



# **10th DELHI SUSTAINABLE DEVELOPMENT SUMMIT**

**Beyond Copenhagen:  
new pathways to sustainable  
development**



The Energy and Resources Institute

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Plant Biotechnology  
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Bioremediation Technology  
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Biotechnology  
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TERI-BCSD India  
Film and Television Unit  
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### Technology Dissemination and Enterprise Development

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Accounts  
Secretaries (Administrative Services and Pool)  
Personnel  
Project Monitoring  
Purchase  
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### TERI Technologies Ltd

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### Southern Regional Centre, Bangalore, and TERI Mumbai


### TERI Worldwide

TERI North America, Washington, DC, USA  
TERI Europe, London, UK  
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Representation in Japan, Malaysia, and  
Africa

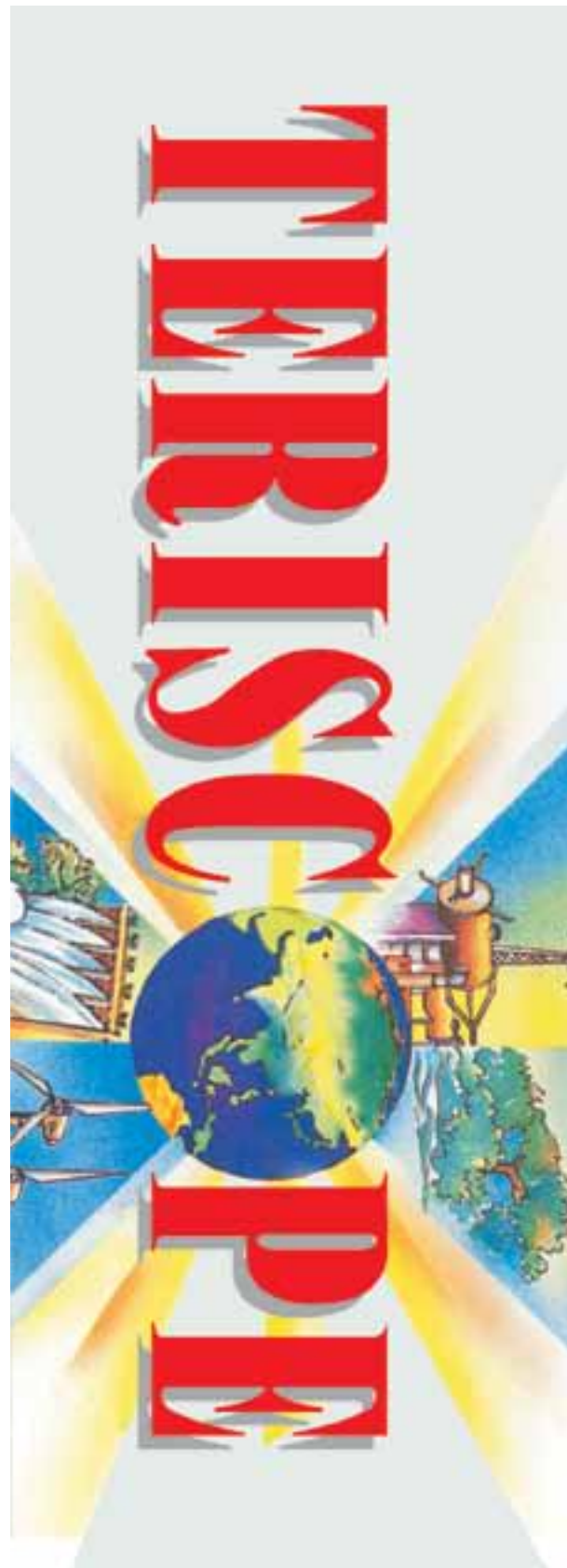
## From the Director-General's desk...

**E**arly February each year is an extremely important period for colleagues in TERI, and we believe for the global community at large. The Delhi Sustainable Development Summit organized annually by TERI is held in this period, and represents a period of intense activity and preparation. The Summit itself has grown enormously in stature and global reach, as clearly exhibited by the calibre of speakers and participants that the event attracts. On this occasion, the theme of the Summit was 'Beyond Copenhagen: new pathways to sustainable development', and we were fortunate to get 10 current and former heads of state and heads of government. In addition, the three ministerial sessions had a total of 18 speakers. What was also gratifying was the live video hook-up with Governor of California, HE Mr Schwarzenegger, whose presence on the large screen made a major impact through his eloquent expression of a deep commitment to meeting the challenge of climate change and his ready wit and charisma that came through even though he was not physically present.

An important implication of DSDS 2010, and particularly in view of the less than satisfactory outcome at Copenhagen, is the growing need for welding together a coalition of diverse stakeholders, including government, business, research organizations and academia as well as civil society. Without nitpicking with quantitative projections of what would happen with the impacts of climate change in the future in different parts of the world, what is abundantly clear is the fact that climate change has very serious implications, which cannot be ignored any longer. What is even more compelling is the logic that action to reduce emissions of greenhouse gases has so many associated co-benefits that it would be completely unwise and irresponsible to ignore widespread action that is now required. If we take, for instance, the single co-benefit of higher energy security which could be assured if greenhouse gas emissions are reduced, then we need to be concerned about the prospect of the world reaching peak oil conditions. It is now becoming increasingly clear that the world would reach a plateau, if not an impending decline, in production of oil very soon. Arguments could be made whether this would happen in five years or ten years, but that issue is not germane to the need for planning for a post oil future. There are so many collective and compelling arguments for the world to move to a low carbon future, and a gathering like DSDS can provide direction to global society to promote and pursue effectively the transition to a sustainable future. We need a reorientation of objectives worldwide to focus on the next quarter century at least and certainly not the next quarter of illusory profits. Could we possibly convince decision-makers across the globe that preserving the fragile ecosystems of this planet and stabilizing its climate are goals far more important to the human race than making a few more bucks from business as usual?



R K Pachauri  
Director-General, TERI





# World Sustainable Development Forum

**D**evelopment is not just about achieving numerical targets. There remains a need to look beyond tracking progress on universal goals in order to understand if the well being of people is improving – in terms of health, literacy, and access to basic services – and the factors responsible for this change.

The WSDF (World Sustainable Development Forum) is a platform that seeks to create awareness and ensure action towards meeting the objectives of sustainable development. This Forum has been inspired by the success of TERI's annually held flagship event, the DSDS (Delhi Sustainable Development Summit) and the need to spread the message from each summit to different parts of the world.

It has been envisaged as a conduit to identify, analyse, and disseminate policy interventions to enhance human well-being in the present, and create conditions for a sustainable future.

In this endeavour, the forum has been able to secure the patronage of a group of highly distinguished global leaders drawn from government, industry and the academia.

## List of WSDF Patrons

- **Mr Kofi Annan**, Former Secretary-General, United Nations; and President Global Humanitarian Forum, Geneva
- **Lord John Browne**, Former Group Chief Executive, British Petroleum Co plc
- **HE Mr Maumoon Abdul Gayoom**, Former President, Republic of Maldives
- **HE Mr Olafur Ragnar Grimsson**, President of Iceland
- **HE Ms Tarja Halonen**, President of Finland
- **Mr Jeffrey R Immelt**, Chairman and Chief Executive Officer (CEO), General Electric Company, USA
- **Mr Haruhiko Kuroda**, President and Chairperson, Board of Directors, ADB
- **Dr Jose Antonio Ocampo**, Professor at the School of International and Public Affairs; Fellow of the Committee on Global Thought at Columbia University; former Under Secretary-General for Economic and Social Affairs, United Nations
- **Shri Jairam Ramesh**, Hon'ble Minister of State for Environment and Forests (Independent charge)
- **Prof. Jeffrey D Sachs**, Director, Earth Institute; and Special Advisor to the Secretary- General of the United Nations
- **Mr George Soros**, Chairman, Soros Fund Management, LLC and Founder of the Open Society Institute\*
- **HE Mr Jens Stoltenberg**, Prime Minister of Norway
- **Dr Shoichiro Toyoda**, Honorary Chairman/Member of the Board, Toyota Motor Corporation, Japan
- **HE Mr Meles Zenawi**, Prime Minister of the Federal Democratic Republic of Ethiopia

## WSDF Advisory Group Members

- **Ms Lorraine Bolsinger**, President and CEO, GE Aviation
- **Dr Adnan A Shihab-Eldin**, Former Acting Secretary General, Director of Research at OPEC; Advisor to Kuwait Petroleum Corporation, Austria
- **Mr Warren Evans**, Director of Environment, The World Bank, USA
- **Dr Prodipto Ghosh**, Former Secretary, Ministry of Environment and Forests, Government of India, Distinguished Fellow, TERI
- **Ms Frannie Leautier**, Former Vice President, World Bank Institute, Washington, DC; Managing Partner of The Fezembat Group
- **Dr Bindu N Lohani**, Vice-President (Finance and Administration), Asian Development Bank
- **Dr Ligia Noronha**, Director, Resources and Global Security Division, TERI
- **Dr Pal Prestrud**, Director, Center for International Climate and Environmental Research Oslo, Norway
- **Dr Leena Srivastava**, Executive Director, TERI
- **Dr Kazuhiko Takeuchi**, Vice Rector, United Nations University
- **Mr Georges Valentis**, Managing Director, The Institut Veolia Environnement, France
- **Prof. Wei Zhihong**, Former Director, Global Climate Change Institute, Tsinghua University

The WSDF Patrons and Advisory Group members meet annually, providing an opportunity for the Secretariat to submit an update of activities under the Forum for each year and to stimulate discussions on the Forum's way forward.

## RSDS (Regional Sustainable Development Summit)

In order to sensitize and generate public awareness on issues of sustainable development regionally, the WSDF conducts RSDS on an annual basis. The RSDS 2007 on 'International Solidarity Conference on Climate Change Strategies for the African and Mediterranean Regions' was held at Tunis, Tunisia, hosted by the Government of Tunisia. In 2006 the first RSDS was held at Shirakawa, Japan, highlighting the importance of science and technology for achieving sustainable development goals.

## WSDF Newsletter

As part of its outreach activities, the WSDF Newsletter series titled '*Tackling tomorrow's challenges today*' brings to focus key global sustainable development challenges. The series, with an inter-disciplinary approach and international focus invites eminent scientists, researchers, and policy advisors to provide opinions on select developmental issues.

The 21st century has been dubbed the century of the environment. To truly maximize the available opportunities and a forum of this caliber, we invite expressions of interest for WSDF endeavours.

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## For further details, contact

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# Curtain Raiser to DSDS 2010

THEME

**Mission for a sustainable tomorrow:  
business as a game changer**

## Opening session

The Seventh World CEO Forum, the curtain-raiser to the Tenth Delhi Sustainable Development Summit (DSDS) was attended by 166 participants, including 11 government representatives, 29 NGOs and institutions, 88 CEOs, and a number of TERI-BCSD members.

Dr R K Pachauri (Director-General, TERI), inaugurating the event, commended TERI-BCSD for their continuous efforts and for having 102 of the biggest and progressive organizations as its members.



Dr R K Pachauri  
President, TERI-BCSD India



Mr Bjoern Stigson  
President, WBCSD

He asserted that the Forum recognizes the need for businesses to take the lead in bringing about a change in the right direction. In doing so, he concluded, they can motivate civil society and governments to follow suit. Mr Bjoern Stigson (President, WBCSD) emphasized that with all major economies investing in green technologies, the 'Green race is on'. He urged India to join the race.

## Session I

### Vision for a sustainable tomorrow: business as a game changer

The panellists of the this session agreed that even though the Copenhagen Summit has often been termed a failure, there is no ambiguity about the fact that the climate change issue has arrived where it belongs—at the top of the political agenda.

However, efforts on the part of the government have been far from adequate. Businesses need to understand that their decisions and actions have both direct and

indirect impact on the environment. They also need to realize that now is the time to act.

Sustainability has now evolved from an environmental issue to an economic one. Hence, the driving force that the world needs, to emerge out of the adverse effects of recession could very well be green energy.

In the end, it was stressed that the real challenge lies not in terms of technology but scaling up along competitive terms. Financial organizations were identified as important catalysts and potential game changers, who should provide the requisite financial incentives to provide green technology with the much-needed boost.

## Session II

### Concurrent break away sessions on sub themes

#### *Vision 2050: the new agenda for business*

Vision 2050 co-chair, Mr Idar Kreutzer (CEO, Storebrand), while focusing on the challenges, transformation and opportunities for business, raised concerns over the growing demand of fossil fuels, water, etc., which could lead to resource insecurity and an ecosystem collapse.

After acknowledging that the biggest risk that businesses face today is inaction, the session proceeded towards a group discussion, moderated by Mr Mark Spelman (Global Head of Strategy, Accenture, UK), to identify the 'must haves' for implementing Vision 2050.

The following broad themes were identified.

- **Political:** Need for governmental action to reduce negative subsidies, introduce strong legislations and offer incentives for action.
- **Technological:** Improving efficiency by investing in R&D on green technologies.
- **Economic:** Need for internalizing cost, reducing externalities, and risk-sharing amongst various stakeholders.
- **Social:** Increasing public awareness and making concerted efforts to alter consumption patterns and lifestyles.



Break away sessions in progress

### ***The green economy: a transformation to address climate change and multiple crises***

This session focused on the initiatives taken by companies that focus on convergence of development, environment and economics. Discussions centred on small interventions that can reduce energy consumption in a big way, such as providing 'sleep mode' at telecom base stations during night time.

The need for ethically, equitably and environmentally responsible banking to promote a new paradigm in development was deliberated upon. The importance of developing solutions that utilize local resources was highlighted.

### ***Water: the new challenge for the 21st century***

The session brought to the fore the fact that given the current situation of water scarcity, it shall soon be valued as liquid gold and the next World War would be fought on water issues.

Though industrial water consumption is a small percentage of agricultural water use, it was pointed out that its recycling and efficient use can have a positive impact on water resources. Industries that use more water should be encouraged to move towards water-use efficiency, via innovative technologies, and taking appropriate measures for water conservation.

It was emphasized that engaging different stakeholders including NGOs, government, and industries in a dialogue for efficient water management is vital for sustainable water use. The forum stressed the need for wastewater reduction, recycle, and reuse in the industrial sector.

## **Session III**

### **The way forward**

Ms Bharati Gupta Ramola (Executive Director, PriceWaterhouseCoopers Pvt. Ltd.) spoke about the need for developing a relevant framework to attain all-round resource efficiency that would include governmental incentives, legislation and societal actions.

Mr Manoj Kohli (CEO, Bharti Airtel) stated that the conflict between business and environment is ending, with corporate houses increasingly moving towards green businesses. Mr Uday Khanna (CEO, Lafarge India Pvt. Ltd) stressed upon urgently addressing water usage-related issues and added that corporate houses can become water neutral, while not compromising on growth. Prof. Jeffrey D Sachs (Director, The Earth Institute) discussed the dichotomy between environmental sustainability and poverty alleviation. Mr Caio Koch-Weser (Vice-Chairman, Deutsche Bank) drew out a three-pronged strategy involving like-minded countries and companies collaborating towards a common end.

Bjoern Stigson (President, WBCSD) spoke about the radical shift in business philosophy to factor in sustainable business practices. Dr Pachauri urged businesses, and local and state governments to display a proactive approach in ensuring a sustainable future.

## **Dinner session**

The session moderated by Mr Vikram Chandra (CEO and Managing Director, NDTV Networks, India) saw Dr R K Pachauri being honoured with the Commander of the Order of the White Rose by HE Mr Matti Vanhanen, Prime Minister of Finland. Expressing his gratitude, Dr Pachauri promised to live up to the spirit of the honour.

The spotlight was on the 'Lighting a Billion Lives' campaign, committed to dissemination of solar lanterns into villages.

Axel Hilgers (Director-South Asia, Lufthansa) revealed that Lufthansa has reduced its fuel consumption from 6.3 to 4.2 litres per passenger per 100 kilometres. They are also exploring options of alternative fuels, and supporting carbon credit.

Dr Farooq Abdullah (Hon'ble Minister of New and Renewable Energy, Government of India), expressed his confidence in the LaBL initiative and explained the benefits of it. For instance, in the Sundarbans region of West Bengal, solar lamps have saved people from snakebites.

Ms Shilpa Shetty (noted Indian actor) revealed that she had already established a Foundation whose mission is to light up the lives of village dwellers.

According to Dr R K Pachauri, such initiatives not only provide basic necessities in a sustainable manner but also enable people to take destiny into their own hands.





## 10th DELHI SUSTAINABLE DEVELOPMENT SUMMIT

### Beyond Copenhagen: new pathways to sustainable development

*The DSDS (Delhi Sustainable Development Summit) – organized each year by TERI since 2001 – brings together the world's finest minds and leading thinkers on one platform to deliberate over the challenges of sustainable development. The tenth edition of the annual summit was held during 5–7 February 2010. As in previous years, DSDS 2010 also engaged heads of governments, Nobel laureates, corporate CEOs, academics, and representatives of bilateral and multilateral organizations, and research institutions. TERIScope brings to its readers an overview of the proceedings of DSDS 2010.*

## Day 1, 5 February 2010

### Inauguration

**Inauguration by Dr Manmohan Singh**, Hon'ble Prime Minister of India

**In the presence of** HE Mr Jens Stoltenberg, Prime Minister of Norway; HE Mr Jigmi Yoser Thinley, Prime Minister of Bhutan; HE Mr Matti Vanhanen, Prime Minister of Finland; HE Mr George Papandreou, Prime Minister of the Hellenic Republic, Greece; The Hon Jean Charest, Premier of Quebec; HE Mr Danilo Türk, The President of the Republic of Slovenia; Dr Farooq Abdullah, Hon'ble Minister of New and Renewable Energy, Government of India; Mr Jairam Ramesh, Hon'ble Minister of State (I/C) for Environment and Forests, Government of India; Mr S M Krishna, Hon'ble Minister of External Affairs, Government of India.

Dr Manmohan Singh, Hon'ble Prime Minister of India, in his inaugural address congratulated TERI on the 10th anniversary of the annual DSDS (Delhi Sustainable Development Summit), an event which

has increasingly gained importance in the international arena. He acknowledged the fact that TERI had earned respect over the years for research on the twin challenges of energy security and climate change.



Reflecting on the lessons from the Copenhagen Summit, he said, 'It is important to ensure that we deliver what we have promised to do.' Referring to the UNFCCC, Dr Singh mentioned that the framework needed to be a centerpiece of global cooperation on climate change.

He elaborated that to be successful, the international climate change agreements require consensus on (i) the science of climate change, and (ii) the need to operate within an ethical framework. A key barrier to meeting the climate change challenge was lack of global consensus on burden sharing. In the above context, he said that the



Dr R K Pachauri, along with the heads of state at the inauguration.

**Inset:** Dr Manmohan Singh, Hon'ble Prime Minister of India giving inaugural speech

developed world needs to assume a larger responsibility, while at the same time the developing world also needs to contribute.

The IPCC has recently faced some criticism but that does not challenge the core results put forth by the Panel. 'India has full confidence in the IPCC and in its leadership and will support it,' he said.

The Prime Minister mentioned that the climate action delays will make the goal of poverty alleviation even more difficult. Therefore, priority needs to be assigned to mitigating actions that provide collateral benefits, which alleviate poverty and improve environmental quality. India is taking measures to ensure that its development path is in accordance with the principles of sustainable development. An international network on climate change (comprising 120 institutes) has been constituted to further the understanding on the science of climate change.

To conclude, Dr Singh mentioned that we should be mindful of the challenges that we face not as nations divided by frontiers but as a united world. ■



## THE SUSTAINABLE DEVELOPMENT LEADERSHIP AWARD

The Sustainable Development Leadership Award, instituted by TERI in 2005, is given away every year in recognition of significant contribution towards the cause of sustainable development.



The Fifth Sustainable Development Leadership Award was presented to HE Mr Yukio Hatoyama, Prime Minister of Japan. The award was presented by Dr Arcot Ramachandran, Chairman, TERI Governing Council. The award was received by Mr Mutsuyoshi Nishimura, Special Advisor to the Cabinet in charge of Climate Change, Japan, on behalf of the HE Mr Yukio Hatoyama, Prime Minister of Japan.

## Keynote address by leaders

### Imperatives of visionary leadership

**Moderator** ■ **Mr Vikram Chandra**, CEO and Managing Director of NDTV Networks plc, India  
**Speakers** ■ **HE Mr Anote Tong**, President of the Republic of Kiribati ■ **HE Mr Danilo Türk**, The President of the Republic of Slovenia ■ **HE Mr George Papandreou**, Prime Minister of the Hellenic Republic, Greece ■ **HE Mr Jens Stoltenberg**, Prime Minister of Norway ■ **HE Mr Jigmi Yoser Thinley**, Prime Minister of Bhutan ■ **HE Mr Matti Vanhanen**, Prime Minister of Finland ■ **The Hon Jean Charest**, Premier of Quebec ■ **HE Mr William Jefferson Clinton** (by video), Former President of USA ■ **HE Mr Ricardo Lagos**, Former President, Government of Chile ■ **HE Dr Gro Harlem Brundtland**, Former Prime Minister of Norway and Special Envoy on Climate Change, United Nations



Leadership panel in progress

There was a near consensus that even though Copenhagen had limited impact, there had been some progress, and learnings could be drawn from the summit. It was also discussed that the recent attacks on the IPCC (Intergovernmental Panel of Climate Change) by no means damages the credibility of the institution or the science, and efforts need to be made to address climate change concerns immediately. Speakers also emphasized that there is a need to develop a truer understanding of wealth and well-being. For addressing climate change, in addition to working on a legally binding agreement, there is a need to set up an international regulatory authority. The distinguished speakers also focused on increased public engagement



HE Mr Matti Vanhanen



HE Mr George Papandreou



HE Mr Jens Stoltenberg



HE Mr Jigmi Yoser Thinley

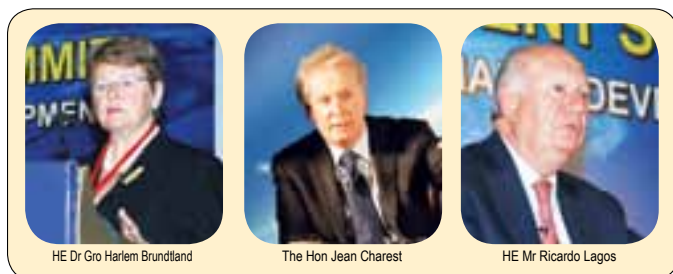


HE Mr Danilo Türk



HE Mr Anote Tong





and shaping of public opinion for better understanding of the Copenhagen outcomes and agreed that any movement forward would require involvement of all stakeholders and it would not be sufficient to only rely on the government. Also, it would be imperative to harmonize the developmental objectives of countries with efforts to address climate change concerns. The speakers concurred that politicians, businesses, and civil society need to work together to develop a global curriculum for education. Financing is not only the biggest issue that needs to be addressed but also is a matter of justice for countries addressing twin challenges of poverty alleviation and climate change. They emphasized on the need to fast-track the process of establishing a financing mechanism, where contributions need to be made by both public and private sector. Cap and trade, carbon taxation, and pricing are the common instruments for financing which not only create incentive for the industry to generate movement in a low carbon economy but also generates funds for financing climate mitigation and adaptation initiatives in the developing countries. The speakers finally stated that forests provide a cost-effective means for addressing climate change and there needs to be increased focus on both reduction of deforestation and reforestation.

The session continued after lunch with an emphasis on climate change issues and the need for reaching a climate deal that would be just and fair to all countries. The speakers which included Mr William Jefferson Clinton, former president, US, through a video link stressed that climate change affects the most vulnerable people around the world, thereby accentuating the need for steps such as green jobs within the economy. The speakers emphasized on the criticality of taking immediate steps to reduce greenhouse gas emissions through efficiency improvement and upscaling strategies. It was stated that more and more countries across the world are formulating and initiating appropriate mitigation action plans essential to deal with climate change and move forward on the path of

sustainable development. One of the key factors that were stressed during the session was the fact that for the first time the finances were specified in phases till 2020. The need to discuss the political outcome of COP 15 was stressed upon by the speakers. They stated that sustainability implies concerns for social equity between generations thereby highlighting the significance of harmony between humanity and nature. Thus, there is a need to secure an economic growth that properly distributes wealth. It was also said that access to energy would remain crucial for all. During the session it was emphasized that developed countries need to move towards a low carbon growth, the two key challenges being climate change and poverty. It was highlighted that leaders need to stay engaged in climate change negotiations. The speakers were positive that a just and fair climate deal could be achieved. They observed that developed countries needed to make deeper emission cuts, needed to take concrete actions at home, facilitate adaptation, and promote a low carbon economy in developing countries. Hence, both developed and emerging economies need to work together to help poor countries. ■

## Mainstreaming Climate Policies with development

**Chairperson** ■ Mr Caio Koch-Weser, Vice Chairman, Deutsche Bank, UK  
**Keynote speaker** ■ Mr Haruhiko Kuroda, President, Asian Development Bank, The Philippines

**Speakers** ■ Mr Esko Aho, Former Prime Minister of Finland and currently Executive Vice President, Member of the Group Executive Board, Nokia Corporation, Finland ■ Mr Juan P Bonilla, Chief of Climate Change Unit, Inter-American Development Bank, USA ■ Mr Pierre Jacquet, Executive Director (in charge of strategy) and Chief Economist at the French Development Agency (AFD), Paris ■ Mr Anthony Nyong, Head of OSUS Unit, African Development Bank, Tunisia ■ Dr Ulrich Schröder, Chairman of the Managing Board, KfW, Germany ■ Dr Andrew Steer, Director-General for Policy and Research, DFID, UK ■ Ms Hilde M Tonne, Executive Vice President and Head of Communications AND Corporate Responsibility, Telenor, Norway ■ HE Mr Rachmat Witoelar, Former State Minister for the Environment, and Chairman, National Council on Climate Change, Indonesia



Session in progress

This session on mainstreaming climate policies with development was moderated by Mr Caio Koch-Weser,



Vice-Chairman of Deutsche Bank, UK. He introduced the theme of the session highlighting how political positions could change in the next ten months leading up to COP 16 in Mexico and stressed the need for multiple-pronged strategies of smaller like-minded countries, civil society groups, and research institutions each acting independently but complementary with each other.

Mr Haruhiko Kuroda, President, ADB initiated the session with his keynote address. In his address Mr Kuroda stressed as to why efforts with respect to climate change are important as it is about lives of people that we are striving everyday for; he also emphasized that the stakes for Asia are high and leaders of Asia should make every effort to improve lives of people. There was an agreement that there is a great degree of convergence between development policies and climate change policies. The panel also stressed that there should be enabling conditions for technological innovation, public-private partnership, capacity building for a low carbon development pathway and so on.

The focus should be on cost effective measures that take advantage of co-benefits and on the national front he urged to promote renewable energy for energy security as well as develop low carbon pathways for development; encourage public-private partnership by means of regulation. He further said that 'while we work towards MDGs we must address climate change'. ■

## The Urgency of Sustainability in Business

**Chairperson** ■ Mr Björn Stigson, President, World Business Council for Sustainable Development

**Keynote speakers** ■ Mr Matthias Bichsel, Director of the Projects and Technology Business, Royal Dutch Shell plc, The Netherlands ■ Mr Kris Gopalakrishnan, Chief Executive Officer and Managing Director, Infosys Technologies Limited, India

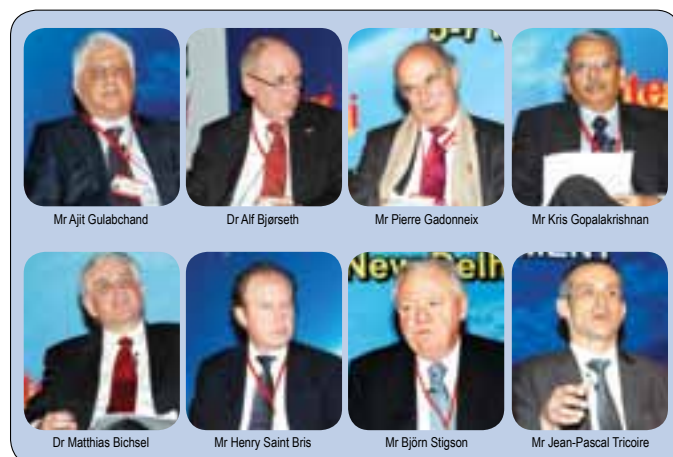
**Speakers** ■ Dr Alf Bjørseth, Chairman, Scatec AS, Norway ■ Mr Henry Saint Bris, Senior Vice President Strategy, SUEZ Environment, France ■ Mr Pierre Gadonneix, Former Chairman and CEO, Electricite de France (EDF), and Chairman, World Energy Council ■ Mr Ajit Gulabchand, Chairman and Managing Director, Hindustan Construction Co Limited, India ■ Mr Jean-Pascal Tricoire, President and Chief Executive Officer, Schneider Electric SA, France



Session in progress

The focus of this session was to identify best practices and the way forward for participation of the business community in tackling the issue of climate change, more so in the context of the current economic downturn. It was emphasized that apart from the government and businesses, the civil society will also play an important role in the future, given its ability to reach the grass-roots level. Various initiatives by the corporate sector were cited in this regard.

It was highlighted that the government, with its existing strengths, should be treated as a partner and frame policies to encourage innovation. It was also pointed out that the government has an important role in raising awareness about green consumerism.





The panellists agreed that venture capital holds a huge opportunity in the near future. It was mentioned that as a way-forward strategy for the business community, businesses should develop solutions that have the outreach and are affordable, as in the case of the telecom sector's success in India. ■

## Dinner session

### Presentation of the Green Globe Foundation's Annual Awards Ceremony



Winners of Green Globe Foundation Awards with Dr R K Pachauri and other dignitaries

#### Green Globe Foundation Award

The award endeavoured to honour the heroes making efforts to save the planet. He commended Wizcraft for their excellent organization skills and appreciated the conceptualization of the Green Globe Awards as having value for future generations.

The YUVA Award was presented to Mr Raghav Mimani as the youth of this country who believes that growth is not just about economic growth but growth in a sustainable manner. Further the Young Achiever award went to Aarav Bhatia, son of cine-star, Akshay Kumar. The green architecture award was presented to the Centre of Environmental Science and Engineering, Indian Institute of Kanpur. The Best Public Figure espousing the environmental cause award was presented to actor and famous media personality Mr Rahul Bose.

The extraordinary contribution of corporate house in private sector was awarded to Rewa Electric Company Pvt Ltd.

#### Message from Prime Minister of Bhutan, HE Mr Jigmi Yoser Thinley

In his message he stressed that Bhutan to be one of the happiest countries as they have taken a number

of measures to ensure that happiness is sustainable. Highlighting some of their achievements he stated that Bhutan as a country is carbon neutral, and they have ventured into carbon sequestration. 72% of the land is under forest cover and 5% under national cover of protected area. ■

## Special session (in conversation)

### HE Mr Arnold Schwarzenegger

Governor of California *(by live video link)*

He highlighted the strong efforts California is making towards becoming a green economy, by virtue of which it is today 40% more efficient than rest of the United States. He also asserted that there is a need for



the federal Government of United States to follow the trajectory at a national level. He further emphasized that it is time for the sub-national governments to engage in sustainable development like California. Also bringing out the economic benefits of going green, he mentioned that the green sector is today producing 10 times more jobs than any other sector of the economy and that 57% of the venture capitalist flocks to California due its pro environmental policies. Also expressing his opinion on the outcome of Copenhagen summit, he said that he considers Copenhagen summit a success as it showed that significance of the engagement of the sub national governments. Endorsing the importance of public engagement and action at the grass root level to make a substantial difference he congratulated Dr Pachauri for being a role model for encouraging action as grass root levels. Shunning the voice of climate sceptics and opponents, he said that he knew that he was in the right direction, and quoting that it was hard to convince the people that world is not flat but round, he asserted that it takes world some time to realize every truth and he is sure that it will happen in the near future.

Regarding solar energy sector in California His Excellency Governor mentioned that there has been a 100% increase in the production capacity of solar companies in California due to which the economy has been able to achieve major reduction in fuel consumptions. He further added that the government is promoting and funding these technologies.



## Day 2, 6 February 2010

### Climate Change and Local Government

**Chairperson** ■ **Dr Tayeb Kamali**, Vice Chancellor, The Higher Colleges of Technology, UAE  
**Speakers** ■ **Ms Linda S Adams**, Secretary for Environmental Protection, California Environmental Protection Agency ■ **HE Ms Bärbel Höhn**, Former Minister of the Environment of North-Rhine Westphalia, Vice-chair of the Green Party Parliamentary Group, Germany ■ **Mr Mutsuyoshi Nishimura**, Special Advisor to the Cabinet in charge of Climate Change, Japan ■ **Mr I H Rehman**, Director, Social Transformation, TERI ■ **Ambassador Staffan Tillander**, Sweden's Climate Change Ambassador ■ **Mr Harry Verhaar**, Sr. Director Energy and Climate Change, Green Switch Champion, Philips Lighting, The Netherlands



The session on climate change and local government opened with Dr Linda Adams elaborating on the initiatives taken by California on climate change mitigation. She mentioned that California has a long history of environmental stewardship. The State also ensures that sub-national governments are equipped to address the threats of global warming. HE Ms Bärbel Höhn talked about the initiatives taken by Germany for reducing carbon emissions. She opined that although Germany has a national-level climate policy, there is scope to do a lot more at the sub-national level. Mr Mutsuyoshi Nishimura shared Japan's experience, where 30 000 municipalities collaborated with local enterprises for formulating strict standards. Nishimura averred that though finance and new technologies are important, a lot can be achieved through the ingenuity of local governments.

Continuing in the same vein, Mr Harry Verhaar added that local governments and city leaders, in collaboration with enterprises, will play an important role in working towards low carbon growth. He asserted the need for remedying the lack of public understanding on a sustainable society. Ambassador Staffan Tillander stated that local governments should act as agents of change rather than implementing agencies. Mr I H Rehman talked about the need for engagement, capacity building, and resource allocation at the local level. He called for the adoption of a bottoms-up approach for tackling climate change. The session ended with a vote on the question, 'Do you think institutions of local government are capable enough to implement climate strategies?' Fifty-eight per cent of the respondents voted 'Yes, but with more capacity'. ■

### Ministerial session I

#### Creating a New Energy Future

**Chairperson** ■ **Dr Sultan Ahmed Al Jaber**, Chief Executive Officer, Abu Dhabi Future Energy Company (ADFE), UAE  
**Keynote speaker** ■ **Dr Farooq Abdullah**, Hon'ble Minister of New and Renewable Energy, Ministry of New and Renewable Energy, Government of India  
**Speakers** ■ **HE Mr Jean-Louis Borloo**, Senior Minister, Minister for Ecology, Energy, Sustainable development and Sea, in charge of climate change negotiations, Government of France ■ **HE Mr Jan Dusik**, Minister of the Environment of the Czech Republic, Czech Republic ■ **The Hon Martin Ferguson AM**, MP, Minister for Resources and Energy; Minister for Tourism, Australian Government ■ **Dr Wakako Hironaka**, Member House of Councillors, Government of Japan ■ **HE Mr Paul Magnette**, Minister of Climate and Energy, Belgium



The session focused on 'creating a new energy future', wherein the role of renewable energy was highlighted. For a developing country like India, the main challenges are accessing long-term finance at low interest rates, promoting R&D activities, and building the capacity of necessary human resources. Economic barriers and governance issues restrict the uptake of renewable energy and need to be addressed on an urgent basis. It was noted that renewable sources of energy remain



The Hon Martin Ferguson AM, MP



Dr Wakako Hironaka



HE Mr Paul Magnette



Dr Sultan Ahmed Al Jaber



HE Mr Jean-Louis Borloo



HE Mr Jan Dusik

fragmented, and favourable policies do not exist. It was emphasized that a single technology cannot solve the energy problems, and there is a need to acknowledge the fact that energy markets are changing. To ensure seamless transition to cleaner fuels, nuclear energy and natural gas will increasingly play an important role. Moreover, the transition to a clean technology society will not be led by a single country, but all the countries will need to work together in developing practical technologies. There is an opportunity to decouple economic growth from energy consumption, which can be achieved by changing the way the energy is generated and used, which should essentially lead to less pollution and pave way for new leadership. This approach will also provide additional benefits in terms of promoting energy security, creating jobs, and allowing upscaling of projects. It was felt generally that Copenhagen was disappointing, but the Summit must be viewed in terms of the impetus it provided in creating a new economic order, which is more respectful of its economic resources. But the modalities of this order remain to be worked out. In the audience poll conducted, almost 95% of the audience felt that renewables will play an important role in driving global economy by 2050. ■

## Enhancing Financial Flows and Technology Access

**Chairperson** ■ **Dr Prodipto Ghosh**, Distinguished Fellow, Climate Change, Centre for Global Environment, TERI

**Keynote Speaker** ■ **Prof. Kandeh Yumkella**, Director-General, United Nations Industrial Development Organization, Austria

**Speakers** ■ **Ms Cornelia Richter**, Director General Planning and Development, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Germany ■ **Dr Ajay Mathur**, Director General, Bureau of Energy Efficiency, India ■ **Ms Michele de Neveres**, Senior Manager - Environment Department, The World Bank, USA ■ **Dr Leena Srivastava**, Executive Director - Operations, TERI



The session began with Dr Prodipto Ghosh introducing the key issues in finance and technology—high estimates of mitigation and adaptation costs and lack of funds. Issues of governance like appropriate sources of finance, NAMAs and suitable MRVs, and the role of private sector and multilateral financial institutes are also discussed.

In his keynote address Prof Kandeh Yumkella highlighted the need for another industrial revolution that will decouple economic growth with energy consumption. He called for structural transformation that can lead to sustainable industrial development, mobilizing funds for sectors like manufacturing, agribusiness, and so on.

Ms Cornelia Richter said that a triangular approach involving the private sector, the scientific community, and the government is required to overcome the technology challenge. She emphasized on the role of national technology innovation systems, political feasibility, cooperation, and capacity development. Highlighting the incremental costs of use of technology for mitigation and adaptation, Dr Ajay Mathur added that these costs need to be provided or covered by the savings and that the Copenhagen Accord has strengthened the process of technology transfer.



Ms Cornelia Richter



Dr Prodipto Ghosh



Prof Kandeh Yumkella



Dr Ajay Mathur



Ms Michele de Neveres



Dr Leena Srivastava



Ms Michele de Neveres emphasized on the need for low carbon and climate resilient economic growth. She said carbon markets were essential and putting a price on carbon offsets is important to incentivize low carbon growth.

Dr Leena Srivastava highlighted the challenges of education, health, poverty, and energy along with climate change and the need to have integrated approach. She also emphasized on the skewed nature of global spending patterns and the need to change consumption patterns in order to steer ahead of the present challenges. ■

## Mobilizing Knowledge and Knowledge Institutions

**Chairperson** ■ Prof. Sir Peter Crane, Dean, Yale School of Forestry and Environmental Studies, USA

**Speakers** ■ Prof. Hironori Hamanaka, Chair of the Board of Directors, Institute for Global Environmental Strategies, Japan ■ HE Mr Hideki Minamikawa, Deputy Vice Minister, Ministry of the Environment, Japan ■ Prof. Heather Munroe-Blum, Principal (President) and Vice-Chancellor, Professor of Epidemiology and Biostatistics, McGill University, Canada ■ Dr Arabinda Mishra, Director, Climate Change, Centre for Global Environment Research, TERI ■ Prof. Jehuda Reinharz, President, Brandeis University, USA ■ Mr Jeff Seabright, Vice President, Environment and Water, The Coca-Cola Company, USA



The session focused on mobilizing knowledge and knowledge institutions, and their role in developing new pathways for sustainable development, along with highlighting the role of students and alumni in breaking down disciplinary silos.

Prof. Hironori Hamanaka emphasized on the contribution of the IGES (Institution for Global Environmental Strategies) in mobilizing knowledge. He talked in detail as to how knowledge institutions can lead to sustainable development practices.

HE Mr Hideki Minamikawa focused on three kinds of knowledge mobilizations, which include an international pledge for climate change, scientific knowledge mobilization, and biodiversity conservation.

Prof. Heather Munroe-Blum advised on a rethink on a new definition for knowledge, which brings together science and technology on a common platform, along



with social sciences and humanities. She emphasized that knowledge institutions should be centres for the integration of experiences from various stakeholders.

Dr Arabinda Mishra focused on four thought-provoking themes. These include the changes in the drivers of knowledge; the trends in the evolution of knowledge institutions and the vast knowledge generated from these; new mechanisms for mobilizing knowledge; and how knowledge can act as a cross-cutting resource for integrating climate change and sustainable development.

Prof. Jehuda Reinharz spoke on the need to change the way we see nature and society, by introducing the concept of 'liberal art education to practice'. He emphasized on innovative education systems, such as establishing a Global Student Research Forum.

Mr Jeff Seabright discussed the role of business in climate change and sustainability issues using the concepts of three prints vis-à-vis footprint (dealing with carbon emissions), handprint (positive actions that change markets), and blueprint (that deal with broader policy frameworks required to drive changes leading to sustainable development). ■

## AFD Book Launch

*Cities: steering towards sustainability*, the latest in the series of readers edited and published by AFD (French Development Agency) titled 'A Planet for Life' edited by Mr Pierre Jacquet, Executive Director in charge of Strategy and Chief Economist, AFD; Dr Rajendra K Pachauri, Director-General, TERI; and Dr Laurence Tubiana, Director, IDDRI (Institute for Sustainable Development and International Relations) was released on the occasion of DSDS 2010. The book addresses the urgent need for sustainable development of cities all across the world in view of the growing climate crisis.





## Keynote address

**Chairperson** ■ Ambassador C Dasgupta, Distinguished Fellow, TERI  
**Speaker** ■ Nobel Laureate Prof. Wangari Maathai, Member of Parliament for Tetu Constituency and Nobel Peace Laureate, 2004, Republic of Kenya



This session witnessed the passionate and inspiring speech of Nobel Laureate Prof. Wangari Maathai who called for compassion, empathy, and values

to protect our future generations from climate change. She started with a reflection on Copenhagen and how it had been a disappointment for many because of lack of legally binding targets. She however mentioned that the announcement of financial support for developing countries, albeit small, was an indication of some level of political commitment. Prof. Maathai highlighted that in countries where citizens are informed, social and environmental issues become agendas for election campaigns. She strongly supported that religious groups need to be brought into the picture because while different stakeholders are led by diverse interests and priorities, religious groups are led by values. Prof. Maathai called for the consideration of three concepts – Respect, Be Grateful, and Do Not Waste. She said that in countries lacking the technology, knowledge, and capital to face the impacts of climate change, it becomes more than just an environmental issue, having large-scale social and political repercussions including human security. She exemplified the creation of the Congo Forest Fund to protect the Congo forests. She emphasized that national laws need to be implemented to respond to climate change adequately along with ensuring public education and awareness for action at the local level. There is also a need to add quality and not only quantity to the monetary aid offered for climate action in order to ensure the right utilization of resources. In conclusion she highlighted the need to continue the momentum towards attainment of sustainable development.

## Balancing of inner and outer ecology

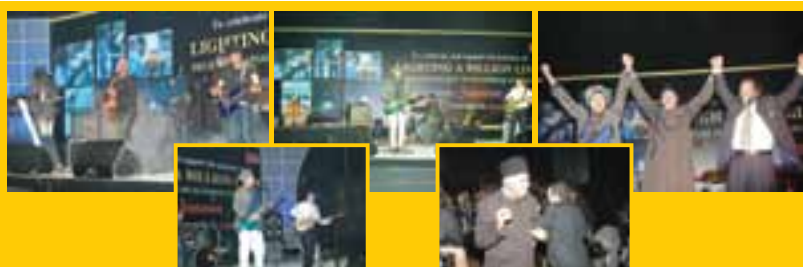
**Chairperson** ■ Dr R K Pachauri, Director-General, TERI  
**Speaker** ■ Swami Sukhabodhananda, International Management and Spiritual Guru and Founder Chairman, Prasanna Trust



This session on balancing of inner and outer ecology chaired by Dr R K Pachauri emphasized on the need to bring about a harmony between the inner nature of human beings and nature as we see it in its pristine glory outside. Swami Sukhabodhananda stressed on the importance of focussing on the ethical dimensions of decision making in every sphere of life and the existence of a state of imbalance within all individuals as well as inner foolishness, which even knowledge fails to destroy. He considered inner greed as being strongly responsible for destruction of the inner and outer ecological balance. To address any imbalance in outer ecology, he emphasized on addressing disturbances and conflicts within human beings. The lack of love, happiness, goodness, peace, and sensitivity inside human beings is reflected in every individual's actions. It is, therefore, important to have peace and love within to be able to spread the same outside. Swamiji opined that vision, power, speed, skill, and strategy are five essential qualities to create inner harmony and love. The genesis of every war which also is the greatest ecological polluter actually lies in the misery of the inner self. In his concluding remarks, he stressed on the importance of knowledge management and the need to be blissful within oneself to be able to bring external harmony and create inner and outer balance. Dr Pachauri expressed his deep gratitude to Swamiji for having shared his knowledge with the gathering and highlighted his efforts towards Lighting a Billion Lives in Mahima village, Uttarakhand.

## LaBL Music Concert

Junoon, Pakistan's biggest rock band performed live to a thunderous applause by the audience in support of the Lighting a Billion Lives campaign. Lead singer and guitarist Salman Ahmad and his band enthralled the crowds with energetic renditions of super hit numbers like *Dhoom Tana*, *Sayonee*, and *Khudi ko kar buland itna*. The concert was kickstarted by a performance by Indian pop group Aryans who began proceedings with their debut hit song, *Ankhon mein tera hi chehra*.



Day 3, 7 February 2010

## Ministerial session II

### Why do we need a binding agreement?

**Chairperson** ■ **Mr Jairam Ramesh**, Hon'ble Minister of State (I/C) for Environment and Forests, Ministry of Environment and Forests, Government of India

**Speakers** ■ **HE Ms Lykke Friis**, Minister for Climate and Energy, Denmark ■ **HE Mr Brice Lalonde**, French Ambassador In Charge of International Negotiations on Climate Change, France ■ **HE Ms Stefania Prestigiacomo**, Minister for Environment, Land and Sea, Italy ■ **HE Ms Teresa Ribera Rodriguez**, Secretaria de Estado de Cambio Climático, Ministerio de Medio Ambiente y Medio Rural y Marino, Madrid, Spain ■ **HE Mr Juan Rafael Elvira Quesada**, Minister of Environment and Natural Resources, Ministry of Environment and Natural Resources, Mexico



The session commenced with deliberations on the likelihood, nature, and scope of a LBA (legally binding agreement). The initial question on the need for an LBA was raised by HE Ms Lykke Friis, who stated that it was essential for mobilizing private sector resources and catalysing government efforts. HE Mr Brice Lalonde highlighted why we need an LBA given that members are democratically bound through public opinion, scientifically bound by the seriousness of the issue, in addition to being economically bound to achieving a transition towards a low carbon economy. HE Ms Stefania Prestigiacomo emphasized that for any long term project in a market based economy a legally binding agreement is crucial. HE Ms Teresa Ribera Rodriguez pointed out various constraints within which global climate policy needs to be crafted, such as resource constraints, geographical contexts, scientific



HE Ms Lykke Friis



HE Mr Brice Lalonde

uncertainties, and population issues. Speaking as the country that will have the next CoP presidency, HE Mr Juan Rafael Elvira Quesada emphasised that we must approach the process with a renewed sense of creativity in order to build upon the outcomes that we already have, towards the outcomes that we want in terms of nature, content and scope. Finally as chairperson of the session, in his closing remarks, Mr Jairam Ramesh, summarised the discussions by focussing on mechanisms and methodologies towards compliance, drafting of an LBA around the principles of common but differentiated responsibilities and respective capabilities, and equity in the GHG flows. ■

## Keynote address

**Chairperson** ■ **Mr Nitin Desai**, Former Under Secretary General of the United Nations and Distinguished Fellow at TERI

**Speaker** ■ **Prof. Jeffrey D Sachs**, Director, The Earth Institute, USA, and Special Advisor to the Secretary-General of the United Nations



Prof. Jeffrey Sachs began his keynote address by bringing out the lack of focus or any mention of the technology that would take the world on a trajectory of sustainable development. He also pointed out that the race to develop green technology need not be the solution to the problem of emissions as commonly presumed. Citing the example of China, he said that though China was racing ahead in the area of green technologies, it was still building huge coal-fired plants to fuel its burgeoning economy. He reminded that time was running out and the emissions were still accelerating. The problem is something to be addressed here and now and not over next 20 years.

Contd...



HE Ms Stefania Prestigiacomo



HE Mr Juan Rafael Elvira Quesada



HE Ms Teresa Ribera Rodriguez



Prof Sachs said that we are neither on a sustainable nor a realistic trajectory of development. He presented a four-pronged approach that must be adopted immediately. He first stressed on the adoption of a concrete and serious formula rather than one based on generalities. For example, the proposal by some countries for a tax on GHG emissions. This would be followed by a need to begin the real life and death challenge of adaptation to climate change. He described the scenario in Africa where a whole region of 10 000 miles stretching across several countries was experience conflict due to the scarcity of water.

Focusing on the need to bring technology to the forefront, Prof. Sachs stated that unlike the belief prevailing in many quarters, we do not have existing technology that could take us on the path of sustainable development. We need to transform internal combustion engines to electrical ones and we need to handle nuclear waste, which is fraught with problems—mainly the challenge of radioactive waste. We need to upscale the production of wind and solar technologies. In short, there is a need to bring greentech out from the research and pre-commercial stage to the commercial stage, for which RDDD (research, development, demonstration, diffusion) was the essential requirement.

Prof. Sachs also explicated that the world cannot wait for the US anymore, but should go ahead of it putting a stop to the legalism and generalities and bringing on board engineers, businesses, and financiers. Financing is urgently needed for adaptation, scaling up the resilience of poor countries, transforming core technologies, and reducing the cost of green technology.



He proposed that the government of India should raise a group of 20-30 million 'eco-farmers' who would work on degenerated, barren lands. They would not only restore the forests, wetlands, corals to life, but also provide employment. Ms Anjali Jaiswal, Senior Attorney, Natural Resources Defense Council, USA, lauded the Indian mindset which looks inwards for solutions and said that there was a lot that the US could learn from India.

Prof Walter Erdelen touched upon a number of crucial issues—water and climate change; governance in environmental affairs; ethics; the science behind climate change and the need to communicate it; costing, mainstreaming, and networking. Mr Suman

## Mobilizing Civil Society

**Chairperson** ■ Dr Larry Brilliant, President, The Skoll Urgent Threats Fund, USA  
**Speakers** ■ Mr Suman K Bery, Director General, National Council of Applied Economic Research ■ Prof. Walter Erdelen, Assistant Director General, Natural Sciences, UNESCO ■ Mr Rick Mayo-Smith, Co-Chairman, Indochina Capital, Vietnam  
 ■ Mr Carl Pope, Executive Director, Sierra Club, USA ■ Dr Ursula Schaefer-Preuss, Vice-President, Knowledge and Management and Sustainable Development, ADB ■ Mr Bittu Sahgal, Environmentalist and Editor, Sanctuary Asia and Sanctuary Cub Magazines, India  
**Special invitees** ■ Ms Anjali Jaiswal, Senior Attorney, Natural resources Defense Council, USA ■ Mr Salman Ahmad, Member, Rock Group

Moderated by Mr Larry Brilliant, the session focused on the role of civil society in mobilizing action on the issue of climate change. Mr Carl Pope said that reducing the carbon footprint should be looked at as an opportunity. He cited the example of solar lanterns which could transform a billion lives. Mr Bittu Sahgal stressed on the need to mobilize the younger generation.



Ms Anjali Jaiswal



Mr Bittu Sahgal



Mr Suman K Bery



Prof. Walter Erdelen



Mr Rick Mayo-Smith



Mr Carl Pope



Dr Ursula Schaefer-Preuss



Mr Salman Ahmad



Dr Larry Brilliant



Bery said that civil society had reason to be proud for bringing the issue of climate change on the map. Mr Rick Mayo-Smith, emphasized the need to look at our own personal actions and their impacts.

Ms Ursula Schaefer-Preuss, stressed on the need to invest in climate-friendly infrastructure. Mr Salman Ahmad, of rock group Junoon, joined the panel at the request of the moderator and stressed upon the principles of compassion, communication, collaboration, and cooperation. ■



HE Ms Marie Pierre Emilienne Lloyd

Prof. Emil Salim

HE Ms Marie Pierre Emilienne Lloyd said the people of Seychelles were already suffering and losing territory everyday. Their survival itself was threatened. She lamented that even large developing countries did not take account of their concerns. She strongly called for an agreement which ensured temperature rise to be limited to 1.5 °C from the pre-industrial levels.

Rt Hon. John Gummer, started by admitting that UK had been a large contributor to global emissions. He highlighted the need for the creation of a new financial arrangement. Mr Gummer pointed out that the current capitalist arrangement was not adequate to deal with climate change. He urged developed countries to act first followed by other countries. Drawing parallel with the issue of human rights, he pointed out that Europe must achieve good human rights records first before pressurizing countries like Myanmar to improve their human rights records. Besides heads of states and governments, the involvement of the business community was key.

Prof. Emil Salim began by bringing into focus the unfinished agenda of Bali which was to be achieved in Copenhagen. He said it was essential to have a second edition of the Kyoto Protocol in the form of a legally binding agreement based on the principle of 'Common but Differentiated Responsibilities'. He then said that the impacts of climate change are now visible after 29 islands have already sunk. We see water scarcity all around. There is erosion of biodiversity. We also see new diseases emerging. He said an integrated approach was required that can deal with climate change challenges along with poverty eradication and other developmental priorities. He called for developing renewable and clean technologies to raise the value of natural resources through human resources development. ■

## Ministerial session III

### Building on the Copenhagen Accord

**Chairperson** ■ Dasho Paljor J Dorji, Advisor - National Environment Commission, Government of Bhutan

**Keynote address** ■ Mr John Kerry – by video, United States Senator from Massachusetts

**Speakers** ■ Rt Hon. John Gummer, MP for Suffolk Coastal, UK ■ HE Ms Marie Pierre Emilienne Lloyd, Minister of Health and Social Development, Seychelles ■ Prof. Emil Salim, Former Minister for Pollution and Environment, Indonesia



The session was moderated by Dasho Paljor J Dorji who said that the issue of getting an agreement and building on the progress made in Copenhagen was important. In his keynote address through a video link, Mr John Kerry, focused on the significance of the fact that America went to Copenhagen. He expressed hope that eventually America will lead the world in the fight against climate change.



Dasho Paljor J Dorji

Rt. Hon. John Gummer

## Climate Challenge in Africa

**Chairperson** ■ Prof. Lord Nicholas Stern, Lord Stern of Brentford, Kt, FBA IG Patel Professor of Economics & Government, London School of Economics and Political Science, UK  
**Speakers** ■ Mr Abdoulie Janneh, Under-Secretary-General and Executive Secretary, United Nations Economic Commission for Africa, Ethiopia ■ HE Mr Stanislas Kamanzi, Minister of Natural Resources, Rwanda ■ HE Mr Erastus Mwencha, Deputy Chairperson of the African Union Commission, Ethiopia ■ Dr Ligia Noronha, Director, Resources and Global Security, Centre for Global Agreements, Leg. & Trade, TERI ■ Mr Gurjit Singh, Joint Secretary (East and Southern Africa), Ministry of External Affairs, Government of India



The session focused on the main issues that are of utmost importance to the African conglomeration of countries in the light of the impacts of climate change on Africa. The session commenced with the remarks of Prof. Lord Nicholas Stern who stressed that in the case of Africa, development, adaptation, and mitigation are intricately intertwined. He also mentioned that several opportunities exist for Africa in the field of solar and hydropower.

Mr Abdoulie Janneh highlighted that Africa is already facing the brunt of climate change and although he felt encouraged by the IPCC and the recent Copenhagen Accord, he felt that the lack of action at present is the biggest hurdle to development. Mr Erastus Mwencha asserted that climate change could be looked upon as opportunity if the international community supported Africa in its effort to combat climate change. He said that having learnt bitter lessons from the WTO, it would be better to start acting now on adaptation and

mitigation strategies rather than loosing precious time waiting for other parties to come on board.

Mr Stanislas Kamanzi expressed that Rwanda is already facing serious climate change threats. He also emphasized that natural adaptation capacities must be supported adequately by financial and human capacity. Dr Ligia Noronha stressed that India and Africa should learn from each other and build their capacities to make them less vulnerable to the impacts of climate change.

Mr Gurjit Singh maintained that there is a need for concentrating on the existing IPR regime for provision of clean technologies to developing countries. He also emphasized that in the case of new financing care should be taken so that the terms of trade for Africa are not diluted.

In his final remarks, Lord Stern was emphatic in mentioning that it is indeed possible and feasible to achieve two seemingly contrasting goals of managing climate change and removing poverty in Africa. ■

## Valedictory session and Presentation of White paper

**Chairperson** ■ HE Mr José Maria Figueres Olsen, Former President of Costa Rica  
**Speakers** ■ Mr Yvo de Boer, Executive Secretary, United Nations Framework Convention on Climate Change (UNFCCC), Bonn ■ Mr B K Chaturvedi, Member, Planning Commission, Government of India ■ Dr R K Pachauri, Director-General, TERI ■ Mr Shyam Saran, Prime Minister's Special Envoy on Climate Change, Government of India

The grand finale of the DSDS 2010 was chaired by Jose Maria Figueres Olsen, former President of Costa Rica. The first speaker Shyam Saran shared his experience of the COP15 and what the world should expect from the Accord.

Yvo de Boer said that even if we assume that climate change is a hoax, there are three international trends—people in industrialized countries have unsustainable lifestyles; we are rapidly depleting our natural resources; and harming the air, environment, and ecosystem.

B K Chaturvedi spoke about the strategies of the Planning Commission of India in mitigating climate change, with special focus on energy efficiency. He insisted that it should be a part of the planning process.

Dr R K Pachauri stressed on the importance of income and wealth distribution in relation to climate mitigation. He also highlighted the need for actions, rather than mere words. He saluted the Government of India for launching the National Solar Mission. He hopes for some constructive action between now and the COP16 in Mexico this year.

The event ended with a round of applause for Dr Pachauri and TERI, and with the announcement that the next DSDS will be held between 3 and 5 February 2011. ■



## SPECIAL EVENTS

### YUVA Meet 2010: Understanding climate change through the social glass

The YEA (Youth Education and Action), TERI organized a two-day special event on the sidelines of DSDS 2010 called the YUVA Meet 2010 on the theme 'Understanding climate change through the social glass' on 2-3 February 2010. The meet brought together about 120 participants from India and 30 participants from Europe, Philippines, Bangladesh, Korea, Japan, and Malaysia.

The two days of interaction and deliberation shed light on issues of concern and also considered solutions and ways to address the problem. Mr Charlie Walker, Director (Programmes), British Council enlightened the participants about various youth oriented programmes primarily initiated by the British Council. Dr Arabinda Mishra, Director, Climate Change Division, TERI set the tone for the deliberations with his keynote presentation on the core theme.



The highlight of the event was Envirotisement. Participants were asked to design an advertisement around an environmental theme and the judges had a tough time selecting the winner as all the performances were excellent. The other group activity was the designing of a 'Transition Campaign' on assigned themes.

The valedictory session was chaired by Mr Manish Tiwari, Hon'ble Member of Parliament and other distinguished guests like Mr Kevin McLaven, Acting Director, British Council, Dr R K Pachauri, Director General, TERI, and Ms Ranjana Saikia, Associate Director, TERI.

### Transport and Climate Change

The special event on Transport and Climate Change focused on deliberating upon issues related to the current trends of transport growth and their impacts in terms of increasing energy use and CO<sub>2</sub> emissions. Dr Leena Srivastava, Executive Director, TERI highlighted the importance

of the transport sector for all countries and the complex challenges that stand in the way of moving towards a low carbon path. Ms Ursula Schaefer-Preuss, Vice President (Knowledge Management and Sustainable Development), ADB emphasized the need for a paradigm shift in view of the growing challenges related to the transport sector, especially in Asian cities.

A series of presentations were made by experts to present the global, Asian, Indian, and urban perspective on transport and climate change issues. Speakers presented the on-going growth trends in the transport sector, their impact on energy use and CO<sub>2</sub> emissions, and the pathways to move the transport sector on a low carbon path. This was followed by a panel discussion.

### Experts meet to deliberate on an alternative university appraisal system

Representatives of six educational institutions met on 6 February to deliberate and detail an Alternative University Appraisal system that is aimed at strengthening ESD (Education for Sustainable Development) in higher education institutions. The meeting was organized by Hokkaido University, Japan, United Nations University – UNU-IAS (Institute of Advanced Studies) and hosted by TERI University, both members of the Promotion of Sustainability in ProSPER. Net (Postgraduate Education and Research Network).

The AUA (Alternative University Appraisal) project, launched in June 2009, as a collaborative undertaking of ProSPER.Net, aims to support higher education institutions that plan to introduce ESD or that desire to strengthen their current ESD activities. The ultimate goal of the project is to create a learning community where higher education institutions can share good ESD practices and learn from one another.

ProSPER.Net, which is an alliance of higher education institutions in the Asia-Pacific region, aims to integrate sustainable development in the post graduate curricula. The network, currently consisting of 19 member institutions, is an initiative under the auspices of the UNU-IAS.





## Estimating carbon footprint of urban household energy use



TERI organized the project dissemination workshop of its study 'Estimating carbon footprint of urban energy use' on 4 February 2010 at TERI, New Delhi. The three-year long study funded by Veolia Institute of Environment, France was undertaken by TERI with an aim to developing tool to estimating the carbon impacts of urban household energy use. Addressing the participants, Dr Prodipto Ghosh, Distinguished Fellow, TERI, highlighted the importance of the topic of the study and the need to understand the impacts of urban lifestyles. He discussed the key features of the TERI study and appreciated the methodology developed to estimate the carbon footprint of urban household energy consumption. Dr Ghosh's remarks were followed by a presentation by Ms Akshima T Ghate, Area Convenor, Transport and Urban Development, TERI which provided a detailed overview of the TERI study and the carbon footprint results for Jaipur city. Dr Gaëll Mainguy, Executive Editor, Scientific Publications, Veolia Environment Institute, France described the study as one its first kind in developing countries and highlighted the key contributions of the study. The presentations and remarks were followed by an interactive session chaired by Dr Ghosh wherein the participants presented their views on the study.

## Celebrating International Year of Biodiversity, 2010



The Special Event 'Celebrating International Year of Biodiversity, 2010' was a platform to discuss relevant biological, economic, and cultural issues.

Dr Leena Srivastava (Executive Director, TERI) highlighted the climate change and biodiversity linkage, while

Mr Ahmed Djoghla (Executive Secretary, CBD) emphasized on capability utilization to solve the crisis.

Mr Hem Pande (Joint Secretary, Ministry of Environment and Forests) spoke about governmental efforts in biodiversity. Mr Ram Boojh (Programme Officer, UNESCO) focused on biosphere reserves. Dr P Pushpagadan (Director-General, Amity Institute of Herbal and Biotech Products Development, Thiruvananthapuram) elaborated on utilizing the tribal communities' knowledge through benefit-sharing.

Dr Haripriya Gundimeda provided examples of win-win situations from market-based schemes based on valuation of biodiversity. Dr Yogesh Gokhale (Fellow, TERI) spoke on successful sacred conservation practices in India.

Dr J P Singh (Principal Scientist, CAZRI, RRS, Bikaner) elucidated on the importance of biodiversity in the arid zone, while Dr Lonard Sonnenschein (President, World Aquarium and Conservation for the Oceans Foundation) spoke about fisheries. Prof. P S Ramakrishnan remarked that science and research must be combined to influence policy formulation. Dr Gokhale proposed a vote of thanks to conclude the session.

## Integrating REDD+ with Poverty Alleviation and Development actions



The basic objective of REDD (Reducing Emissions from Deforestation and Degradation), proposed in 2005 at CoP11 (Montreal) and agreed upon in Copenhagen, was to reduce emissions from deforestation and degradation, maintain and enhance carbon stocks and suitably compensate countries for their actions.

REDD+ could benefit the deprived in the forestry sector via sectoral development strategies, enhance tenure security and community resource rights, generate new sources of funding for long-term capitalization of rural poor and create new public-private partnerships.

Discussions focused on potential partners' roles and a benefit-sharing mechanism for the forest dependent communities. The panelists emphasized on integrating REDD+ with many development projects outside the forestry sector, including the National Rural Employment Guarantee Scheme, Watershed Development Programmes, and so on. There was unanimous agreement that proper implementation necessitates reduction of transaction costs, capacity-building of local stakeholders, and a robust mechanism for monitoring and verification. Creation of a REDD Cell at the Ministry of Environment and Forests was also suggested.

The idea of assimilating REDD with the LLS (Livelihoods and Landscapes Strategy) was put forward. The LLS provides an opportunity of integration with other land uses to enhance livelihoods of the poor. TERI is implementing the programme in Haryana, in partnership with IUCN.

## APP international workshop on high performance commercial buildings in India



The international workshop on high performance commercial buildings in India revolved around sharing the key findings of TERI's research, conducted in association with the BEE (Bureau of Energy Efficiency) and APP (Asia Pacific Partnership).

TERI's study shows that by incorporating both ECBC (energy conservation building code) compliant measures and low-energy strategies, new buildings can reduce their energy consumption by up to 60%. These findings are being used to modify building by-laws of five Indian municipalities.

Mr Girish Sethi (Director, Industrial Efficiency, TERI) provided an overview of the APP-BATF project. Dr Ajay Mathur (DG, BEE) spoke about the need to force builders and architects to design more energy-efficient buildings. He also launched the website on high performance commercial buildings in India. Mr Sanjay Seth shed light on BEE's efforts towards information dissemination and spoke about developing various rating schemes for energy-efficient buildings in India. Karan Grover elaborated on the traditional architects' role in designing sustainable buildings. James Law, Hong Kong, described various green interventions taken up by his firm.

Dr R K Pachauri (Director-General, TERI) emphasized on 'the need to come up with a strategy to communicate information on green buildings to the public.' Mark Ginsberg, moderator, asserted that the Indian government is affecting a positive change in the country.

## Fostering Regional Cooperation for Water Security and Governance in South Asia

The round table conference organized on 4 February 2010 focused on the issue of regional cooperation for water security and governance in South Asia. It was agreed that since a number of resources in the South Asian region are



under stress, there is a need for cooperation to resolve these problems.

Capacity building in the water sector was identified as a grey area which needed further discussions. South Asia, considered the least integrated region in the world, requires regional cooperation, exchange of knowledge, and a common framework to manage our dwindling resources. Rapid growth in population, industrialization, and urbanization are creating a greater gap between demand and supply. To stem this, collaborative research and communication is essential. The speakers stressed that regional cooperation needs to be pluralized, redefined, and re-invigorated. Also regional cooperation should not be limited to governments but should also focus on institutional and people to people cooperation. It was also agreed that there was a need for a trans-boundary governance framework to address the issues of water security in the South Asian region and then generate adaptation and mitigation measures that can be implemented regionally. Mr Ashok Jaitly, Distinguished Fellow and Director, Water Resources Division, TERI, Dr Laxman Prasad, Department of Science and Technology, Government of India, Dr Manish Kumar, UNICEF were among the dignitaries present at the event. The Regional Knowledge Hub for Water and Climate Change adaptation in South Asia was also launched during the event. Dr Ursula Schaefer-Preuss, Vice-President (KM & SD), Asian Development Bank delivered the keynote address.

## Building climate change resilience in urban areas: perspectives from cities in India

TERI in collaboration with the ISET (Institute for Social and Environmental Transition) organized a seminar on 'Building climate change resilience in urban areas: perspectives from cities in India'. The event, part of the Asian Cities Climate Change Resilience Network programme supported by the Rockefeller Foundation, saw a good gathering of professionals and researchers. Welcoming the gathering Dr R K Pachauri stressed the need for addressing climate change concerns into the city planning framework and the need for sustainable development. Mr Marcus Moench, Director, ISET spoke on the ACCCRN programme which

is assisting partner cities to develop resilience strategies and associated implementation proposals. Three cities in India, namely; Surat, Indore, and Gorakhpur are presently engaged in the ACCCRN process. Ms Crisrina, Associate Director, Rockefeller Foundation, gave an overview of the ACCCRN programme followed by presentations by the city partners from Surat, Indore, and Gujarat made presentations on the city vulnerability analysis conducted within the cities. Ms Jyoti Parekh from IRADE talked about the role that individual sectors have to play within the overall resilience building process.

### Closed door in camera session for discussion on white paper on roadmap to Mexico

A closed door in camera session was convened with the purpose of discussing the proposed white paper on the roadmap to COP 16 in Mexico this year. Mr Nitin Desai, former Under Secretary General of the United Nations and Distinguished Fellow, TERI chaired the discussions which included current and former heads of states and governments, ministers, high commissioners and ambassadors and a host of other high-level dignitaries and climate negotiators. Notable among the discussants were HE Mr Ricardo Lagos, former President, Government of Chile, HE Mr Jose Maria Figueres Olsen, former President of Costa Rica, HE Mr Jean-Louis Borloo, Senior Minister, Ministry of Ecology, Energy, Sustainable development and Sea, in charge of climate change negotiations, Government of France, HE Dr Gro Harlem Brundtland, former Prime Minister of Norway and Special Envoy on Climate Change, United Nations, Norway, Dasho Paljor J Dorji, Advisor, National Environment Commission, Government of Bhutan, HE Ms Lykke Friis, Minister for Climate and Energy, Denmark, and HE Mr Paul Magnette, Minister of Climate and Energy, Belgium.

### Green Aviation

Beginning the discussions, Mr Clement Gignac, Minister of Economic Development, Innovation and Export Trade, Quebec, Canada

emphasized upon the direct relation between green aviation and sustainable development. He also stressed on the need for a three-way partnership between universities, industries, and the government. Dr Nasim Zaidi, Director General of Civil Aviation, India stressed on developing better fuel-efficient aircrafts, ATM (air traffic management), and efficient infrastructure and operations. He emphasized on the need for mutual agreement in using emissions trading as a mitigation tool and that, unilateral measures are not in the interest of the Indian economy.

Dr Anand Kumar, Indian Oil Corporation Ltd mentioned that IOCL has given due credence to innovation by setting up an R&D centre for self-sufficiency in lubricants. Dr Sam Sampath, Pratt and Whitney, Canada highlighted that the aviation industry will not be able to achieve the goal of being carbon neutral without alternative fuels. Dr Fassi Kafyeke, Bombardier Aerospace, Canada talked about the need to reduce noise footprint.

## International Climate Change Exhibition 2010

TERI organized the second ICCE (International Climate Change Exhibition) to complement the theme of DSDS 2010. The exhibition was inaugurated by Dr Farooq Abdullah, Hon'ble Minister of New and Renewable Energy, Government of India, in the presence of HE Mr Matti Vanhanen, Prime Minister of Finland, and Dr R K Pachauri, Director-General, TERI. The ICCE provides a platform for exhibitors to demonstrate new environment-friendly technologies, products, and services. It also aimed to engage visitors in the debate on possible solutions to mitigate climate change and find out more about the alternative technological revolution. It endeavours to motivate people to take action towards reducing their ecological footprint and hopes to inspire organizations to act on an individual level and explain how small changes can make a difference.



Dr Farooq Abdullah,  
Hon'ble Minister for New and  
Renewable Energy, Government  
of India, HE Mr Matti Vanhanen,  
Prime Minister of Finland, and  
Ms Shilpa Shetty inaugurating  
ICCE 2010



## List of Steering Committee Members

### Special invitees

- **Mr Jayant M Mauskar, IAS**, Additional Secretary – Climate Change, Ozone Cell and Impact Assessment, Ministry of Environment and Forests, GOI, India
- **Mr Rajiva Misra**, Joint Secretary (UNES), Ministry of External Affairs, GOI, India

### Government

- **Ajay Mathur**, Director General, Bureau of Energy Efficiency, Under Ministry of Power, Government of India, India

### Institutions/NGOs

- **Gunter Dresrusse**, Country Director, GTZ, India
- **Borge Brende**, Secretary General, Norwegian Red Cross, Norway
- **Björn Stigson**, President, WBCSD, Switzerland
- **David Jhirad**, Vice President for Research and Evaluation, the Rockefeller Foundation, USA
- **Jeffrey D Sachs**, Director, Earth Institute & Special Advisor to the Secretary-General of the UN, USA

### Multilateral/Bilateral

- **Yvo de Boer**, Executive Secretary, UNFCCC, Germany
- **Sybille Suter**, Head, Swiss Agency for Development and Cooperation (SDC), India
- **Michael Anderson**, Head, DFID, India

- **Nitin Desai**, Former Under Secretary General, UN, India
- **Xianbin Yao**, Director General, Asian Development Bank, Manila, Philippines
- **Aban Marker Kabraji**, Regional Director, Asia, IUCN, Thailand

### Corporate

- **Naina Lal Kidwai**, Group General Manager and Country Head, HSBC, India
- **Shailesh Rao**, MD, Google India & Chairman, IAMAI, India
- **Jamshed J Irani**, Director, Tata Sons, India
- **R S Sharma**, CMD, ONGC, India
- **Richard Sandor**, Chairman, CCX, USA
- **Michael P Schulhof**, Chairman, CEO, Global Technology Investments Group LLC, USA
- **Larry Brilliant**, President, Skoll Urgent Treats Funds and Advisor, Google.org, USA

### Media

- **Prannoy Roy**, President, NDTV, India
- **Rahul Kansal**, Chief Marketing Officer, Bennett Coleman & Co Ltd (BCCL), India
- **Bhaskar Das**, Executive President, Bennett Coleman & Co Ltd (BCCL), India
- **Rob Taylor**, Director, Science and Environmental Programs, International Centre for Journalists (ICFJ), USA

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