

# Risk, Responsibility & Opportunity: The CEO's guide to climate action

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# About the Series

The Copenhagen Climate Council Thought Leadership Series are inspirational, concise and clearly argued essays from global thought leading investors, scientists, city designers, entrepreneurs, experts, CEO's and policy makers on elements important when developing a new global climate treaty. Communicating potentials and opportunities inherent in tackling climate change, the Thought Leadership Series aims to enhance the public and political awareness of solutions promising significant impact on global emissions growth.

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The essays will each provide input to the World Business Summit on Climate Change on 24–26 May 2009 that will send a strong message to the 2009 UN Climate Change Conference (COP15) in Copenhagen. The message will include how to remove barriers and create incentives for implementation of new solutions in a post-Kyoto framework. This event is hosted in cooperation with the following key partners: UN Global Compact, World Business Council for Sustainable Development, World Economic Forum, 3C and Climate Group.



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# Risk, Responsibility & Opportunity: The CEO's guide to climate action

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*With an introduction by*

**Erik Rasmussen**, CEO, Monday Morning,  
founder of the Copenhagen Climate Council

*In conversation with*

**Shai Agassi**, CEO and founder, Better Place

**Carsten Bjerg**, CEO, Grundfos

**Jørgen Mads Clausen**, CEO, Danfoss

**Anders Eldrup**, president and CEO, DONG Energy

**Lise Kingo**, executive vice-president and chief of staff, Novo Nordisk

**Rob Morrison**, chairman, CLSA Asia Pacific Markets

**Paul S. Otellini**, president and CEO, Intel

**Robert Purves AM**, chair of Environment Business Australia,  
board member WWF International

**Jens Ulltveit-Moe**, CEO, Umoe AS

**Li Xiaolin**, chairwoman and CEO, China Electric Power  
International Co. Ltd.

# Developing a new mindset

Thanks to science we now have an increasingly clear and ominous picture of how our climate is changing. As their knowledge continues to evolve, scientists have issued stronger and more compelling warnings about the impacts of climate change and the steps that need to be taken in order to avoid the most catastrophic outcomes associated with these changes.

Some of these findings are included in this report and they paint a very gloomy picture of the future of our planet. But there is still room for hope. We cannot prevent manmade climate damage. Depending on the speed and ambition of our actions, we can not only stabilize the global climate system but fuel a series of new industrial ventures and create sustainable future economic growth. We still have the possibility to turn climate risks into new opportunities.

Rising to seize these opportunities is the imperative of the business community. As both an important part of the problem and the driving force behind the solution, business holds the decisive key to climate change — and now it is the time to use it.

With this report, *The CEO's Guide to Climate Action*, the Copenhagen Climate Council takes one step towards mobilizing a response from the broader business community. With insights from ten leading businesspeople, all members of the Copenhagen Climate Council and with Samuel DiPiazza, CEO of PricewaterhouseCoopers as lead author, the report portrays how innovative companies across all sectors of the global economy are accounting for climate change and taking action to minimize risk and leverage new opportunities. If this were a representative sample of global business, there would be room for optimism; but these are all front-runners. Their vision and approach must quickly become common practice within a very short time if business shall fulfill its responsibility in the fight against climate change.

It is the mission of the Copenhagen Climate Council to articulate a strong, coherent and ambitious mandate on

behalf of the global business community and present it to the Danish hosts of the UN Climate Change Conference taking place in Copenhagen this December. That is why we have joined forces with a group of leading international institutions committed to addressing climate change: UN Global Compact, World Business Council for Sustainable Development, The Climate Group, Combat Climate Change (a Vattenfall initiative) and the World Economic Forum. This mandate — The Copenhagen Call — will be delivered at the conclusion of the World Business Summit on Climate Change in Copenhagen May 24–26.

The Copenhagen Call shall be an unequivocal call to action, a message to world leaders from the business community that solutions are possible. Agreement in 2009 on the foundational principles of a long-term climate framework, including strong incentives for massive investment in new technologies and new climate solutions, is a global imperative. Such an agreement is the only way to mobilize the required transformational resources from the private sector, and so spawn a new green industrial revolution to ensure a sustainable and prosperous planet for future generations: The biggest and most important win-win opportunity ever.

December 2009 should mark a new global partnership between business and politics. Scientists have provided all the arguments for the need and urgency of that partnership. Their message is clear: We are running out of time. To clear the path for political agreement, the next step should be an innovative and visionary business response. That is what this report is all about — outlining some of the critical issues and possible responses in dealing with climate change.

If there is one conclusion to be drawn from the pages that follow, it is this: The challenge ahead is daunting and critical, but not insurmountable. The biggest challenge is to develop a new approach to doing business and a new mindset within business. We hope this report will help show the way.

**Erik Rasmussen**, CEO, Monday Morning,  
founder of the Copenhagen Climate Council

“There is no bigger problem than climate change. The threat is quite simple; it’s a threat to our civilisation.”

*Sir David King, Former Chief Scientific Advisor to the UK Government, June 2004*

“Climate change presents a unique challenge for economics: it is the greatest and widest-ranging market failure ever seen.”

*Lord Nicholas Stern, The Stern Review on the Economics of Climate Change, October 2006*

“The consequences for the global climate of policy inaction are shocking”

*World Energy Outlook 2008, International Energy Agency, November 2008*

“Very soon, climate change impacts will exceed the adaptive capacities of local communities ... And remember, poorest countries and the poorest communities in these countries are the most vulnerable to these effects.”

*Rajendra K Pachauri, Head of the Intergovernmental Panel on Climate Change (IPCC), December 2008*

“As the global financial crisis spreads and worsens, and the world economy slows down apparently, the international community must not waver in its determination to tackle climate change.”

*Wen Jiabao, Prime Minister of China, November 2008*

“My presidency will mark a new chapter in America’s leadership on climate change that will strengthen our security and create millions of new jobs in the process.”

*Barack Obama, President-elect of the United States, November 2008*

# The changing climate: success or survival?

Whichever way we choose to look at it: new regulations, changing physical landscapes, emerging strategic opportunities — climate change is affecting the way we do business. When the European Union introduced the EU Emissions Trading Scheme in 2005, some 12,000 installations belonging to 7,300 businesses in 15 countries found themselves counting the costs of carbon. The Australian Government Department of Climate Change estimated that the drought in 2006–07 lowered its national economic growth by 0.75 percent. Total investments in alternative energy in North America and Europe amounted to over \$5 billion in 2007. Businesses are entering into a period of transformation and increased uncertainty, where winners and losers may be separated according to their ability to survive and succeed in a carbon-constrained world.

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As business leaders, CEOs need to confidently navigate their companies through this period of transformation, preparing for and reacting to the adverse implications presented by climate change.

But a responsible approach to climate change consists of far more than just minimizing risk. CEOs ability to understand and address climate change will be critical to ensuring their companies' success in this changing environment: by managing the shift to a low carbon and energy efficient world, embracing new technologies and behaviours, and supporting a bold and emphatic response from politicians to climate change, modern corporate leaders can minimize their environmental impact while enhancing shareholder value and maximizing competitiveness.

## **The CEO's role in climate change: Leading the way**

CEO vision and leadership is a vital component of accelerating the collective response to climate change. This applies not just to those businesses with a clear link to the issue (e.g. the power sector), but also across the broader spectrum of industries which are indirectly affected by the impact of climate change. The responses to PricewaterhouseCoopers's 12<sup>th</sup> CEO annual survey<sup>1</sup> suggest that nearly half of all CEOs asked, across all industries, are already making changes to their businesses in some form or other as a result of climate change.

How, then, is a CEO to determine a response that appropriately manages the risk and capitalizes on the new opportunities brought by our carbon-constrained future? For the majority of businesses, counting carbon is uncharted territory. These business leaders may have many questions on how to navigate their firms to meet these challenges. PricewaterhouseCoopers (PwC) has gathered the thoughts of ten Councilors from the Copenhagen Climate Council, who head companies in different industry sectors in different parts of the world. Combined with research and insights from PwC, this paper will present five ways in which corporate leaders can make a difference to the way their business and industry respond to climate change.

### **Climate change success and survival — Five key CEO roles**

- Role 1    Seizing growth opportunities**
- Role 2    Preparing and protecting your business**
- Role 3    Setting an example**
- Role 4    Empowering others**
- Role 5    Helping to define climate change policies**

Some of these roles are crucial for survival, e.g. preparing and protecting the business; others help define success, not just in tackling climate change, but to gain a strategic advantage over competitors. These roles are underpinned by the understanding of the links between climate change and business, including everything from physical and regulatory risks to growth and market opportunities.

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<sup>1</sup> 12<sup>th</sup> Annual CEO Survey, PricewaterhouseCoopers 2009

## Understanding climate change

With the lead of prominent scientific bodies such as the Intergovernmental Panel on Climate Change (IPCC)<sup>2</sup>, we are better equipped to understand how the climate is changing and the role of human activity in these changes. However, business leaders do not need to appreciate the intricacies of climate science to be able to understand how climate change, as a global issue, will present business threats and opportunities.

Jens Ultveit-Moe, CEO and founder of Umoe, an investment company that successfully shifted its focus on traditional energy sources to renewable energies, shared his experience: “I recall the first time I became aware of global warming, as far back as the 1970s. I followed the debates but did not really believe in it. By the time the Stern Review was released, I found the evidence utterly convincing and the trajectory [of climate projections] very frightening. I also saw that this was very significant in terms of my own business, which was at that time very reliant on oil and gas.”

Those Councilors interviewed have based their actions on addressing climate change as “good business sense” and believe that those who fail to address the issue will find themselves “be left behind”. They are also clear not to confuse altruistic motives with prudent business sense. Li Xiaolin, chairwoman and CEO, China Electric Power International Co. Ltd. believes that “dealing with climate change now ... will hopefully secure a happy and healthy future for our children” but moves on to stress that making climate change a priority CEO issue “benefits business operations — by becoming cleaner and more efficient, companies should secure increased profits over the long term.”

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<sup>2</sup> See Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), 2007.

# TEN KEY THINGS TO KNOW ABOUT CLIMATE CHANGE

1

Warming of the climate system is unequivocal, as is evident from **increases in atmospheric greenhouse gas concentrations and global average temperature, dwindling high altitude and latitude snow and ice, and sea level rise.**

2

Most of the observed increase in global average temperatures since the mid-20<sup>th</sup> century **is very likely due to the observed increase in anthropogenic (human-induced) greenhouse gas emissions.**

3

The scientific evidence points to **increasing risks of abrupt or irreversible impacts from climate change** associated with business-as-usual (BAU) paths for emissions.

4

Under a BAU scenario, greenhouse gas emissions could more than triple from pre-industrial levels by the end of this century, resulting in a 50% risk of exceeding **5°C global average temperature change.**

5

Climate change can alter the **frequency and severity of many extreme weather events,** such as floods, droughts and hurricanes.

6

These present **major disruptions in socio-economic terms**. For example, about 40 million people could be exposed to coastal flooding, with half of these residing in ten major cities, including New York, Mumbai, Shanghai, Osaka-Kobe and others. Agricultural systems could be severely disrupted, affecting food supplies and economic livelihoods, and extreme weather patterns could present health complications particularly in children and the elderly.

7

In his Review on the Economics of Climate Change, Lord Stern predicted that a **2 to 3 degree rise in temperature could slow global economic output by 3% per year**, and poor countries would be hit hardest.

8

To avoid the risks of dangerous climate change, climate scientists predicted that **global greenhouse gas emissions need to peak within the next fifteen years, and be halved relative to 1990 levels by 2050**.

9

Achieving these deep cuts in emissions is estimated to **cost around 1% of GDP by 2050** — a level that is significant but manageable relative to the cost of inaction.

10

A long-term binding **global climate change regime** is expected to be agreed at Copenhagen in December 2009 to provide the international framework for climate actions.

# CEO role 1: Seizing growth opportunities

Climate change has moved from an afterthought to the top of many boardroom agendas as companies recognise potential growth opportunities that may be realised by taking responsible action to address climate change. At a collective level, the Stern Review<sup>3</sup> was unequivocal that “the benefits of strong, early action on climate change outweigh the costs”. Moreover, if investments are made wisely, Lord Stern concluded that not only would the costs of addressing climate change be manageable but “there will be a wide range of opportunities for growth and development along the way”<sup>4</sup>. In an address on the findings of his review<sup>5</sup>, Lord Stern expressed it very succinctly: “Strong mitigation is consistent with growth ... The cost of business as usual is such that it will really damage growth”.

Addressing climate change is already producing benefits and growth for many companies. In the latest PricewaterhouseCoopers CEO annual survey, close to one-third of those who have started investing in response to climate change have already received returns on their investments, and a further one-half of respondents expect short to medium term returns.

Opportunities for growth while addressing climate change range from the achievement of efficiencies that can reduce carbon footprint and energy usage to new markets or existing markets such as electricity generation, that are radically reshaped. Li Xiaolin stresses the importance of identifying opportunities: “By identifying growth opportunities in the process of coping with climate change and creating business advantage through a dedicated effort to energy-saving and emission reduction, it may help the enterprise to bolster efficiency and cut emissions while enhancing its competency in the marketplace.”

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<sup>3</sup> The Stern Review Report on the Economics of Climate Change, HM Treasury, 2006

<sup>4</sup> Ibid.

<sup>5</sup> London School of Economics, Gurukul Chevening Lecture 2006, The Stern Review on the Economics of Climate Change.

Jørgen M. Clausen, CEO of Danish industrial company, Danfoss, and also chairman of the Danish Energy Industry does not doubt the growth opportunity presented by climate change: “We have decided that climate change is the biggest opportunity for Danish industry because we can turn it into jobs. The wind turbine industry, for example, has the same relative importance to Danish industry as the automobile industry has in Germany.” Danfoss has a long-standing history of developing cleaner and more energy efficient technologies. The worldwide growth potential of its expertise is illustrated by its involvement in the development of an ‘eco city’ in Tianjin, China. Clausen explains: “We are trying to build an entire city using Danish technologies to demonstrate how you can benefit by designing systems differently. It is about technology transfer but it is also about growth as well.”

Growth opportunities for mature and young businesses alike lie in the ability to innovate and improve. Better Place uses a business model that takes many of the characteristics of the mobile phone market and applies them to personal vehicle transportation. Better Place is hoping to usher in the era of mass-market electric car transport by providing the infrastructure necessary for electric vehicles such as recharge spots and battery switch stations. The result, Better Place CEO Shai Agassi claims, is not only a potential huge growth story but a dramatic reduction in the cost of CO<sub>2</sub> abatement.

Carsten Bjerg, CEO of Grundfos, one of the world’s leading pump manufacturers, gains a competitive edge by improving the energy efficiency of its core products: “We have always been investing more in R&D than the industry and that has enabled us to produce a circulator pump which uses the same amount of electricity as an energy saving light bulb. A big issue for us is to regulate the speed of pumps so that they do not just pump full power all the time but only what is needed. It seems obvious but this is still not the dominant technology of the market.” As the pumps in heating systems make up a significant share of a household’s electricity consumption, improvements in energy efficiency in pumps could be an important contributor to the reduction of greenhouse gas emissions. An emphasis on innovation has also spurred Grundfos to explore comple-

mentary new growth opportunities linked with climate change. “I think there will be big changes. We are looking at how we can improve efficiency for our customers by enabling our products to do more. For example, we are investing in technologies that clean the water as well as pumping it and using pump technology for device cleaning and exhaust gas systems.”

The Grundfos example highlights how opportunities for growth are not confined to companies in the front line of climate change. Intel is busy exploring how semiconductors can be used to deliver greater energy efficiency. Stephen Harper, Intel’s environmental and energy policy director, points out: “Climate change presents an opportunity for Intel because of the close linkage of climate change and energy efficiency. As well as continuing to improve micro-processor energy efficiency, we see semiconductors as a key enabling technology in helping the world to use smarter machines, smarter motors, smarter factories, smarter buildings and smarter houses.” Other established sectors, such as consumer products and retail, could also stand to gain from increased demand for environmentally responsible products.

The ability to spot opportunities and make timely decisions is crucial. This involves taking the lead at times, but also knowing when to hold back and wait for the right opportunity. DONG Energy hopes to be operating a demonstration plant for second-generation bioethanol production in time for the UN Climate Change Conference in December 2009. The plant will demonstrate a sustainable utilisation of agricultural residues for the production of bioethanol, feed and solid biofuel. Anders Eldrup, president and CEO of DONG Energy, stresses that this is a deliberate “second generation” move. “We decided not to participate in the first generation. Even though it would have been easy to do so, we believed the ethical discussion about using food stuffs for fuel raised real issues,” says Eldrup.

## CHECKLIST

### SEIZING GROWTH OPPORTUNITIES

- Do you understand how climate change affects your markets, regulations and technology?
- Have you considered how climate change can help you move into new markets or radically reshape existing markets?
- Are you making a dedicated effort to turn energy saving and energy efficiency into business advantage?
- Are you looking at climate change and envisioning growth opportunities through consumers' eyes?

# CEO role 2: Preparing and protecting the business

A responsible corporate leader must account for the physical and regulatory risks of climate change. Action taken to mitigate this climate risk is undoubtedly the most effective response, and should not only cover the physical risk prompted to the firm and its assets by evolving climactic scenarios but by preparing for rapid regulatory change.

Regulations to address climate change vary widely across jurisdictions. However, increasing certainty in scientific scenario analysis such as that contained in the Fourth Assessment Report of the IPCC, coupled with worsening climate impacts, will only increase pressure on governments to intensify regulation. These actions will heighten risk, but create opportunity for new innovation. Rob Morrison, chairman of CLSA Asia Pacific Markets, explains: “A large scale change in the environment, such as an ice free Arctic, would present climate change as a very real and tangible issue and this could trigger a ‘panic button’ reaction from governments in the form of wide scale new legislation that could severely restrict many current business practices. At the same time, this response could introduce new opportunities through bigger subsidies for energy efficiency and low carbon industries.”

Healthcare company Novo Nordisk is innovating to respond to climate change and began to do so well in advance of regulatory pressure. In an effort to move away from fossil-fuelled electricity generation, the firm is investing in a long-term carbon-neutral strategy that will secure predictable electricity that has the co-benefit of being insulated against price fluctuations while sending a clear signal to stakeholders that it is serious about its social and ethical responsibilities.

In the 2008 Carbon Disclosure Project (CDP) Report<sup>6</sup>, a col-

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<sup>6</sup> PricewaterhouseCoopers is a global adviser to the Carbon Disclosure Project and was the report writer for the 6<sup>th</sup> Carbon Disclosure Report, 2008

laboration of 385 institutional investors that collects key climate change data from more than 1500 major corporations around the globe, numerous sectors described physical risk factors as material to their businesses. The manufacturing sector cited temperature changes, flooding, increased storm intensity, water shortages, spread of disease and change in local weather patterns as significant physical risks. Water supply was cited as a critical risk by the raw material, mining, paper and packaging sector, as well as the utilities sector.

The list of impacts and sectors, of course, does not end there and there will also be indirect effects that can and will affect all markets. In the US, the loss of oil and gas platforms in the Gulf of Mexico following Hurricane Katrina increased gasoline prices which cut into profits in other industries, including chemical companies and fertilizer manufacturers that use fossil fuels as ingredients in their own products. Damage to highways and port facilities in Louisiana and Mississippi slowed the shipment of goods to companies in a host of other industries hundreds of miles away.

Understanding how business activities and investments are affected by climate change is the first step in preparing the business for these impacts. This should become part of their risk management culture. CEOs and their teams need to identify and understand how the most significant climate change trends will affect their companies including, for example, identifying and quantifying the carbon impacts along its value chain. It is also important to identify the interdependencies between climate change risks and other risks relevant to the organisation.

Long-term business-planning strategies should take into account global and local climate scenarios, aided by scenario analyses and event simulations. Resources should then be allocated (accordingly) to identify and monitor indicators of how these scenarios are being realised, as well as to develop the organisational agility to address any issues that arise.

Adaptation provisions need to be put in place especially for business operations most vulnerable to climate impacts. An organisation may not be able to respond effectively on

its own to climate change risks, and may need to explore partners with whom to collaborate to mitigate or prepare for the occurrence of climate-related impacts.

## CHECKLIST

### PREPARING AND PROTECTING THE BUSINESS

- Have you assessed your company's vulnerability to climate change?
- Have you looked beyond asset vulnerability to potential disruption of your markets, your supply chain and your workforce?
- Are you aware of how climate change could affect your investment planning and decisions?
- How exposed is your company and your markets to increased regulation on climate change?
- Have you considered scenario planning to help inform strategic planning and capital allocation decisions?

# CEO role 3: Setting an example

The extent to which individual companies take responsibility for measuring, reporting and reducing their own emissions is the foundation for addressing climate change. The Bali Action Plan, the 2007 decision agreed by governments which will guide the agreement to be reached in Copenhagen in December of this year, calls for “measurable, reportable and verifiable” actions to be taken to reduce carbon emissions. As regulations become more stringent and this level of detail becomes standard business practice, emissions metrics and performance will become an integral component of corporate financial reporting.

An essential role for CEOs is to ensure that robust reporting mechanisms and reduction strategies are in place within their companies. Progress in achieving climate change goals should be reviewed and discussed at board meetings. Paul S. Otellini, president and CEO, Intel, observes: “Clear, consistent and comparable reporting is important not least to prevent some companies’ messaging from getting ahead of its actions. There are companies out there who ‘green wash’, which is a terrible sin. It is important that companies get appropriate recognition for the good that they’re doing but not by talking about good that has not been done yet.”

In 2008, 74% of Global 500 companies that responded to the CDP reported GHG emission reduction targets. Within the retail sector, more than 90% of companies reported that they had emission reduction targets in place, with 76% in chemicals and pharmaceuticals and 70% in oil and gas. In the technology, media and telecoms industries, 68% reported emission reduction targets.

Corporations have implemented a wide range of strategies to reduce greenhouse gas emissions. The transport sector is focusing on investments in new technologies, adjusting travel patterns, energy efficiency improvements and workforce education. The utilities sector will invest further in renewables or low carbon fuel sources and improved efficiency of existing fossil fuel plants. The technology, media

and telecoms sectors aim to reduce business travel and to source more electricity purchases from renewable sources while reducing energy use.

Intel's Stephen Harper stresses the company's responsibility not just to reduce its own emissions but also to look at how it can work with companies in its supply chain to address climate change: "We're working on that at two levels. First, through the World Business Council and World Resources Institute there is a high level effort to help companies figure out how to measure and take the carbon out of the supply chain. Second, there is a much more detailed effort with the Electronics Industry Citizenship Council which has focused on labour practises and some basic environmental issues. We're now looking at trying to develop common approaches across the supply chain to measuring how much carbon is built into different steps in the process. You need to have a common metric and a common approach so that we can reduce the carbon embedded in the final product in as efficient a way as possible."

Novo Nordisk has set an ambitious target to achieve a 10% absolute reduction in its greenhouse gas emissions over a 10-year period, without the use of carbon offsets. Lise Kingo explains that this early response was driven by two factors: "One was the company's ambition to demonstrate environmental responsibility and the other was that we were facing increased costs of energy and a potential difficulty in accessing sufficient volumes of energy in the very long term."

The company will achieve its target via continued efficiency optimisation, investment in energy efficiency and conversion to renewable energy. In a partnership with DONG Energy, the first of its kind when it was announced in 2007, DONG's experts are helping to identify energy savings options at Novo Nordisk's Danish production sites; Novo Nordisk then earmarks energy cost savings for reinvestment in renewable electricity, and aims for its Danish production sites to convert their total consumption of electricity to renewable sources by 2014. The partnership, now replicated with several other companies, has made it possible for DONG Energy to develop a new offshore wind farm with Novo Nordisk signing an agreement to purchase approximately a third of its output for more than ten years.

Two general themes can be observed from the range of carbon reduction activities described above. Firstly, business leaders need to set quantifiable targets and then use them to measure their performance. Secondly, carbon reduction strategies — which will reduce energy expenditures and demonstrate responsible action to stakeholders — need to be designed in a thoughtful and strategic manner and tailored to individual business activities.

## CHECKLIST

### SETTING AN EXAMPLE

- Do you have robust emission reduction strategies and reporting mechanisms in place within your company?
- Do they form part of the mainstream governance of the company?
- Are emissions reductions and energy efficiency measures key performance indicators that are discussed at board meetings?
- Does your company have a renewable energy strategy?
- Are you working with suppliers to reduce emissions in your supply chain?
- Are you actively seeking out opportunities to lead or join sector-wide initiatives to champion climate change solutions and reduce emissions in your sector?
- Are you communicating your initiatives and your successes to your stakeholders?

# CEO role 4: Empowering others

CEOs have an important role to play in inspiring and empowering staff, suppliers, stakeholders and other businesses in their sector and related sectors. The importance of a CEO's voice and its power to be heard both internally and externally should not be underestimated. Shai Agassi, CEO and founder, Better Place, observes: "a lot of companies do not think that they can influence others but the reality is often different. CEOs need to assess where their leverage points are. Can they influence entire supply chains? Can they leverage their position in the market to go and make a big, big change? How can they partner with people in the right way?"

An example of such cooperation is the Digital Energy Solutions Campaign in which Intel has partnered with other leading information and communications technology (ICT) companies and environmental non-governmental organisations (ENGOs) to expand policymakers' understanding of the role of ICT in improving the energy efficiency of the broader economy.

Climate change is a reality and corporate leaders need to take bold, pro-active steps to address any impacts that it will have on their business. Jens Ulltveit-Moe observes that the balance of media discussion is often distorted and that the voice of business can be an important counterweight: "There is a scientific consensus but, of course, there is also a tiny dissident minority opinion. However, the way the media often structure debates can lead people to conclude that there are still roughly two equal views about climate change."

Providing the right information helps frame the issue. CLSA, an independent brokerage and investment group, has leveraged its position as a leading provider of market intelligence within the Asia-Pacific investment community to bring the topic of climate change to the forefront of boardroom discussions. Its Corporate Government Index included a Clean & Green score in 2007, which measures

Asian companies' sensitivity to environmental issues. Strikingly, 42% of Asian corporations did not respond to the survey, and of those who did, 64% scored zero on the Clean & Green criteria. The Chairman of CLSA Asia-Pacific, Rob Morrison, explains: "We surveyed around 600 Asian companies as part of our Corporate Governance survey and as you can imagine for a number of these companies it wasn't very popular but ultimately we believe these surveys do positively impact corporate behaviour." CLSA expects a positive reaction to its efforts as the link between climate issues and business is better understood: "The key leverage factor in effecting change in behaviour is through providing research that stimulates greater understanding of environmental impact and issues, climate change and regulatory responses to those changes, to global investors. When capital providers start asking tough questions of company management, companies are generally quick to respond. We think the global investment community has tremendous leverage available here to make a difference and CEOs need to be aware of it."

Corporate leaders have a role to play in drawing the company's attention to the hard facts of climate change and setting out a framework whereby staff in the company can engage positively with the issue. Robert Purves AM, chair of Environment Business Australia, observes: "On many boards, you will get one director who doesn't accept that climate is a real issue. Also, you often get the situation where you have group general managers who get frustrated with their senior management because they are too slow on the issue and are missing opportunities." The CEO's role is to get the company to address the issue objectively, outline the risks, be clear about strategy and set the internal culture.

Empowering staff within the company and setting the right internal culture is also important for recruitment and retention. Intel's Paul S. Otellini points out: "Each year we often recruit new employees from a pool of thousands of college graduates. It is increasingly becoming a tick list item for them to ask 'where is your company on the green scale?' If we want to continue to have the best and brightest coming to us then it is very important that we set a lead on climate change." His view is echoed by Li Xiaolin's

experience at China Electric Power International: “Environmental protection is a core strategic component of our corporate culture, which I am sure has an influence on how our employees think and behave. Our people are actively involved in all kinds of practices that promote environmental conservation, which in turn also helps to further develop our corporate culture.”

Actions on issues such as climate change could form part of an employee engagement strategy for a firm; Novo Nordisk uses energy-saving ideas from its production staff. Lise Kingo believes that “mobilising employees behind our energy saving strategy has been crucial” and at the same time the company has gained “overwhelming feedback from employees ... as this is something that engages people.” Rob Morrison echoes this view: “the staff were pleased that we were proactive in getting ISO 14001 environmental certification; it enables their individual actions to contribute to a larger effort, and they feel good about it.”

By setting targets and providing incentives, business leaders can help mobilise actions from its staff. DONG Energy sets energy consumption targets internally among its own employees. Anders Eldrup explains: “It gives a focus for some very practical actions such as turning off computers and lights as well as more across-the-board measures such as introducing solar energy into our buildings.” PricewaterhouseCoopers is incentivising its UK staff to step up their use of video conferencing as an alternative to business travel. Employees that book video conferences earn points which are used to support the World Land Trust to protect areas of the rainforest in the Cerro Candelaria reserve project in Ecuador.

## CHECKLIST

### EMPOWERING OTHERS

- Are you empowering staff within your company — to engage positively with the climate change issue, both at work and at home?
- Are there mechanisms in place so that staff can put forward or implement their own ideas to address climate change? How are you measuring their impacts?
- Can you use action on climate change to help recruit and retain the best people?
- Are you looking at ways to help your customers reduce their carbon footprint or contribute to climate change solutions?

# CEO role 5: Helping to define climate change policies

CEOs have an important role to play in shaping the global policy response to climate change. The views of business leaders are needed to inform politicians and to maximise the effectiveness of policies and implementing mechanisms. Lise Kingo points out: “There is an increasing demand for business leaders to have the courage to step onto the scene and raise their voices on what it will take to create the framework for a more sustainable development globally.”

As pressure mounts for governments to act, it is important that they act in a responsible manner. Early and regular engagement by private-sector senior management can provide valuable insight to regulators in the design of effective mechanisms that will fairly and predictably limit carbon emissions without being unfairly punitive to a particular industry sector. By vocally supporting proactive and progressive regulation, industry can demonstrate its corporate sustainable ethos while developing an effective approach that satisfies the interests of all parties.

Several CEOs interviewed spoke of their experiences interacting with government. Intel, with its international presence, has worked with environmental protection agencies over many years to develop types of environmental permits that are “very stringent but also very flexible which work right for their facilities”. By making its voice heard in the policy-development process, business can underscore the importance of clear signals to guide long-term investment as well as regulatory frameworks that recognise corporate action taken in advance of any regulation. Jens Ultveit-Moe, however, urges business leaders to be realistic and reasonable: “I think if businesses asked government to pay them [for addressing climate change] from day one it would be an unreasonable request. However, if businesses ask government to give a long term framework for their investment where they can make money if they do a good job, then this is more acceptable to governments.”

Shaping climate policies and the regulatory landscape could involve seeking out the right partnerships, for example with non-governmental organisations. The NGO landscape in relation to climate change is gradually changing, with greater emphasis on science-based climate action and a focus on collaborations with businesses. Leading CEOs and the heads of major NGOs are beginning to form “win-win” collaborations that take into account both business interests and corporate responsibilities.

## CHECKLIST

### HELPING TO DEFINE CLIMATE CHANGE POLICIES

- Are you making use of your leverage in influencing policies on climate change?
- Have you communicated your position on climate change policies?
- Are you reaching out to organisations / governments that can influence climate policies?
- Are you leveraging media interest in climate change to help get your message across

# The goal at UNCCC 2009 in Copenhagen

The CEOs interviewed have five critical messages for the world's political leaders as they prepare for Copenhagen:

## **The time to act is now**

The next ten years are crucial in the fight against climate change. Carsten Bjerger articulates the need for politicians to seize the moment: "We have the capability to address climate change but it will only happen if our politicians take decisions."

## **Targets need to be short-term as well as long-term**

Shai Agassi of Better Place urges: "If we come out of Copenhagen only with targets that date beyond 2020, we will all have failed. If the only timeframe reaches beyond the control or lifespan of current heads of state, the odds for that target being meaningful will be negligible. The effect, if politicians don't set short-term as well as long term targets, will probably be more along the lines of 'business as usual' and 'I'll leave that problem to my successor.'"

## **Business needs predictability**

CEO's are unanimous on the need for a regulatory framework that is clear, consistent, ambitious and long-term. "Remember, it is companies that have to deploy their balance sheet to make it happen," says Shai Agassi. "If you have a policy that is vague or changing, not committed in time, it is very hard for the long-term large infrastructure investments that we're doing right now." DONG Energy president and CEO Anders Eldrup emphasises the same point: "When we do our investment planning, we are looking at CAPEX-heavy industrial investments. We need a high universal carbon price and long-term know-

ledge about the rules of the game. Higher carbon prices are very, very important to drive required new investment; it is a great problem for industry that we don't know the rules of the game after 2012."

#### **A carbon new deal is needed**

Li Xiaolin, vice chairwoman and CEO of China Electric Power International, says: "Stepping up scientific innovation and international cooperation will be crucial. Achieving development goals with minimum GHG emissions is a must-go direction for the future, which can only be made possible through technological innovation and international cooperation." She stresses that "efforts must be made to perfect the market mechanisms under the United Nations Framework Convention on Climate Change, with a focus on facilitating technological development and transfer, and to ensure that consensus is reached quickly in the international community. If these technologies can be transferred and deployed to developing countries at relatively low cost, it may well help reduce large amounts of GHG emissions."

The importance of knowledge-sharing is reinforced by Anders Eldrup in the context of the development of carbon capture and storage (CCS): "It is essential that governments promote knowledge sharing. It is meaningless that 10 different companies should develop differing technologies because there is probably only one winning technology and it needs to be implemented as rapidly as possible. CCS is such a crucial thing that we must share knowledge to get things moving." Eldrup also stresses the importance of fair burden-sharing between countries to prevent unfair competition between companies. He further sees the revenue generated from auctioning of carbon allowances as a "historic opportunity" to invest in technological climate solutions.

### **The current economic recession and the financial crisis should spur us on rather than deter us**

In some respects, economic recession, far from being a threat to climate change mitigation, is an opportunity. As governments around the world focus on ways to stimulate investment, addressing climate change presents an opportunity for green growth. Jørgen Mads Clausen, CEO of Danfoss, points out that, while the economic recession is short term, the impact of climate change and the measures needed to combat it are long term: “What we are trying to achieve is a follow-on agreement for when Kyoto expires in 2012. The current financial crisis will have changed by that time.”

Bjerg emphasises the importance of not being deterred by the credit crunch and subsequent economic downturn: “The financial crisis could turn into an excuse for some politicians. That would be a big mistake because everyone involved in this will tell you that waiting just makes it more expensive and reduces our chances of preventing the worst impacts of climate change. We need to do it now.”

## **Conclusion**

CEOs that have contributed to this ‘thought piece’ have drawn from their personal and professional experiences to produce a climate change action plan for their peers. The examples and case studies, checklists and messages that these CEOs have shared are aimed at supporting the transition to an increasingly carbon-constrained world. Those that are able to adapt and innovate shall be the leaders of the next generation; those that wait too long risk being left behind.

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## About PricewaterhouseCoopers

**PricewaterhouseCoopers** has been advising policy makers and companies on climate change since 1997, helping them to analyse issues and develop practical solutions to the challenges they face. With a global network of over 800 Sustainability and Climate Change professionals, **PricewaterhouseCoopers** offers a broad range of advisory, assurance and tax services that guide clients through the complexities of adapting to a low-carbon economy and a resource constrained world.

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## About the Copenhagen Climate Council

The **Copenhagen Climate Council** is an international initiative that brings together leading authorities on climate change, including the world's most renowned scientists, business leaders and diplomats, who are dedicated to turning the challenges of climate change into new opportunities. Founded by Monday Morning, the leading independent think tank in Scandinavia, the **Copenhagen Climate Council** aims to create a constructive and positive global dialogue based on effective solutions to climate change. The recommendations of the Council are delivered directly to the Danish government, which will take them forward to the UN COP15 Climate Summit in December in 2009. This gives business a voice at the negotiating table and the opportunity to help build a workable framework to tackle climate change.

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