



**TIME FOR**

**CHANGE**

**BUILDING ON THE  
COPENHAGEN  
CONFERENCE OF THE PARTIES  
IN DETERMINING FUTURE  
DIRECTION FOR BUSINESS**



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# Foreword



R K PACHAURI, PhD

Director-General  
TERI (The Energy and Resources Institute)  
and Chairman  
IPCC (Intergovernmental Panel on Climate Change)

This issue of the WSDF newsletter comes at a time when there is growing concern on the uncertainties associated with arriving at a global agreement on climate change. I have just been to Mexico and held discussions with the President of Mexico as well as some of the ministers in his cabinet and other officials in the Government of Mexico. There is an obvious recognition of the fact that the Copenhagen Conference of the Parties did not quite deliver what was expected, and therefore, there is a tendency to pitch expectations for Cancun at a level which is realistic. But often in human actions, what seems like a setback often proves to be an important turning point. Perhaps that would turn out to be case with Copenhagen.

Global negotiations towards a binding agreement on climate change are by their nature a complex undertaking. Consequently, perhaps some of the hopes that were clearly built into the Bali roadmap in December 2007 did not take into account the realities and pitfalls that would be encountered on the way to Copenhagen. In a somewhat similar manner those of us involved in the field of climate science also failed to anticipate the kind of backlash that now in retrospect seems to have been inevitable. As long as science was on the fringes of policy any questioning of it was generally mild and not in any manner assailed the basic findings that have progressively shown the centrality of human actions as responsible for bringing about climate change in recent decades. But the Fourth Assessment Report

(AR4) of the Intergovernmental Panel on Climate Change (IPCC) clearly entered the policy arena, because it had a heavy impact in determining the thrust and content of the Bali action plan and then both in September 2008 and September 2009 when the UN Secretary General held successive High Level Summits on Climate Change during the session of the UN General Assembly in New York, I was given the responsibility of presenting the major findings of the AR4 to the leaders gathered on those two occasions. They numbered about 80 in 2008 and over 100 in 2009. In addition, the findings of the AR4 were also disseminated on a large scale through the media and highlighted on many other occasions. The findings of the IPCC were being held up as a basis for action in every responsible forum across the globe. Clearly, this did not suit some sections of the society, and therefore, one single error in the AR4 became a basis for questioning the science of climate change as a whole, and some other developments were hyped and misrepresented, prominently highlighted by the international media, such as the hacked emails at the University of East Anglia.

The current questioning of the science and the lack of visible

progress in the negotiations, however, does not take anything away from the realization that is growing worldwide among the public that action on climate change is essential and urgent. The lack of an agreement, therefore, can at worst shift the burden to local communities and societies. Frankly, that may turn out to be a far better assurance of action than any single global agreement. It, therefore, is important to realize the role that local bodies and grassroots organizations would now have to play to see that irrespective of global or regional agreements climate change gets the attention of society on the basis of the enormous and rapidly growing evidence that people themselves will evaluate in the coming months and years. **This realization by civil society and grassroots organizations perhaps holds larger potential for solutions than a global agreement might provide.** All in all, therefore, we should not lament the lack of a binding agreement in Copenhagen, but rather hail the fact that finally this problem which has been caused by human beings is going to be solved only by human beings in a solid and extensive programme of action.



“In the run up to Copenhagen, most of the major economies put forward impressive domestic economic plans to deal with climate change. While it would have been simpler to implement these had Copenhagen given us a binding treaty, the fact is that today most governments have demonstrated that they recognize the need to develop a low-carbon economy in the next 40 years. The science admits no compromise, and even if it takes more time, eventually the world will turn to a new model of low carbon growth.”

**George Soros**

Chairman, Soros Fund Management,  
LLC  
Founder, Open Society Institute

“Today’s global markets are not compatible with a low-carbon future. We need to transform global markets into ‘green markets’. We must mobilize the private sector by putting a price on carbon. Carbon pricing has twin effects. It provides the polluter with incentives to reduce emissions and develop environmentally friendly technologies. In addition, it generates revenue that can be used for climate action in developing countries. Carbon pricing can be used to stimulate transfer of funds from developed to developing countries. By means of carbon trading, we can address two of the most important challenges of today—climate change and poverty. Smart action now will cost us less than paying the price of global warming in the future. We must make sure that we do the right thing and that we do it now.”

**Jens Stoltenberg**

Prime Minister of Norway

“The Asia-Pacific region is now the center of growth in low-carbon investments. For wind alone, annual installed capacity for the past three years has averaged 10,156 MW—more than that of Europe and the US. China and India are now among the top five countries in wind power installed capacity. Investments are also growing in geothermal, small hydro, and solar power. Governments in the region have set clear targets, incentives, and support mechanisms to expand the uptake of energy-efficiency measures and renewable energy options. Examples include energy-efficiency targets in China and Thailand, renewable energy laws in Pakistan and the Philippines, and innovative market mechanisms such as trading of energy efficiency and renewable energy certificates in India. Combined, these offer tremendous opportunities for businesses. Uncertainty still prevails on the post-2012 global framework, but the national and regional thrust is crystal clear—the region will be an attractive, long-term investment destination for low-carbon solution providers.”

**Haruhiko Kuroda**

President and Chairperson, Board of Directors Asian Development Bank

# Focus

## Building on Copenhagen discussions in determining the role of business

Anupama Arora\*

The Copenhagen summit (COP15)<sup>1</sup> intended to agree on the parameters to extend the existing international framework for controlling greenhouse gas (GHG) emissions. Unfortunately it did not conclude in a legally binding agreement upon the nations. However, it cannot be denied that the sheer presence of the leaders of 119 countries at the Copenhagen summit in December 2009 made a very strong and positive statement about the interest the issue of climate change has generated in the minds of the world leaders. The Copenhagen Accord, however, only reflects a broader consensus to stay within 20C of warming, but does not state any specifics for national emission targets or mitigation plans till either 2020 or 2050.

Even on issues related to technology transfer or adaptation, the accord lacks the details required for prompt action. Therefore, while the corporates all over the world might have been pressing their respective Governments to send out clear

and long term signals on future climate policy, they will have to continue taking uncertainty into account until the binding targets are defined, agreed upon and enshrined in the national legislative frameworks.

### Why corporates are seeking more clarity on regulatory front?

Copenhagen might not have led to concrete targets but it has made it obvious to the corporate sector that some form of climate legislation/regulation is inevitable. However, there is a lack of clarity on what precisely it would be like. This has triggered a sense of unease in the business community as while businesses are aware of the evolution of multiple climate policies they do not know how these would eventually unfold, and impact their business in their future. Companies in support of climate legislation endorse that a clear climate policy is better for the economy and business than the status quo. Absence of such a policy creates uncertainty, which impacts the sustained economic

growth and development of new markets and business opportunities

Business leaders are increasingly acknowledging that Government action on climate and clean energy is a necessary element for transition to a cleaner society. The failure of Copenhagen summit in culminating in nationally binding targets however, has potentially delayed investments in low carbon projects. Therefore, the national and regional regulations in the interim period will be the most important drivers of low carbon investments by the private sector. Perhaps the biggest driver for business is the regulatory certainty as the investment decisions are based on the expectations about the future. In this context government policy is the key determinant of business decisions. Without appropriate climate policies in place the companies today face a real dilemma. For instance an electrical utility company may have to invest as much as 2 trillion dollar in the next 20 yrs to replace an ageing unit and meet the

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<sup>1</sup> The 2009 United Nations Climate Change Conference, commonly known as the Copenhagen Summit, was held at the Bella Center in Copenhagen, Denmark, between 7 December and 18 December. The conference included the 15th Conference of the Parties (COP 15) to the United Nations Framework Convention on Climate Change and the 5th Meeting of the Parties (COP/MOP 5) to the Kyoto Protocol. The conference was held to agree upon a framework for climate change mitigation beyond 2012

energy demands of the growing population. Faced with a suite of fuel choices and generation options, a price on carbon and other regulatory details would make a lot of difference to its choices and preferences. Many companies of the utility industry are thus urgently calling for rules of the road to help take decision on their investment over the next couple of decades and to avoid spending millions of dollars on infrastructure (for instance power plants) that might have to shut down due to future regulatory pressures. Similar constraints are being faced by the automobile industry. The average gestation period for a new technology is 7-8 yrs such that the company would be able to launch a technology that is being designed now in 2017. It is therefore, very important for the businesses to know at the earliest what would be the likely demand for low carbon technologies in the near future.

Although to some it might seem counterintuitive in first instance, but in light of the above it does not come as a surprise that in the recent years a significant number of business organizations have emerged as strong advocates for national climate and energy policy that regulates reduction of green house emissions. This shift has been a surprising turnaround from the long

prevailing environmental politics that pitted business against the environmental advocates in a binary struggle. Some of the major corporations today are aligning themselves with non governmental organizations (NGOs)<sup>2</sup>, unions, national security hawks and even religious groups to urge enactment of legislations that could project an emission trajectory for next couple of decades. This is because they realise that climate change is not just an environmental issue but a multifaceted problem, encompassing national security, international diplomacy and economic policy, which in turn define the business environment.

### **Benefits perceived by business**

It is believed by many corporates today that a clear and long term legislative framework would alleviate much of their uncertainty and allow for a more strategic business planning. Also clean energy is going to be one of the fastest growing businesses in the 21st century. An investment of \$33.9 billion<sup>3</sup> was reported in the second quarter of 2010 itself reflecting optimism among the investors about the clean energy's longer term prospects.

Corporate investment amounted to \$5.1 billion<sup>4</sup> in 1H10(first half of 2010), a 325 percent increase from the

same period in 2009. Thus it is evident that the largest global companies are seeing the business case for operational cleantech integration, leading them to do huge investments in cleantech,. This uptick is being driven by companies looking to improve energy efficiency and reduce carbon emissions in order to reduce their operational costs, mitigate energy price volatility risk, drive sustainable growth, and comply with existing and pending regulations around carbon and climate change risk disclosure.

Many corporates which have made investments in the sector have high stakes attached to awaited policy interventions. More so as the consumers are becoming more environmentally aware, the companies are facing increasing pressure from the stakeholders to demonstrate proactive corporate social stewardship. Companies pursuing this end have developed agendas which would benefit greatly from a well structured climate policy in place.

This change in the attitude of business is evident across most countries and industry sectors. According to a recent survey by the Institutional Investors Group in Climate Change (IIGCC)<sup>5</sup> the proportion of institutional investors who consider firms' climate change policies when making investment decisions has

<sup>2</sup> A non-governmental organization (NGO) is a legally constituted organization created by natural or legal persons that operates independently from any government and a term usually used by governments to refer to entities that have no government status

<sup>3</sup> Bloomberg

<sup>4</sup> Cleantech group 2010 press release (Cleantech Group & Deloitte (<http://cleantech.com/about/pressreleases/Q2-2010-release.cfm>))

<sup>5</sup> The Institutional Investors Group on Climate Change (IIGCC) is a forum for collaboration on climate change for European investors. It brings investors together to use their significant collective influence to engage in dialogues with policymakers, investors and companies to accelerate the shift to a low carbon economy

more than doubled in the past two years (IIGCC, 2010). Also the results of the survey showed that the interest in climate change policies is having a tangible impact on firms seeking to attract institutional investors. About 80 per cent of respondents claimed that they had actively cooperated with companies on issues related to climate change, including improvements in disclosure and integrating climate change into business operations and strategies. However, the report warned that the continued absence of comparable climate change policy related disclosures by the government was making it difficult for investors to formally integrate climate change factors into investment analysis. This reiterates the need for legislative/policy measures to deal with climate change. The survey analysis indicates that in

all likelihood, even though the businesses which are carbon intensive and polluting and vulnerable to higher climate risk might continue to attract investment the investors will factor those risks in and as a result the cost of capital will increase for carbon intensive businesses

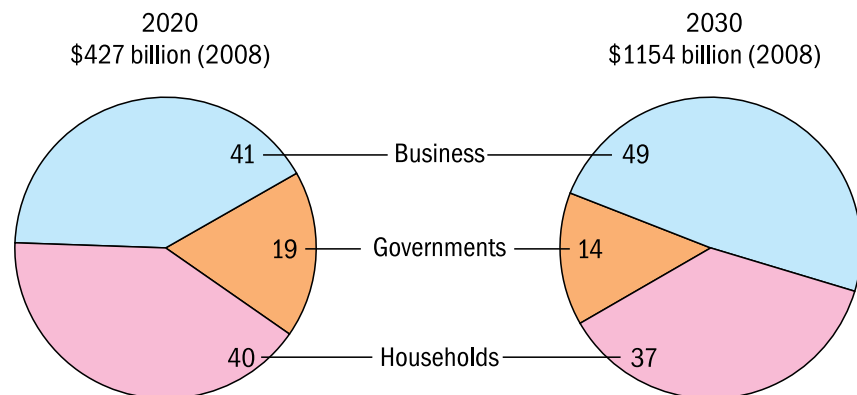
In line with the above the Deutsche Bank Climate Change Advisors group<sup>6</sup> report “Investing in Climate Change 2010- A Strategic Allocation Perspective” published in January 2010 concluded that market drivers for climate change investment remain robust driven by mandates and innovations policy. The report anticipated a bullish outlook for public markets, private equity/venture capital and infrastructure investments. Across asset classes climate change investment is growing rapidly relative to the broader market. The first quarter

of 2010 saw \$5.9 billion invested in cleantech<sup>7</sup> across 731 deals, a marked increase from the fourth quarter 2009 when \$3.9 billion was invested across 483 deals. The report further recommended that investors should consider outweighing climate change in their portfolios in light of size and growth potential of climate change investments.

While the reasons driving the companies to seek action on the climate policy front may vary across companies, it is undeniable that many companies are keen on having climate legislations in place.

WEO 2009 report states that under the 450 Scenario<sup>8</sup>, businesses would account for 41% of the incremental investment in 2020 and almost half the incremental investment in 2030. They have a prominent role across all sectors, whether in building new, clean power plants, implementing more efficient processes in industry, purchasing low-carbon commercial vehicles, or building new-generation aeroplanes and ships.

The additional investment required in the 450 Scenario<sup>9</sup> would pose a major financing challenge for businesses, particularly those in high-growth renewable sectors. With risk being an important and costly



<sup>6</sup> Deutsche Bank Climate Change Advisors is the brand name for the institutional climate change investment division of Deutsche Asset Management, the asset management arm of Deutsche Bank

<sup>7</sup> Cleantech is a term used to describe products or services that improve operational performance, productivity, or efficiency while reducing costs, inputs, energy consumption, waste, or pollution

<sup>8</sup> 450 Scenario is the International Energy Agency’s plan, that sets out an aggressive timetable to actions which are required to limit the long-term concentration of greenhouse gases in the Earth’s atmosphere to 450 parts per million of carbon-dioxide equivalent

<sup>9</sup> The Organisation for Economic Co-operation and Development (OECD), is an international economic organisation of 33 countries. It defines itself as a forum of countries committed to democracy and the market economy, providing a setting to compare policy experiences, seeking answers to common problems, identifying good practices, and co-ordinating domestic and international policies of its members

dimension of energy sector financing, effective government support is particularly important at this time

While in the short term, continued special attention needs to be given to improving access to credit and lowering the cost of debt (loan guarantees, clean energy bonds and monetized tax credits can be effective in boosting private investment); in the long term predictable, longer-term policies focused on clean energy technologies are important, reflecting the long life of most energy technologies and investments. Such policies would help investors to evaluate potential investments more effectively and to reduce the financial risks. This would permit investors to consider a longer payback period and lenders to finance a higher portion of the investment. For example, feed-in tariffs typically specify the price to be paid for the electricity for the first 10 to 20 years, while carbon price and credible market mechanisms can fulfill a similar purpose across all the sectors.

Corporate investments to reduce energy-related CO<sub>2</sub> emissions are also affected by government policies directed at different objectives. For instance subsidies to fossil-fuel production or consumption make investments to reduce energy-related CO<sub>2</sub> emissions less attractive. In most non-OECD countries, at least

one fuel or form of energy is subsidized, most often through price controls that hold the retail or wholesale price below the true market level. By contrast, subsidies that favour lower emitting technologies (such as feed-in tariffs for renewables) promote investments in those technologies and are assumed to have a growing place in government policies.

### The other end of the spectrum

Looking at the other end of the spectrum, there are a number of companies which feel that abandoning climate regulation would be in their best interest. In the latest annual sustainability research series 'After Copenhagen: Business And Climate Change' from the Economist Intelligence Unit<sup>10</sup> (EIU), 2009, half of the surveyed executives (52 per cent) agreed that conflicting evidence on climate change meant the jury was still out on how serious this issue is.

This perspective, does not however take account of that the fact that scientific evidence on climate change is becoming increasingly compelling and the issue of climate change is unlikely to move out of public eye, even if the climate agreement is not finalized in the near future (COP16<sup>11</sup>, Mexico). The longer the society waits to deal with climate change the more severe the problem would become. The greater the delay

in setting targets, the steeper and more ambitious cuts in GHG emissions would have to be pledged which would impose a huge cost on the business community. Also in all likelihood with continued occurrence of climate change related natural disasters (as projected by IPCC<sup>12</sup> Fourth Assessment Report) governments would be compelled to announce stringent and punitive emission cuts.

### Differing perspectives in the market place

There seems to be a divide in the marketplace. While some companies are actively moving further along the low carbon path, others are unsure whether this should be a key focus. This was also evident from the recent EIU global survey of 542 executives, who were polled online in December and January 2009 – after the Copenhagen summit. It concluded that corporate progress on carbon reduction over the past year has stalled and the executives are less confident over the governments' ability to deliver a level regulatory playing field following the perceived failure of COP15. Nearly half (46 per cent) of those polled said they were pessimistic about the ability of their governments to deal with climate change, especially in an international context.

<sup>10</sup> The Economist Intelligence Unit (EIU) is part of the Economist Group. It is a research and advisory company providing country, industry and management analysis worldwide

<sup>11</sup> COP16 is the 16th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC). It is the 2010 United Nations Climate Change Conference and will be held in Cancún, Mexico, from 29 November to 10 December 2010

<sup>12</sup> Intergovernmental Panel on Climate Change

One striking difference between the believers and the non-believers that came out through the survey was that while both the groups were equally likely to have implemented energy efficiency initiatives in their businesses to cut costs, far more companies (59 per cent) with ‘believers’ saw carbon reduction as a way to obtain advantage through new products and services and many more have actually improved the environmental footprint of existing products and services.

The business community need not wait for targets to be set for taking action on climate change. Copenhagen might not have provided the clarity sought by the businesses, nonetheless it has reinforced the urgency to address climate change. With or without binding agreements companies need to keep driving forward. They need to execute a low carbon strategy that optimizes the opportunities and mitigates the possible risks posed to their business by new legislations. Some of the specific issues that companies would need to focus on include: -

**1. Achieving energy efficiency:**

Across the spectrum from manufacturing to retail, from raw materials to consumer products, companies need to work towards bringing down their energy cost, by employing energy efficient processes and practices and reducing carbon emissions. This is likely to continue, prompted by ever-increasing energy costs and technological innovation.

**2. Developments of the skills of anticipating future regulations and standards:**

Companies are required to become more proactive at anticipating future regulations and standards and taking their managerial decisions accordingly. This would allow them to send strong signals to their respective governments about the extent to which regulations would be received favorably by the concerned stakeholders

**3. Mainstreaming and reporting of carbon management practices:**

Businesses need to continue investing in energy and carbon management practices and explore the possibility of integrating them with their daily business operations and key performance indicators. These practices should not be looked at as a separate wing disconnected with mainstream business, and only used as a regular number crunching exercise. Further a full report of the carbon management practices should be made available to the investors as for long term or strategic investments in infrastructure or energy projects (producing and consuming) the companies need to understand the project’s sensitivity to different policies, carbon price and climate scenarios. As the requirement for business to do environmental reporting is increasing, investment in robust and flexible data management system will

enable companies to meet these changing obligations more efficiently

**4. Awareness generation and marketing:**

As the global economy is recovering from recession, momentum needs to be built up around climate change and carbon management as important issues concerning consumers. To an extent this could be facilitated through relevant media coverage, corporate and product marketing and wider communication and education

**5. Taking informed investment decisions:**

Given that it is unlikely that there will be a single price for carbon in the medium and short term, the investment decisions should take into consideration a range of scenarios.

**6. Preparing for carbon taxation:**

Employing carbon tax is one of the things regulators worldwide are considering. However, tax on carbon will pose an issue for the companies. Also as it might take some time for the changes to the tax system to filter through, as a result variations between countries might create complexity that business would need to prepare for.

**6. Preparing for the worse:**

The persistence of the present scenario of policy and carbon market uncertainty coupled with pressure on public expenditure has constrained the public investment in low carbon infrastructure in some countries. Therefore it

would be prudent for chief risk officers of companies to not only prepare themselves for a 2 degrees increase in temperature but also consider the implications of 3-4 degrees increase in temperature particularly if they have markets, long-lived assets or supply chains which are vulnerable to climate impacts( e.g. coastal regions, regions highly reliant on water availability and regions vulnerable to extreme weather events).

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# Opinion

## Building on the Copenhagen Conference of the Parties in determining future direction for business

Poul V Jensen

COP15 promised to provide a successor agreement to the Kyoto Protocol and to create a framework for global cooperation. Indeed, certain progress was made in a number of important areas. Yet, there is no escaping the fact that a breakthrough has not been achieved. After Copenhagen, now more than ever, one should imbibe the message that embarking on the carbon reduction journey entails taking action at all levels. A key role is played by politicians and, even more importantly, by the industry and private sector.

The absence of a binding international agreement leaves the business and industry with no other option but to face another year of uncertainty over the direction of global policy. The non-binding nature of the agreement and lack of a timetable for implementation are posing challenges for corporates the world over. In such a scenario, business and industry may be tempted to view climate change as a simple compliance exercise that will only require action when regulations are introduced at the global level. Yet, COP15 should not serve as an excuse

to scale back carbon reduction plans. Instead, companies need to realize that their response to climate change is a defining factor in their future performance. Hence, there is an urgent need to develop climate change strategies, which limit emissions of CO<sub>2</sub> and other GHGs without jeopardizing growth plans. A wait-and-see approach would certainly be risky.

Indeed, the public debate on economic impact of climate change has mostly been focused on the potential threat to growth. However, this discussion has taken a turn because climate change is no longer perceived as an environmental or social issue, but an immense economic opportunity. An ever-increasing number of companies understand that there is no natural contradiction between economy and environment—one does not inevitably exclude the other. Infact, many European businesses are already gearing up to the new opportunities that climate change presents, while simultaneously taking appropriate action for themselves. We should all acknowledge and encourage these exemplary efforts. Not only are carbon-intensive industries tapping

into the vast opportunities of reducing emissions, but other sectors also are looking at ways to reduce their environmental impact through all-encompassing examination—from reducing packaging to lessening supply chain carbon footprints. This is surely not just a new marketing phenomenon, but rather a sign that industry is taking responsibility for its impact on the climate, while pursuing economic growth.

But more can be done, in fact, more *needs* to be done. It is a fact that around the world investment in low-carbon technologies is not progressing fast enough. It is apparent that business and industry are willing to act, but it is up to the public authorities to create conducive market conditions. Industry requires a clear policy context from governments before heavily investing in developing solutions that positively impact climate change. One cannot ask industries to adopt cleaner production patterns, change a whole industrial apparatus, and invest in low-carbon technologies without guaranteeing the requisite environment that involves predictability and a level

regulatory playing field, and that, too, preferably at the global level.

The issue of ‘competitiveness’ is indeed vital because countries are evolving at different rates in terms of their climate change agenda. Lack of international coordination has meant a fractured response to climate change. European industries have certainly recognized the benefits of early action and continues to pioneer the move to a global low-carbon economy.

This, naturally, brings with it a set of unique opportunities and challenges. The opportunity is to be a future technology leader and technology supplier. But it also involves a potential loss of competitiveness derived from the additional costs implied by the price of carbon. A level playing field on a global scale is needed so as to ensure that European industries are not adversely affected by a carbon price with respect to companies located in

other countries, where emissions-control policies do not exist. Enabling European industries to remain competitive is paramount to achieving a sustainable future. Simply because, only competitive enterprises have the capacity to free their resources to innovate, improve their environmental performance, and pursue social objectives.

*The author is Director, European Business and Technology Centre*

## Building on the Copenhagen Conference of the Parties in determining future direction for business

Simone Mori

The Copenhagen Accord, supported so far by those 110 countries responsible for more than 80% of global emissions, reaffirmed that climate change is one of the greatest challenges of our time, and that increase in mean global temperature should be kept below 20C.

However, despite expectations, the Copenhagen Conference was neither able to define a legally binding global agreement, nor could it clarify the mechanisms to achieve such an ambitious goal.

Since there was no major breakthrough at the UNFCCC session held in April at Bonn, most of the developed and emerging countries are still pondering over how to shape their national policies in view of COP16 at Cancun.

A variety of proposals is currently on the table. Enel, one of the world-largest power companies with operations spread across 23 countries, is promoting sound policies aimed at progressing towards a low-carbon economy. At the same time, it is fully equipped to utilize the opportunities offered by such policies.

At Enel, we manage a wide range of technologies and are committed to developing new ones to reduce emissions. We

deal in areas such as renewables, nuclear, carbon capture and storage (CCS), smart grids, electric transportation, and energy efficiency. Being one of the world-largest operators in Clean Development Mechanism (CDM), we are also experienced in transferring low-carbon technologies to developing countries.

Like us, many other companies, too, are already acting upon and willing to upgrade their commitment towards tackling the scenario. The challenge is to formulate relevant policy and regulatory frameworks capable of offering adequate incentive. As has been demonstrated by experiences with the CDM, to achieve significant results in matters related to emissions abatement it is imperative to directly involve the private sector.

In our opinion, the ideal approach is to work for the progressive establishment of a global carbon price. Notwithstanding the drawbacks, the European Emissions Trading Scheme (EU ETS) has shown that it is possible to achieve emission reductions targets by associating them to economic value.

We do understand that many countries, especially emerging and developing nations, are not

equipped to introduce cap-and-trade systems. But we believe that, in this case, agreements should be defined as soon as possible so as to provide a post-2012 perspective to offset mechanisms like CDM or other crediting bodies. These can act as effective tools in linking existing and upcoming national and regional emissions reductions schemes, thereby facilitating creation of a global market. Reform and enhancement of CDM is possible, as well as introduction of other offset mechanisms based on instruments being defined by the UNFCCC. These instruments include the Nationally Appropriate Mitigation Actions (NAMAs) and forestry activities (REDD). In any case, it is essential that direct involvement of the private sector is considered as a driving force.

Whatever the specific design, effective carbon markets depend on the following requirements:

- long-term stable regulatory framework, so that risks are reduced and investments are properly planned;
- business continuity, allowing carbon credits from projects already approved by the UNFCCC to be eligible as compliance instruments along their entire current life cycle of generation;

- streamlined procedures to issue carbon credits, while guaranteeing environmental integrity and technology transfer;
- standardized methodologies, as recently envisaged by the CDM Executive Board such as development of baselines or positive lists enabling simplified additional checks for certain project types and host countries, namely least developed ones lagging behind in emission reduction initiatives;
- measures to avoid competitive distortions and carbon leakage; and
- liquidity, to avoid carbon price dynamics from being manipulated

However, market mechanisms should be accompanied by appropriate public policies to support an accelerated development of promising low-carbon technologies such as CCS. In developing countries, specific programmes are also needed to promote capacity building and address other barriers to deployment of low-carbon technologies.

We hope that negotiations will be revitalized to move climate policies forward from what presently appears to be a stalemate situation. At Enel, we are keen to play a role in converting these policies into a success story. In our view, success in this regard should be measured by the following yardsticks:

- clarity about global long-term targets and the path to achieve them;
- quickly putting into operation effective instruments—market-based (for developed countries) and instruments designed to foster technology transfer (for emerging economies and developing countries); and
- cooperative programs and partnerships to develop technologies that are most promising.

*The author is Executive Vice-President, Enel SpA.*

# Building on the Copenhagen Conference of the Parties in determining future direction for business

Dr Bindu N Lohani

We are faced with two global crises and challenges—the 2008–09 financial and economic crisis, and the challenge of climate change. On the latter front, while the outcome at Copenhagen was not as ambitious as some would have liked, I believe the Copenhagen Accord serves as an important building block. In the midst of these two challenges, there lie opportunities that can help in abatement of carbon emissions—opportunities to meet tomorrow’s challenges today.

The recession has resulted in an unprecedented fall in greenhouse gas emissions—the maximum in any year during the past four decades.<sup>1</sup> To address the crisis, governments responded with stimulus packages that are reaping some encouraging and positive results. These packages also include climate-friendly green investments. Out of the \$787 billion US’ economic recovery plan, \$94 billion is in green components. Forty per cent of China’s \$584 billion stimulus package is allocated to green investments. South Korea introduced its Green New Deal with more than 80% allocated to

environment, and commits 2% of its GDP to annual investments in green themes.<sup>2</sup> In its formulation of a 10-year economic growth strategy, Japan will focus on core areas such as ‘green innovation’, which is expected to generate 1.5 million jobs.<sup>3</sup>

We are now seeing more opportunities for the business sector to be involved in climate change. It is believed that businesses selling low-carbon goods and services now generate more revenue than the aerospace and defence sectors combined, making the sector one of the new lynchpins of the global economy. Listed companies in the climate change sector—including those in renewable-power generation—attained a global turnover of \$534 billion in 2008, while the aerospace and defence sector together was worth \$530 billion. Since 2004, worldwide employment numbers in climate-related activities has more than doubled—from just over 1 million to about 2.4 million. Finally, it is predicted that at the current rate, revenues from the sector would exceed \$2 trillion by 2020.<sup>4</sup>

Therefore, the business community and the private sector, through public-private partnerships, should continue to look at how they can be part of the solution in addressing the climate change challenge. Businesses can use and share innovative technology for mitigation and adaptation transformations. In coordination with multilateral and bilateral agencies, they can get involved in creative financial structuring to support climate change initiatives. Through their corporate social responsibility efforts, businesses can play the role of model corporate citizens amidst the greatest global challenge.

I feel that at a time of immense global difficulty what has been done in the climate change area is admirable. But, I also see even more opportunities, and hope that actions in the right direction will be undertaken by both the government and the private sector.

*The author is Vice President, Asian Development Bank.*

<sup>1</sup> Recession Results in Steep Fall in Emissions. Financial Times. 20 September 2009.

<sup>2</sup> A Climate for Recovery, HSBC Global Research. 25 February 2009.

<sup>3</sup> Japan Growth Plan Bets on Green-tech, Health, Tourism. Associated Press. 18 June 2010.

<sup>4</sup> Low Carbon Industries Comes of Age. Financial Times. 17 September 2009.

“Building on the Copenhagen Conference of the Parties in determining the future direction of business seems to be a sound topic for the next WSDF newsletter. It is firmly believed by everyone, including business leaders, that irrespective of the COP’s decisions, GHG emissions shall be continually reduced throughout the world by common efforts towards addressing global climate change.

Enterprises should always keep in mind their social responsibility of protecting the environment through commitments of emissions reduction or voluntary emissions reduction. Enterprises can take the route of a low-carbon economy to find out cost-benefit approaches in order to achieve goals of both business development and environment protection.”

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**Prof. Wei Zhihong**

Deputy Director, Global Climate Change  
Institute  
Tsinghua University

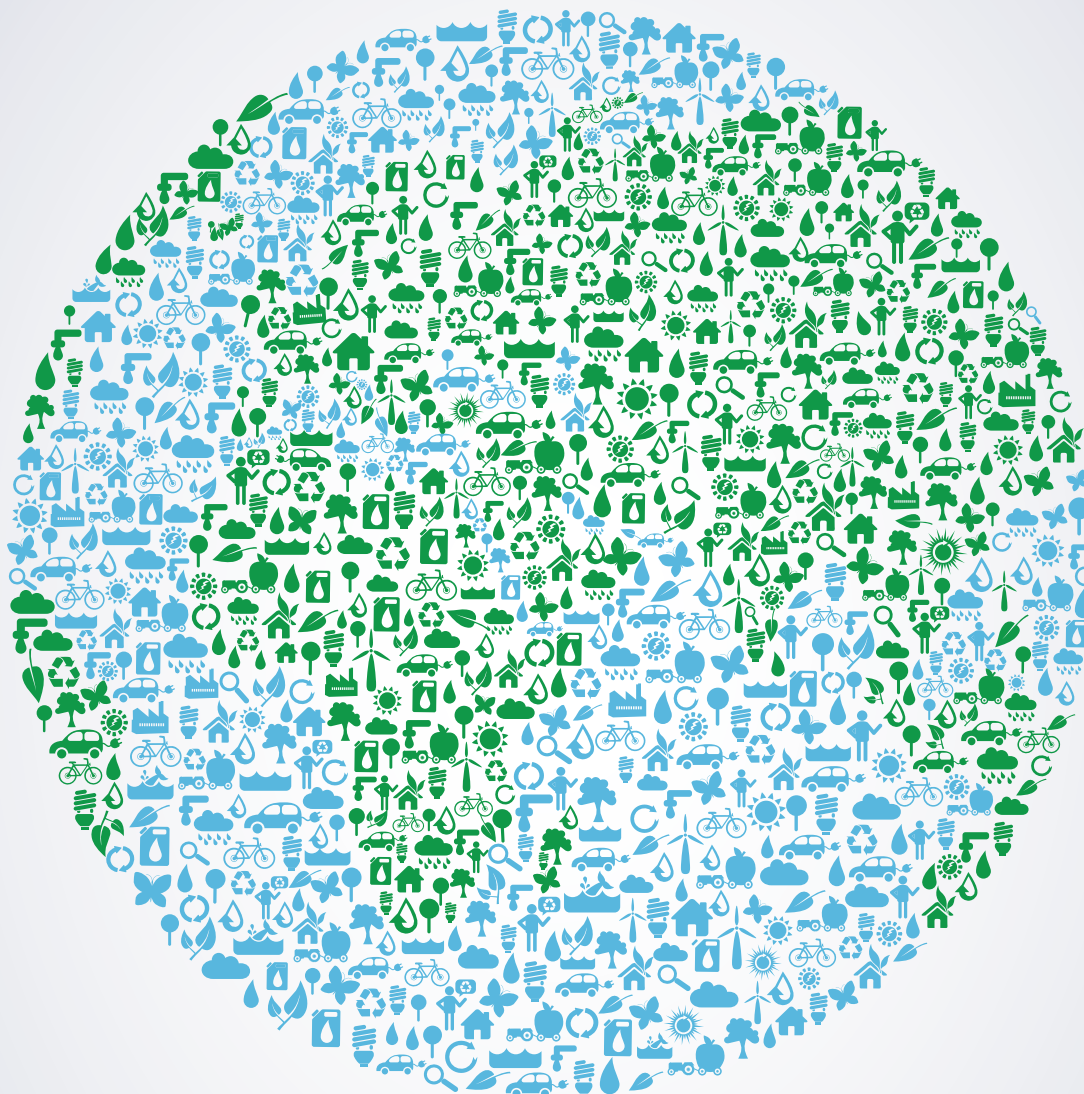
“Even though a collective binding agreement has not been reached at Copenhagen, it provided a forum for extensive participation of world governments at all levels. We see the emergence of a very important pattern of responses as governments around the world take various actions on their own to mitigate impacts of climate change.

Acceptance of the need to plan and design adaptation programmes is a crucial outcome—especially by the developing countries—that provides an opportunity to implement sustainable holistic approaches supporting their development pathways. The private sector should be an important partner in this process, playing a leading role in opening up new horizons for expanding livelihood opportunities and developing new technologies.”

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**Kazuhiko Takeuchi**

Vice Rector, United Nations University



# Local Answers to a Global Challenge

**11<sup>th</sup> DELHI SUSTAINABLE DEVELOPMENT SUMMIT**

3-5 February 2011, Hotel Taj Palace, New Delhi

TAPPING LOCAL INITIATIVES AND TACKLING GLOBAL INERTIA

## DSDS 2011

### Tapping Local Initiatives and Tackling Global Inertia

Science now tells us that climate change, trends of unsustainable use of natural resources, and ecosystem degradation are problems of immediate and growing concern the world over. We know that solutions are urgently required, and that the world's sustained attention and focus must be applied to find them. At the same time, many examples of successful local initiatives to address these problems are blazing a trail daily, all over the world. Yet on a global scale, political will is lacking and inertia remains, as evidenced by the outcome of the 15<sup>th</sup> UN COP at Copenhagen. Creating the momentum the world needs now on these crucial issues will be the focus of the 11<sup>th</sup> Delhi Sustainable Development Summit.

DSDS 2011 will be a unique platform for showcasing examples of local initiatives that successfully address the planet's most pressing problems. The summit will gather leaders and innovators from politics, NGOs, corporations, academia, and other stakeholders to work and focus together on the all important need to find a way to turn these examples of local initiatives into global momentum. DSDS 2011 will serve both as a platform for and a challenge to the world, to learn together the key lessons from local success stories that are needed to move the world in the right direction.

## DSDS 2011 – Special Features

### State-level Sustainable Development Summits

Local governments and its institutions assume a larger role in nurturing local resources, developing local initiatives and mobilising the civil society towards a desirable change. There is a need to tap these initiatives and emulate them globally. DSDS 2011 proposes to reach out to six Indian states, namely Assam, Bihar, Karnataka, Maharashtra, Rajasthan and Uttarakhand in November-December 2010, to bring out these models of sustainability.

Leveraging the theme of DSDS 2011, the State-level Sustainable Development Summit will look at creating awareness and mobilising support from the state governments for DSDS 2011. It will also seek to initiate discussion on state-specific sustainable development issues, best practices and the way forward.

### The World CEO Forum: Curtain Raiser to DSDS

Understanding the business sector's impact on the world economy and its role in sustainable development, The Energy and Resources Institute-Business Council for Sustainable Development (TERI-BCSD) India, in partnership with the World Business Council for Sustainable Development (WBCSD) Geneva, introduced the World CEO Forum at DSDS 2004. Since then, over 500 Indian and international companies, heads of state and government officials have attended the forum.

### Sustainable Development Leadership Award

The Sustainable Development Leadership Award, instituted by TERI in 2005, recognises the contributions towards the cause of sustainable development. TERI will announce its sixth Sustainable Development Leadership Award at DSDS 2011.

### Special Events

The most popular feature of the DSDS, the Special Events are held before or after the DSDS to allow focused discussions, which compliment the theme of the summit involving specific stakeholders.



# Resources

## Journal papers

Bonilla Silvia H, Almeida Cecília M V B, Giannetti Biagio F, *et al.* 2010. **The roles of cleaner production in the sustainable development of modern societies: an introduction to this special issue.** *Journal of Cleaner Production* **18**(1):1–5.

Boyd Emily, Hultman Nate, Roberts, J. Timmons, *et al.* 2009. **Reforming the CDM for sustainable development: lessons learned and policy futures.** *Environmental Science & Policy.*

Fortanier Fabienne and Wijk Jeroen van. 2010. **Sustainable tourism industry development in sub-Saharan Africa: Consequences of foreign hotels for local employment.** *International Business Review* **19**(2): 191–205.

Ghose Ajoy K. **Technology vision 2050 for sustainable mining.** 2009. *Procedia Earth and Planetary Science* **1**(1): 2–6.

Karakosta Charikleia, Doukas Haris, and Psarras John. 2009. **Directing clean development mechanism towards developing countries' sustainable development priorities.** *Energy for Sustainable Development* **13**(2): 77–84.

Kolk Ans and Tulder Rob van. 2010. **International business, corporate social responsibility and sustainable development.** *International Business Review* **19**(2):119–125.

McLellan B C, Corder G D, Giurco D, *et al.* 2009. **Incorporating sustainable development in the design of mineral processing operations – Review and analysis of current approaches.** *Journal of Cleaner Production* **17**(16): 1414–1425.

Sloan Philip, Legrand Willy, and Chen Joseph S. 2009. **Corporate Social Responsibility for Sustainable Business Management.** *Sustainability in the Hospitality Industry.* pp.115–131.

Streimikiene Dalia, Simanaviciene Zaneta, and Kovaliov Ruslan. 2009. **Corporate social responsibility for implementation of sustainable energy development in Baltic States.** *Renewable and Sustainable Energy Reviews* **13**(4): 813–824.

Udo Victor E and Jansson Peter Mark. 2009. **Bridging the gaps for global sustainable development: A quantitative analysis.** *Journal of Environmental Management*, **90**(12): 3700–3707.

Wang Bang-jun, Zhou Min, and Ji Feng. 2009. **Analyzing on the selecting behavior of mining cities' industrial transition based on the viewpoint of sustainable development: a perspective of evolutionary game.** *Procedia Earth and Planetary Science* **1**(1):1647–1653.

## Books and reports

Berlie Laurence Schwesinger. 2010. **Alliances for Sustainable Development: Business and NGO Partnerships.** Palgrave Macmillan. 176pp.

Hitchcock Darcy and Willard Marsha. 2009. **The Business Guide to Sustainability: Practical Strategies and Tools for Organizations.** Earthscan. 320 pp.

Rainey David L. 2010. **Sustainable Business Development: Inventing the Future Through Strategy, Innovation, and Leadership.** Cambridge University Press. 764pp.

UN (United Nations). 2009. **The Business of Sustainable Development in Africa: Human Rights, Partnerships, Alternative Business Models,** pp 359, edited by Ralph Hamann, Stu Woolman, and Courtenay Sprague.

World Business Council on Sustainable Development. 2010. **Business and development.** 28pp.

# Events

- 14–18 September 2010  
Rimini, Italy
- 14th International Biotechnology Symposium and Exhibition: Biotechnology for the Sustainability of Human Society**  
Contact name: Chiara Angelucci  
Tel: +39 0541 305896 • Email: [ibs2010@adriacongrex.it](mailto:ibs2010@adriacongrex.it)  
Fax: +39 0541 305842 • Website: [www.ibs2010.org](http://www.ibs2010.org)
- 10–12 September 2010  
Singapore
- 2010 International Conference on Environmental Science and Applications**  
Asia-Pacific Chemical, Biological and Environmental Engineering Society (APCBEEES)  
E-mail: [iceea@vip.163.com](mailto:iceea@vip.163.com) • Website: [www.iceea.org](http://www.iceea.org)
- 20–21 September 2010  
London, UK
- 12th Renewable Energy Finance Forum—London**  
Tel: 44 207 779 8995 • E-mail: [energyevents@euromoneyplc.com](mailto:energyevents@euromoneyplc.com)  
Fax: 44 207 779 8946 • Website: [www.euromoneyenergy.com](http://www.euromoneyenergy.com)
- 12–14 October 2011  
Hyderabad, Andhra Pradesh, India
- International Conclave on Climate Change (ICCC-1) & Exhibition 2011**  
Contact name: Dr Shalini Sharma  
Head, Centre for Climate Change, Engineering Staff College of India (ESCI)  
Old Bombay Road, Gachi Bowli, Hyderabad, Andhra Pradesh, India  
Tel. + 91 40 2300 4126 • E-mail: [iccc.esci@gmail.com](mailto:iccc.esci@gmail.com), [ccc.esci@gmail.com](mailto:ccc.esci@gmail.com)
- 21–22 October 2010  
Madrid, Spain
- Solar Industry Conference (CIS-ES)**  
Tel: 49 30 726296–300 • E-mail: [info@solarpraxis.de](mailto:info@solarpraxis.de)  
Fax: 49 30 726296–309 • Website: [www.solarpraxis.de](http://www.solarpraxis.de)
- 27–29 October 2010  
Kyoto, Japan
- ICCCGW 2010: International Conference on Climate Change and Global Warming**  
Conference Secretariat, ISSN International Centre  
20, Rue Bachaumont, 75002 Paris, France  
Website: [www.waset.org/conferences/2010/kyoto/icccgw/](http://www.waset.org/conferences/2010/kyoto/icccgw/)
- 1 November–3 December 2010  
University of Twente, The Netherlands
- Energy Management and Cleaner Production in Small and Medium-scale Industries**  
Contact name: Ms Barbera van Dalm, CSTM-Twente Centre for Studies of Technology and Sustainable Development, University of Twente  
P.O. Box 217, 7500 AE Enschede, The Netherlands  
Tel: +31 53 489 3203 • E-mail: [secr@cstm.utwente.nl](mailto:secr@cstm.utwente.nl), [cstm-courses@mb.utwente.nl](mailto:cstm-courses@mb.utwente.nl)  
Fax: +31 53 489 4850 • Website: [www.utwente.nl/cstm/tsd/news](http://www.utwente.nl/cstm/tsd/news)
- 19–21 November 2010  
Kampala, East Africa, Uganda
- 2010 Pilot International Conference on Global Sustainable Development**  
Theme: Climate Change: A Challenge to Businesses in the 21st Century  
Contact name: Robinah K Nanyunja  
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Opposite East African Chains  
PO Box 22500, Kampala, Uganda.  
Tel: +256 772508970, +256 772058579, +256 701508970, +256 712348575  
Email: [info@pilotinternationalconferences.org](mailto:info@pilotinternationalconferences.org), [communication@pilotinternationalconferences.org](mailto:communication@pilotinternationalconferences.org)  
org  
Website: [www.pilotinternationalconferences.org](http://www.pilotinternationalconferences.org), [www.pilot-int.org](http://www.pilot-int.org)
- 9–12 December 2010  
Hyderabad, India
- Waste Management Expo 2010 (WME'10)**  
Conventions & Fairs (India) Pvt. Ltd,  
E-519, Floral Deck Plaza, Central MIDC Road, Opp. SEEPZ  
Andheri (E), Mumbai-400 093 India .  
Tel. 91 22 2839 8000 • E-mail: [conventions@mtnl.net.in](mailto:conventions@mtnl.net.in)  
Fax: 91 22 2839 0502 • Website: [www.confairs.com](http://www.confairs.com), [www.wmeonline.in](http://www.wmeonline.in)
- 13–15 April 2011  
Sofia, Bulgaria
- Environmental International Forum SAVE the Planet – Waste & Water Management, Recycling**  
Contact name: Maya Kristeva  
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E-mail: [office@viaexpo.com](mailto:office@viaexpo.com)  
Website: [www.viaexpo.com/index.php?option=com\\_content&view=article&id=113&Itemid=138](http://www.viaexpo.com/index.php?option=com_content&view=article&id=113&Itemid=138) =en



## World Sustainable Development Forum

The WSDF (World Sustainable Development Forum), established by TERI, provides a platform to identify, analyse, and disseminate policy interventions to enhance human well-being in the present, and create conditions for a sustainable future. In its endeavours, the Forum is supported by highly distinguished patrons and advisory committee members who are global leaders in government, industry, and academia, as well as opinion-makers in a world characterized by locale specific socio-economic and environmental priorities. Given the diverse developmental imperatives across regions, WSDF activities and events seek to spread the key messages emerging from the annual DSDS (Delhi Sustainable Development Summit) and RSDS (Regional Sustainable Development Summit), collate information, monitor developments, and report on the progress of MDGs, apart from understanding and disseminating information on the issues of sustainable development in varied contexts.

Towards this end, a biannual newsletter series titled 'Tackling tomorrow's challenges today', which is published by the Forum, seeks to discuss development prerogatives, debates, and discourses with the aim of highlighting challenges to the attainment of development that is sustainable worldwide. Given overriding global concerns on the subject, this second volume brings to focus the key issues pertaining to climate change and food security.

### **Acknowledgement**

The WSDF (World Sustainable Development Forum) solicits support from governments, institutions, organizations, and corporate houses in bringing together the finest minds and leading thinkers of the world to focus on the global challenges of sustainable development.

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