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## **BUSINESS AND CLIMATE CHANGE: AN MNE GUIDELINES PERSPECTIVE**

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<sup>\*</sup> See OLIS document COM/DAF/INV/ENV/EPOC(2009)1

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## INTRODUCTION

Integration of climate change considerations into corporate strategies has started reshaping the way enterprises carry out their business. In their efforts to address climate change, companies face new opportunities, including developing new technologies and products and accessing new markets. By becoming more energy-efficient, they can also make important savings. In many cases, addressing climate change makes good business sense.<sup>1</sup> But companies also face higher risks in relation to climate change, including increasing legal and regulatory pressure; higher costs as the price of carbon is being internalised; climate-induced disruption of business activity and reputational risk. Ultimately, the balance of costs and opportunities will depend on a variety of factors, including sector specificities, government policies and companies' ability to engage consumers in addressing the climate change challenges.

This paper provides an overview of how business practice is developing in light of the challenges and opportunities of climate change – with a focus on those practices aimed at contributing towards the development of a low carbon economy. It draws on the recent literature and uses the recommendations in the OECD *Guidelines for Multinational Enterprises* (hereafter referred to as the *Guidelines*) as guiding principles to organise the discussion.

### **Business and climate change – from awareness to action**

A recent survey by McKinsey on how companies think about climate change<sup>2</sup>, to which over 2000 executives responded, revealed that 60% of executives view climate change as an important consideration within their company's overall strategy, while 70% view it as an important dimension for reputation and brand. Translation into corporate action remains however limited: for 44% of CEOs climate change is not an important item on their agenda, 70% reported that their company does not include climate change targets in the performance review of executives and among the executives reporting that managing environmental issues was important, 60% belonged to companies that had not defined emissions reduction targets. However, 80% of executives expected to be affected by some form of climate change regulation in the coming 5 years.

Business attitude towards climate change is driven by a variety of factors, including government policies and regulation and pressure from consumers and other stakeholders. In recent years, governments in OECD countries have implemented domestic climate policy frameworks, including a mix of policy instruments aimed at mitigating greenhouse gas (GHG) emissions. These policy mixes include market-based instruments, such as taxes and cap-and-trade systems, as well as regulation and information campaigns. Domestic climate policies are evolving, with key milestones still to come, such as the international post-2012 framework that countries are aiming to agree at COP15 in December 2009, in Copenhagen.<sup>3</sup> While companies are facing increasing government measures, an important component of the business answer to climate change is also driven by private initiatives to respond to societal expectations communicated by other channels than law (e.g., consumer associations, the press, international organisations, etc.).

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<sup>1</sup> D.C. Esty and Winston, A.S (2006), "Green to Gold".

<sup>2</sup> The McKinsey Quarterly (2008). "How companies think about climate change: a McKinsey Global Survey" [www.mckinseyquarterly.com/How\\_companies\\_think\\_about\\_climate\\_change\\_A\\_McKinsey\\_Global\\_Survey\\_2099](http://www.mckinseyquarterly.com/How_companies_think_about_climate_change_A_McKinsey_Global_Survey_2099).

<sup>3</sup> The United Nations Framework Convention on Climate Change, 15<sup>th</sup> Conference of the Parties, to take place on 7-18 December 2009 in Copenhagen.

Business leaders of the UN Global Compact recognise their role in fighting climate change and show their determination to take action in a statement called “Caring for Climate”.<sup>4</sup> Following the recognition that “climate change is an issue requiring urgent and extensive action on the part of governments, business and citizens...”, business leaders commit to “taking practical actions now to increase the efficiency of energy usage and to reduce the carbon burden of our products, services and processes, to set voluntary targets for doing so, and to report publicly on the achievement of those targets annually...”.

### **How can the *Guidelines* enhance the positive contribution of the private sector to a low carbon economy?**

The OECD *Guidelines for Multinational Enterprises*<sup>5</sup> provide a set of principles and standards applicable to multinational and domestic enterprises for responsible business conduct in a variety of areas.<sup>6</sup> The *Guidelines* are recommendations addressed by governments to multinational enterprises, reflecting good practice and aiming to ensure that the operations of companies are in harmony with government policies and that they contribute to sustainable development. Though the *Guidelines* do not specifically address climate change, they cover key areas of corporate activity, which can be seen as having direct or indirect links with climate change, such as environment,<sup>7</sup> information disclosure, combating bribery and science and technology.

In addition, the *Guidelines* benefit from a unique implementation mechanism. National contact points (NCPs) are government offices responsible for encouraging the observance of the *Guidelines* in a national context and for ensuring that they are well known and understood by the national business community and by other interested parties. The NCPs gather information on national experiences with the *Guidelines*, handle enquiries, discuss matters related to the *Guidelines* and assist in solving problems that may arise in this connection. When issues arise concerning implementation of the *Guidelines* in relation to specific instances of business conduct, the NCP is expected to help resolve them. So far, only one case has been filed alleging the climate change impacts of business activity. It was filed in May 2007 with the German NCP, which found that the company had not violated the *Guidelines*.<sup>8</sup>

### **Structure of the report**

This report explores three broad areas in which business action in fighting climate change is particularly relevant, and where corporate practices have already developed. Each of these areas is also addressed by recommendations contained in various chapters of the *Guidelines*.

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<sup>4</sup> Caring for Climate: [www.unglobalcompact.org/Issues/Environment/Climate\\_Change](http://www.unglobalcompact.org/Issues/Environment/Climate_Change).

<sup>5</sup> The *Guidelines* were adopted in 1976 and revised in 2000. In addition to the 30 OECD member countries, 11 non-members (Argentina, Brazil, Chile, Egypt, Estonia, Israel, Latvia, Lithuania, Peru, Romania and Slovenia) have adhered to them.

<sup>6</sup> The *Guidelines* chapters cover: employment and industrial relations, human rights, environment, information disclosure, combating bribery, consumer interests, science and technology, competition, and taxation.

<sup>7</sup> A report prepared under the aegis of the Environment Policy Committee and the Investment Committee provides detailed information on the tools and approaches available to companies wishing to improve their environmental performance. OECD (2005). “Environment and the OECD Guidelines for Multinational Enterprises. Corporate tools and approaches”.

<sup>8</sup> Information available at [www.bmwi.de/go/nationale-kontaktstelle](http://www.bmwi.de/go/nationale-kontaktstelle), [www.germanwatch.org](http://www.germanwatch.org) and Draft report by the Chair of the 2009 Annual meeting of the National Contact Points (DAF/INV/NCP(2009)1).

As a first step to address climate change, an increasing number of companies have undertaken to **measure, report and verify** the levels of their greenhouse (GHG) emissions. This is an essential step in the assessment of the different climate-related risks faced by a company, but also to understand the company's impact on climate. Measuring GHG emissions is important both for enterprises, governments and other stakeholders. For companies, it constitutes the basis for the development of a corporate climate change strategy and to monitor it. For policy makers, it provides information to compare performance across industries and to develop targeted climate change policies. For other stakeholders, including consumers, it provides a basis to understand the company's carbon footprint and make well informed choices. Financial institutions are also increasingly paying attention to the overall performance of companies in which they invest, – including how they manage climate related risks. Developing and reporting climate-related information raises a number of issues that are also reflected in the recommendations of the *Guidelines*, regarding, *inter alia*, standards for measuring, disclosing and verifying information.

Beyond emission accounting and reporting, enterprises are also making **commitments to address climate change**, and are putting in place mechanisms for the implementation of these commitments. As underlined in the *Guidelines*, long-term progress requires the establishment of measurable objectives and, where appropriate, targets for improved environmental performance. It also requires to continually seek to improve such performance.

Consumers are among the main contributors to climate change, and, together with governments and industry they are also key pillars in the fight against climate change. Consumers are becoming increasingly aware of their role, and many do want to act in a more responsible manner and contribute to reducing their emissions. However, there is still a huge gap between consumer awareness, what consumers declare they are willing to do, and what they actually do. Governments and business have a key role to play in **engaging consumers** to help them effectively contribute to a low carbon economy.

## MEASURING, REPORTING AND VERIFYING EMISSIONS

The first step for companies wishing to lower their impact on climate change is to measure their GHG emissions. This information is essential for managers to better understand the challenges faced by the company, to compare emissions across industry, and to put in place a strategy to manage emissions and climate related risks, both within the company and throughout its supply-chain.

Measuring, disclosing and verifying information related to the company's activities are important elements of responsible business conduct, and are given prominence in the *Guidelines* in chapters III on Disclosure and V on Environment.<sup>9</sup> The *Guidelines* notably recommend that enterprises collect and evaluate adequate and timely information regarding their activities, and their environmental impacts; use high quality standards for disclosure of non-financial information including for environmental reporting, and collect adequate information for regular monitoring and verification of progress toward environmental, health, and safety objectives or targets.

Developing accurate information on which to base companies' strategies and policies requires a range of tools:

- Methodologies for collecting information on GHG emissions.
- Reporting frameworks.
- Mechanisms to verify and certify GHG emissions and other GHG performance measures.

### Measuring emissions

*Enterprises "should establish and maintain a system of environmental management appropriate to the enterprise, including collection and evaluation of adequate and timely information regarding the environmental, health and safety impacts of their activities". Chapter V of the Guidelines (Environment).*

The recent business literature leaves little doubt about the importance for companies of collecting information regarding their GHG emissions. According to CERES<sup>10</sup>, "it is becoming increasingly vital for companies to begin inventorying emissions associated with their operations". Collecting information about, and measuring its own emissions is key for the company to start developing a strategy towards reducing emissions, but it is also an important way to demonstrate that the company is aware of its impact on climate change, and of the need to start taking some action to mitigate it.

The most widely used accounting tool to measure GHG emissions is the Greenhouse Gas Protocol (GHG Protocol). It was developed in partnership between the World Resources Institute (WRI) and the World

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<sup>9</sup> This report quotes extracts from the different chapters of the *Guidelines*. The full text is available at: [www.oecd.org/daf/investment/guidelines](http://www.oecd.org/daf/investment/guidelines).

<sup>10</sup> CERES (2008). Corporate Governance and Climate Change. Consumer and technology companies: [www.ceres.org/Document.Doc?id=397](http://www.ceres.org/Document.Doc?id=397)

Business Council for Sustainable Development (WBCSD), and provides an accounting framework for GHG standards, programs and inventories prepared by individual companies (see Box 1).<sup>11</sup>

#### Box 1. The GHG Protocol and ISO Standards

The **GHG Protocol** Initiative arose when WRI and WBCSD recognized that an international standard for corporate GHG accounting and reporting would be necessary in light of evolving climate change policy. Together with large corporate partners such as British Petroleum and General Motors, WRI introduced a report called “Safe Climate, Sound Business” that identified an action agenda to address climate change, which included the need for standardized measurement of GHG emissions. The first edition of *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Corporate Standard)* was published in 2001. Since then the GHG Protocol has built upon the Corporate Standard by developing a suite of calculation tools to assist companies in calculating their greenhouse gas emissions and additional guidance documents.

In 2006, the **International Organisation for Standardisation** (ISO) adopted the Corporate Standard as the basis for its *ISO 14064-1: Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals*. The ISO standards ISO 14064 and ISO 14065 provide an internationally agreed framework for measuring GHG emissions and verifying claims made about them so that “a tonne of carbon is always a tonne of carbon”. They thus support programmes to reduce GHG emissions and also emissions trading programmes. ISO 14064 is emerging as the global benchmark on which to base such programmes.

ISO, the WRI and the WBCSD have signed a Memorandum of Understanding to work together to promote their GHG accounting and reporting standards.

Source: [www.ghgprotocol.org](http://www.ghgprotocol.org) and [www.iso.org/iso/climatechange\\_2008.pdf](http://www.iso.org/iso/climatechange_2008.pdf)

For measurement purposes, emission sources are divided into three categories:

- **Scope 1 GHG emissions** are direct emissions from GHG sources owned or controlled by the company.
- **Scope 2 GHG emissions** do not physically occur from within the company reporting boundary and are therefore “indirect” emissions. Scope 2 emissions are caused by the organisations consumption of electricity, heat, cooling or steam. This category is often called “purchased electricity” because it represents the most common source of Scope 2 emissions.
- **Scope 3 GHG emissions** are a company’s indirect emissions other than those covered in Scope 2. They are from sources that are not owned or controlled by the company, but which occur as a result of its activities.<sup>12</sup>

So far, despite fast developments in the last decade, carbon measurement and disclosure remain mainly focused on current direct emissions at corporate level. Based on CDP6, disclosure of indirect emissions (scope 3) is usually pursued by less than half of the companies that disclose direct emissions (see table 1). Reporting of emissions forecasts drops even further to 13% among the respondents to CDP6. More elaborate assessment and reporting that would include measuring the risks and opportunities that climate

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<sup>11</sup> The Greenhouse Gas Protocol, [www.ghgprotocol.org](http://www.ghgprotocol.org).

<sup>12</sup> The Carbon Disclosure Project, [www.cdproject.net](http://www.cdproject.net).

change carries for business<sup>13</sup>, as well as the elements of the corporate strategy to address these risks<sup>14</sup> are however increasingly of interest, notably to investors and financiers<sup>15</sup>.

**Table 1. Companies disclosing emission information under the CDP6 (per sector, in %)**

	Scope 1	Scope 2	Scope 3
Chemicals & Pharmaceuticals	91	89	49
Construction & building products	100	86	43
Manufacturing	70	67	21
Oil & gas	71	60	26
Raw materials, mining, paper & packaging	89	83	33
Transport & logistics	50	50	13
Utilities	89	67	41
Financial Services	64	65	56
Hospitality, leisure and business services	65	71	29
Retail and consumer	71	67	39
Technology, media and telecoms	72	70	46

Source: [www.cdproject.net](http://www.cdproject.net)

As of today, only few companies go beyond the accounting of emissions at corporate level to assessing the total amount of GHGs produced throughout the whole life of a product, from its production to its final disposal. Life-cycle assessment of product carbon footprint is nevertheless developing, especially in the retail sector. Product Carbon Footprint (PCF) can provide important information and signals on the impact on climate of products and services. It may also help companies to look beyond their own carbon impact to consider a supply chain approach (and therefore link with an advanced reporting of companies' emissions such as the disclosure of "scope 3" emissions). However, PCF calculation requires extensive data collection and is demanding on human resources. As of today, there is no internationally agreed LCA methodology and standard, although some are under development. ISO has started developing such a standard (ISO 14067) and the WRI and WBCSD are working on a Product and Supply Chain GHG Accounting and Reporting Standard due for publication in 2010.

### Disclosure and reporting

*"Enterprises should ensure that timely, regular, reliable and relevant information is disclosed regarding their activities (...) and performance."* Chapter III of the *Guidelines* (Disclosure).

*"Enterprises should apply high quality standards for disclosure, accounting, and audit. Enterprises are also encouraged to apply high quality standards for nonfinancial information including environmental and social reporting where they exist. The standards or policies under which both financial and non-financial information are compiled and published should be reported."* Chapter III of the *Guidelines* (Disclosure).

<sup>13</sup> Including the risks posed by new regulations, threat of litigation for inaction and physical hazards.

<sup>14</sup> The company's position on climate change, its actions to address climate change, including its corporate governance (see section on Commitments).

<sup>15</sup> See GRI/KPMG (2007). Reporting business Implications of Climate change in Sustainability Reports: [www.globalreporting.org/CurrentPriorities/ClimateChange](http://www.globalreporting.org/CurrentPriorities/ClimateChange).



*Enterprises should “provide the public and employees with adequate and timely information on the potential environment, health and safety impacts of the activities of the enterprise, which could include reporting on progress in improving environmental performance.” Chapter V of the Guidelines (Environment).*

*Enterprises are “encouraged to communicate additional information that could include: value statements or statements of business conduct intended for public disclosure including information on the social, ethical and environmental policies of the enterprise and other codes of conduct to which the company subscribes.” Chapter III of the Guidelines (Disclosure).*

Disclosing information regarding a company’s GHG emissions is the logical step following the collection and inventory of such information. There is an upward trend in corporate reporting of GHG emissions and other climate related information. Based on a recent survey by the Carbon Disclosure Project (CDP)<sup>16</sup>, 80% of responding companies<sup>17</sup> acknowledged reporting on GHG emissions in annual corporate reporting in 2008. Between its first report in 2003 (CDP1) and the latest report, in 2008 (CDP6), the level of total disclosed emissions under the CDP rose from 1.8 to 7.4bn tonnes of CO2 equivalent. This resulted from an increase in the response rate to CDP, an increase in disclosure rates among the Global 500 and the widening scope of covered emissions, to incorporate three different GHG emissions (CO2, CH4, N2O). Among sectors, the gas and electricity utility sector scores highest in term of responding to the CDP (at 93%).

The trend towards increased voluntary corporate reporting under CDP can be attributed to a number of factors, including increased awareness of climate change challenges and opportunities, the development of mandatory emission trading markets, such as the European Union Emissions Trading Scheme (EU ETS) and increased regulatory requirements on the disclosure of non financial information.<sup>18</sup>

In the UK, for instance, the Government is committed, under the Climate Change Act 2008, to producing, by October 2009, voluntary guidance on how organisations should measure and calculate their greenhouse gas emissions to assist with their voluntary reporting. The Act also requires the Government to take a decision by April 2012 on whether to introduce regulations on the reporting of greenhouse gas emissions.<sup>19</sup>

Denmark adopted in May 2008 an Action Plan on Corporate Social Responsibility to make it mandatory for the approximately 1100 of its largest companies to report on their progress on corporate social

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<sup>16</sup> The Carbon Disclosure Project (CDP) is an independent not-for-profit organisation which holds the largest database of corporate climate change information in the world. The data is obtained from responses to CDP’s annual Information Requests, issued on behalf of institutional investors, purchasing organisations and government bodies. Since its formation in 2000, “CDP has become the gold standard for carbon disclosure methodology and process, providing primary climate change data to the global market place.” [www.cdproject.net](http://www.cdproject.net)

<sup>17</sup> 383 companies among the Global 500 responded to the CDP survey in 2008. Although CDP coverage is global, response level from emerging countries’ companies remains limited - Russia (0%), India (14%) and China (15%).

<sup>18</sup> See notably [www.sustainabilityreporting.eu](http://www.sustainabilityreporting.eu)

<sup>19</sup> Clause 80 of the 2008 Climate Change Act called for mandatory GHG emissions reporting for 50000 UK organisations but was rejected.

responsibility, including on their actions to address climate change.<sup>20</sup> The requirement to report is notably supported by “The Climate Compass”.<sup>21</sup>

In other countries, voluntary reporting is promoted and incentivised through a number of mechanisms, including ranking and benchmarking (e.g., in the Netherlands) and awards (e.g., German Sustainability Awards). The UK’s ACCA Awards<sup>22</sup> rewards companies for excellence in environmental, social and sustainability reporting. The aim is to identify and reward innovative attempts to communicate corporate performance, although not commenting on performance itself. In 2008, ACCA UK awarded BT Group the best report for displaying a strong integration of sustainability into business strategy and disclosing the GHG emission reduction targets of the company as well as feedback on performance against targets.<sup>23</sup>

Pressure towards more obligatory requirements for corporate reporting is also mounting in the United States, *inter alia*, in response to the growing interest of investors in the risks of climate change for companies. In September 2007, members of the Investor Network on Climate Risk (INCR)<sup>24</sup> sent a petition to the US Securities and Exchange Commission asking that it require publicly held companies to assess and fully disclose their material financial risks and opportunities from climate change. In response to the petition, a Congressional hearing was convened on the role of the SEC in addressing climate change and in July 2008 the Senate Appropriations Committee approved language in the Financial Services Appropriations bill calling on the SEC to issue new guidance on climate-related disclosure.

Companies have different internal ways to report on their climate change information, including annual reports, sustainability reports, websites and securities filing, in addition to external means such as voluntary registries and benchmarking exercises (see Table 2).

**Table 2. Voluntary reporting frameworks**

<b>Registries</b>		
<b>World Economic Forum Global GHG Registry</b>	Global initiative to stimulate voluntary disclosure and management by companies of their worldwide climate emissions. The methodological basis for preparing the inventory is the GHG Protocol.	<a href="http://www.pewclimate.org/w_e_forum.cfm">www.pewclimate.org/w_e_forum.cfm</a>
<b>The California Climate Action Registry (CCAR)</b>	Voluntary GHG registry established in 2000 to promulgate standards and tools to measure, report, verify and reduce GHG in California and in the US. To date, 300 corporations, cities, public agencies from California measure, monitor and publically report on GHG emissions, using the CCAR protocols.	<a href="http://www.climateregistry.org">www.climateregistry.org</a>
<b>Benchmarking exercises</b>		
<b>Carbon Disclosure Project (CDP)</b>	CDP provides global corporate information on climate change, based on voluntary responses to CDP surveys by companies from the Global 500, FTSE 350 and S&P 500 indices. The information is	<a href="http://www.cdproject.net">www.cdproject.net</a>

<sup>20</sup> Reporting should include three areas: 1) policies on social responsibility including standards or guidelines that the company is using, 2) how the policies are implemented, and 3) an assessment of achievements, and an indication of future expectations.

<sup>21</sup> The Climate Compass is a new Climate Alliance methodology to help local authorities establish a climate change action plan in the shortest time: [www.climate-compass.net](http://www.climate-compass.net)

<sup>22</sup> [www.accaglobal.com/publicinterest/activities/subjects/sustainability/awards](http://www.accaglobal.com/publicinterest/activities/subjects/sustainability/awards)

<sup>23</sup> [www.bt.com/betterworld](http://www.bt.com/betterworld)

<sup>24</sup> The petition was submitted by a group of investors with USD 1.5 trillion in assets along with Ceres and several other nonprofit organizations. See INCR: [www.incr.com](http://www.incr.com)

	reported annually in CDP reports (already 6 editions). In addition, CDP produces a Carbon Disclosure Leadership Index ranking the 60 best performing companies.	
<b>Ceres and RiskMetric Group Climate Change Governance Framework</b>	Checklist addressing corporate response to climate change (including board oversight, management execution, public disclosure, emissions accounting and management), against which 100 US companies were benchmarked in 2006 <sup>25</sup> and 63 consumer and technology companies were assessed in 2008. <sup>26</sup>	<a href="http://www.ceres.org">www.ceres.org</a>

Despite the significant efforts made by companies to report on their GHG emissions, the multiplicity of reporting frameworks and methodologies makes it difficult to analyse and compare climate change performance.<sup>27</sup> A 2008 study by EIRIS<sup>28</sup> found that 81% of the 35.6% companies classified as having a high impact for climate change disclosed their GHG emissions. However, only 38% of these companies disclose indication on the scope of data or on the methodology used. Globally, only 9% of companies disclose the scope of their emissions against the GHG Protocol.

Mandatory schemes, such as the European Union Emissions Trading Scheme (EU ETS), have their own reporting guidelines like the European Commission Monitoring and Reporting Guidelines.<sup>29</sup> Other guidelines and reporting frameworks exist that either integrate climate change disclosure within the broader framework of sustainability reporting (such as the Global Reporting Initiative), or provide a sector or country declination (see Table 3).

**Table 3. Other selected disclosure guidelines**

<b>Broader reporting frameworks</b>		
<b>Global Reporting Initiative</b>	Guidance for any organization to disclose their sustainability performance. The GRI addresses a much wider set of issues than emissions reporting. It provides a framework to disclose information on economic, social and environmental performance.	GRI: <a href="http://www.globalreporting.org">www.globalreporting.org</a>
<b>Global Framework for Climate Risk Disclosure</b>	Framework to encourage standardized climate risk disclosure to investors and its insertion in existing reporting mechanisms (business risks and opportunities resulting from climate change and companies efforts to address them).	Investor Network on Climate Risk: <a href="http://www.incr.com">www.incr.com</a>
<b>Country-specific initiatives</b>		
<b>New Zealand Business Council for Sustainable Development</b>	Guide and on-line calculator to help organizations to measure and manage GHG emissions for voluntary purposes. The guide builds on the GHG Protocol to measure the carbon footprint, use that information to reduce footprint, and explore options to offset those emissions that cannot be reduced.	Business Council for Sustainable Development (New Zealand): <a href="http://www.nzbcسد.org.nz/emissions">www.nzbcسد.org.nz/emissions</a>
<b>Bilan Carbone</b>	Methodology for corporate GHG accounting and website detailing the methodology and making available a list of certified	ADEME (France): <a href="http://www.ademe.fr/bilan-carbone">www.ademe.fr/bilan-carbone</a>

<sup>25</sup> CERES (2006). Corporate Governance and Climate Change. Making the connection: [www.ceres.org/Document.Doc?id=90](http://www.ceres.org/Document.Doc?id=90)

<sup>26</sup> CERES (2008). Corporate Governance and Climate Change. Consumer and technology companies: [www.ceres.org/Document.Doc?id=397](http://www.ceres.org/Document.Doc?id=397)

<sup>27</sup> For reference, Governments use the IPCC for National Greenhouse Gas Inventories ([www.ipcc-nggip.iges.or.jp/public/2006gl](http://www.ipcc-nggip.iges.or.jp/public/2006gl)) to estimate greenhouse gas inventories to report to the UNFCCC.

<sup>28</sup> EIRIS (2008). "The state we're in: global corporate response to climate change and the implications for investors", [www.eiris.org](http://www.eiris.org). The study used publically available information on the Global 300,

<sup>29</sup> [http://ec.europa.eu/environment/climat/emission/mrg\\_en.htm](http://ec.europa.eu/environment/climat/emission/mrg_en.htm)

	organizations able to carry out the assessment. The methodology is compatible with ISO 14064, the GHG Protocol and the EC Monitoring and Reporting Guidelines for the EU ETS.	
<b>Sector-specific initiatives</b>		
<b>GRI Electric Utility Sector Supplement</b>	Sector-specific disclosure and performance indicators. Expected for 2009.	<a href="http://www.globalreporting.org/ReportingFramework/SectorSupplements/ElectricUtilities">www.globalreporting.org/ReportingFramework/SectorSupplements/ElectricUtilities</a>
<b>Global Climate Disclosure Framework for Electric Utilities</b>	Guidelines to electricity utilities and power generators for presenting information on emissions and on climate change strategy. It complements the GRI Electric Utility Sector Supplement by requiring more detailed information on carbon emissions and corporate strategy to address climate change.	IIGCC, CERES & IGCC: <a href="http://www.iigcc.org/docs/PDF/Public/Globalelectricutilitiesdisclosureframework.pdf">www.iigcc.org/docs/PDF/Public/Globalelectricutilitiesdisclosureframework.pdf</a>
<b>Petroleum Industry Guidelines for Reporting GHG Emissions</b>	Guidelines addressed to the petroleum industry to promote consistent and reliable GHG accounting and reporting practices from oil and gas operations. The guidelines build on the GHG Protocol.	IPIECA, API & OGP: <a href="http://www.ipieca.org/activities/climate_change/downloads/publications/ghg_guidelines.pdf">www.ipieca.org/activities/climate_change/downloads/publications/ghg_guidelines.pdf</a>

In response to increasing demands for standardised reporting guidelines on the inclusion of climate change information in mainstream reports, the Climate Disclosure Standards Board<sup>30</sup> was formed at the 2007 annual meeting of the World Economic Forum. CDSB works to develop a globally accepted framework, based on existing standards, for corporate reporting on climate change.

### Verifying emissions

*Enterprises should “establish and maintain a system of environmental management appropriate to the enterprise, including:*

- *Collection and evaluation of adequate and timely information regarding the environmental, health, and safety impacts of their activities.*
- *Regular monitoring and verification of progress toward environmental, health, and safety objectives or targets.” Chapter V of the Guidelines (Environment).*

External verification of emission accounting is becoming increasingly important. Key drivers are the development of mandatory disclosure, as well as the scepticism of consumers and other stakeholders regarding corporate climate change performance. For example, a 2008 consumer survey by Consumers International and AccountAbility found that 70% of respondents in the US and the UK believe that corporate climate change reporting should be verified by independent parties.<sup>31</sup>

Companies are becoming increasingly aware of the importance of adding credibility to their efforts to measure and report on their emissions by having the information externally verified. According to the latest report by the Climate Disclosure Project (CDP6), 56% of respondents had their emissions verified (72% of respondents publically disclosed GHG emissions). CERES reports that out of 40 companies they surveyed, 29 also reported using an external auditor or government program to verify their inventory.<sup>32</sup>

<sup>30</sup> [www.cdsb-global.org](http://www.cdsb-global.org)

<sup>31</sup> Assure View: The CSR Assurance Statement Review Report, cited by CERES (2008).

<sup>32</sup> CERES (2008). Corporate Governance and Climate Change. Consumer and technology companies: [www.ceres.org/Document.Doc?id=397](http://www.ceres.org/Document.Doc?id=397).

Verification methods vary from reviewing utility bills provided by the company to on-site reviews of how inventory data is being collected. Beyond official emission registries and voluntary government programs, several private sector players are also involved in this field, which is becoming a growing business.<sup>33</sup>

Mandatory schemes, such as the EU ETS, the Clean Development Mechanism (CDM) and Joint Implementation programmes have third-party assurance processes.<sup>34</sup> A Verification Protocol has been developed by the International Emissions Trading Association, intended as a reference manual for verifiers, to facilitate a uniform, transparent and cost effective verification of installations covered by the EU ETS.<sup>35</sup> According to PriceWaterHouse<sup>36</sup>, however, EU-wide standards for verification and accreditation of verifiers have not been implemented. More generally, both the recourse by companies to verification of their GHG emissions and the establishment of global emissions verification standards are still at an early stage of development.

In addition to verification of companies' emissions inventories, a range of certification schemes exist (see Table 4) which aim to encourage good practice in carbon measurement, management and reduction at corporate level and provide a signal of good performance.

**Table 4. Certification schemes**

Objectives	Requirements	Methodology
<b>Carbon Trust Standard:</b> <a href="http://www.carbontruststandard.com">www.carbontruststandard.com</a>		
Launched in June 2008 By Carbon Trust in the UK to encourage good practice in carbon measurement, management and reduction by businesses and public sector organisations.	Organizations must (i) measure their carbon footprint including their electricity and gas consumption, any onsite fuel consumption (e.g. heating oil, diesel, etc.) and fuel consumption of owned vehicles; (ii) meet an absolute reduction in emissions or a 2.5% per annum reduction in a carbon efficiency benchmark; and (iii) provide evidence that the organisation is managing carbon in an appropriate manner through effective governance procedures, accurate carbon accounting and carbon management programmes.	The standard builds on the Greenhouse Gas Protocol Corporate Standard and ISO14064-1:2006. To date, 60 (mostly UK-based) organizations have been certified.
<b>Climate Cool Certification:</b> <a href="http://climateneutralnetwork.org">http://climateneutralnetwork.org</a>		
Developed by the Climate Neutral Network for climate neutral products, services, and enterprises, i.e. with net-zero impact on global warming.	The first step in obtaining the Climate Cool™ certification is by undertaking an inventory of GHG emissions, using a climate neutral "metrics system" paper. Once the enterprise footprint is established, the company can develop an application for climate neutral certification by creating and implementing a portfolio of projects including both internal, on-site reductions and external offset investment projects to mitigate the remaining climate impacts of their operations.	The Network's protocol was developed to be consistent with the GHG Protocol. To date, 8 companies have been certified.

<sup>33</sup> CERES (2008). Corporate Governance and Climate Change. Consumer and technology companies: [www.ceres.org/Document.Doc?id=397](http://www.ceres.org/Document.Doc?id=397).

<sup>34</sup> DNV (Det Norske Veritas Certification ([www.dnv.com](http://www.dnv.com)) was the first entity accredited as a verifier under the Kyoto Protocol to the United Nations Framework Convention on Climate Change. Over the past decade DNV has engaged in validation, verification and certification of activities related to the Protocol's Clean Development Mechanism (CDM) and Joint Implementation programmes, and holds a 48% market share of CDM projects so far.

<sup>35</sup> [www.ieta.org/ieta/www/pages/getfile.php?docID=1153](http://www.ieta.org/ieta/www/pages/getfile.php?docID=1153)

<sup>36</sup> PriceWaterHouseCopers (2007). Building trust in Emissions Reporting. A call for Action on the Global Emissions Compliance: [www.pwc.com](http://www.pwc.com)

<b>CarbonNeutral:</b> <a href="http://www.carbonneutral.com">www.carbonneutral.com</a>		
Developed by the Carbon Neutral Company for product, service or activity	Requirements: an assessment of CO2 emissions was done by an independent third party, the emissions have been reduced to net zero through internal reductions (change of a manufacturing process for example) and best practice external reductions (carbon offsetting), there is a commitment to reduce emissions internally on an on-going basis, to document progress, and to communicate what has been done clearly.	No reference to specific methodology in the CarbonNeutral protocol, although both ISO standards and the GHG Protocol are mentioned in annex.
<b>NoCO2 and LowCO2 Certification:</b> <a href="http://www.noco2.com.au/web/page/certify">www.noco2.com.au/web/page/certify</a>		
NOCO2: Company is carbon neutral and has completely removed its climate change impacts.	This is metered through an engineering audit that quantifies the greenhouse gas emissions impact from all inputs (products, services and labour) consumed. Upon contractually declaring that it will maintain a zero carbon footprint, the company can display the NoCO2 logo.	The carbon emission assessments, life cycle analyses and reports are conducted in compliance with the ISO 14000 series and the GHG Protocol.
LowCO2: For companies who wish to communicate a percentage reduction in their carbon footprint (displayed on the LowCO2 logo).	This is metered through an engineering audit and emissions monitoring plan. A comprehensive initial emissions audit is fundamental to any claim of carbon reduction. The audit quantifies the greenhouse gas emissions from scope 1 and scope 2 emissions sources, as well as emissions from waste and work related employee travel.	

## MAKING COMMITMENTS TO ADDRESS CLIMATE-CHANGE

A proactive business attitude towards climate change is necessary if substantial mitigation of GHG emissions is to be achieved. Proper emissions accounting is a first step in that direction. Beyond that, a proactive attitude involves developing strategies to manage emissions, but also embedding climate change considerations into the corporate governance structure, and establishing the necessary mechanisms and incentives to put those strategies and considerations into practice.

Active contribution by business to environmental progress and continuous improvement (involving internalisation of these concerns throughout the company) figure prominently in the *Guidelines*. They notably recommend the establishment of measurable objectives for improved environmental performance, and the development of products, procedures and technologies that can help the companies continually seek to improve corporate environmental performance.

### Determining commitments

*Enterprises should “contribute to economic, social and environmental progress with a view to achieving sustainable development”.* Chapter II of the *Guidelines* (General Policies).

*Enterprises should “establish and maintain a system of environmental management appropriate to the enterprise, including: establishment of measurable objectives and, where appropriate, targets for improved environmental performance, including periodically reviewing the continuing relevance of these objectives”.* Chapter V of the *Guidelines* (Environment).

Managing emissions embeds several steps. First and foremost, it requires that companies adopt quantitative GHG emission reduction targets. The level and timeframe of the target is an indication of the level of the company’s commitment to achieve real, measurable progress in addressing climate change. Using publically available information on the Global 300, EIRIS found in 2008 that only one quarter of the 35.6% companies classified as having a high impact for climate change published a long-term strategic target to reduce emissions.<sup>37</sup> In 2008, about half (54%) of the 383 companies who responded to CDP6 disclosed emissions reduction targets and 81% reported an emissions reduction programme.

Several types of emission reduction targets exist: *Intensity targets* allow for total emissions to increase with organic growth or acquisitions made by the company. They can be useful for evaluating the efficiency of a company’s operations and processes. *Absolute emission targets* are more aggressive, since they impose on the company a level of reduction that does not depend on performance. With *carbon neutrality targets*, companies commit to achieving zero net emissions. To achieve this objective, they may use internal strategies – such as operational efficiency improvement or renewable energy purchases – or external measures such as investing in carbon offset projects.

In OECD countries, more and more companies are led to adopt emission reduction targets in order to comply with newly established carbon regulations or in anticipation of such regulations. Companies are also driven to manage their emissions through the development of carbon markets (see Box 2). Some schemes are mandatory (such as the EU Emissions Trading Scheme (EU ETS), others are voluntary (the Chicago Climate Exchange (CCX), but they rely on firm commitments from companies.

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<sup>37</sup> EIRIS (2008). The state we’re in: global corporate response to climate change and the implications for investors. [www.eiris.org](http://www.eiris.org)

### Box 2. Carbon emission trading markets

A number of national and sub-national carbon market schemes have been developed or are under development in Europe, the US, Japan and Australia. Although carbon markets are still at an early stage of development, their integration has become an important issue for discussion<sup>38</sup>. The International Emissions Trading Association<sup>39</sup> works for the development of an active, integrated global greenhouse gas market, through promotion of good practices, event organisation and network development.

So far, the largest GHG trading program is the European Union Emissions Trading Scheme (EU ETS).<sup>40</sup> In 2008, it represented 94% of transactions of the allowance-based markets in terms of volume of CO<sub>2</sub> traded and 99% in terms of value. The Climate and Energy Package adopted in December 2008 by the European Parliament aims at strengthening the EU ETS, notably by imposing stronger emission reductions, expanding the scope of the market to include additional GHG and sectors and scaling up auctioning to allocate the allowances.

In the US, trading schemes – which until now, have been the result of State-based and regional initiatives – are likely to be complemented by federal regulation, currently under consideration. Two schemes already exist: the Chicago Climate Exchange (CCX) and the Regional GHG Initiative (RGGI). Members of the CCX have made voluntary commitments to reduce GHG emissions by 6% below 1998-2001 by 2010. The RGGI is a mandatory system or compliance market where 10 US States aim to reduce power sector emissions by 10% below 2009 levels by 2019. The RGGI is notable in that it was the first cap and trade scheme to distribute most allowances (95%) through auctioning.

In October 2008, Japan launched a trial domestic scheme based on voluntary participation in view of the implementation of a mandatory scheme. This constitutes a major shift in Japan's policy, which so far has relied on voluntary commitments, notably by major industries to stabilize CO<sub>2</sub> emissions at 1990 level by 2010 (through the Keidanren Voluntary Action Plan – VAP) and from smaller emitters participating in the Japan Voluntary Trading Scheme (J-VETS).

Even when not compelled to by regulation, a growing number of companies are entering into or initiating voluntary emission reduction programmes (see Table 5). They do so for several reasons, e.g., in anticipation of potential regulatory requirements, to enhance and differentiate their products, to attract investors, and to improve their reputation.

**Table 5. Selected voluntary GHG emission reduction programs.**

<b>World Wildlife Fund Climate Savers</b>	Partnership of WWF with leading corporations - including IBM, Nokia, Sony, Coca-Cola and HP - who have agreed to collectively cut carbon emissions by some 14 million tons annually by 2010	<a href="http://www.worldwildlife.org/climate/climatesavers2.html">www.worldwildlife.org/climate/climatesavers2.html</a>
<b>U.S. Environmental Protection Agency Climate Leaders</b>	251 US companies committed to completing a corporate-wide inventory of their GHG emissions, setting aggressive reduction goals, and annually reporting their progress to EPA.	<a href="http://www.epa.gov/climateleaders">www.epa.gov/climateleaders</a>
<b>American Petroleum Institute Voluntary Climate Challenge Programme</b>	Commitment by API-member refining companies to improve their energy efficiency by 10 percent between 2002 and 2012.	<a href="http://www.api.org/ehs/climate/new/program.cfm">www.api.org/ehs/climate/new/program.cfm</a>
<b>Association des Entreprises pour la Réduction de l'Effet de Serre</b>	French companies from the industry and energy sectors that committed in 2002 to voluntary GHG emissions reductions over 2003/2007.	
<b>Japan Keidanren Voluntary Action Plan</b>	Voluntary commitment by major Japanese industries to stabilize CO <sub>2</sub> emissions from fuel combustion and industrial processes at 1990 level by 2020.	<a href="http://www.keidanren.or.jp/japanesepolicy/vape/index.html">www.keidanren.or.jp/japanesepolicy/vape/index.html</a>

<sup>38</sup> ECO/CPE/WP1(2009)7. The economics of climate change mitigation: how to build the necessary global action in a cost-effective manner? (not published yet).

<sup>39</sup> [www.ieta.org](http://www.ieta.org)

<sup>40</sup> [http://ec.europa.eu/environment/climat/emission/index\\_en.htm](http://ec.europa.eu/environment/climat/emission/index_en.htm)



Emission reduction targets can be met in several ways. Internal strategies allow the companies to obtain long-term improvements. They include improving energy efficiency (e.g., through better insulation and energy-efficient lighting), shifting away from fossil energies towards renewable energies, reorganizing the business model to maximize energy savings and minimize carbon production (in the transportation for instance), adopting less carbon intensive inputs and developing less energy intensive products. The low-hanging fruit in GHG reduction terms is generally in energy efficiency.

For many companies, the most difficult GHG reduction challenge is managing the supply chain. As underlined by the CDP Supply Chain Report 2009,<sup>41</sup> an organization could be put at risk by the inability of its suppliers to manage the climate-related risks. However, not all areas of the supply chain bear similar impacts, and it might be particularly costly to undertake an extensive analysis of the overall emissions throughout the entire supply chain. Identifying and focusing on the areas of the supply chain where more impact can be achieved may be more efficient. Using a carbon criterion in the procurement decision may also yield important benefits, although looking only at the current emissions of suppliers – without paying due attention to future company climate change actions - may be short-sighted in the current context of companies still adapting to this new priority.<sup>42</sup>

Companies also have the possibility to manage their emissions “externally” through offsetting. The compliance market includes Emission Reduction Units (ERUs) from Joint Implementation (JI), Certified Emissions Reduction (CERs) from the Clean Development Mechanism (CDM) and the Joint Implementation (JI), as well as Assigned Amount Units (AAUs) from emission trading under the Kyoto Protocol.<sup>43</sup>

The voluntary offset market, although in an early stage of development, has grown significantly over the past years. According to the World Bank,<sup>44</sup> between 2007 and 2008, the voluntary market grew from 43 to 54 MtCO<sub>2</sub> or USD 263 million to USD 397 million. While in volume the CDM and JI are much larger, emission trading (in MtCO<sub>2</sub>) on these markets dropped by half in the same period.

To meet demand from business and individuals, a growing number of offset providers have entered the market, with varying degrees of credibility. To respond to uncertainty regarding the quality of offset purchases, a number of certifications and standards are emerging (see Table 7). In parallel, benchmarking initiatives are also developing, such as the initiative led by CarbonConcierge<sup>45</sup> based on a carbon offset provider evaluation matrix designed to rate selected North American providers.<sup>46</sup>

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<sup>41</sup> [www.cdproject.net/reports.asp](http://www.cdproject.net/reports.asp)

<sup>42</sup> Emission reduction throughout the supply chain will be analysed in more depth in the next version of this report.

<sup>43</sup> [www.ghgonline.org/kyoto.htm](http://www.ghgonline.org/kyoto.htm).

<sup>44</sup> World Bank (2009). State and trends of the carbon market 2009: [http://wbcarbonfinance.org/docs/State\\_Trends\\_of\\_the\\_Carbon\\_Market\\_2009-FINAL\\_26\\_May09.pdf](http://wbcarbonfinance.org/docs/State_Trends_of_the_Carbon_Market_2009-FINAL_26_May09.pdf)

<sup>45</sup> Carbon Concierge ([www.carbonconcierge.com/learn/COPEM-Final.pdf](http://www.carbonconcierge.com/learn/COPEM-Final.pdf)) is an educational and consultancy organization that engages small, mid-sized and large businesses, as well as municipalities, to develop and implement climate reduction strategies.

<sup>46</sup> Based on the methodology developed by Carbon Concierge, two retail providers came out on top of the list of North American providers: NativeEnergy ([www.nativeenergy.com](http://www.nativeenergy.com)) and Climate Trust ([www.climatetrust.org](http://www.climatetrust.org)).

**Table 7. Voluntary offset standards**

<b>Scheme</b>	<b>Scope</b>	<b>Methodology</b>
<b>Gold Standard</b> <a href="http://www.cdmgoldstandard.org">www.cdmgoldstandard.org</a> Developed by WWF	Offset projects and carbon credits (CDM projects). Focus on renewable energy and energy efficient projects in developing countries.	CDM methodology Certification.
<b>Voluntary Carbon Standard</b> <a href="http://www.v-c-s.org">www.v-c-s.org</a> . Developed by Climate Group, IETA & WEF.	Offset projects and carbon credits	The VCS assures buyers that the offset project they purchase are real (have happened), additional (beyond business-as-usual activities), measurable, permanent (not temporarily displace emissions), independently verified and unique (not used more than once to offset emissions). It is based on ISO 14064-3:2006.
<b>Green-e</b> Administered by the Centre for Resource Solutions. <a href="http://www.green-e.org">www.green-e.org</a>	Certification for offset sellers. US leading independent certification and verification programme for renewable energy.	
<b>Climate, Community &amp; Biodiversity Standards</b> Founded by 13 NGOs and companies. <a href="http://www.climate-standards.org">www.climate-standards.org</a>	Offset projects. For land-based projects that deliver climate, biodiversity and community benefits.	IPCC Good Practice Guidance & CDM methodology.
<b>Plan Vivo</b> <a href="http://www.planvivo.org">www.planvivo.org</a>	Offset projects and carbon credits.	Plan Vivo certificates represent units of long-term carbon benefit from sustainable community based forest management and agroforestry plus associated, quantified, environmental and social benefits. Own "Plan Vivo Standards".
<b>Greenhouse Friendly</b> Australian Government Greenhouse Challenge Plus Programme <a href="http://www.climatechange.gov.au/greenhousefriendly">www.climatechange.gov.au/greenhousefriendly</a>	Certification for offset sellers & carbon-neutral products	Greenhouse Friendly Guidelines: the assessment must be performed in accordance with the current Australian Standard for LCA in the ISO 14040 series.
<b>VER+</b> ( <a href="http://www.tuev-sued.de/climatechange">www.tuev-sued.de/climatechange</a> ) Developed by TÜV SÜD	Offset projects, carbon credits, carbon neutral products	CDM methodology Verification based on monitoring reports from the project developer, conducted by an auditor.
<b>Voluntary Offset Standard</b> European Carbon Investor Services <a href="http://www.carboninvestors.org">www.carboninvestors.org</a>		

### Implementing commitments

*Enterprises should "continually seek to improve corporate environmental performance, by encouraging, where appropriate, such activities as:*

- adoption of technologies and operating procedures in all parts of the enterprise that reflect standards concerning environmental performance in the best performing part of the enterprise;

- development and provision of products or services that have no undue environmental impacts; are safe in their intended use; are efficient in their consumption of energy and natural resources; can be reused, recycled, or disposed of safely;" Chapter V of the Guidelines (Environment).

Climate change risks and opportunities are increasingly viewed as involving all elements of a business – from operations and product design to supply chain management and the business model itself. Ensuring the necessary changes requires the internalisation of climate considerations throughout the structure of the company and the development of incentive mechanisms to maximize the involvement of all stakeholders: from the board, to the CEO and the employees across departments.

An example of a pro-active, non-governmental advocacy with corporations on how to mitigate emissions is the corporate framework for climate change governance developed by CERES (see Table 5)<sup>47</sup>. According to CERES, companies that integrate climate change in their board and executive structure are more likely to maintain the long-term commitment needed to address climate change. Assigning a board member or committee to oversee climate change risks and strategies not only signals a company’s strong commitment, but also increases the likelihood of a proactive response to the potential regulatory, financial, reputation and legal risks posed by climate change as well as the potential business opportunities.

**Table 5. CERES’ Climate Change Governance Framework**

<p><b>Board oversight</b></p> <p>Board has explicit oversight responsibility for environmental affairs/climate change Board conducts periodic review of climate change and monitors progress in implementing strategies</p>
<p><b>Management Execution</b></p> <p>Chairman/CEO clearly articulates company’s views on climate change and GHG control measures. Executive officers are in key positions to monitor climate change and manage response strategies. Executive officers’ compensation is linked to attainment of environmental goals and GHG targets.</p>
<p><b>Public Disclosure</b></p> <p>Securities filings and/or MD&amp;A identify material risks, opportunities posed by climate change. Public communications offer comprehensive, transparent presentation of response measures.</p>
<p><b>Emissions Accounting</b></p> <p>Company conducts annual inventory of direct and indirect GHG emissions and publicly reports results. Company has set an emissions baseline by which to gauge future GHG emissions trends. Company has third party verification process for GHG emissions data.</p>
<p><b>Emissions management</b></p> <p>Company sets aggressive absolute GHG emission reduction targets for facilities, energy use, business travel, and other operations, and achieves these targets on schedule. Company has implemented company-wide programs to improve the energy efficiency of its operations. Company currently purchases renewable energy for a significant portion of its energy use and has set targets to increase future renewable energy purchases. Company pursues strategies to maximize opportunities from product and service offerings related to climate change. Company has assessed supply chain GHG emissions, engaged with suppliers on controlling emissions, addressed climate impacts of materials/packaging and improved logistics to reduce emissions.</p>

Source: Ceres and RiskMetric Group

<sup>47</sup> See CERES (2006). Corporate Governance and Climate Change. Making the connection: [www.ceres.org/Document.Doc?id=90](http://www.ceres.org/Document.Doc?id=90) and CERES (2008). Corporate Governance and Climate Change. Consumer and technology companies: [www.ceres.org/Document.Doc?id=397](http://www.ceres.org/Document.Doc?id=397)

Nevertheless, of the 63 companies from the technology and consumer sectors reviewed by CERES, only 15 had tasked board-level committees with environmental oversight and 7 CEOs had taken leadership roles on climate change initiatives. Examples include Nike's Corporate Responsibility Committee, Applied Materials strong CEO leadership in the internal steering committee on sustainability and climate change and Dell's Sustainability Council led by the Corporate Sustainability Director.

In addition to the strong leadership of managerial levels, mobilising employees is a critical step to ensure adequate implementation of climate change strategies and a strong driver towards innovation in the business model. This is consistent with the recommendation in the *Guidelines*<sup>48</sup>, that enterprises "should provide information to employees and their representatives which enables them to obtain a true and fair view of the performance of the (...) enterprise..."

According to the "CEO's guide to climate action", empowering staff within the company and setting the right internal culture is also important for recruitment.<sup>49</sup> Young workers especially are proving to be an important lever to foster environmentally-friendly corporate initiatives. According to Whitehead Mann,<sup>50</sup> "pressure for ethical change is coming from the very top and the young, particularly new graduate staff. Conversely, many shareholders and non-executives are indifferent – if not hostile to the debate".

In order to engage employees, some companies have put in place incentives that link compensation to climate-related objectives. For instance, in 2008, out of the 383 companies who responded to CDP6, 59% incorporated carbon targets into remuneration. CERES confirms this trend<sup>51</sup>, with some 20 companies out of 63 factoring energy or climate change performance into employee compensation. For example, Intel included environmental performance in the bonuses of all employees for 2008. However none of the companies reported by CERES explicitly linked any Chief-level executive compensation to climate change goals.

Beyond the compensation incentive, mobilising staff includes informing, raising awareness, training and interacting to promote innovation, as developed in a guide by Comité 21 on mobilising staff teams in support of sustainable development.<sup>52</sup>

Finally, ensuring the business case for climate change actions is a strong driver to implement the commitments. Indeed some of the easiest strategies that companies can pursue make good business sense. Reaching emission targets through the improvement of internal energy efficiency, the use of less carbon-intensive fuels and materials, and a better management of carbon emissions throughout the supply chain can lead to substantial energy savings and therefore yield a financial return to the company, while addressing environmental concerns. Preserving the company's reputation and anticipating compliance to forthcoming regulation also make good business sense.

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<sup>48</sup> Chapter IV of the *Guidelines* (Employment and Industrial Relations)

<sup>49</sup> Di Piazza, Samuel, PriceWaterhouseCoopers International (2009), "Risk, Responsibility & Opportunity: the CEO's guide to climate action".

<sup>50</sup> Whitehead Mann (2008). Is the boardroom heating up?:  
[www.wmann.com/knowledge\\_articles/Climate%20Change.pdf](http://www.wmann.com/knowledge_articles/Climate%20Change.pdf)

<sup>51</sup> CERES (2008). Corporate Governance and Climate Change. Consumer and technology companies:  
[www.ceres.org/Document.Doc?id=397](http://www.ceres.org/Document.Doc?id=397)

<sup>52</sup> Comité 21, « Mobilisation des équipes pour le développement durable »,  
[www.comite21.org/docs/fluidbook/index.html](http://www.comite21.org/docs/fluidbook/index.html).

## ENGAGING CONSUMERS

Consumers have an important impact on climate change. Heating houses, using electric appliances, driving cars and travelling, eating and drinking – each of the things that millions of consumers do day after day generates GHG emissions and contributes to climate change. Following governments and industry, consumers are the third key pillar in the fight against climate change. Broadly speaking, governments will develop the policies and put in place the conditions to create new markets for climate-friendlier goods and services; business will develop those new goods and services, and consumers will purchase them, and thus pay a significant part of the bill of a low carbon economy. Engaging consumers is therefore essential for the success of a low carbon economy.

The *Guidelines* provide recommendations on how enterprises should deal with consumer interest, some of which are particularly relevant in the context of corporate climate change strategies, namely: raising consumer awareness, providing consumers with clear and accurate information and developing climate-friendly products and services.

### Raising consumer awareness

*Enterprises should “continually seek to improve corporate environmental performance, by inter alia, promoting higher levels of awareness among customers of the environmental implications of using the products and services of the enterprise.” Chapter V of the Guidelines (Environment).*

Consumers are becoming increasingly aware of their role in contributing to climate change - and of their responsibility in contributing to fight it. Many do want to act in a more responsible manner and reduce the emissions related to their lifestyle and consumer habits. However, there is still a huge gap between consumer awareness, what consumers declare they are willing to do, and what they actually do.

According to the 2007 survey of 2734 people in the US and the UK by Consumers International and AccountAbility<sup>53</sup>, climate change is a mainstream consumer issue: consumers are strongly concerned and are ready to take action. A 2008 survey by McKinseyQuarterly of 7751 consumers in Brazil, Canada, China, France, Germany, India, the UK and the US revealed that more than half of all consumers say they are willing to recycle, buy energy-efficient appliances and to drive more fuel efficient cars.<sup>54</sup> Research by The Climate Group in 2008 covering 1000 people in each of the US, UK and China, confirms an increasingly receptive market interested in what companies are doing, and eager to do more.<sup>55</sup> Compared to similar research done in 2007<sup>56</sup>, more people are doing something in the more obvious high-carbon activities such as household energy use and driving, and people who previously did not know what could

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<sup>53</sup> Consumers International and AccountAbility (2007), “What assures consumers on climate change?” [www.consumersinternational.org/shared\\_asp\\_files/GFSR.asp?NodeID=96683](http://www.consumersinternational.org/shared_asp_files/GFSR.asp?NodeID=96683).

<sup>54</sup> McKinseyQuarterly (2008), “Addressing consumer concerns about climate change.”

<sup>55</sup> The Climate Group (2008), “Consumers, Brands and Climate Change”, [www.theclimategroup.org/assets/resources/Consumer\\_Brands\\_and\\_Climate\\_Change\\_2008\\_US\\_Sectors.pdf](http://www.theclimategroup.org/assets/resources/Consumer_Brands_and_Climate_Change_2008_US_Sectors.pdf)

<sup>56</sup> The Climate Group (2007), “Consumers, Brands and Climate Change”.

be done or were not interested in changing their consumption habits, have now changed their food shopping and driving behaviour.

The study by Consumers International and Accountability also shows that only 10% of consumers trust what companies and government tell them about global warming. It says that “corporate and government efforts to inform consumers on climate change are falling on deaf ears, with barely one in ten people in the UK and US believing what they say on the issue”. Furthermore, 75% of consumers, although concerned about how their consumption affects climate change, feel paralysed to act beyond small changes around the home (such as turning off stand-by modes and converting to energy-efficient light bulbs). The study indicates that this is due to a lack of understanding about what individuals can do; concerns over the financial cost of acting; a perceived lack of availability, and a mistrust of corporate claims about energy efficient products and services.

Enterprises seem to be aware of the need to raise consumer awareness on the climate change impacts of the goods and services they offer. The 2008 survey by Mc Kinsey on how companies think about climate change<sup>57</sup> shows that most executives consider climate change is important to consider within their companies overall strategy, and that they are relatively optimistic when anticipating the business prospects that climate change could present. Among the factors influencing companies to take climate change into consideration, “customer requests or preferences” rank second<sup>58</sup> (corporate reputation ranking first and media attention to climate change third, followed by senior executives personal convictions, regulation and investment opportunity).

However, there is surprisingly little said in the recent business literature on how best to engage with customers. A recent “CEO’s guide to climate action”<sup>59</sup> lists, among the five key CEO roles, that of empowering others” - which includes staff, suppliers, stakeholders and other businesses in the sector - but there is no reference to consumers.<sup>60</sup> In its study “Towards a low carbon economy”<sup>61</sup>, the WBCSD states that energy efficiency is widely accepted as the most cost-effective way to mitigate climate change and accounts for 50% of the potential to halve energy-related CO2 emissions by 2050. It lists lack of awareness and information on energy consumption and costs as one of the barriers to the deployment of energy-efficient technologies and practices, and recognises that “there is a need to educate consumers about the financial and environmental benefits of energy conservation, which will support effective consumer decisions”.

There is enormous potential for improvements in engaging consumers in the development towards a low carbon economy. Consumer education and awareness raising is the responsibility of both governments and business. Many governments have undertaken to inform consumers about ways to lower their carbon footprints. Examples include the UK’s ACT ON CO2 Campaign (“How can I make a difference?”)<sup>62</sup>, which provides consumers with an easy-to-use CO2 calculator for everyday actions (in the home, driving,

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<sup>57</sup> McKinseyQuarterly (2008), “How companies think about climate change”

<sup>58</sup> The report does not specify what the term “customers” comprises but it is likely to be larger than consumers, and also refer to the supply chain.

<sup>59</sup> PricewaterhouseCoopers International (2008), “Risk, responsibility & opportunity: The CEO’s guide to climate action”.

<sup>60</sup> The checklist at the end of the section “Empowering others” includes a question, which could be related to consumers, but is more likely to addresses corporate customers: “Are you looking at ways to help your customers reduce their carbon footprint or contribute to climate change solutions?”

<sup>61</sup> World Business Council on Sustainable Development, WBCSD (2009), “Towards a low carbon economy. A business contribution to the international energy and climate debate”.

<sup>62</sup> <http://campaigns2.direct.gov.uk/actonco2/home.html>

shopping, etc); the webpage by France's Agence de l'environnement et de la maitrise de l'énergie (ADEME) dedicated to the eco-citizen<sup>63</sup> and the information portal by Australia's Department of Climate Change ("Think climate, think change").<sup>64</sup>

A range of business initiatives have also emerged to help educate consumers and inform them of their role in lowering their carbon footprint. Together.com<sup>65</sup> is The Climate Group's consumer engagement campaign, aimed at delivering consumers "easy and affordable ways to fight climate change. It shows how the little action people take in their everyday lives - like switching to energy-saving light bulbs - can make a big difference to both CO<sub>2</sub> emissions and household bills". "A simple switch",<sup>66</sup> a campaign by Philips Lighting, aims at offering more energy-efficient products and providing easily accessible information to consumers on the impacts of the use of the company's products. Tesco's "Greener Living" website contains a wealth of accessible information on climate change and provides suggestions to consumers on how to reduce their carbon footprint.<sup>67</sup> Other enterprises follow a mixed approach – they provide information related to the carbon footprint of their own goods and services on their company websites, as well as links to broader government sponsored information campaigns. One example is the French retailer Monoprix, whose webpage on its own sustainable development policy includes links to the government's energy-saving campaign".<sup>68</sup>

### **Providing information and empowering consumers**

*"When dealing with consumers, enterprises should act in accordance with fair business, marketing and advertising practices and should take all reasonable steps to ensure the safety and quality of the goods or services they provide. In particular, they should ensure that the goods or services they provide meet all agreed or legally required standards for consumer health and safety, including health warnings and product safety and information labels. Enterprises should also provide accurate and clear information regarding their content, safe use, maintenance, storage, and disposal sufficient to enable consumers to make informed decisions."* Chapter VII of the Guidelines (Consumer Interests).

To empower consumers and help them make the right choices, they need to be given the necessary information about the goods and services on offer. They also need to be given the means to express their demands. Of course, this does not necessarily mean that informed consumers will actually make the "right" choices: knowing about the health implications of junk food does not deter many people from eating it, and similarly, knowing the carbon footprint of using a car will not make many drivers switch to using public transportation.<sup>69</sup> But being informed is certainly a first, essential, step towards change.

One way companies increasingly use to inform consumers about the climate impact (or carbon footprint) of their products is through their websites. Examples include the description - in terms which are accessible to

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<sup>63</sup> <http://ecocitoyens.ademe.fr>

<sup>64</sup> [www.climatechange.gov.au/index.html](http://www.climatechange.gov.au/index.html)

<sup>65</sup> [http://www.theclimategroup.org/what we do/together](http://www.theclimategroup.org/what_we_do/together).

<sup>66</sup> [www.asimpleswitch.com/global](http://www.asimpleswitch.com/global).

<sup>67</sup> [www.tesco.com/greenerliving/cutting\\_carbon\\_footprints/default.page](http://www.tesco.com/greenerliving/cutting_carbon_footprints/default.page).

<sup>68</sup> [www.monoprix.fr/Groupe/DeveloppementDurable/Default.aspx](http://www.monoprix.fr/Groupe/DeveloppementDurable/Default.aspx) and [www.faisonsvite.fr](http://www.faisonsvite.fr).

<sup>69</sup> The Climate Group (2008)

the average person - of the carbon footprint of their products, by the fruit drink producer Innocent,<sup>70</sup> the shoe maker Timberland,<sup>71</sup> or the special feature on a low carbon society by electronics producer Sharp.<sup>72</sup>

Labels are another way to provide information. Their efficiency, and consumer trust in them, will depend on the trustworthiness of the provider or certifier of the label. As of today, most carbon labels for products are based on private standards and certification schemes. Exceptions are “PAS 2050”, developed in 2008 by the British Standard Institute and the Carbon Trust and the Carbon Footprint Scheme, launched in 2009 in Japan.

**Table 8. Examples of carbon labels (at product level).**

Scheme	Stages of life cycle	Methodology	Website
AB Agri GHG modelling	Production (transport, distribution not covered)	Compliant with PAS 2050 & certified by Carbon Trust	<a href="http://www.llamasoft.com/Guru_GHG.htm">www.llamasoft.com/Guru_GHG.htm</a>
Climatop	Entire cycle	LCA	<a href="http://www.climatop.ch">www.climatop.ch</a>
Carbon Reduction label	All stages (except human inputs, transport to consumers, production of capital goods)	PAS 2050	
CarbonCounted		Aligned with GHG Protocol, ISO 14064 and PAS 2050. Subject to annual verification by a certified auditor.	<a href="http://www.carboncounted.com">www.carboncounted.com</a>
Carbonlabels.org	Entire cycle	Builds on PAS 2050	<a href="http://www.carbonlabels.org">www.carbonlabels.org</a>
CarbonFree	Entire cycle (but capital goods and management operations related to production are optional).	LCA	<a href="http://www.carbonfund.org">www.carbonfund.org</a>
Climate Conscious Carbon Label	Entire cycle	LCA	<a href="http://www.climateconservancy.org">www.climateconservancy.org</a>
PAS 2050 (British Standard Institute)		Own methodology	<a href="http://www.bsigroup.com/en/Standards-and-Publications/Industry-Sectors/Energy/PAS-2050">www.bsigroup.com/en/Standards-and-Publications/Industry-Sectors/Energy/PAS-2050</a>

Source: OECD (2009)<sup>73</sup>

One problem often raised in relation with environmentally-related labels is their number. Another one is their readability (how much and what kind of information can be usefully provided through a label?) and their comparability. There is also a risk of competition between different environmental and social labels. For example, consumers wishing to “do good” and buy the “right” product are increasingly confronted with a range of different labels, and different options: fair trade, organic, locally produced, “no air transport”, etc.

<sup>70</sup> [www.innocentdrinks.co.uk/us/ethics/resource\\_efficient/our\\_carbon\\_footprint](http://www.innocentdrinks.co.uk/us/ethics/resource_efficient/our_carbon_footprint)

<sup>71</sup> [www.timberland.com/corp/Timberland\\_Climate\\_Strategy\\_2009\\_report.pdf](http://www.timberland.com/corp/Timberland_Climate_Strategy_2009_report.pdf)

<sup>72</sup> [www.sharp-world.com/corporate/eco/csr\\_report/2008pdf/sharp09\\_14e.pdf](http://www.sharp-world.com/corporate/eco/csr_report/2008pdf/sharp09_14e.pdf)

<sup>73</sup> COM/TAD/ENV/JWPTE(2009)7, “Counting carbon in the marketplace” Part I – Overview paper (not published yet).



There are many types of consumers, and their readiness to take action in order to reduce their impact on climate change, also varies. The Climate Group<sup>74</sup> distinguishes between:

- *Campaigners*: deeply committed but require supporting evidence to trust
- *Optimists*: committed and want to feel good
- *Confused*: undecided and need clarity of why and how
- *Followers*: partially committed and want to look good
- *Unwilling*: accept climate change as an issue but are not prepared to act
- *Rejecters*: actively reject both the issue and taking action

Connecting with all the different types of consumers and delivering a convincing message to all is not easy. Indeed, one of the conclusions from the research by The Climate Group is that, while the majority of surveyed consumers are receptive to businesses engaging them on combating climate change, there is a leadership gap for brands to fill. According to Consumers International and Accountability consumers need to know that “they are doing the right thing” and that “their action matters” - but they also expect others – including governments and business to play a strong role – and to play it seriously. Table 9 below provides some examples of corporate practice that can help assure consumers, including through accessible and clear information.

**Table 9. What works in assuring consumers?**

Key principles	Corporate practices in relation to climate change
<b>Consistency.</b> Companies that consumers trust give out the same message in everything they do – through their products, labels and promotions, customer service staff, corporate communications and through partnerships with trusted experts.	<b>Yahoo</b> , in developing a strategy for going carbon ‘neutral’ has sought to do this in a way that is not only rigorous and transparent but embedded in its corporate culture.
<b>Linking responsibility, quality and service.</b> Consumers are ready to make efforts to fight climate change, but they also want value for money.	<b>Toyota</b> succeeded in marketing its hybrid, Toyota Prius, as a mass market vehicle. Buyers are attracted not only to the car’s fuel efficiency but to its iconic status as an environmentally friendly vehicle popularised by many celebrities.
<b>Serious intent.</b> Consumers accept that companies are profit-motivated, but they object when there is a discrepancy between what they say and what they do, or where they appear to be ‘greenwashing’ in their approach.	Few companies are yet able to claim that they have done everything possible to reduce their own impacts. But showing a serious intent is a first step. <b>Innocent</b> introduces its ethic’s policy (which describes i.a. the company’s efforts to reduce its emissions), with a humble “We sure aren’t perfect, but we’re trying to do the right thing.”
<b>Trust in the messenger.</b> Companies need to take a broad view of assurance and develop both formal and informal mechanisms to get their message across, not	<b>News Corporation</b> uses both the power of individual relationships and mass media to get the climate change message across to consumers. While in the UK, BSkyB

<sup>74</sup> The Climate Group (2007, 2008).

forgetting their own employees as ambassadors of the company.	engineers have been dropping off low energy light bulbs when they install equipment in people's homes, the company has set up a MySpace channel dedicated to climate change.
<b>Clear information.</b> Companies that people trust provide an ethics-built-in guarantee within their brand and back this up with the right information when and where it is needed help consumers make decisions without having to always 'read the small print'. Caveats should be avoided – too many asterisks or brackets can make a message lose its power.	<b>Marks &amp; Spencer's 'Plan A' and Whole Foods Market</b> both tie the company's commitments to climate change into its overall brand offering and back it up with further information and endorsements.
<b>Seeing is believing.</b> A picture may be worth a thousand words but a demonstration beats everything. This is also true for high-visibility campaigns that appeal to consumers.	<b>The Co-operative Group's</b> Solar Tower in Manchester UK and <b>Wal-Mart's</b> move to put solar panels on the roof of some of its store are key examples where companies have used highly visible demonstrations alongside less visible operational changes and policies. <b>Tesco</b> set a target to sell 10 million energy efficient light bulbs in one year. It slashed prices by half – which led to a quadrupling of sales and attainment of its target.

Source: based on Consumers International and AccountAbility (2007) and Futerra Sustainability Communications (2008)<sup>75</sup>

### Shaping consumer demand: offering low carbon goods and services

*One way for enterprises to seek to improve their environmental performance is through “the development and provision of products and services that have no undue environmental impacts, are safe in their intended use; are efficient in their consumption of energy and natural resources; can be reused, recycled, or disposed of safely”.* Chapter V of the *Guidelines (Environment)*.

Put in the context of a low carbon economy, this means that enterprises have the primary responsibility on the carbon footprint of the products and services they offer to consumers, and therefore also have a key role in shaping consumer demand and proposing consumers less carbon intensive choices.

The 2008 consumer survey by The Climate Group reveals strong consumer demand for innovative solutions that will help people reduce their impact on the climate. On the other hand, spending extra money is not being considered as an option by many. Instead, a majority of people is ready to make changes to their lifestyle and invest their time. However, this will not be enough to achieve significant carbon reductions. As the World Resources Institute<sup>76</sup> puts it, “corporate climate strategies will not succeed in they rely only on consumers to do the right thing. Some climate-conscious consumers will buy low carbon products or make behavioural adjustments, such as turning down their thermostats to save energy. These actions are important, but they alone will not achieve the reductions needed at the pace required. Companies must drive consumer preferences by advancing mass market, low-carbon products and services. They must attract consumers based on cost and performance, in addition to being a “green” or “responsible” product.

Many enterprises have lowered the carbon footprint of their products and services - either because regulation so requires (e.g., GHG emission limits for cars), or out of economic and environmental

<sup>75</sup> Futerra Sustainability Communications (2008), “The Greenwash Guide”.

<sup>76</sup> World Resources Institute (WRI) (2009), “Sharpening the cutting edge: Corporate Action for a Strong, Low-Carbon Economy”.

“common sense”. For these products and services to succeed, consumers need to buy them. Government also have a role in enhancing the “carbon friendliness “ of products and services and thereby also consumer demand - by setting emission limits, energy performance standards, or by removing products from the market altogether. According to research by Consumers International and Accountability<sup>77</sup>, over half of surveyed citizens (51.5%) believe governments should be forcing businesses to remove products that are most damaging to global warming, and 70% want claims about climate change by corporations to be independently verified. Among the study’s recommendations is that choice reduction policies should be developed for all high impact consumer products and services where viable alternatives exist.

Governments have indeed banned certain products and thus eliminated the need for consumers to choose. One example is Australia’s ban of incandescent light bulbs. New construction norms, requiring the use of double glazed windows in new buildings is moving low quality windows out of the market in many countries. Market incentives to replace polluting and inefficient products - cars, heaters, appliances, etc. are paving the way for more carbon friendly alternatives.

However, the role of government in regulating markets is necessarily limited, and business will continue playing a crucial role in offering consumers low carbon goods and services - at a price that consumers are ready to pay, and with a message that consumers are ready to believe. As energy costs rise, companies can differentiate themselves by providing those products that have attributes which are attractive to consumers, while also meeting growing needs for improved efficiency.<sup>78</sup>

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<sup>77</sup> Consumers International and Accountability (2007).

<sup>78</sup> WRI (2009)

## CONCLUDING REMARKS

This working document has provided an overview of how business practice is developing in light of the challenges and opportunities of climate change, using the recommendations in the OECD *Guidelines for Multinational Enterprises* as guiding principles to organise the discussion.

The paper focuses on three key areas in which corporate practice in this field is developing: measuring, disclosing and verifying emissions; making commitments to reduce emissions and developing corporate strategies to implement them; and engaging consumers to help them better contribute to fighting climate change. Some important areas, such as emissions management throughout the supply chain and the scope of business engagement in the development of climate change policies, will be addressed in more depth in a further version of the paper.

The revised version of this paper, building on comments received in the OECD Conference on Corporate Responsibility and further bilateral consultations, will contribute to a report for the joint IC/EPOC project on “Engaging the private sector in support of a low-carbon future” [COM/DAF/INV/ENV/EPOC(2009)1]. It will be submitted for official review to the Working Party of the Investment Committee (IC) and the Working Party on Global and Structural Policies of the Environment Policy Committee (EPOC).