



BCC& THE BENGAL CHAMBER
Business Council of India

**environment and
energy conclave**

Sustainable
Resource
Management 2014



**environment and
energy conclave 2014**

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ITC Sonar - The Luxury Collection, Kolkata



“Over the course of the twentieth century and into the twenty-first, the relationship between the human world and the planet that sustains it has undergone a profound change. Major, unintended changes are occurring in the atmosphere, in soils, in waters, among plants and animals, and in the relationships among all of these. The rate of change is outstripping the ability of scientific disciplines and our current capabilities to assess and advise.”

“The environment is where we all live; and development is what we all do in attempting to improve our lot within that abode. The two are inseparable.”

Extract from “Our Common Future” report prepared by the World Commission on Environment and Development, 1987

The term "Sustainable Development" by itself links the two concepts of "environment" and "development" and it refers to "development seeking to meet the need of the present generation without compromising the ability of future generations to meet their own needs. It aims at assuring the on-going productivity of exploitable natural resources and conserving all species of fauna and flora."

Like Minded Developing Countries (LMDC), which includes India and China presented an early first draft for negotiating the 2015 global climate treaty. Negotiators from over 195 countries gathered in Bonn in June 2014 to put together a draft of an UN agreement that will guide climate actions over the next few decades. The focus is on operationalizing the principle of equity in the new agreement entailing

the distribution of the economic burden of climate change mitigation action across countries based on not only future emissions and economic status of the country, but also accounting for past emissions accumulated over past two centuries mostly from the developed countries.

Even as the world is waiting for a successor to the Kyoto Protocol during times which are increasingly witnessing extreme weather events, the UN's IPCC has recalibrated its projection of the risks following from global warming concluding that it had under-reported them earlier in 2007. The United States has announced a policy announcing drastic cuts in carbon pollution from power plants. Such measures, it is expected, would spur growth in the alternative energy industry. Science aside, climate change is as much a political issue as it is a human induced phenomenon. The financial crisis had seen food riots in several countries. The commoditization of water was predicted in the 1970s and growing competition for it featured in the literature in the 1990s.

It has taken about two decades to turn what appeared to be adversity into what appears to be opportunity. If conversion to green energy, for example, can be lucrative, there is an ever more valuable market yet: locations where there are no legacy energy systems of dismantle. For example, rural India has generally been starved of power. Alternative energy can be especially rewarding in such places.

The new focus is **Resource Security**. Effective management of our primary energy resources, alternative energy resources, mineral resources, land resources, water resources and biodiversity coupled with the need for a sustainable ecosystem are the driving principles behind domestic economic policies and even our foreign policy. Thus, **Sustainable Resource Management is our theme for 2014**.



The REAL agenda for our environment is actually all to do with our natural resources.

The “clean up” and “regenerate” agenda includes the following:



- Clean up our air, which is full of toxins.
 - Promote sustainable mining operations.
 - Efficiently combust primary energy, conserve primary and secondary energy.
 - Revive rivers of sewage and chemicals – River cleaning will work if pollution control strategies are adapted accordingly. Rivers need water for dilution, sewage needs to be treated in drains and treated sewage recycled and reused so that it is not mixed with untreated waste.
- Regenerate forests so that forest-based livelihoods can be encouraged, e.g., forest protection that leads to green wealth creation. An effective agenda for coexistence needs to be created, such that protection to natural habitats and benefits of protecting wildlife are shared with the locals and conservation is durable and effective.
 - Initiate a workable model for promotion of bioenergy apart from initiating programmes like solar-rooftop and mini-grid set-up such that the growth of renewable energy is primarily based on decentralized generation and aims to meet the energy needs of the underprivileged.

Therefore, **focus of the Conclave in 2014** would be to,

- a. Revisit the analytical tools that help individuals in the public and private sectors to develop reasoned policies for managing natural resources like water, mineral resources, forests, etc.
- b. Address ecological and economic interrelationships in the management of ecosystems.
- c. Valuation of ecosystem services.
- d. Optimal management of multi-use natural resources, such as forests.
- e. Motivation and behaviour of resource managers.
- f. Carbon sequestration, bio-energy, and climate change mitigation.



The challenges towards sustainable management of the country's mineral resources range from the technological issues in extraction to mining practices, and overall resource management inadequacies.

Mining has faced multiple problems in recent years. There have been problems in acquiring land for new mines and delays in government approvals. Increased judicial scrutiny following corruption scandals in the allotment of mining blocks and environmental degradation caused by illegal mining have made matters worse. The worsening current account gap, some argue, could be attributed to the policies and practices in the mines and mineral sector in the country. India imported coal worth over \$15 billion in 2012-13 while its iron ore exports were negligible compared with about \$7 billion a couple of years ago. Had there been no coal imports and had iron ore exports continued, the current account gap of \$88.2 billion in 2012-13 (4.8 per cent of gross domestic product) would have been a relatively comfortable \$66.2 billion (3.6 per cent).



Coal imports cannot be a long-term option as global prices of coal are increasing and will add to the cost of power generation. Industry players and analysts say a multi-fold solution is required to revive the mining sector. No doubt the mining sector faces plenty of problems. But the problems are not insurmountable. Sustainable mining should be the mantra and the Conclave will explore the concept further.



- India is rich in natural resources. The country produces as many as 87 minerals including fuel, metallic, non-metallic, and atomic minerals. Among the minerals, reserves of coal, iron ore and bauxite are vast and will last decades. India's coal reserves of 293 billion tonnes are the fourth largest in the world and account for nearly 10 per cent of global deposits. Bauxite reserves of 3.5 billion tonnes and iron ore deposits of 28.5 billion tonnes are the fifth and seventh largest, respectively, in the world. However, India accounts for just 0.5 per cent of the USD 10.7 billion (global budget in 2010) global spending on mineral exploration.
- Sixty years ago, India and China had comparable coal reserves and output. China's annual output now exceeds three billion tonnes while India extracted 558 million tonnes of the dry fuel in 2012-13. This fell well short of the 772.84 million tonnes the country needed that year. As a result, India had to import 140.63 million tonnes. Still, supply fell 59 million tonnes short of demand. Only consumers in coastal areas found it feasible to import as high inland transportation costs made it unaffordable for others.
- **Inevitably, coal shortage is hurting power generation. More than half the country's electricity generation is coal based, as will be 85 per cent of the new capacity coming up by 2016-17. The country lost 15.1 billion units of electricity due to non-availability of coal in 2012-13, contributing to a peak power deficit of 11 per cent and hurting economic activity.**
- Iron ore mining is buried in even bigger problems. Until a couple of years ago, India was the world's third-largest exporter of the mineral, earning \$7 billion from it annually. Exports surged from 62.57 million tonnes in 2003-04 to 117.37 million tonnes in 2009-10. The sector expanded rapidly to meet insatiable demand from China in the run-up to the 2008 Beijing Olympics. In the backdrop of recent controversies, iron ore mining has been banned or has been allotted with production caps leading to a fall in iron ore output to 135.8 million tonnes in 2012-13—from 167.2 million tonnes in the previous financial year, and exports crashed to 18.37 million tonnes. Iron ore imports, inconceivable until recently, are now a reality. Bauxite mining is also caught up in land acquisition and environmental issues. Production of this raw material, used in making aluminium, has fallen since 2007-08. As a result, aluminium output is not enough to meet demand. The country produced 1.72 million tonnes of aluminium in 2012-13, lower than demand of 1.97 million and the target of 2.06 million tonnes.



Where the
Bengal Chamber
creates value...

The Bengal Chamber of Commerce and Industry, India's oldest institution of its kind, traces its origins to 1833. For the last 180 years, the Chamber has played a pioneering role as a helmsman, steering the evolution of Commerce and Industry in India. The Chamber reviewed and commented upon some of the most critical legislations in the country. The Bengal Chamber was involved in the conceptualization of the airport in Kolkata and the Howrah Bridge and had lobbied for the creation of overland trade routes with China through Tibet. The Bengal Chamber has helped in the formation of a slew of educational and cultural institutions – Indian Institute of Management Calcutta, Indian Institute of Social Welfare and Business Management (IISWBM), Nazrul Manch and the Academy of Fine Arts apart from bringing to Kolkata the son-et-lumiere at the Victoria Memorial.

Today, from financial services, insurance, banking and taxation to focusing on the environment and energy sectors, the Chamber's range of operations is diverse and evolving over time. The Chamber today is deeply involved in areas like Healthcare, Education, Energy and

Environment, Information Technology,
Finance and Banking, Corporate
Governance, MSME

to name a few and has now assumed a multi-faceted role. Our tie-up with the European Business and Technology Centre (EBTC) on promoting clean technology access deserves special mention. Our linkages with overseas Governments, Businesses and Institutions are growing stronger by the day and we have created very relevant B2B platforms for both inward and outward investments by hosting delegations and taking regular business missions spanning continents. We have over 30 sector / area specific Committees catalyzing business growth, industrial development and socio-economic progress.

The Chamber has now taken up a new role to enable ourselves to expand our footprint to the national arena to be able to contribute more effectively to the economic activities of the nation while retaining its focus and roots in the Eastern Region. Therefore, we have launched our modernized logo (BCC&I) at the **Public Session of the AGM held on 14th September 2013, which was graced by Shri Pranab Mukherjee, President of India which was an unprecedented occasion not only for us, but for Chambers of Commerce in general.**



Development, Manufacturing, Infrastructure, Tourism –

2014

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environment and energy conclave





The Bengal Chamber in Energy and Environment Management

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 Energy and Environment Committee. Our objective is to spread awareness about the latest developments in the fields of energy and environment, the need for energy conservation, promote energy efficiency, adopt green technologies and address environmental issues arising from industrial operations.

We have also instituted the annual Environment and Energy Conclave, which is held every August and is the regional forum for discussing environmental and climate challenges and mitigation actions in sync with our industrial growth aspirations. We are also working with overseas partners representing overseas Governments (like the European Business and Technology Centre, and the British, American and Canadian embassies) in addressing development of clean technology issues and promoting B2B contacts. Recently, we have embarked on a movement at the national level committed to energizing a behavioural response to save energy by launching an e-portal (www.wattguru.com) dedicated to propagating the virtues and benefits of energy conservation. The Chamber is also engaging with value added services in energy and environment management. The Chamber has joined hands with Jadavpur University (JU), a pride of the State and a renowned centre of learning in the country, together with DFIC Management Consultants (Germany and India) to set up a "Centre for Energy and Climate Excellence (CECE)", the focus of which is to undertake consulting and research-based activities towards meeting the needs of businesses in the realms of energy conservation, energy planning and sustainable management practices.





Past Environment and Energy Conclaves and our activities in the realms of Energy, Environment and CleanTech

Links from our website, for insights on our activities in the realms of Energy and Environment.

- a. <http://bengalchamber.com/environment-and-energy-conclave.html>
(For links to the presentations, programme schedules and video recordings of the last three Conclaves in 2011, 2012 and 2013.)
- b. <http://bengalchamber.com/energyconclave/year2013/the-bengal-chamber-environment-and-energy-conclaves-snapshot.pdf>
(For the PDF file with an overview of all the Conclaves from 2008 to 2013.)
- c. <http://bengalchamber.com/agm13/pages/Energy%20and%20Environment.html>
(For an overview of all the programmes in the Energy and Environment spheres that we conducted in the last year.)



Some of the eminent speakers who have addressed

The Environment and Energy Conclave in the previous 6 years

Designations of the speakers are those which they held during the year in which they addressed the Conclave.

Some of the speakers like Dr. Kirit Parikh, a legend in the Indian energy and economic policy spheres, Dr. Ajay Mathur and Shri Partha S Bhattacharyya have addressed the programme more than once.

- **Dr. R K Pachauri**, Chairman, IPCC and Director General, TERI (Video Address);
- **Shri Shyam Saran**, Special Envoy of the PM on Climate Change;
- **Dr. Kirit Parikh**, Member, Planning Commission;
- **Shri Anil Razdan**, IAS, Secretary to the Government of India, Ministry of Power;
- **Dr. Sunita Narain**, Director General, Centre for Science and Environment (CSE); Director, Society for Environmental Communications; & Publisher, Down To Earth;
- **Dr. Ajay Mathur**, Director General, Bureau of Energy Efficiency;
- **Dr. Bikash Sinha**, Homi Bhabha Professor, DAE, Former Director, Saha Institute of Nuclear Physics and Variable Energy Cyclotron Centre, Department of Atomic Energy, Government of India;
- **Shri Manish Gupta**, Hon'ble Minister-in-Charge, Power & Non-Conventional Energy Sources, Government of West Bengal;
- **Prof. B K Dutta**, Chairman, West Bengal Pollution Control Board;
- **Mr. Pavan Sukhdev**, Founder-Director of Corporation 2020; Founder-CEO, GIST Advisory; Visiting Fellow, Yale University; and Former Special Advisor and Head of UNEP's Green Economy Initiative;
- **Ambassador C Dasgupta**, Distinguished Fellow, TERI;
- **H.E. Peter Varghese**, High Commissioner of Australia in India;
- **Shri S Narsing Rao**, IAS, Chairman-cum-Managing Director, Coal India Limited;
- **Shri Partha S Bhattacharyya**, Chairman, Coal India Limited;
- **Shri A K Debnath**, Chairman-cum-Managing Director, Central Mine Planning & Design Institute Limited (CMPDI);
- **Shri M K De**, IAS, Principal Secretary, Dept. of Power and Non-Conventional Energy Sources, Government of West Bengal;
- **Shri Sunil Mitra**, Former Revenue and Finance Secretary, Government of India and Former Power Secretary, Government of West Bengal;
- **Mr. M S Unnikrishnan**, Managing Director, Thermax Limited;
- **Dr. R R Sonde**, Chief Technology Officer and Executive Vice President, Research, Innovation & Technology, Thermax Limited;
- **Mr. Sumit Mazumder**, Vice Chairman and Managing Director, TIL Limited;
- **Mr. Shishir Joshipura**, Managing Director & Country Manager, SKF India Limited;
- **Mr. Sandipan Chakravorty**, Managing Director, Tata Steel Processing and Distribution Limited;
- **Mr. Sanjib Bezbaroa**, Vice President - Corporate EHS, ITC Limited;
- **Mr. Amitabha Mukhopadhyay**, President & CFO, Tata AutoComp Systems;
- **Ms. Malini Thadani**, Head, Group Communications, Public Policy and Corporate Sustainability, HSBC India;
- **Shri S P Gon Chaudhuri**, Ashden Award Winner and Special Advisor, Renewable Energy, Govt. of West Bengal;
- **Mr. Poul V Jensen**, Director, European Business and Technology Centre;
- **Mr. Phil Marker**, Counselor and Head, Energy, Climate and Growth Unit, British High Commission, New Delhi;
- **Ms. Nicola Watkinson**, Senior Trade & Investment Commissioner, South Asia, Australian Trade Commission;
- **Mr. Sanjay Wadvani**, OBE, Deputy High Commissioner of the UK in the Eastern Region, and many others.