



**The
Bengal
Chamber**

The Bengal Chamber
of Commerce and Industry

Presents

**Environment and
Energy Conclave**



A forum for thought leaders from the Government, Industry, Academia and Civil Society to discuss and strategize our response to Climate Change in sync with our development aspirations.



"Our rapidly melting, carbon-choked, over-populated planet, smack bang in the middle of a climate change crisis, is filled with three kinds of people: those who congregate at the opening of a green envelope (so to speak) to generate eco-soundbites and murmur things like, "if only people cared more"; those who passionately loathe eco-warriors and cry "Greenwash! Greenwash!" if anyone so much as suggests they could walk to the postbox instead of driving their 4x4; and the third kind, which is basically the rest of us....."

Helen Elfer, "International Day of Climate Action: 350", October 2009

There is a fourth category of people – those who believe that Climate Change needs real-time mitigation efforts and not just debates and discussions on who is responsible for the situation we are in today. The Bengal Chamber of Commerce and Industry belongs to this category and our Environment and Energy Conclave is the forum for sharing ideas and experiences on how to sustain industrial productivity and profitability while ensuring a low carbon footprint and implementing winning carbon management practices.

The Bengal Chamber of Commerce and Industry

'Royal Exchange', 6 Netaji Subhas Road, Kolkata 700 001
Tel: 91-33-2230 8396 / 3711 / 3733 / 3746 Fax: 91-33-22301289
Email: bencham@bengalchamber.com Website: www.bengalchamber.com



Where the Bengal Chamber creates value...

The Bengal Chamber of Commerce and Industry was set up in 1853. For the last one and a half centuries, the Chamber has played a pioneering role as a helmsman, steering the evolution of Commerce and Industry in India. The Chamber's vision is to be the most valued Partner of Commerce, Industry, Academia, Professionals and Governments for achieving responsible economic growth as well as accomplishing their societal and environmental needs.

Donning its multiple roles as catalyst, initiator, facilitator, business partner and service provider, the Chamber has helped Governments, both at the Centre and State in crafting pioneering and significant legislations.

A continuous endeavour of the Bengal Chamber has been to focus on sustainable development and to disseminate information and educate business, industry and society about the need for balancing industrial growth with ecological stability. In short, this is the maxim of the Chamber's Energy and Environment Committee.

The Energy and Environment Committee

Vision Statement

To promote inclusive sustainable development of industry in the areas of preservation of the environment, conservation of energy and development of green technology.

Mission Statement

- a) Promote the cause of preservation of the environment and conservation of energy and the need for adopting green technology through renewable and sustainable energy sources for industry.
- b) To organize seminars and workshops with the objective of spreading awareness about the latest developments in the fields of energy and environment.
- c) To advise individual industries with regard to their problems and concerns pertaining to pollution and related environmental issues, and consider the scope for abatement of the same.
- d) To assist the Chamber in formulating views for submission to Government and other authorities.
- e) To network with various organizations working on climate change, green energy, clean technology, energy efficiency and sustainable development.



In the abovementioned context, the Energy and Environment Committee of the Bengal Chamber is providing the regional forum for discussing and brainstorming global and local environmental issues like climate change and the response of Business, the Government, the Academia and the Civil Society.

Since 2008, the Energy and Environment Committee has launched the now-iconic Environment and Energy Conclave, which is addressed by thought leaders in energy policy, senior officials of the Government, policy leaders in conventional and non-conventional energy, overseas Governments and Embassies, Central and State Governments, leading academics and CEOs from all over the country with delegates and speakers from India and abroad.

The objective is to provide the regional forum for visiting the scenarios governing the Indian economy and industry with the UN-mandated Climate negotiations in the background and look at emerging scenarios that would confront industry and the business community. As a leading Chamber of Commerce, our concern is with respect to the cost of adaptation to Climate Change for the country, which is estimated at 2.6 per cent of India's GDP. Importantly, the Conclave addresses and tries to solve the specific challenges facing Indian industry in the realm of cutting the emission intensity by 20-25%. This is a huge challenge, especially since our growth momentum cannot be compromised with.



The Conclave traces the negotiations and focuses on the impact of the recent Conference of Parties in Copenhagen (2009) and Cancun (2010). The focus is on adaptation, technology transfer and creating a new fund for long-term climate finance.

Chief among issues of concern for nations is how to take mitigation actions forward. In the course of 2010, all 37 industrialized nations and 42 developing countries, including the largest emerging economies, submitted targets and voluntary actions to reduce or limit greenhouse gas emissions. These mitigation promises need to be formalized as a matter of urgency. Developed countries have announced pledges totaling USD 28 billion and many of them are now making information available on the disbursement of these funds. Additionally, under the Kyoto Protocol, politically charged issues include the need to avoid a gap after the first commitment period and the importance of having clarity on the continuation



of the Kyoto Protocol, along with the continuation of engaging the private sector through the Kyoto Protocol's market mechanisms beyond 2012.

Under the Convention, the unresolved issues include the accountability for implementation of mitigation targets and actions; the mobilization of long-term finance, the creation of a new fund for this and the accompanying accountability of its delivery, along with the understanding of fairness that will guide long-term mitigation efforts.

All these world climate negotiations; dynamics; are captured in the Chamber's Environment and Energy Conclaves, each of which is, an, "of the industry, for the industry, by the industry initiative".

Focus:

- Create awareness on global and local environmental issues.
- Discuss importance of conservation and efficiency practices.
- Minimizing climatic impact of industrial operation while not deviating from profit motive.
- Impart training and create a knowledge bank on harnessing new opportunities and practices in technology.

Environment and Energy Conclave - Snapshot





Energy Conclave 2008, 22nd-23rd August 2008, ITC Sonar, Kolkata <i>Energy in the Age of Climate Change - Efficiency, Conservation and New Options</i>	Environment and Energy Conclave 2009, 28th-29th August 2009, ITC Sonar, Kolkata <i>Solutions for Building Competitive Advantage</i>
<p><i>Inaugural Session</i> Shri Anil Razdan, IAS, Union Power Secretary Dr. Kirit S Parikh, Member, Planning Commission Shri Sunil Mitra, IAS, Additional Chief Secretary, GoWB</p> <p><i>Climate Change & Industry – Impact and Measures</i> Shri Malay K De, IAS, CMD, WBSEDC Mr. Sanjoy Kumar Chakraborti, ED, CESC Mr. Subhash Rustagi, EVP, EHS, ITC Mr. Sudipta Das, Partner, E&Y Mr. Surojit Bose, Asst. Director, PwC</p> <p><i>Focus Power – Creating opportunities for sustainable industrial growth</i> Mr. M.K. Sengupta, GM, DSP Mr. Mriganka Majumdar, ED, WBSEDC Dr. R R Sonde, EVP, Thermax Limited Mr. Rajiv Garg, Energy Economist, BEE, MoP, GoI Mr. S K Dasgupta, VC, DCL</p> <p><i>Energy options in India – Fossil fuel and new and renewable sources</i> Prof. Sujay Basu</p> <p><i>The next steps – New Technology (Renewables: Solar, Wind, Waste to Energy, Biomass, Project Financing)</i> Mr. Arun Bhalla, EVP, PTC India Mr. J Mukherjee, MD, GP Green Energy Mr. Kanad Bose, Regional Head, Vestas Mr. M S Unnikrishnan, MD, Thermax Limited Mr. Ramanarayana Parhi, VP, Selco International Shri S P Gon Choudhuri, MD, WBGEDC</p> <p><i>The coal story</i> Dr. Kalyan Sen, BESU Mr. P S Bhattacharyya, Chairman, Coal India Shri P R Mandal, Advisor, Ministry of Coal, GoI Mr. Purajit Roy, VP, EMTA Group</p> <p><i>Tomorrow's Choice (Carbon Footprints, LPG)</i> Mr. Alope Mookherjee, Chairman, Flakt & IPP, BCCI Mr. Kailash Mishra, Chairman & CEO, EG Gas Limited Mr. M S Unnikrishnan, MD, Thermax Limited Mr. Sudipta Das, Partner, E&Y Mr. Tapan K Chakravarty, Consultant, Tata Steel</p>	<p><i>Inaugural Session</i> Shri Shyam Saran, Special Envoy of Prime Minister Prof. (Dr.) Bikash Sinha, Former Director, SINP & VECC, Department of Atomic Energy Mr. Sanjay Wadvani, OBE, Deputy High Commissioner of Britain in Eastern Region Dr. R K Pachauri, Chairman, IPCC and Director General, TERI (video address)</p> <p><i>Session I: Decoupling industrial growth from environmental degradation – Actionable strategies</i> Prof. N.R. Banerjee, Chairman, WEBEL Mr. Sutanu Ghosh, Managing Director, Ghosh, Bose and Associates Mr. S.R. Ghosh, EVP & Head-Plant/Projects, Haldia Petrochemicals Mr. Sanjib Bezbaroa, Senior Specialist-Corporate EHS, ITC</p> <p><i>Session II: Harnessing sustainability for profit – The bottom line on sustainability</i> Shri Partha S Bhattacharyya, Chairman, Coal India Mr. Arun Mittal, Vice President, OEM – Auto, Exide Mr. S. K. Pati, Chief, Power System, Tata Steel Mr. S Padmanaban, Senior Energy Advisor, USAID Dr. A.S. Unnikrishnan, Scientist F and DU Leader, Physical Oceanography, National Institute of Oceanography</p> <p><i>Session III: Industry-Academia Discussion Forum: From fundamental research to actionable strategies in endeavouring for a carbon positive corporate organization</i> Shri M K De, IAS, Chairman & Managing Director, WBSEDCL Dr. Rintu Banerjee, Professor, Agricultural & Food Engineering Department, Indian Institute of Technology, Kharagpur Prof. Joyashree Roy, Professor of Economics, Jadavpur University Shri S P Gon Choudhuri, Managing Director, West Bengal Green Energy Development Corporation Mr. P K Basu, Director-Technical, CESC Limited</p> <p><i>Session IV: CEO's Roundtable: 2012- A likely beginning to new emission reduction commitment including India: Responses and strategies by India Inc.</i> Mr. Alope Mookherjee, Chairman, Flakt (India) Limited; Hon. Consul, Sweden, & Past President, BCCI Mr. Pierre Jonette, CEO, ArcelorMittal Design & Engineering Centre Mr. M S Unnikrishnan, Managing Director, Thermax Mr. Amitabha Mukhopadhyay, President & CFO, Tata AutoComp Systems</p> <p><i>Session V: Clean technologies in industry – R&D and application</i> Prof. Sujay Basu, Director, Centre of Energy and</p>



<p>Energy Conclave 2008, 22nd-23rd August 2008, ITC Sonar, Kolkata <i>Energy in the Age of Climate Change - Efficiency, Conservation and New Options</i></p>	<p>Environment and Energy Conclave 2009, 28th-29th August 2009, ITC Sonar, Kolkata <i>Solutions for Building Competitive Advantage</i></p>
	<p>Environment Management Mr. Karim Kassam, Director, Business and Corporate Development, Ballard Power Systems (Canada) Mr. Debabrata Sanyal, Consultant, Descon Limited Dr. Kalyan Sen, Professor Emeritus, BESU Mr. Niranjana Khatri, General Manager – Welcom Environ Initiatives, ITC Welcomgroup Prof. S S Chakraborty, Chairman -cum-Managing Director, Consulting Engineering Services (Represented By: Dr. A S Ray, Chief General Manager) Dr. Dieter Feldmann, Project Manager Globalization, Europäische Funk-Rundsteuerung GmbH (EFR, Germany)</p> <p><i>Session VI: Managing the corporate carbon footprint – Traditional and new approaches</i> Mr. Dibyendu Basu, Managing Director, DC Industrial Plant Services Private Limited Mr. Prabir Chatteraj, Additional Director & Chief Coordinator (ER), PCRA Mr. A B Chakraborty, Group General Manager – Chief CMG & Chief CSR, ONGC Dr. Dipankar Dey, Associate Dean (Research), IBS, Kolkata</p> <p><i>Session VII: Talk Show – Pushing the frontiers of energy</i> Mr. Nazeeb Arif, VP, Corp. Comm., ITC Dr. G D Gautama, IAS, Principal Secretary, Deptt. of Power and Non-Conventional Energy Sources, GoWB Dr. R R Sonde, CTO and EVP – Research, Technology & Innovation, Thermax</p>

Environment and Energy Conclave 2010, 27th-28th August 2010, ITC Sonar, Kolkata
From Copenhagen to Mexico: Business Sustainability in Emerging Scenarios





Inaugural Session

Keynote Address:

Climate Change Negotiations: Implications for India's Economy

Ambassador C Dasgupta, Distinguished Fellow, The Energy and Resources Institute

National Mission for Enhanced Energy Efficiency

Dr. Ajay Mathur, Director General, Bureau of Energy Efficiency, Ministry of Power, GoI

Australia's domestic action and international approach to climate change

His Excellency Peter Varghese, High Commissioner of Australia in India

The Climate Challenge – A collaborative approach

Mr. Sanjay Wadvani, OBE, Deputy High Commissioner of Britain, Eastern Region

Session I:

Climate Change and business sustainability

Session Chairperson:

Mr. Bushen Raina, Chairman, Jamshedpur Utilities and Services Company Limited

The larger implications of Climate negotiations at Copenhagen and beyond for business

Mr. Fergus Auld, First Secretary, Climate Change & Energy, British High Commission, DFID, India

Effecting change management by measuring carbon footprint

Mr. Surojit Bose, Associate Director, PricewaterhouseCoopers Pvt. Ltd.

Green Technology in manufacturing – an enabler for business sustainability

Mr. Sunil Kumar C. S., Senior Specialist Corporate EHS, ITC Limited

Finance for green business – Opportunities

Mr. Sourabh Jain, Associate Vice President – Markets, First Climate India Pvt. Ltd.

Session II:

IPR and Climate Change – Friends or Foes?

Session Chairperson:

Mr. Anjan Sen, Principal Patent Attorney and IPR Advocate, Anjan Sen & Associates, IPR Attorneys, Kolkata

Who owns our low carbon future? – Intellectual Property and access to clean energy technologies

Dr. R R Sonde, Chief Technology Officer and Executive Vice President, Research, Innovation & Technology, Thermax Limited

Climate Change - Technology - IPR

Dr. P Ram Babu, Chief Executive Officer, General Carbon Advisory Services Private Limited

Session III:

Panel Discussion:

Climate Change and Alternative Energy for Industry – Perspectives for the East

Chairperson:

Dr. R R Sonde, Chief Technology Officer and Executive Vice President, Research, Innovation & Technology, Thermax Limited

Panelists:

Shri S P Gon Chaudhuri, Managing Director, West Bengal Green Energy Development Corporation Limited

Shri Shailendra Shukla, Director, Chhattisgarh Renewable Energy Development Agency (CREDA)

Mr. Rammesh Kumar, Chairman, Beltron Telecom Green Energy Systems Limited

Session IV:

International Perspectives

Session Chairperson:

Climate Action (Policy Focus) & Clean Technology

Mr. Alope Mookherjea, Hon. Consul, Sweden, Past President, The Bengal Chamber of Commerce and Industry, & Chairman, Flak (India) Ltd.

Overseas Perspective - Climate Action (Policy Focus): U.S.A.

Mr. Clinton Brown, Consul for Political and Economic Affairs, Consulate General of the United States of America



**Session V:
The Indian Power Paradox**

Session Chairperson:

Mr. S K Dasgupta, Vice Chairman, Development Consultants Pvt. Ltd.

Supercritical technology – roadmap for India

Mr. S Saha, Deputy General Manager, The Tata Power Company Limited

De carbonizing the Power Sector: moving to Cancun

Ms. Preeti Malhotra, Director - Power & Env. Policies, Alstom Projects India Limited

Technology and advanced metering infrastructure

Mr. Manik Basu, Senior Manager- Testing, CESC Limited

**Session VI:
Sustainability in Climate Change initiatives**

Session Chairperson:

Mr. Sutanu Ghosh, Managing Director, Ghosh, Bose & Associates Pvt. Ltd.

Sustainability in low impact building designs

Dr. Surya Pandey, International Research Relations Director, Waikato Institute of Technology

Sustaining building performance through active energy efficiency

Mr. Kandarp Mehta, Associate General Manager – Office Building Solutions, Schneider Electric India Private Limited

Generation of energy through decentralized waste treatment

Mr. A Saji Das, Director, BIOTECH Renewable Energy Private Limited

**Session VII:
Valedictory Session:
Moving forward after Copenhagen - Perspectives from Thought Leaders**

Session Moderator:

Mr. M S Unnikrishnan, Managing Director, Thermax Limited

The future of Coal

Shri Partha S Bhattacharyya, Chairman, Coal India Ltd

Beyond Mexico, the best mix for energy in India, Nuclear and Solar with eco friendly Fossil extracts

Padma Bhushan Dr. Bikash Sinha, Homi Bhabha Professor, DAE, Former Director, Saha Institute of Nuclear Physics & Variable Energy Cyclotron Centre

Technological intervention in reducing emissions in coal-fired power stations

Dr. G D Gautama, IAS, Additional Chief Secretary, Department of Power and Non-Conventional Energy Sources, Government of West Bengal

2011

Environment and Energy Conclave 2011

*Sustainable Development and
Driving Technology Advances in Future Energy*

26th – 27th August 2011, ITC Sonar, Kolkata

The Conclave will promote innovation and investment opportunities surrounding future energy technology including renewable energy. It will also present a most relevant business platform bringing together project owners and solution providers with stakeholders from both the public and private sectors. The focus will be to present solutions for a modern and sustainable energy system.

India ranked 10th among G-20 nations in 2009 in clean-energy investments, drawing investments of USD 2.3 billion. Over the next decade, it is projected to rise to number four, whatever be its policy stand, with a projected investment of USD 118 billion to USD 169 billion. And it is tipped to grow the fastest. In this context, the theme of the Conclave is most relevant.



The Conclave will answer the following questions:

- ❖ **Solar: Are we approaching parity with traditional energy sources as technology drives costs down and capacity up?**

With ever-increasing advances being made in solar technology, hear from leading companies in the sector on the state-of-the-art in crystalline Si, thin film and high-efficiency concentrated solar, as well as solar thermal technology, and how these advances are translating into lower costs and increased reliability. There would also be case study presentations on large solar projects.

- ❖ **Biofuels: Are they finally delivering on the early potential?**

Has the food or fuel debate run its course? Will algal biofuels provide the key? What is the environmental impact of biofuels? Can biofuels deliver on their promised potential? These are just some of the questions that this interactive panel will tackle in what promises to be a lively debate on the adoption of biofuels as a future energy resource.

- ❖ **Carbon Capture and Storage: Technologies and how can we move from pilot projects to widespread adoption?**

Fossil fuels look set to remain the mainstay of global energy supply – the imperative is therefore to find cleaner and more efficient ways of using them. As carbon capture and storage moves away from the pilot plant to more widespread adoption, this session will look at the legal, regulatory and financial hurdles that will need to be overcome and look at the various technologies available.

- ❖ **Smart Grids and Super Grids: Are they the key to renewable integration?**

Electricity grids are undergoing a radical transformation. Do smart grids and supergrids hold the key to security of electricity supply and the widespread integration of renewable energy technologies? This session brings together experts from leading companies in the field to assess the current status and the opportunities that grid transformation will bring.

- ❖ **Energy storage: Overcoming the technical challenges for applications as diverse as batteries for electric vehicles to grid-scale storage.**

From batteries for electric vehicles to grid-scale storage, energy storage is one of the hottest issues in the future energy sector. Hear from leading experts in the field about the latest technological advances and the challenges that remain.

- ❖ **Hydrogen: How is it delivering the fuel of the future?**

Hydrogen has long offered the enticing prospect of a zero-emission fuel for transport and stationary power applications. But it has yet to deliver on this promise at significant scale. This session will explore the real prospects for hydrogen as a key fuel in a future energy system.

- ❖ **Energy efficiency and conservation in power generation: What is happening where?**

Through case study presentations, the session would address the various energy conservation technologies in practice in power generating stations and give insights into technologies like repowering.

- ❖ **Clean coal technologies – a must-do for India.**

Coal is and will continue to be the most commonly combusted primary energy source in India. Yet, there are a number of challenges facing the coal-power sector, and there are several constraints that will affect its trajectory. There is now a broad and evolving array of technology options for coal-based power generation, unlike in the past when subcritical pulverized coal combustion was the dominant technology of choice. There are also varying concerns about the applicability of these emerging technologies in the Indian context. Thus, it is important to engage in an in-depth analysis of technology issues as well as strategic planning to allow for appropriate development of the coal-power sector.

This would be an event, which would help you immensely in your business operations; since the Conclave would discuss on-the-ground realities in the realm of future technology in the context of a sustainable energy system. The takeaway and learning would be immense since delegates would carry back the knowledge gained for possible implementation in their own organizations. Clean technology is the best response to the climate challenge, which is the most dominating issue confronting humankind and threaten the very existence of our children and future generations, unless we do something about it now.

So, do join us!



SPONSORSHIP DETAILS

Sponsorship category	Amount (Rs.)	Benefits
Platinum Sponsor	7,00,000	<ol style="list-style-type: none">1. Organization to be recognized as the event promoter.2. Display of organization logo on the main seminar banner.3. Insertion of sponsor brochures in the delegate folder.4. Display of the sponsor's own banner (nos. 4)5. Logo in Chamber's promotional material (if logo is provided to Chamber in advance).6. 20 delegates from sponsoring organization will not have to pay the participation fee.
Gold Sponsor	4,00,000	<ol style="list-style-type: none">1. Display of organization logo on the main seminar banner.2. Insertion of sponsor brochures in the delegate folder.3. Display of the sponsor's own banner (nos. 2)4. Logo in Chamber's promotional material (if logo is provided to Chamber in advance).5. 10 delegates from sponsoring organization will not have to pay the participation fee.
Silver Sponsor	2,00,000	<ol style="list-style-type: none">1. Display of organization logo on the main seminar banner.2. Insertion of sponsor brochures in the delegate folder.3. Logo in Chamber's promotional material (if logo is provided to Chamber in advance).4. 5 delegates from sponsoring organization will not have to pay the participation fee.
Event Supporter	1,00,000	<ol style="list-style-type: none">1. Display of organization logo on the main seminar banner.2. Logo in Chamber's promotional material (if logo is provided to Chamber in advance).3. 2 delegates from sponsoring organization will not have to pay the participation fee.

DELEGATE FEE: ₹. 5515/- (INCLUDING SERVICE TAX)

FOR Details on the Environment and Energy Conclave, 2011, please write to us:

Mr. Subhodip Ghosh

Director

The Bengal Chamber of Commerce and Industry

Royal Exchange, 6 Netaji Subhas Road, Kolkata - 700 001

Tel.: 91-33-2213 0625 (D) / 2213 0744 / 2213 1445 / 2230 3711 / 2230 3733

Cell: +91-9830708197

Fax: 91-33-2230 1289, E-mail: subhodip@bengalchamber.com