly, and the importance of carbon versus classic procurement targets is expected to triple during the next five years. In the future, it will become common for Members to adjust their supply base according to low-carbon criteria: 56% of Members state that in the future they expect to deselect Suppliers for failing to meet formal carbon management criteria, compared to just 6% today.

It is clear that Suppliers are going to need to start to perform detailed assessments about their current capabilities in terms of climate change and carbon emissions management. They will also need to set ambitious targets for reducing their emissions in order to remain competitive.

Assessing Suppliers along the four dimensions of carbon management

To assess the current status quo of carbon management capabilities, we analyzed the supply base along the four dimensions of carbon management: strategic risk awareness about climate change, carbon reduction ambition, reporting capabilities and implementation practices.

Strategic awareness

Strategic awareness is at a level similar to last year, and a large part of the supply base (58%) feels exposed to regulatory developments. For example, Suppliers most commonly identify risks related to general emissions regulations (57%) and cap-and-trade schemes (38%). To a lesser extent, mandatory technology requirements (19%) and energy carbon taxes (16%) are also perceived as a sources of risk. Suppliers also identify industry- and company-specific risks (38%) such as regulations related to waste and water management or product labeling.

Environmental changes caused by climate change impose more extreme and sometimes new physical risks. Extreme weather events threaten almost three quarters of Suppliers (69%), while changes in temperature and rainfall patterns (49%) as well as flooding and rising sea levels (46%) are in the minds of almost half of Suppliers. Again, some Suppliers (24%) point towards other company-specific risks that their businesses face, such as crop infestation or coastal erosion.

A group of early movers in the supply base are looking beyond the risks of climate change, and are distinguishing themselves from their peers by turning risk into opportunity. Several companies, for example, have started to take advantage of climate change mitigation instruments such as the Kyoto mechanisms – emissions trading, clean development mechanisms and joint implementation. Others have begun to exploit national policies such as subsidies for renewable energy. The remaining Suppliers are now challenged to catch up to this group, as well as to the Members' level of strategic awareness.

Carbon reduction ambition

Only 38% of Suppliers currently have carbon reduction targets in place compared to 82% of the Members. The success of long-term global carbon reduction among Suppliers will now depend on two main factors.

First, Suppliers who set good targets today must be able to achieve these short-term targets and then sustain these levels in the long run. On average, companies with targets in place meet IPCC requirements to avoid dangerous climate change. However, their current commitment lasts an average of 5 years, while IPCC targets need to be sustained until 2050. In fact, 81% of Suppliers do not set targets beyond 2012.

Second, success will depend on how quickly Suppliers who do not have targets put them in place. 62% of Suppliers still do not have any targets in place at all, and realistically speaking, it is likely that their emissions will keep growing at the same pace as the economy. If nothing changes, global emissions from all Suppliers – those with and without targets – will probably increase slowly instead of decreasing.

Reporting capabilities

Reporting capabilities are crucial because they enable performance to be tracked. Suppliers do display an increased willingness to disclose emissions information, particularly when it comes to Scope 1 and

Scope 2 emissions: 62% of Suppliers currently report Scope 1 emissions and 63% report Scope 2 emissions. There is, however, a lack of information around Scope 3 emissions among Suppliers – when we look at supply chain emissions, the percentage of Suppliers who report drops to 8%.

One additional area of major improvement this year is the enhanced quality assurance of the reported data. Compared to 2008, the number of companies who had their emissions data externally verified increased by nearly half.

Collaboration and best practice sharing show the greatest potential when it comes to closing the gap between Supplier and Member performance.

Implementation practices
The most commonly used approaches for implementing emission reduction plans are energy efficiency increases, process improvements and renewable energy use. More than 20% of Suppliers are using three or more approaches at the same time to reduce emissions.

Suppliers have also succeeded in making the topic of climate change an important priority at the board level. Today, 60% of companies have elected a board committee member or other top-level executive who has overall responsibility for climate change and carbon reduction activities.

Unfortunately, the long-term sustainability and depth of commitment behind Supplier plans across the full supply base is highly questionable. Just 28% of Suppliers have incentive schemes in place for employees to drive carbon reduction, and only 33% have a strategy in place to engage with their own suppliers on this topic.

The way forward
Member companies are clearly at the forefront of carbon emissions management. While some Suppliers are performing exceedingly well and have positioned themselves as role models and catalysts for change, Suppliers in general will need to improve their capabilities quickly and continuously if they are to bridge the gap. Given Member commitment to effective carbon management, there is a strong business case – as well as a moral imperative – for them to do this.

Collaboration and best practice sharing between Members and their supply base will be crucial to bringing carbon emissions and climate change management to the next level. CDP's role is to support these companies as they improve their capabilities over time, by tracking their performance and providing them with standardized metrics that will help them to assess their yearly improvement. As part of this activity, Member companies receive a customized dashboard report that highlights the performance of their Suppliers against an agreed scoring metric. The metric takes account of awareness, ambition, reporting and implementation practices. The dashboard also highlights leading Supplier practices. Member companies plan to use the results to engage with Suppliers in order to transfer best practices and raise the overall level of performance. The CDP Supply Chain Report 2011 will further highlight the progress that has been made in this area.

Contents

1 The A.T. Kearney Perspective

Sustainability-focused companies outperform their peers
During the past 18 months, as the financial crisis took its toll, many companies considered abandoning their carbon emissions management initiatives. But an A.T. Kearney analysis reveals that companies that demonstrated a true commitment to sustainability over the course of the recession appear to have outperformed their industry peers in the financial markets. In 16 of the 18 industries examined, companies recognized as sustainability-focused (as defined by inclusion in the Dow Jones Sustainability Index or the Goldman Sachs SUSTAIN focus list) outperformed their industry peers and were well-protected from value erosion. Our findings suggest that investors may reward 'true' sustainability-focused companies that demonstrate the following characteristics:

- A focus on long-term health rather than short-term gains;
- Strong corporate governance;
- Sound risk management practices;
- A history of investing in carbon emissions management innovations.

Genuine carbon impact must involve the supply chain
Now is the time for companies to move to next generation carbon emissions management. They must move beyond saying the right words to truly making carbon reductions happen. To achieve genuine results, however, companies must address the carbon impact of their supply chains, because 50 percent of a product's value, and often upwards of 70 percent, is typically derived from suppliers. Companies are finally realizing that consumers are aware that they do not just buy products – they also buy the supply chains that deliver the products.

As firms move to next generation carbon emissions management programs, a growing number of companies are putting in place specific, comprehensive strategies for internal operations and external relationships. Rather than simply offering general statements of good corporate citizenship, these companies have improved their supply departments with updated carbon reduction measures and practices, evaluating suppliers and their supply management organizations across multiple dimensions.

The power of innovation
Traditionally, supply managers sought to provide the necessary inputs at the lowest market prices. However, as executives and consumers move to distinguish market prices from social costs – that is, market price plus externalities and social consequences – supply is redefining and expanding its role by managing both internal and external costs. Supply managers can now foster carbon reductions by ensuring that suppliers incorporate innovations into their operations and processes. These executives also have the opportunity to investigate new processes and technologies that reduce dependency on scarce and potentially expensive resources. Managing the supply chain then becomes the catalyst for triggering corporate behavior that truly addresses carbon reduction.

Accountability – addressing a fundamental challenge
A.T. Kearney believes that if we are to provide counsel to companies regarding their carbon reduction strategies, it is important for our firm to hold ourselves accountable on these issues. Two years ago, A.T. Kearney announced plans to move to a carbon-neutral consulting model by 2010. This commitment to carbon neutrality applies to all aspects of global operations – both internal and client-facing activities – and is part of a larger carbon reduction effort that was launched across the firm's offices in 36 countries.

The focus of this effort was to develop a series of innovative alternative delivery mechanisms that the firm's 1,500 consultants around the world could use for providing consulting services in a more sustainable and low-carbon way. The travel inherent in the consulting industry gives it a disproportionately large carbon footprint compared with many other professional services organizations, so efforts have focused on reducing the frequency of business travel and using collaborative technology to maintain the firm's hallmark collaborative working style while also reducing carbon emissions.

Consistent with this pledge, the firm has also implemented initiatives to limit internal travel, shift necessary travel from air to rail as feasible, select services from among carbon-efficient airlines, hotels and rental car companies, increase the use of public transit and further increase the energy and resource efficiency of its operations.

For A.T. Kearney, and for the businesses it serves, learning to grow profitably and delivering value for all stakeholders in a resource-limited and threatened global environment is a fundamental business challenge of this century.

Daniel Mahler
Vice President at A.T. Kearney

Stephen Easton
Principal at A.T. Kearney

2 About CDP Supply Chain

"We believe it is important for companies to determine their scope 1 and 2 greenhouse gas (GHG) emissions. These emissions are directly associated with a company's operations and can be determined with reliability and consistency. Tracking them reveals opportunities to improve operational performance in a way that's good for both business and the environment and can therefore be sustained. Further, we support public disclosure of this information. As part of our objective to work with environmentally responsible suppliers, IBM has encouraged its key suppliers to gain that understanding and to disclose their inventories through the CDP Supply Chain program."

John Paterson, Chief Procurement Officer IBM

In the wake of a global financial crisis fueled primarily by a lack of stakeholder information, corporate transparency is vital. Companies that have proven themselves leaders in areas such as measurement and disclosure have evolved beyond the view that climate change only poses risks, and are reaping benefits from the opportunities they have found. These leaders are spreading this message not only to their customers and shareholders, but also to their suppliers who provide the goods and services needed to run their businesses.

Introduction to CDP

Through its 7th annual Information Request, CDP has persuaded more than 2,500 companies across the globe to report their greenhouse gas (GHG) emissions and related climate change strategies. CDP hosts the world's largest database of self-reported corporate climate change information.

CDP collects and provides this information to the marketplace on behalf of two main groups:

Investment Market: 475 institutional investors controlling $55 trillion in assets under management request disclosure from listed companies in whom they invest.
Purchasing Organizations: 55 global purchasing organizations from the public and private sectors that request disclosure from their suppliers.

This global system provides stakeholders with a clear understanding of how companies are positioned as we transition to a low-carbon economy, and it enables transparency on climate change.

"The Carbon Disclosure Project's detailed reporting is helping persuade companies throughout the world to measure, manage, disclose and ultimately reduce their greenhouse gas emissions. No other organization is gathering this type of corporate climate change data and providing it to the marketplace."

Ban Ki-moon, UN Secretary-General

CDP Supply Chain

In 2009, 44 CDP Supply Chain Member companies requested information from more than 1400 of their Suppliers. Using CDP's annual Information Request, they gathered information in a single format, reducing the time and resources spent by Suppliers on multiple requests. This also resulted in streamlined, comparable results which were then analyzed and benchmarked by CDP and its report writer, A.T. Kearney.

The CDP Supply Chain Program helps to integrate carbon management and climate change mitigation into the procurement function. In an outsourced world, where companies externalize manufacturing, production, and logistics, most multinationals find that the emissions embedded in products purchased from the supply base are more significant than their own emissions.

The objectives of the CDP Supply Chain Program are to reduce global emissions by:

- Driving action in purchasing companies by providing primary data from key suppliers;
- Motivating supplier companies by educating and supporting the collection and reporting of high-quality climate change information;
- Influencing international standards by establishing a global process for supply chain disclosure – leveraging the expertise and experience of Members and their suppliers.

By inviting suppliers to participate in the CDP process, Members lead the agenda by stressing the importance of climate change within their own corporate strategy. Their actions raise awareness among suppliers of the issues associated with climate change and the need to smoothly transition into a low-carbon economy. This business-to-business approach strengthens relationships and promotes Member-supplier collaboration to develop innovative solutions to climate change.

In addition to the 44 Member companies, Walmart has selected CDP as its standard reporting mechanism for GHG emissions as part of the 15 questions that make up its Supplier Sustainability Assessment. Thousands of companies will report annually to CDP as a result of this decision.

CDP moving ahead
As regulatory frameworks begin to mandate emissions reductions, CDP's role will expand. We will continue to work with corporations, policymakers and other stakeholders to provide actionable climate change data that complement the development of mandatory reporting rules.

Systems upgrade and data sharing
CDP is currently undergoing a significant systems upgrade, designed to improve data comparability, facilitate benchmarking services and deliver data that is appropriate for procurement decisions, investment analysis and regulatory submissions. In countries such as the US and the UK, where mandatory carbon reporting is on the horizon, CDP's systems will help companies prepare for such requirements and will eventually integrate with existing national registries to enable corporations to disclose more detailed and standardized data.

Standardized reporting
CDP is leading the work of the Climate Disclosure Standards Board (CDSB), working with Deloitte, Ernst & Young, KPMG and PricewaterhouseCoopers to develop robust accounting standards to enable carbon reporting through financial reports. CDP and CDSB will also work with the World Economic Forum to advise the G20 group of nations on climate change accounting in 2010. CDP actively supports the WRI and WBCSD-led Greenhouse Gas Protocol team's work to develop and improve the international standards for Scope 3 emissions reporting.

CDP Water Disclosure
Beginning in 2010, CDP will request water-related data from 300 of the world's largest companies in water-intensive sectors. This critical data will include water usage and exposure to water stress in a company's own operations and its supply chain. Responses will provide valuable insight into the strategies deployed by leading companies and will be used to drive investment toward sustainable water use.

"If climate change is a shark, water is the teeth."
Paul Dickinson, CEO, Carbon Disclosure Project

CDP Supply Chain Report 2010
CDP is pleased to release the findings from the data collected in 2009 in the CDP Supply Chain Report 2010. It is the second annual assessment of Supplier progress and covers trends, examples, and an analysis of the 710 Supplier responses to the Member companies' request for information. In addition, we report on the progress shown by the 44 Members in carbon management and supplier engagement.

"At Walmart, we believe everyone has a responsibility to reduce greenhouse gas emissions throughout the supply chain. We recognize from our own experience, that working to reduce greenhouse gas emissions can drive innovation and enable cost savings. Through our Supplier Sustainability Assessment, we are asking suppliers to publicly report their GHG emissions, reduction strategy and actions to the Carbon Disclosure Project. By doing so, we gain a better understanding of our supply chain footprint and help suppliers realize the business advantages that accompany efforts to reduce greenhouse gas emissions."

Matt Kistler, Senior Vice President of Sustainability Walmart

3 Methodology Followed

Assessing Member and Supplier performance

The CDP Supply Chain Program

CDP Supply Chain is a collaboration of global corporations who have extended their climate change and carbon management strategies beyond their direct corporate boundaries to engage with their suppliers via CDP's annual Information Request. Member companies use CDP's standardized format to communicate with their supply chain companies in a streamlined, unified, annual request. This year 44 Member companies reached out to 1402 of their Suppliers, and 710 (51%) responded to the request.

This report synthesizes the key findings that have been extracted from the 2009 CDP Supply Chain Information Request responses. It contains:

- An analysis of the GHG emissions and climate change management performance of CDP Supply Chain Member companies – referred to as **Members** in this report;
- An analysis of CDP Supply Chain Supplier companies – referred to as **Suppliers** in this report – across the four dimensions of carbon management;
- The way forward for CDP.

A glossary at the end provides the reader with clear definitions of the technical terms used throughout this report.

Multi-modal Member evaluations

The following sources were used to evaluate the behavior of the 44 Members with regard to GHG emissions and climate change management:

- The CDP Supply Chain Information Request;
- The Supplementary Member Questionnaire;
- Interviews with selected Members.

The CDP Supply Chain Information Request was completed by all Members, representing eight different industries (see Figure 1).

52% of the Members responded to the Supplementary Member Questionnaire. This was designed to complement the original CDP Supply Chain Information Request by focusing on how Members interact with their suppliers to drive improvements in carbon management. Interviews were also held with selected companies in order to check the hypotheses, analyses and conclusions that were extracted from both the Information Request and the Member Questionnaire.

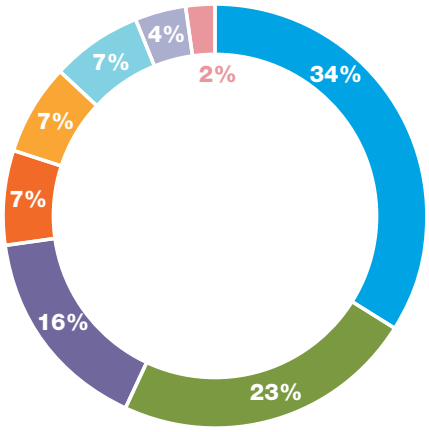
Evaluating Suppliers across the four dimensions of carbon management

The CDP Supply Chain Report 2010 analyzes data from the Information Request to assess Supplier performance regarding GHG emissions and climate change management along four distinct dimensions:

- Strategic awareness;
- Carbon reduction ambition;
- Reporting capabilities;
- Implementation practices.

This year, Supplier participation grew by 24%. Out of the 1402 Suppliers contacted, 710 (51%) participated, 95 (7%) declined to participate and 597 (42%) did not respond (see Figure 2).

Figure 1 – Members per industry



Consumer Staples	34%
Industrials	23%
Information Technology	16%
Financials	7%
Telecommunications	7%
Health care	7%
Utilities	4%
Materials	2%

Of those who responded, 48% were disclosing to CDP for the first time and 43% authorized their responses to be disclosed publicly. In terms of company size, 21% of the responding Suppliers were SMEs[4].

Most of the Suppliers who responded were from Europe (45%) and North America (34%). Asia (17%) was slightly better represented than in 2008, while Suppliers from the rest of the world made up the remaining 10% (see Figure 3).

From an industry point of view (see Figure 4), industrials and IT companies represented nearly half (48%) of the respondents. Consumer staples (15%), consumer discretionary (13%) and materials companies (11%) were also well represented. Financials, healthcare, utilities and energy companies combined represented less than a tenth (7%) of the respondents.

The way forward

Suppliers in general will have opportunities to improve their capabilities regarding climate change and carbon emissions management. This publication also highlights CDP's role in supporting these companies as they improve their capabilities over time, by tracking their performance and providing them with standardized metrics that will help them to assess their yearly improvement.

Figure 2 – 2008 and 2009 Supplier participation rate

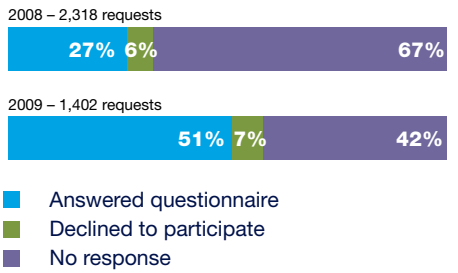
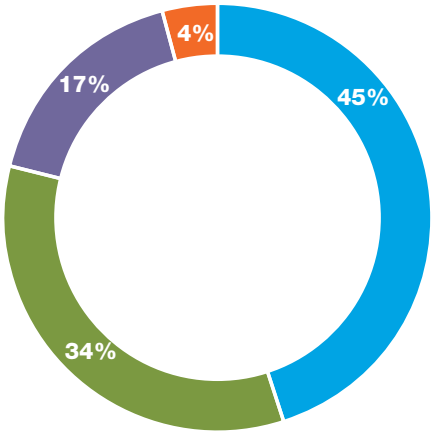
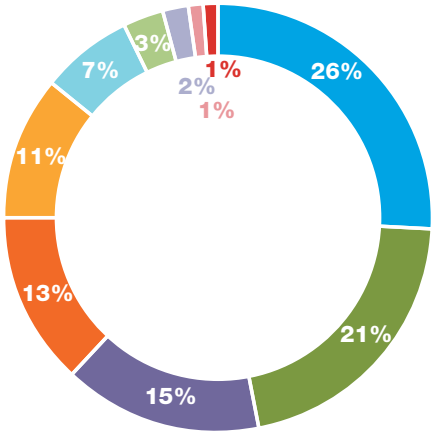


Figure 3 – Suppliers by geography



Europe	45%
North America	34%
Asia	17%
ROW	4%

Figure 4 – Suppliers by industry



Industrials	26% (181)
Information Technology	21% (148)
Consumer Staples	15% (106)
Consumer Discretionary	13% (87)
Materials	11% (75)
Telecommunications	7% (45)
Financials	3% (22)
Health Care	2% (12)
Utilities	1% (9)
Energy	1% (7)

4 Small to Medium Enterprises. See glossary for detailed definition

4 CDP Supply Chain Member Analysis

"Our Group-wide Carbon Management Board has devolved authority for the management of our carbon emissions on behalf of our Board. It meets on a quarterly basis to review progress and provide strategic direction and governance framework for our Carbon Management programme."

Royal Mail Group

"Climate change could result in changes in consumer preferences and retail customer demands – we must anticipate and react to such changes to maintain the demand for our products."

PepsiCo

At the forefront of carbon emissions management

Most CDP Supply Chain Members now have a formal, documented corporate climate change strategy. They have integrated a carbon policy into their procurement organization, and they have a reduction plan in place. Supplier relationship management processes are now becoming more important than ever, with an emphasis on green criteria for supplier selection. Although facing practical challenges, these Members are taking steps to move forward and overcome the issues they encounter. They are eager to collaborate with their Suppliers, but in order to remain competitive, these Suppliers are going to need to perform detailed assessments of their current capabilities in terms of climate change and carbon emissions management and set ambitious targets to reduce their emissions.

High awareness among Member companies

CDP Supply Chain Members are typically organizations very much at the forefront of climate change and carbon emissions management. Therefore, it is hardly surprising that the 2009 survey confirms their significant risk awareness of the topic (see Figure 5). In fact, the results of both the CDP Supply Chain Information Request and the Member Questionnaire confirm that the CEOs and board representatives of Member companies are placing increasing importance on climate change and GHG emissions reduction.

Formal strategies with a focus on efficiency

All Member companies currently have at least some general guidelines with regard to climate change strategy. A majority have taken this further to put in place a formal and documented climate change strategy (see Figure 6). Over 90% of the Members have either a board committee or another executive body with overall responsibility for climate change management to ensure that the strategy is turned into action effectively (see Figure 7).

Figure 5 – Members reporting exposure to risks related to climate change

Figure 6 – Members with a corporate climate change strategy

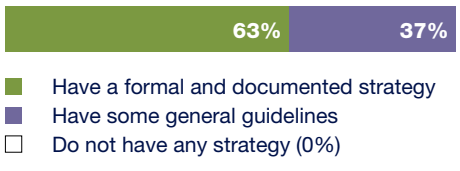


Figure 7 – Members with a board committee or other executive body with overall responsibility for climate change

Efficiency is the most prominently expressed objective for corporate climate change strategy (71%, see Figure 8). Topics such as compliance, risk management, brand improvement, product differentiation and cost reduction are also of great concern. To a lesser extent, employee retention is also a part of corporate climate change strategy.

90% of CDP Supply Chain Members currently have a detailed plan in place to reduce their GHG emissions or their energy use – an increase of 6% compared to last year (see Figure 9). Clearly, these companies are positioned as trendsetters in terms of climate change and carbon emissions management.

Figure 8 – Objectives by Members for corporate climate change strategy

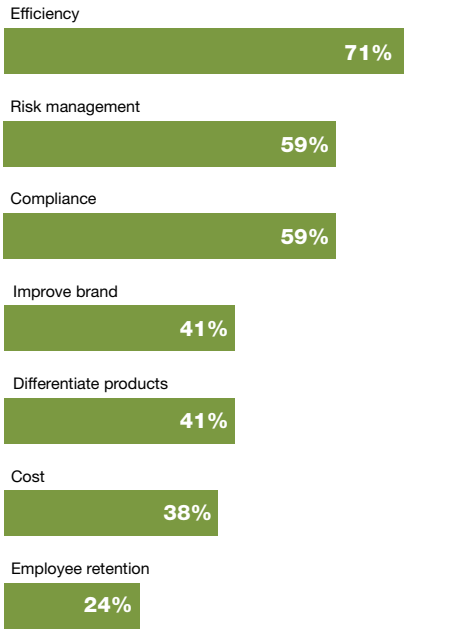
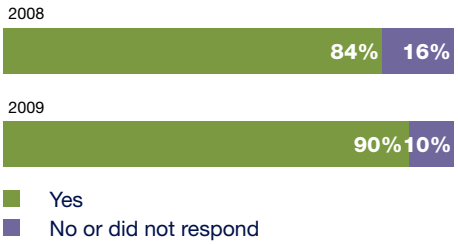


Figure 9 – 2008 and 2009 Members with a carbon emissions and/or energy reduction plan in place



The importance of Scope 3 supply chain emissions

Members realize that the challenge of carbon management needs to stretch beyond the boundaries of their own organizations and into the deeper supply chain.

Members cite several reasons for measuring supply chain emissions, the four most important being:

1. **Customer demand.** Customers increasingly want to know the carbon content of the products they are buying, and many companies recognize an opportunity to differentiate themselves by disclosing this information. As a consequence, more companies are eager to develop better knowledge of their supply chain carbon emissions to support the development of low-carbon products.
2. **Supply chain risk management.** Companies also recognize that current and upcoming regulations aimed at reducing carbon emissions will put pressure on their suppliers and ultimately on them. Increasing their knowledge of carbon emissions within their supply base will help these companies to better judge the risks presented by suppliers, and to collaborate efficiently with them to mitigate these risks and turn them into opportunities.
3. **Stakeholder pressure.** Increased public, investor and stakeholder interest has also pushed companies to integrate carbon management within their business strategy. As these strategies usually involve suppliers, companies need to trace supply chain carbon emissions to ensure supplier compliance.
4. **Joint process improvement.** The tracking and benchmarking of supplier emissions will allow Members to highlight opportunities within their supply base to improve collaboration and put a process in place to reduce carbon emissions. Most of these opportunities will be synonymous with efficiency improvements which will translate into cost savings both for suppliers and Members.

"Recently, having exceeded a goal set in January 2008 to reduce the energy consumption of its volume desktop and notebook PC families by 25 percent by 2010, a full year and a half ahead of schedule, HP set a goal to save 1 billion kWh of electricity by 2011 through a variety of product design strategies — the equivalent of powering 90,000 homes for an entire year."

Hewlett-Packard Company

"In 2008, IBM's energy conservation projects across the company delivered savings equal to 6.1 percent of its total energy use versus the corporate goal of 3.5 percent. These projects avoided the consumption of 235 million kWh of electricity and 6.3 million gallons of fuel, representing an avoidance of 215,000 metric tons of CO_2 emissions."

IBM

"In order to meet Dell's expectations in quarterly business reviews, Tier-1 suppliers must show that they 1) Publicly disclose annual GHG emissions by participating in the Carbon Disclosure Project; 2) Establish a public goal for reducing operational GHG impacts; 3) Set expectations for Tier-2 suppliers to manage and publicly disclose emissions per GHG Protocol… Failure to meet these requirements can impact your ranking and potentially diminish your ability to compete for Dell's business."

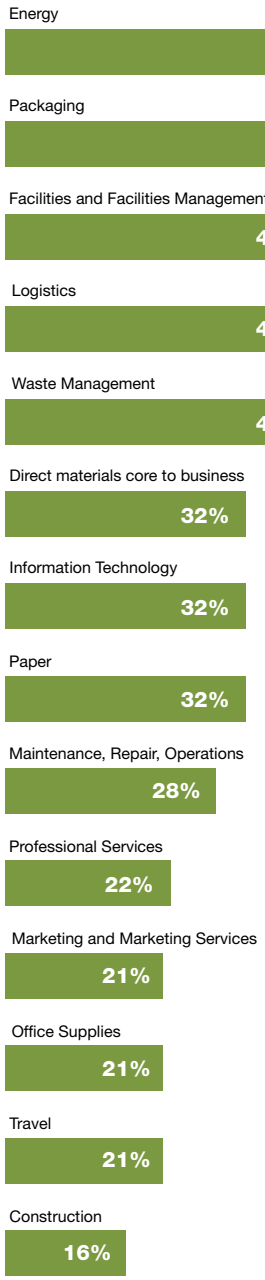
Dell

"We are working with a number of suppliers across our business to reduce our emissions. For example, in the UK we have teamed up with a supplier to use carbon-neutral plastic in the production of our credit cards."

National Australia Bank Group

Figure 10 – Members reporting figures or estimates for supply chain carbon emissions

Figure 11 – Members with extensive experience concerning sustainable options in key spend categories

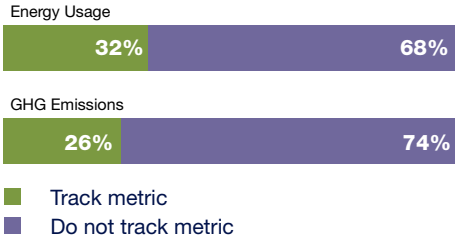


Facing the challenge of carbon information within the supply chain

Member companies are facing significant challenges when it comes to putting their good intentions into practice concerning their supply chain. Just 20% of Members are currently able to report real figures or estimates of their supply chain emissions (see Figure 10).

Current knowledge about low-carbon procurement remains limited, and only a small number of companies have extensive knowledge about the availability of low-carbon products for their major spend categories (see Figure 11). As one would expect, knowledge is higher for spend categories with high carbon content such as energy (58% have extensive experience), packaging (53%) and logistics (42%). However, these percentages suggest that there is significant opportunity for further improvement – the knowledge of low-carbon products is lower for less carbon-intensive spend categories such as office supplies (21%) and marketing services (21%). At the same time, most Members do not currently have the tools to track and evaluate their Suppliers' carbon performance (see Figure 12).

Figure 12 – Tracking of Supplier emissions and energy usage performance



In fact, most Members find reporting their supply chain emissions to be difficult because of the lack of agreed reporting methodology, making the tracking of a large supply base very hard to manage. The Greenhouse Gas Protocol is responding to calls from companies and other stakeholders for standard approaches to accounting for and reporting Scope 3 emissions. Two new standards for product and supply chain emissions are being developed using a multi-stakeholder, consensus-based process with participation from business, government agencies, non-governmental organizations and academic institutions from around the world. CDP is on the steering committee and the final standard will be published in December 2010.

A supplier relationship change – matching them to carbon management criteria

Compared to last year, the number of Members with a strategy for engaging with suppliers on GHG emissions and climate change is broadly similar: an increase of 8% to reach 89% (see Figure 13). Nevertheless, Members realize their challenge in carbon management – to translate high-level strategies and targets into tangible implementation. As a result, many intend to enact rapid changes to the way in which they engage with and select their suppliers.

Within the next 12 months, the usage of supplier relationship management processes such as third party certification requirements from major suppliers or joint process improvement is going to increase significantly (see Figure 14). From a more long-term perspective, the importance of carbon versus classic procurement targets is expected to triple during the next five years (see Figure 15). It is clear that companies are going to be adjusting their supply base according to green criteria at an amazing rate (see Figure 16), creating opportunities for savvy Suppliers to differentiate themselves against their peers.

"We have started collecting suppliers' GHG emission data but the data we have is not complete or robust. In the few cases where we are confident with the data we are using it to drive carbon reduction initiatives e.g. low carbon designs with our construction suppliers."

National Grid

"Baxter recently launched its new Global Supplier Sustainability program which focuses on incorporating green principles into its purchasing program with suppliers. The program includes 20 green criteria elements that will be used to assess Baxter's suppliers. As part of the global business community, Baxter is committed to working with its suppliers to improve their environmental performance, purchase products with reduced environmental impacts, and minimize transportation-related emissions."

Baxter International

Figure 13 – 2008 and 2009 Members with a strategy for engaging with Suppliers on GHG emissions and climate change

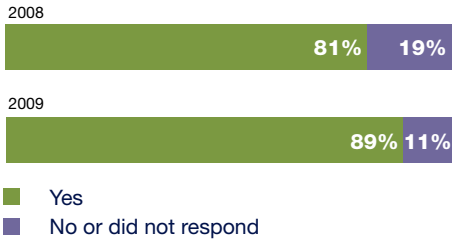


Figure 14 – Member/Supplier relationship management

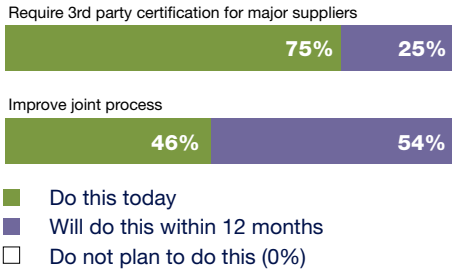


Figure 15 – Importance granted to classic procurement targets vs. carbon targets

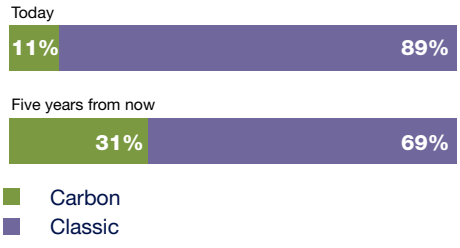
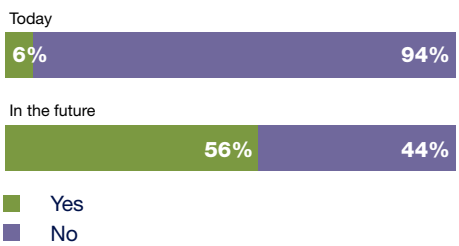


Figure 16 – Member willingness to deselect suppliers for failing to meet carbon management criteria



Member Highlights

"Reckitt Benckiser's carbon emission targets go beyond our own operations to include the whole lifecycle of our products. The Carbon20 programme aims to reduce our products' lifecycle emissions by 20% by 2020. Working with CDP Supply Chain since its launch two years ago has enabled us to better engage with our suppliers on the measurement and management of their emissions with a view to reducing that part of our carbon footprint."

Bart Becht,
Chief Executive Officer
Reckitt Benckiser

"Through our participation in CDP Supply Chain we are now working with a number of suppliers to integrate their carbon emissions into our overall carbon reduction strategy. By working closely with our suppliers we can comprehensively assess the full extent of their emissions which relate to ourselves, take the necessary steps to incorporate these into our own Scope 3 emission footprint, and plan to reduce them accordingly."

Kevin Page,
Operations Director
Clydesdale/Yorkshire Bank
National Australia Bank Group

"Since PepsiCo operates in more than 200 countries, we understand that our emissions are not only within our own operations, but also embedded in our products through our global supply chain. By collaborating with CDP Supply Chain, we gather primary data from our suppliers and growers to be better positioned to meet our emissions reduction goals."

Mitch Adamek,
SVP & Chief Procurement Officer
PepsiCo

"As a founding member of CDP, Unilever believes that CDP's standardised approach to emissions reporting can provide real benefits. In 2010, we will expect an increase in the number of our suppliers engaged through CDP. Unilever will continue to drive emissions reduction activities across the supply chain, and we expect real progress in suppliers emission reduction".

Marc Engel,
Group Chief Procurement Officer
Unilever

"Johnson Controls is committed to sustainability and as a global leader in energy efficiency solutions in buildings and vehicles, we are uniquely positioned to help our customers reduce energy use and greenhouse gas emissions. In turn, we ask our suppliers to verify that the products and services that we purchase are equally efficient. We have benefitted from our partnership with the CDP for several years, and rely on the CDP Supply Chain program to provide an effective global standard in corporate emissions reporting."

Michael Bartschat,
Chair, Global Purchasing Council
Johnson Controls

"National Grid remains focused on climate change, security of supply, and playing a leading role in addressing the longer term issues facing the energy industry. We continue to work closely with our tier 1 suppliers through the CDP Supply Chain Initiative to understand the risks and opportunities in our supply chain. National Grid is working towards incorporating carbon management into our supplier selection criteria in the future. Our work with CDP is an important element of our carbon management strategy."

Ray Schlaff,
Chief Procurement Officer
National Grid

"A powerful way companies can drive change is through the supply chain -- the global network of suppliers, manufacturers and partners it works with to make and distribute its products. The CDP Supply Chain program helps companies engage with their suppliers on carbon and climate change issues. Optimizing a supply chain around environmental sustainability creates an effect far beyond the corporate headquarters. Operational efficiency benefits every stakeholder in the chain, all the way to the customer. If you're not efficient you can't be sustainable or in the long term, profitable."

Tony Prophet,
Senior Vice President,
HP Personal Systems Group Worldwide Supply Chain
Hewlett-Packard

"L'Oréal recognizes that carbon and climate change have serious operational and financial implications for our business. We want our suppliers to understand the risks and identify the long-term opportunities of carbon management. We are working with them, through CDP Supply Chain, to discover opportunities for cost reduction, risk mitigation, and joint emissions reduction activities. This approach provides a mixture of long-term benefits such as environmental exchanges on issues like waste and water consumption/ scarcity, and quick carbon wins for L'Oréal and our suppliers while supporting our extensive Responsible Sourcing efforts."

Miguel Castellanos,
Managing Director,
Worldwide Environment, Health and Safety
L'Oréal

"Acer actively encourages our suppliers to measure and manage their carbon emissions by disclosing through CDP Supply Chain. As we move towards a low-carbon economy it is important to recognize that carbon and climate change have serious commercial, operational and financial implications for business. We want our suppliers to understand the risks and identify the long-term opportunities of carbon management and we are working with them, through CDP Supply Chain, to ensure they are strategically prepared for climate change."

J. T. Wang,
Chairman
Acer

"Logica has been reporting via the CDP since 2006 and in 2009 achieved a leading position in our sector in CO_2 emission reduction and strategy. We use it to drive reporting across our organization and as a result have saved £10M in our UK organization alone. By supporting our suppliers to report via the CDP we want to help them to make similar energy, carbon and cost savings. This in turn reduces the total environmental impact and cost on the services to our clients."

Andy Green,
Chief Executive Officer
Logica

"I see the CDP Supply Chain Project as a pragmatic way to ensure business continuity and cost control in a challenging business environment, with physical, regulatory and financial impacts of climate change already being felt in our respective businesses."

Gary Aldridge,
Group Manufacturing Director
Imperial Tobacco Group

5 CDP Supplier Analysis

"Heinz believes that if consistent regulations were implemented and enforced on a global scale, everyone would benefit from the increased communication and coordination that would result. However, we're finding that many countries are moving forward individually and are currently proposing regulations that may impact some locations but not others. Corporations such as Heinz have an important role to play in the development of consistent global policy, incorporating best practices among a broad spectrum of requirements. Obviously, this is a challenge that needs to be resolved and it requires the participation and collaboration of countries around the world."

H.J. Heinz Company

Introduction – Measuring Member expectations versus Supplier capabilities

Companies increasingly want to know that their suppliers actively participate in carbon management and are aligned with their own ambitions. To support CDP Members with their challenge, we have assessed Supplier performance across four key dimensions: awareness, ambition, reporting and implementation.

CDP Supply Chain Members are eager to collaborate with their suppliers to better manage climate change risks and reduce carbon emissions. But are their suppliers up to this ambitious task?

This section of the report provides an opportunity to evaluate the aggregate supply base on its ability to fulfill Members' expectations of alignment on emissions reduction targets, emissions reduction capabilities and activities. We assessed the supply base along four dimensions:

1. **Strategic awareness about climate change** evaluates how aware the supply base is in terms of existing and future climate change risks. Do Suppliers have the ability to provide solid and precise information about risks related to climate change? Can they derive specific implications from their findings?

2. **Carbon reduction ambition** evaluates the level of sincerity of Suppliers' reported emissions reduction ambitions. How high is their level of ambition to reduce GHG emissions measured by emissions reduction targets? How detailed is the information that they provide about their ambition? What is their time frame for achieving these targets?

3. **Reporting capabilities** evaluates Suppliers' willingness and capability to report GHG emissions and climate change-related activities. Are they proactively creating transparency for the public, investors and other stakeholders about GHG emissions? What are their capabilities when it comes to reporting the main emissions categories: Scope 1, Scope 2 and Scope 3 emissions?

4. **Implementation practices** evaluates the approaches used to reach established emissions reduction targets and whether they are sustainable. What governance mechanisms are in place to ensure implementation? What is the Suppliers' level of commitment to reach their targets? Will these implementation practices be sustainable in the long run?

Suppliers' strategic awareness

Strategic awareness is at a level similar to last year. A group of early movers have a detailed perception of the risks related to climate change and are currently succeeding in taking action to turn their risks into opportunities. Nevertheless, the majority of Suppliers still show considerable room for improvement. If they are to catch up to Members' level of strategic awareness they need to begin utilizing the existing opportunities that climate change offers.

The immediate impact of regulatory change

We assessed strategic awareness based on the number of companies who demonstrate awareness of climate change related-risks and who are able to identify specific types of risks that their businesses are exposed to. Overall, Supplier awareness is at a level similar to last year, particularly when it comes to risk from regulatory and environmental changes (see Figure 17 and Figure 18).

Across most of the globe, governments and organizations are in the process of developing emissions standards, many of which have an immediate impact on the competitive environment upon implementation. As a consequence, a large part of the supply base (58%) feels exposed to the establishment of carbon emissions regulations (see Figure 17). Suppliers who consider themselves exposed to regulatory risks most commonly identify risks related to general emissions regulations (57%) and cap-and-trade schemes (38%). To a lesser extent, mandatory technology requirements (19%) and energy carbon taxes (16%) are also perceived as a source of risk. Suppliers also identify other types of regulatory risks (38%) such as regulation related to waste and water management and product labeling (see Figure 19 – 'Others' category).

"Acknowledging the increased frequency of flooding and storm damage, RBS has recently embarked on a comprehensive survey of flood risk for all our UK properties. This process identifies flood risk at specific properties, determining the magnitude of risk and the extent of impact at each site from an individual flood event or regional flood events. This sizeable exercise is enabling us to map the impact of our changing climate on our portfolio and operations and feed this into our long-term strategic planning. The data will also be factored into the Group's incident reporting procedures and integrated into local disaster recovery plans."

Royal Bank of Scotland

Figure 17 – 2008 and 2009
Suppliers reporting exposure to regulatory risks related to climate change

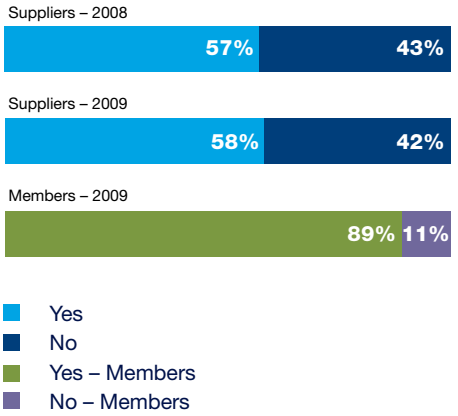
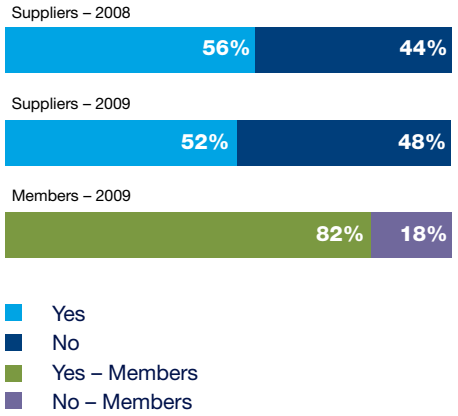


Figure 18 – 2008 and 2009
Suppliers reporting exposure to physical risks related to climate change



"The global carbon market amounted to traded volumes of 4.9 gigatons of carbon reductions with a value of €92bn in 2008. Regulatory changes to combat climate change are providing a huge portfolio of opportunities. They arise in their majority from instruments of climate change mitigation such as the Kyoto mechanisms (emissions trading, clean development mechanism and joint implementation) or at the level of national policies such as subsidies for renewable energy (e.g. the energy feed-in law in Germany)."

Allianz SE

The threat of physical changes to the environment

Physical risk is another area of concern. GHG emissions are causing the climate across the globe to change, and companies recognize that this environmental change imposes more extreme and sometimes new physical risks to their business. Overall, more than half of Suppliers indicate business exposure to physical risks (see Figure 18). Extreme weather events threaten almost three quarters of Suppliers (69%), while changes in temperature and rainfall patterns (49%) as well as flooding and rising sea levels (46%) are in the minds of almost half of Suppliers (see Figure 20). Again, some Suppliers (24%) point towards other company-specific risks that their businesses face such as crop infestation or coastal erosion (see Figure 20 – 'Others' category).

Turning risk into opportunity

A group of early movers in the supply base distinguish themselves from their peers in terms of strategic risk awareness. They manage to combine their high level of strategic awareness with forward-thinking approaches to carbon management in order to realize new business opportunities. In short, these Suppliers are looking beyond the risks that climate change imposes on them and are turning them into precise and concrete opportunities.

Figure 19 – Core types of regulatory risk

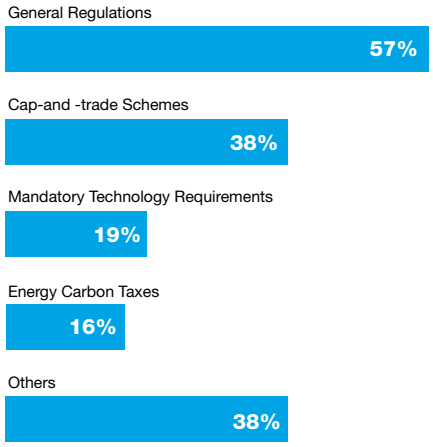
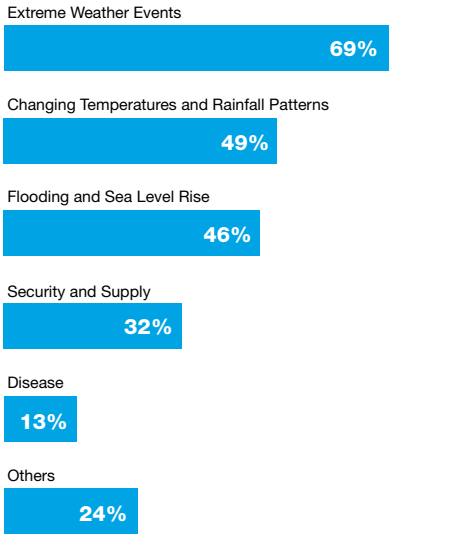


Figure 20 – Core types of physical risk



Suppliers' carbon reduction ambition

The success of long-term global carbon reduction among Suppliers will depend on the ability of those who set good targets today to sustain these levels in the long run. It also depends on how quickly those who do not have targets put ambitious ones in place.

The ambition to reduce carbon emissions is variable

The number of Suppliers who clearly commit to reducing their company-wide emissions is relatively low. 56% have a reduction plan in place but only 38% describe clear and detailed reduction targets. Although there is a significant and very positive increase in the number of Suppliers who have an emissions and/or energy reduction plan in place (27% more Suppliers compared to last year), the gap between Suppliers and Members in this regard remains very large (see Figure 21). For instance, 82% of Members are committed to clear reduction targets (see Figure 22).

The majority choose absolute targets over intensity

A major differentiator between targets is whether they are absolute or intensity-based. Absolute emissions reduction targets[5] are defined by the GHG Protocol as goals to "reduce absolute emissions over time." They are most frequently expressed in percentages or in tons of CO_2-e[6]. Intensity emissions reduction targets[7] are defined by the GHG Protocol as goals to "reduce the ratio of emissions relative to a business metric over time". They are linked to another measure, such as revenue, sales or a production unit. A 2% absolute target will generally deliver far greater emissions reduction in a growing business than a 2% intensity-related target. For that reason, absolute targets are generally considered more robust than intensity-related targets.

Among Suppliers who have a target in place, 70% are working toward an absolute target while 30% use an intensity target (see Figure 23). Nearly all of the intensity denominators used are a proxy for the size of the business (e.g. production or sales volume).

> "Our business opportunities increased as of last year due to a growing number and tightening of existing carbon-related regulations and because of an increased awareness by governments and society about reducing greenhouse gas emissions."
>
> **BASF**

Figure 21 – Companies with a GHG emissions and/or energy reduction plan

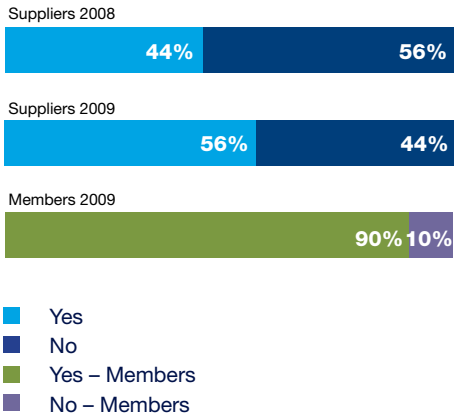


Figure 22 – Companies with a detailed GHG emissions and/or energy reduction target

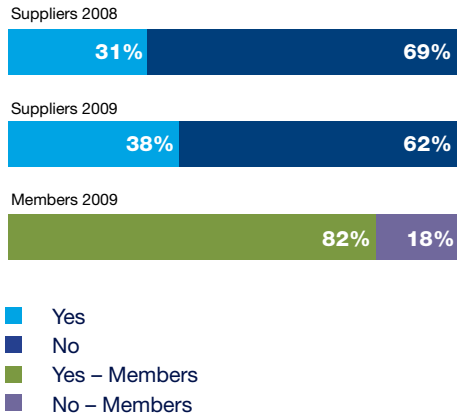
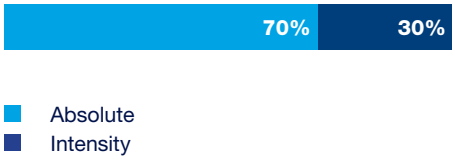


Figure 23 – Suppliers with absolute or intensity target in place



5 See glossary for detailed definition.
6 CO_2-e = CO_2 equivalent. See glossary for detailed definition.
7 See glossary for detailed definition.

"EDP's strategic plan, issued on the investor day in 2008, stated that the CO_2 emissions factor (EF) will be reduced by 56% by 2012 in comparison with 2005 emissions. EF will drop from 600 tCO_2/MWh in 2005 to 270 tCO_2/MWh in 2012. These targets apply to energy production activities."

Energias de Portugal

"In 2008, Telefónica committed to reducing its consumption of network electricity by 30% per equivalent access and its office electricity consumption by 10% per employee by 2015. This will reduce the company's direct and indirect emissions on a global level considerably."

Telefónica

Existing targets are aligned with scientific requirements… for the 38% of Suppliers who have set one

In 2007 the IPCC stated that developed economies must reduce GHG emissions by 80-95% by 2050 in order to avoid dangerous climate change[8]. Are Supplier targets sufficient to reduce emissions in line with these scientific requirements to mitigate ongoing climate change?

To answer this question, we calculated the annual average absolute reduction across the Supplier base. The intensity-related targets (30% of the targets) were adjusted for real GDP growth to give an accurate reflection of what they will deliver in terms of absolute reductions.

The analysis showed that Suppliers' targets are widely spread (see Figure 24), with targets from less than minus 2% – an absolute increase – up to more than 10%. A majority (52%) set the target between 0 and 4%. On average, the annual absolute reduction for Suppliers with a target in place is equal to 3.6% when intensity targets are adjusted for real GDP growth.

In comparison, the percentage of annual absolute reduction required in order to achieve the IPCC recommended reduction of 25-40% by 2020 and 80-95% by 2050 against the 1990 baseline has been calculated[9]. A global reduction rate per annum of 2.6% is required to achieve a 25% reduction by 2020, while a 3.9% rate is required to reach an 80% reduction by 2050.

The average of the Suppliers who set a target (the above-mentioned 3.6%) is not far from the IPCC target (see Figure 25). If this rate were to be achieved and extended over time, then these Suppliers would achieve the 80% reduction target by 2053.

This analysis is based on two conservative assumptions. First, 2009 is assumed as the starting point for reductions. This is because there is a lack of corporate data from 1990 levels – the majority of companies' baseline years are set between 2005 and 2009. Second, it assumes that companies cut yearly emissions at a rate identical to the one indicated in their current plans.

Figure 24 – Number of Suppliers with corresponding annual absolute reduction

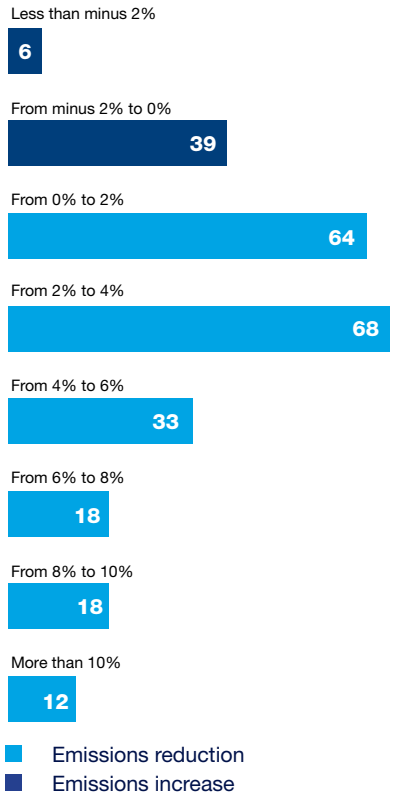
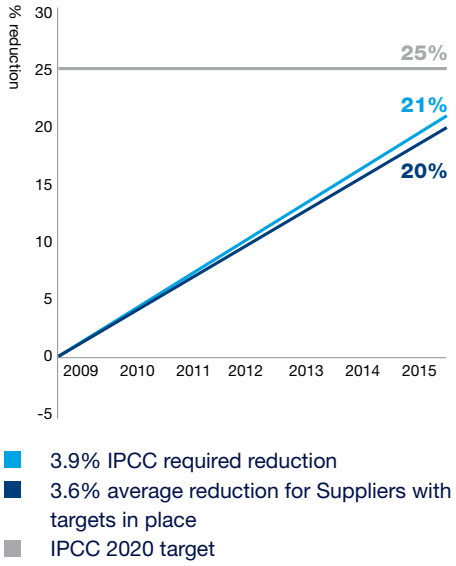


Figure 25 – Estimated carbon percentage reduction over time for Suppliers with a target in place



8 Statement from the Intergovernmental Panel for Climate Change (IPCC) Fourth Assessment Report, 2007.
9 These requirements apply to Annex 1 under the Kyoto Protocol – industrialized countries and countries in transition.

The challenge of long-term achievement

Suppliers with emissions reduction targets set target years ranging from 2009 to beyond 2015 (see Figure 26). A majority of them commit to targets that do not exceed 2 years (52%). Furthermore, a very large majority of them (81%) do not set targets beyond 2012, which correlates with the final year of the Kyoto Protocol. This suggests that businesses, before setting longer term reduction goals, are waiting to hear the outcomes of the United Nations Climate Change negotiations that are intended to define the targets to meet from 2012. The IPCC clearly states that reductions are required well beyond 2012…at least until 2050. However, a very limited percentage of Suppliers (8%) have currently set targets beyond 2015. With an average commitment period of 5.2 years, it remains unclear whether these companies will be able to sustain their targets in the long run.

The slow and continuous increase of global emissions

So far, we have not included Suppliers who do not report a target. However, they represent 62% of all Suppliers who responded to the CDP Supply Chain Information Request. Assuming these Suppliers without reduction targets will keep their emissions intensity constant, their absolute emissions will grow, on average, at the same rate as the real GDP.

Now, if we look at the entire Supplier pool with or without a reduction target, the annual average absolute reduction drops to negative 0.8%. This represents an average carbon emissions increase that will drive Suppliers' emissions far from any sustainable targets (see Figure 27).

It is therefore critical that Suppliers without a reduction target in place quickly commit to ambitious targets. Member companies who are at the forefront of carbon emissions management have an important role to play in convincing these Suppliers to react quickly and thoroughly to the current situation.

"We have committed to reducing our absolute carbon emissions by 50% by 2020, where carbon is taken as carbon dioxide equivalent and includes any GHG."

Cadbury

Figure 26 – Number of Suppliers with corresponding reduction target year

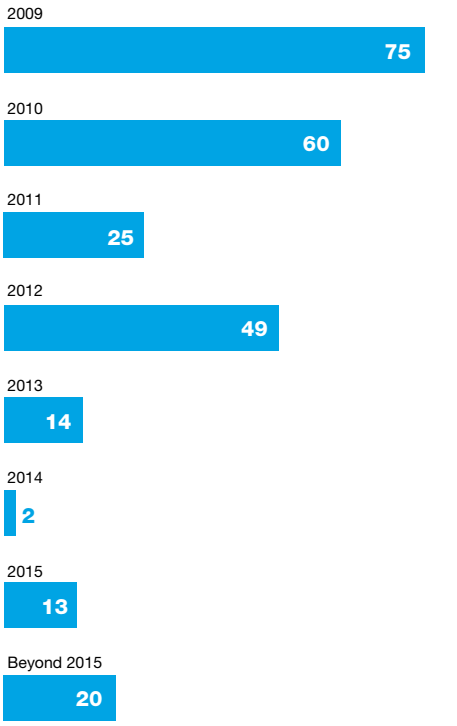
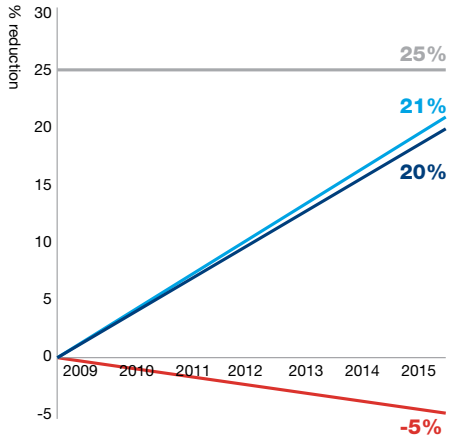


Figure 27 – Estimated carbon percentage reduction over time for all Suppliers



- 3.9% IPCC required reduction
- 3.6% average reduction for Suppliers with targets in place
- -0.8% average reduction for Suppliers with and without targets in place
- IPCC 2020 target

"Juniper had one supplier who believed that they 'did not have a carbon footprint' as they were in a non-manufacturing environment. We were able to educate them about the CDP and explain why managing their carbon footprint makes good business sense. Another supplier felt that they had no need to participate since their company was not publicly held. We convinced them otherwise."

Juniper Networks

"Vivendi reports on the significant environmental impact of its operations in the Annual Report to Shareholders. This information includes not only global climate change information (e.g., total annual equivalent carbon dioxide emissions) but also information about other relevant environmental parameters (e.g., waste generation, water consumption, etc.)."

Vivendi Universal

Suppliers' reporting capabilities

Supplier willingness to disclose emissions has risen significantly, especially when it comes to Scope 1 and 2 emissions. The challenge is now to understand supply chain carbon drivers and the underlying causes through the lower supply chain tiers. This is essential to enable action to be taken. Collaboration and best practice sharing are the way forward for closing the gap between Supplier and Member reporting performance.

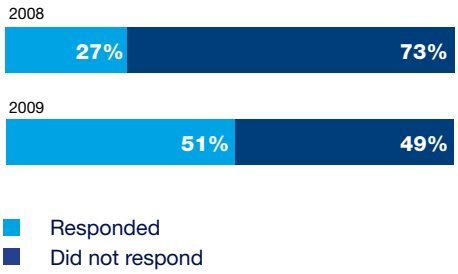
An increase in Suppliers' willingness to disclose

Reporting capabilities are a significant cornerstone in the success of a company's carbon management process, as they lay the foundation for goal-oriented emissions reduction. The reporting process begins with measuring emissions data. This process allows companies to establish a baseline to set emissions reduction targets for the future which will be measured against yearly progress.

We assessed the reporting capabilities of Suppliers by participation rates, companies' abilities to report Scope 1, Scope 2 and Scope 3 emissions and the willingness of companies to be transparent about their emissions through external verification and communication activities.

The Supplier participation rate as a percentage of requests made increased from 27% in 2008 to 51% in 2009 (see Figure 28). Members aimed to gain a more in-depth understanding of their supply chain's carbon management performance and focused on inviting a more targeted group of Suppliers to participate. Increased public and investor interest in carbon management performance also prompted more companies to respond to this year's Information Request. Last, but certainly not least, an important reason for this drastic participation rate increase was the Suppliers' own pro-active interest in improving their carbon management practices, motivating additional companies to participate.

Figure 28 – 2008 and 2009 Supplier response rate



An overall increase in emissions reporting, but still a low level of emissions transparency through Suppliers' own external supply chains

In 2008, less than one third of participating Suppliers were able to report Scope 1 and Scope 2 emissions. This year's results show a dramatic improvement in Supplier capabilities to report Scope 1 and Scope 2 emissions: the numbers have more than doubled – 62% of Suppliers currently report Scope 1 emissions and 63% report Scope 2 emissions (see Figure 29).

The number of Suppliers now reporting Scope 3 emissions has increased compared to 2008, but there is still room for improvement. Suppliers must become as motivated as Member companies to better understand their supply chain emissions, as well as the key drivers that affect emissions outside of their own company walls. The fact is, however, that reporting on supply chain emissions is still very difficult, and Suppliers face challenges such as a lack of standard reporting methodology and the resource-intensiveness of the supply chain emissions evaluation process. The new GHG Protocol Scope 3 standard will provide a standardized method to inventory the emissions of corporate value chains using a combination of data sources so that companies can focus on the greatest opportunities to reduce emissions in the value chain.

Enhanced data quality assurance

One area of major improvement this year is the enhanced quality assurance of the reported data. Compared to 2008, the number of companies who had their emissions data externally verified increased by nearly half. Today, 30% of Suppliers[10] report emissions data that has at least in part been verified by an external third party (see Figure 30). Again, this demonstrates Suppliers' willingness to make carbon disclosure more accurate.

Figure 29 – 2008 and 2009 Scope 1, Scope 2 and Scope 3 emissions reporting

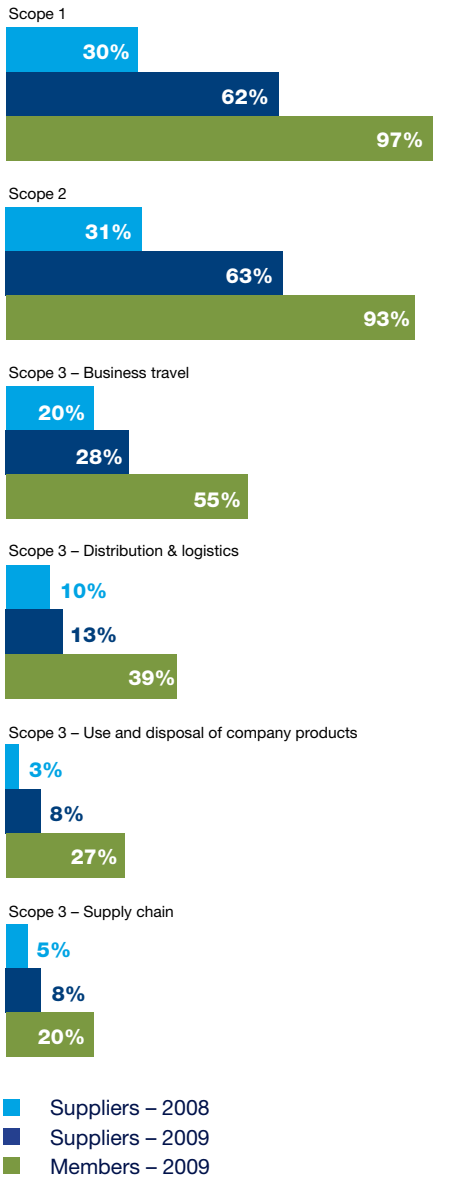
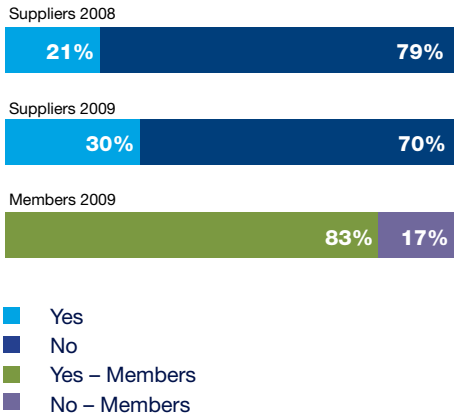


Figure 30 – 2008 and 2009 external emissions data verification



"Millipore posts information on our corporate climate strategy, climate risks and opportunities, GHG management and reduction strategies, and progress towards meeting our GHG reduction goal, in our annual Sustainability Report. We also report on our participation in the EPA Climate Leaders program, including our GHG reduction goal, which is publicly available on our company's individual Climate Leaders webpage."

Millipore Corp.

"Information about climate change risks and opportunities, as well as about past and present emissions, is communicated through our company's Annual Report. We also plan to publish a specific annual report on sustainable development actions in June of 2009."

GDF Suez

10 Excluding Small to Medium Enterprises. See glossary for a detailed definition.

"Our warehouse in Mexico City has installed solar panels which now power the recharging of forklifts. This is one of the largest solar installations in Latin America...our Beauty Tech factory in China has installed 2,000 solar tubes for the preheating of water used for both processes and domestic use… our factory in Burgos, Spain has made a public commitment to become carbon neutral by 2015. This will be achieved by using a number of green technologies, including solar arrays, biofuel, and geothermal energy…our new building at Chevilly la rue is heated with geothermal energy."

L'Oréal

"After successfully piloting one 7.5 ton electric truck in 2007, TNT UK introduced a significant number of electric vehicles into its standard operations. Currently, 50 vehicles in the 7.5 ton segment are operational in about 22 locations throughout the UK."

TNT

Suppliers' implementation practices

An increasing number of Suppliers have energy and/or emissions reduction plans, using a variety of approaches. Companies have also succeeded in making the topic of climate change an important priority at the board level. Nevertheless, the depth, commitment and sustainability of implementation across the full supply base are questionable.

A variety of approaches

Our approach to assessing implementation capabilities within the supply base focuses on measuring:

- The existence of emissions and/or energy reduction plans, as well as the reduction approaches that are identified and utilized;
- The types of governance mechanisms in place;
- How employees are incentivized to implement emissions reduction on a day-to-day basis;
- How Suppliers engage their own supply bases.

A significant increase in Suppliers who have an emissions reduction plan

This year, more than half of Suppliers had an emissions and/or energy reduction plan, which represents a strong increase compared to last year (27% more Suppliers – see Figure 21). However, this overall level is significantly lower than for Member companies.

To fulfill these reduction plans, several approaches to emissions reduction are in use. While some Suppliers use a single approach, others use up to three or more approaches at the same time to reduce emissions. Nearly three quarters (72%) of Suppliers currently reduce emissions by improving energy efficiency (see Figure 31). Approximately 40% of Suppliers work on process improvements, while only 22% of them use renewable energy as a way to reduce carbon emissions. It is interesting to note that an insignificant minority of Suppliers use sequestration to reach their GHG emissions goals.

A marginal improvement in governance

An increasing number of Suppliers are establishing governance within top management to ensure the completion of carbon reduction activities currently in place. 60% of Suppliers have elected a board committee member or other executive who has overall responsibility for carbon management and climate change issues (see Figure 32). Again, the gap compared to Member companies remains significant.

Figure 31 – Supplier approaches to reducing GHG emissions

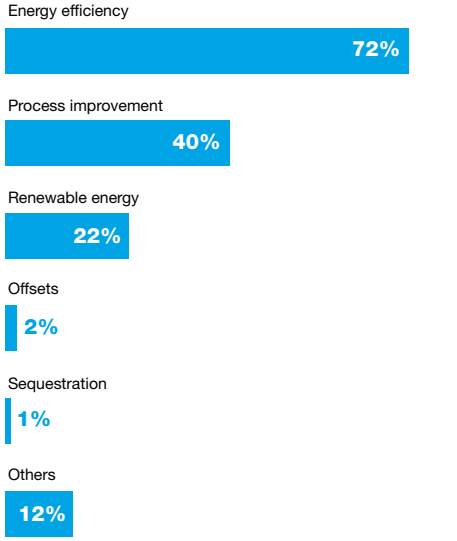
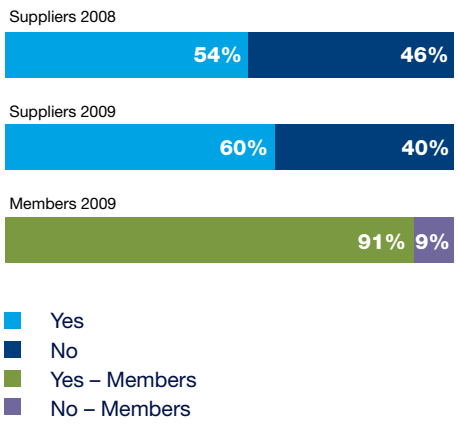
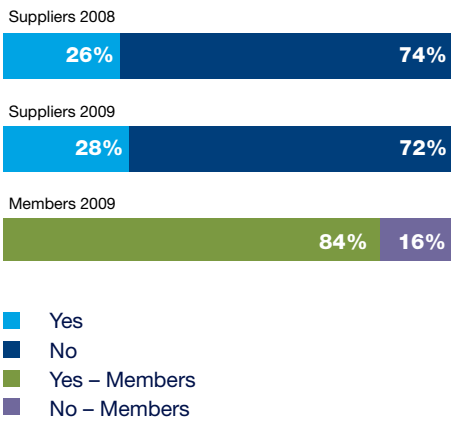


Figure 32 – 2008 and 2009 companies with a board committee or other executive body with overall responsibility for climate change



A lack of employee incentives
Aligning employee objectives with those of the company requires appropriate incentives – they are a key factor for the successful implementation of change management. However, within the context of carbon emissions reduction, the number of Suppliers who provide incentives for the successful implementation of emissions reduction plans and the achievement of targets is stagnating at a very low level (see Figure 33). On a positive note, 75% of the incentives that are currently given out by Suppliers to their employees are related to monetary rewards, which are probably the most effective incentives a company can provide.[11]

Figure 33 – 2008 and 2009 companies providing incentives for attainment of climate change targets



11 This figure excludes Small to Medium Enterprises. See glossary.

"In order to globally promote a CO_2 reduction initiative which can be applied widely, Panasonic established an intranet in September 2008 which contains a Before/After chart of reduction examples. In this intranet site, each plant can search a reduction initiative with a keyword. As of June 2009, eleven hundred reduction initiatives have been registered and Panasonic is striving towards widespread, effective CO_2 reduction initiatives."

Panasonic

"Oversight of Citi's climate strategy and performance is provided at the most senior level by the Board of Directors Public Affairs Committee…Citi also has an Environmental and Social Policy Review Committee…the Corporate Sustainability unit provides advice and support for Citi's climate initiatives, plays a key role in policy/initiative development, and is responsible for ongoing coordination of Citi's climate initiatives at the corporate level."

Citigroup

"Siemens considers climate change today's major task with regards to environmental protection. Within the Siemens board, one member has been assigned as the senior executive in charge of environmental protection at the corporate level. This executive reports directly to our CEO. Further responsibilities for environmental protection at Siemens have been organized on a worldwide basis in the form of a 3-tier model: a corporate tier, a divisional tier and a tier of environmentally relevant units (mostly factories). At each level, specialized departments or experts serve the manager in charge of environmental protection. These tiers are linked via defined auditing and reporting schemes."

Siemens

"Our climate protection program GoGreen is an essential part of our Group's "Strategy 2015"...therefore it is overseen by a Steering Committee which is chaired by our CEO."

Deutsche Post DHL

"The achievement of performance and development targets related to social and environmental responsibility is integrated into incentive programs. Under Novozymes' stock options program, all employees can be allocated stock options if Novozymes achieves their overall targets, including targets on CO_2 emissions reductions."

Novozymes

"TIBCO offers a cash incentive for employees who purchase hybrid/ electric vehicles for personal use. We also provide recharging stations for electric vehicles in the TIBCO garage."

TIBCO Software

"We are working with 50% of suppliers by spend to develop mutual plans to reduce CO_2."

Vodafone Group

"Each business unit has sustainability in their strategic plan and is held accountable. Therefore, incentives come in the form of internal recognition (publicly recognized by the CEO within communication vehicles or highlighted with the Board, etc.) and external recognition (press releases, customers, etc.) which can drive incremental business."

KRAFT

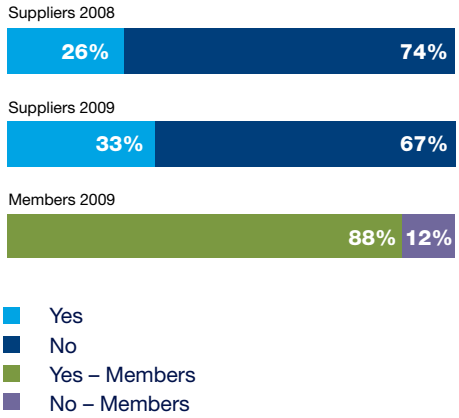
"Anheuser-Busch InBev employees at all levels are entitled to benefit from achieving environmental performance targets. As an example, top performing facilities receive an award and all facility employees qualify for a financial bonus."

Metal Container Corporation[12]

Suppliers need to engage their own supply base

Suppliers' involvement with their own supply base, although increasing, remains limited. 33% of all Suppliers now have a strategy to engage with their own suppliers on climate change issues and GHG emissions, which represents an increase of about one third compared to last year (see Figure 34).

Figure 34 – 2008 and 2009 strategy for engaging with their own suppliers about their GHG emissions



12 Metal Container Corporation is a wholly owned subsidiary of Anheuser-Busch InBev

6 The Way Forward

Conclusion: Sustainable Cooperation, Sustainable Future – CDP and the Supply Chain

Members at the forefront of carbon management

The Member and Supplier assessments speak for themselves: Member companies are without a doubt at the forefront of carbon management. The formal integration of climate change into corporate strategy, the creation of carbon policies in procurement and the existence of reduction plans all indicate Members' leading position in the context of carbon management. However, the implementation of good intentions still presents challenges for Members, particularly when it comes to low-carbon procurement and the tracking of their own supply base's emissions reduction performance – both of which are necessary for reducing the majority of Members' emissions.

Bringing Suppliers to the next level of carbon management

Members are aware of the large gap between Member and Supplier performance along the four dimensions of carbon management – strategic risk awareness, carbon reduction ambition, reporting capabilities and implementation practice – which could hinder Members' carbon management implementation intentions.

The challenge for Suppliers now lies in bridging this gap. They must catch up to Member companies in order to fulfill the Member goals to reduce emissions. At the forefront of the race is a group of 'early mover' Suppliers who are already demonstrating excellent carbon management performance. We expect these early movers to become role models for other Suppliers, as well as catalysts for change in the entire supply base towards better carbon management.

The remaining majority of Suppliers will be forced to improve their capabilities in order to catch up to the market leaders. Some of them will need to start from scratch, while some of them can build upon a solid foundation of carbon management. The bottom line is that the Supplier market has started to adapt to current conditions and that this development is not one that any company can afford to miss.

CDP's role in supporting Members

Members' own responsibilities

Member companies need to recognize their own roles and responsibilities when it comes to supporting their Suppliers in this challenging task. Supplier performance is crucial for their own success, as both are tightly interconnected. Therefore, collaboration and best practice sharing between Members and their supply base will be crucial on the journey to bringing carbon emissions and climate change management to the next level. Responses to the Supplementary Member Questionnaire highlight the fact that Members are becoming increasingly prepared to deselect Suppliers who do not take the carbon management challenge seriously. This means that Suppliers now have a clear business case for improving their performance to meet their customers' objectives.

Annual supply chain performance tracking

CDP's role is to support Members as they establish and evolve effective and efficient carbon management practices throughout their supply chain. As such, CDP offers annual supply chain performance tracking that analyzes the carbon management capabilities of a company's supply chain over time through standardized metrics. The performance scoring takes into account the four carbon management dimensions of strategic awareness, carbon reduction ambition, reporting capabilities and implementation practices. To provide a comparison, the scores are benchmarked against companies from the CDP Supply Chain database, which includes more than 700 top-tier suppliers across the globe.

Customized dashboard

Member companies receive a customized dashboard (see Figure 35) report that highlights the performance of their Suppliers. This dashboard also highlights leading supplier practices in the Supplier database, providing a best practice comparison. Companies can use these results to engage with their own Suppliers in order to transfer best practices and drive improvement throughout their supply base.

Becoming a CDP Member

If you are interested in becoming a CDP Supply Chain member company, please visit http://www.cdproject.net to find out about the benefits available to your organization. The website also contains the CDP Supply Chain Information Request and information about becoming a member.

Figure 35 – Customized dashboard sample (sample data)

			Member X	Members average
Participation	• Number of participants		19	23
	– Number of suppliers requested to participate		55	40
	– Participation rate [%]		35%	64%
Supply base performance	• Overall performance [on a 0 to 100 scale]		40	45
	– Strategic awareness [on a 0 to 100 scale]		48	46
	– Carbon reduction ambition [on a 0 to 100 scale]		13	21
	– Reporting capabilities [on a 0 to 100 scale]		47	59
	– Implementation practice [on a 0 to 100 scale]		40	47

7 Glossary of Key Terms

Absolute emissions reduction targets: Absolute targets are targets that are not linked to any other measure such as revenue or sales. They are most frequently expressed in percentages or in tons of CO_2-e. For example:

Reduce CO_2-e emissions by 50% by 2020 based on 1990 levels;
Reduce CO_2-e emissions by 120 million tons by 2012 based on 2004 levels.

CO_2, Metric Ton of: A metric ton (metric tonne in British English) of carbon dioxide. Please note that a metric ton is equivalent to 2,204.6 lbs (1,000 kg).

CO_2-e, Metric Ton of: Emissions under the "Scopes" must be reported in metric tons of CO_2-e. CO_2-e stands for carbon dioxide equivalent. This is the universal unit of measurement used to indicate the global warming potential (GWP) of a greenhouse gas (GHG), expressed in terms of the GWP of one unit of carbon dioxide. A metric ton of CO_2-e means one metric ton of carbon dioxide or an amount of any of the other GHGs with an equivalent GWP.

GWP or Global Warming Potential: The GHG Protocol defines a global warming potential (GWP) as "…a factor describing the radiative forcing impact (degree of harm to the atmosphere) of one unit of a given GHG relative to one unit of CO_2." By using GWPs, GHG emissions can be standardized to a carbon dioxide equivalent (CO_2-e). GWPs allow the effect of different GHGs to be expressed using carbon dioxide as a reference. For example, the impact on the atmosphere of one unit of methane over a 100-year time span is 21 times greater than one unit of CO_2. Hence, methane's global warming potential (GWP) over a 100-year period is 21.

Intensity emissions reduction targets: Intensity-based targets are targets that are relative to a financial measure such as revenue or sales, or to a measure of activity such as unit of output. They are usually expressed per unit of physical, financial or economic output. For example:

Reduce CO_2-e emissions by 0.1 tons per ton of crude steel produced;
Reduce CO_2-e emissions by 5% per employee by 2009.

IPCC: Intergovernmental Panel on Climate Change. The IPCC is the leading body for the assessment of climate change, established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) to provide the world with a clear scientific view on the current state of climate change and its potential environmental and socio-economic consequences. The IPCC is a scientific body. It reviews and assesses the most recent scientific, technical and socio-economic information produced worldwide relevant to the understanding of climate change.

Scope 1 emissions: Direct emissions from GHG sources owned or controlled by the reporting organization.

Scope 2 emissions: Emissions that do not physically occur from within the organization's reporting boundary and are therefore 'indirect' emissions. Scope 2 emissions are caused by the organization's consumption of electricity, heat, cooling or steam brought into its reporting boundary. This category is often called 'purchased electricity' because it represents the most common source of Scope 2 emissions.

Scope 3 emissions: An organization's indirect emissions other than those covered in Scope 2. They are from sources that are not owned or controlled by an organization, but which occur as a result of its activities. The Scope 3 emissions subcategories considered by the CDP Supply Chain Information Request are: (1) business travel emissions, (2) distribution and logistics emissions, (3) emissions from the use and disposal of a company's products, (4) supply chain emissions.

SMEs: Small to Medium Enterprises. Companies are considered SMEs (European Union definition) when the following four conditions are met: (1) the organization is engaged in economic activity, (2) the organization has fewer than 250 employees, (3) the annual turnover does not exceed €50 million or the balance sheet total does not exceed €43 million, (4) the organization is autonomous. *SME companies receive a shorter version of the 2009 CDP Supply Chain Information Request, and are therefore excluded from some statistical calculations.*

Advisory Member

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