



Climate Leadership Conference 1st August 2019, New Delhi

Proceedings

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Programme

Time	Description		
1030 – 1100 hours	Registration and Welcome Tea		
1100 – 1200 hours	Building disaster resilient infrastructure for the nation against climate change impacts		
	A landmark study released by the Intergovernmental Panel on Climate Change (IPCC) reveals that India is one of the most vulnerable countries in the world to global warming and will face the brunt of climate change devastation in the coming years. Their Special report on 1.5°C investigates the impacts of increase in global average temperature by 1.5°C above pre-industrial levels in the context of strengthening global response to the threat of climate change and sustainable development. Limiting global warming to 1.5°C will not leave us safe. India, as well as the rest of the world will continue to experience increasing negative impact as the temperature rises, although it would be much lesser than the calamitous effects of a 2°C warmer planet.		
	India is already losing about 1.5 per cent of its GDP every year due to climate change-related risks. This builds a stronger case for India to further invest on adaptation and build resilient infrastructure, medical facilities and undertake climate smart agriculture. Recently, the Indian government has pledged INR 480 crores towards setting up of a secretariat "Coalition for Disaster Risk Resilient Infrastructure" on the lines of International Solar Alliance and has already received support from the UN, World Bank and many developed economies which will support building standards, frameworks, R&D etc. to build resilient infrastructure. Industry will have to contribute by beginning to produce materials which can help build disaster resilient infrastructure as well as design and construct using these. The session will understand preparedness of Indian Industry on adoption of climate-resilient infrastructure, the current status and how the transition can be achieved.		
	Session Chairman and Moderator Mr. Ranganath N. Krishna, Area Managing Director, INDO Region, Grundfos		
	Chief Guest Sir Dominic Asquith, British High Commissioner to India, British High Commission		
	Speakers Ms. Purnamita Dasgupta, Chair in Environmental Economics and Head, Environmental and Resource Economics Unit		
	Mr Kamal Kishore, Member, National Disaster Management Authority		
1200 – 1300 hours	Start-up eco-system on innovation in India		

	India has been very active in creating a healthy startup ecosystem, and growth in the number of startups is increasing year-on-year. In fact, India is among the top five startup communities in the world. With a young and inspired pool of entrepreneurs, our country saw a 40% growth in the number of startups and incubators in 2016-17. The objective of this session is to unlock India's Cleantech potential that addresses climate change effectively. The panelists who have themselves addressed climate change impacts by way of innovation and invention will share their insights on challenges and achievements of the startup ecosystem on innovation in the climate change space. This session will focus on how the Indian startup ecosystem fared in 2017-18. Session Moderator Mr Shikhar Jain , Principal Counsellor, Confederation of Indian Industry		
	Speakers Mr. Rahul Singh, Founder & CEO, City Filters, Winner at Climate Launchpad		
	Ms. Bharti Singhla , Chief Operating Officer, Chakr Innovation, 2017 winning company at Climate Solver, World Wild Fund-India		
	Mr. Kevin J Houston, Co-founder & Director, Carbon Masters India, 2017 winning company at Climate Solver, World Wild Fund-India		
1300 – 1400 hours	Lunch		
1400 – 1445 hours	Challenges that industry faces in accounting supply chain greenhouse gemissions and what is the way forward		
	If India needs to contribute to the global commitments and also remain a competitive choice in the international market, companies supply chains consisting mainly of small & medium enterprises (SME) need to also reduce their Greenhouse gas (GHG) emissions. GHG emissions in supply chains are on an average four times higher than those of a company's direct operations.		
	Weak collaboration among suppliers and buyer on environmental matters, variations due to maturity of suppliers when it comes to GHG management and no incentives for suppliers to reduce GHG emissions are the limiting factors for the inclusion of supply chain parameters in the overall GHG emission inventory of large companies. Therefore, fiscal and policy instruments need to be developed. This session will discuss the critical challenges that companies face when accounting for supply chain emissions, what steps are needed, what policy changes are needed, and how to design incentives to bring inclusivity.		
	Session Moderator Ms. Seema Arora, Deputy Director General, Confederation of Indian Industry		
	Speakers Mr. Raju B Ketkale, Senior Vice President and Environment Director, Toyota Kirloskar Motor Pvt Ltd.		
	Mr Debajit Das , National Project Coordinator for Energy Efficiency, United Nations Industrial Development Organization (UNIDO)		

1445 – 1515 hours	Recognition Ceremony – Climate Action Programme 2.0°	
	Opening remarks and welcome by Mr B Rajagopal, President, DSM	
	Address by Mr Sumant Sinha , Co-Chairman, CII Climate Change Council, Chairman and Managing Director, Renew Power	
	Presentation of Awards	
	Address by Chief Guest, Shri C.K. Mishra , Secretary, Ministry of Environment, Forest and Climate Change	
	Closing remarks by Ms Seema Arora, Deputy Director General, Confederation of Indian Industry	
	Close	
1515 – 1600 hours	High-level session – New government's agenda on Climate Change	
	The objective of this session is to crystallize India's position for the upcoming United Nations Secretary General (UNSG) Climate Change Summit where India would lead the discussion on "Industry Transition" along with Sweden. The objective of the session will be to understand whether India will develop ambitious targets for key sectors in addition to its NDC commitments or do the communicated NDCs need to be re-evaluated.	
	Both India and China are also dealing with a serious situation of air pollution and carbon emissions plays a big role in that too, having strong climate policy will reap benefit for countries like India and China. Both China and India are making headways in addressing the air pollution issue through policies and schemes. Learning from the China experience and especially the "China Blue Skies Environmental Policy" will be valuable. However, key questions remain that needs addressing;	
	 progress and challenges in terms of current NDC targets from both countries and what are the areas where there can be collaborations By year 2020 parties, are expected to announce revised targets, what kind of targets can be expected to be announced and what role market mechanisms under article 6 will play in achieving the targets. is the time opportune to bring carbon emissions under air pollution category to make faster progress in this dual challenge. 	
	Session Chairman Mr Sumant Sinha, Co-Chairman, CII Climate Change Council, Chairman and Managing Director, Renew Power	
	Key speakers Mr Jiang Wei Ming, Country President for China, DSM	
	Mr Nitin Desai, Chairman, The Energy and Resources Institute	

Building Disaster Resilient Infrastructure for the Nation against Climate Change Impacts

A landmark study released by the Intergovernmental Panel on Climate Change (IPCC) reveals that India is one of the most vulnerable countries in the world to global warming and will face the brunt of climate change devastation in the coming years. India ranks as the 6th most vulnerable nation in the global climate risk index. The economic losses caused by climate change have been more than 80 billion dollars for India. India is urbanizing at a rapid rate and there is huge demand for infrastructure to keep pace. Therefore, it is necessary to have good planning in processes, risk assessment, methodology, risk matrix, compliances, standards as well as regulation of infrastructure development.

Challenges

- Regulatory
 - There is a misconception that post disaster preparedness/response is a government sector responsibility.
 - Private sector does not take up responsibility for building resilience for disasters.
- Financial
 - There is a gap in budgets for building climate resilient infrastructure. Companies mostly do not consider it a matter of concern to incorporate this aspect into the infrastructure and their operations.
 - Costs while planning for the long-life of the infrastructure are not factored in.
- Social
 - We generally tend to ignore a low probability high risk event. Humans tend to resist any change in their comfort zones and maintain status-quo, and accordingly fail to anticipate the biases in decision making.
- Environmental
 - Failure on the part of public/private sector to harness alternate forms of environmental resources i.e. solar energy, wind power etc. because there is a delay by the regulatory bodies in giving clearance for renewable projects.

Present/Proposed Solutions:

- Provision for self-generated adoption of standards in infrastructure projects, for example: road, water and telecom sector projects. Presently, there are no standards for building towers, following a pro-active approach in adhering to standards for these projects will help in the long run.
- The business continuity plan should to be ingrained at the project planning stage. For example; the business continuity plan for infrastructure projects in the long run

will help sustain through the disaster and will be effective in disaster preparedness and response.

- Systems thinking must be incorporated at all levels. Since, the ecosystem in which businesses operate is one system and all the processes/sectors are integrated. This has to be considered while building resilient infrastructure against the climate change impacts.
- Need to create conditions where finances are easily accessible to build climate resilience.
- Responsibility should be taken up by the private sector as well operating in different regions, to build climate resilient infrastructure.



From Left to Right: **Mr Kamal Kishore**, Member, National Disaster Management Authority; **Mr. Ranganath N. Krishna**, Area Managing Director, INDO Region, Grundfos; **Sir Dominic Asquith**, British High Commissioner to India, Ms. **Purnamita Dasgupta**, Chair in Environmental Economics and Head, Environmental and Resource Economics Unit



Sir Dominic Asquith, British High Commissioner to India

Start-up Eco-system on Innovation in India

A recent BBC article quoted that the world has 12 months to act before catastrophic unchangeable effects of climate change will start. Start-ups, especially those providing technology driven solutions can assist in combatting these issues of pollution and climate change with scalable and economical solutions.

Challenges

- Regulatory
 - Challenge in the amount of time government takes to whet and accept solutions provided by start-ups
- Financial
 - Stringent procedures of banks/financial institutions to provide loans to start-ups becomes an inhibiting factor
- Social
 - Lack of freely available data inhibits local populace from taking decisions related to exposure to air pollution
 - Breaking the stereo-typical mindset that sustainability requires additional steps to be taken by the consumer/user is a challenge
- Environmental
 - Traditional biogas models
 - Normally biogas has lower calorific value which inhibits its commercial usage

Present/Proposed Solutions:

- Purified biogas can provide gas at 92% methane content, which in compressed form can deliver constant 200 bar pressure and lead to savings of 15% w.r.t LPG for commercial restaurants. This purified gas can be used in CNG vehicles without retrofitting.
- End-of-pipe solutions such as collecting Particulate Matter (PM) from Diesel Generators (DG) can assist in reducing PM content at exhaust by 70 to 90%. The collected PM (majorly carbon black) can be used to make inks and dyes.
- Connecting mobile Air Quality Purifiers and monitors to vehicles offer the opportunity to measure real time air quality across locations and understand trends.



From Left to Right: **Mr. Rahul Singh**, Founder & CEO; **Mr. Kevin J Houston**, Co-founder & Director, Carbon Masters India, **Mr Shikhar Jain**, Principal Counsellor, CII; **Ms. Bharti Singhla**, COO, Chakr Innovation



Mr. Rahul Singh, Founder & CEO, City Filters, Winner at Climate Launchpad

Challenges that Industry Faces in Accounting Supply Chain Greenhouse Gas Emissions and what is the Way Forward

Supply chain emissions are normally four times higher direct emissions from business operations. Emission accounting is the first step towards emission reduction which has been quite challenging for the SMEs in India. Beyond energy efficiency (which has a business case), industry needs to increase efforts on supply chains. Accounting supply chain emissions is voluntary at this moment, it is increasingly becoming mandatory to report supply chain emissions as emphasis moves towards scope-3 emissions. SMEs usually do not collect emissions data due to lack of awareness or there is no requirement for accounting emissions under traditional consent operation mechanism from statutory bodies. Financial investment does not come so easily for SMEs which is why incentive schemes by various agencies, public and private, especially large companies are required. Some of the key solutions are creation of revolving funds for SMEs and GHG protocol and laying out few guiding principles which make good ingredients for success of supply chain initiatives by large companies.

Challenges

- Regulatory
 - No requirement for accounting emissions under traditional consent operation mechanism from statutory bodies
 - Reporting supply chain emissions is increasingly becoming mandatory as emphasis moves to scope-3 emissions
- Financial
 - Financial risks associated with new GHG reduction measures
 - o Financial investment does not come so easily for SMEs
- Social
 - India has 25 crore SMEs in different layers, 90% of which are in the category of micro-enterprises which increases the inherent challenge as below
 - o SMEs usually do not collect emissions data due to lack of awareness
 - SMEs lack capacity to prioritise emission reductions
- Environmental
 - Beyond energy efficiency, which has a clear business case, industry needs to increase efforts on supply chain emissions
- Technological and Technical
 - Transparency, accuracy, consistency have been very challenging for scope-3 emissions due to inherent issues listed below
 - Boundary/scope of supply chain emissions
 - Consistency of emission accounting method across all suppliers
 - Accounting methodologies are constantly evolving, and their standardisation is underway
 - Technology risks associated with new GHG reduction measures

Present/Proposed Solutions

Present Solutions in TKM:

- Companies should have supply chain initiatives with partners and dealers with a strong focus on climate change.
- Green procurement in all procurement guidelines should be encouraged
- Compliance to environment management standards: ISO 14001 for all players in supply chain should be mandatory.
- TKM has energy and GHG monitoring tool at the shop/factory level and providing handholding to suppliers/SMEs is big part of their efforts, lasting a decade now.
- Identification of high energy consuming suppliers should be undertaken and accordingly the focus of their handholding efforts (disseminating best practices and undertaking capacity development).
- Capacity building should be encouraged for suppliers. In TKM, cluster concept is used by the company to target key suppliers, who are brought to the company and provided awareness and training workshops.
- TKM has been able to turn water, GHG and energy savings into sustainable business cases and has been communicating these to all suppliers.
- TKM is earning money by accruing environmental/climate benefits and it has taken commitment from all major suppliers who are periodically audited by the company.

Present/Proposed Solutions by UNIDO:

- There is a need for new financial models for addressing the need of SME sector as India has 25 Crore SMEs in different layers.
- There needs to be shared understanding and aspiration between supplier and buyer on this. This depends on specific contextual factors such as- how long the company has been in business, its know-how on synergy of SMEs into industrial operations, and how well it understands integration of sustainability into business operations.
- There is a need to break the mental barriers.
- Businesses need to proactively undertake stipulated measures.
- There is a need to bring consistency in GHG accounting methodologies is therefore important as suppliers may choose different methodologies.
- It is important to convince the supplier that it is win-win situation for everybody by providing clarity on measures and business case.
- Creation of revolving funds for SMEs is a clear step in the direction to convince them for demonstrate measures while covering their technological and financial risks.



From Left to Right: **Mr. Raju B Ketkale**, Senior Vice President and Environment Director, Toyota Kirloskar Motor Pvt Ltd; **Ms. Seema Arora**, Deputy Director General, CII; **Mr Debajit Das**, National Project Coordinator for Energy Efficiency, UNIDO



Mr Debajit Das, National Project Coordinator for Energy Efficiency, UNIDO

Recognition Ceremony – Climate Action Programme 2.0°

Shri C K Mishra, Secretary, Ministry of Environment, Forest and Climate change expressed that climate change is a very real threat and government as regulators do not have a choice but to make the regulations tougher. He further stated that "the entire story about development versus environment is not a sustainable one. We can easily do both through technological intervention." Citing the example of cement industry, which is one of the hard to abate segments, he lauded the wonderful job with respect to mitigation. Shri Mishra recognized the winners of the CAP 2.0 in New Delhi on 1 August 2019.

Shri Mishra further emphasized that "Reduction of emission is the right path and government is willing to hand hold all efforts of industry in this regard. However, government and industry need to be on the same page with respect to every stage of rules and regulations." He emphasized that we owe it to the future generations to reduce emissions

The Climate Action Programme (CAP) 2.0°, a recognition programme to recognize business actions in combating climate change, was introduced by CII in 2018 in partnership with DSM. This aims to acknowledge credible action taken across all sectors to adapt to or mitigate climate change.

Six companies, including four large and 2 SMEs received the first ever climate action recognition under the CII Climate Action Programme (CAP 2.0°)

Award category	Company	Sector
Resilient	ACC Ltd	Energy, Mining and Heavy Manufacturing
Oriented	Dalmia Bharat Limited	Energy, Mining and Heavy Manufacturing
	Delhi International Airport Ltd.	Infrastructure
Committed	Toyota Kirloskar Motors	Light Manufacturing
	Kings International Ltd.	Small and Medium Enterprise Sector
	Sierra ODC Private Limited.	Small and Medium Enterprise

Mr. Sumant Sinha, Co-Chair, CII Climate Change Council, Chairman and Managing Director, ReNew Power, said "Going forward, how companies address climate change is very important and provides a competitive advantage. Also, peer to peer exchange of learnings in the same industry sector is necessary to benchmark performance in terms of best practices".

Mr B Rajagopal, President DSM, congratulating the winners said that it has been an honour to partner with CII on the Climate Action Programme and Awards. He also said "this platform aims to create greater consciousness and commitment amongst corporates on climate impact and action. As a purpose led and performance driven company, DSM believes that 'Doing Well and Doing Good' go hand in hand. We do this by improving our own operations and impact, enabling those of our customers & partners to delivers sustainable solutions and advocating for the future we believe in. Together we will make a difference and create brighter lives for all".

In the first cycle of CAP 2.0, 20 large companies and 50 SMEs participated. The applicants underwent a rigorous evaluation process that included on-site assessment by a peer team of CII-certified assessors who spent approximately 700 man-hours per application over a period of six months. The final shortlist of applicants was validated by a pre-eminent jury comprising of leaders from government, civil society and academia.



From left to right: **Ms Seema Arora**, Deputy Director General, Confederation of Indian Industry; **Mr Sumant Sinha**, Co-Chairman, CII Climate Change Council, CMD, Renew Power; **Shri C.K. Mishra**, Secretary, **Mr B Rajagopal**, President, DSM.



Mr B Rajagopal, President, DSM



Mr Sumant Sinha, Co-Chairman, CII Climate Change Council, CMD, Renew Power

High-level Session – New Government's Agenda on Climate Change

India and China can play a major role in leadership by the work both the nations have been doing with respect to economic growth and environment. Both the nations are developing countries with the largest population, which will result in more emissions. The countries are also vulnerable to the impacts of climate change. Hence, working on climate change mitigation and adaptation is in the interest of both the nations as well as the world. It is a common duty to grow sustainably without committing the same mistakes that were done in the past. It is the responsibility of the industries, and not just the governments, of both the nations to take ambitious steps in reduction of emissions.

Challenges

• By 2030, global population might reach 10 billion – increasing demand of energy, goods and other services for better lifestyle.

Present/proposed solutions:

- In China, with the coming of new Government in 2013, there was a shift in mentality from becoming the manufacturing hub because of cheap labor, land and available resources to more focus on quality over quantity, poverty alleviation and better life for citizens.
- Increasing share of renewable energy and increase in energy efficiency.
- DSM-China has been investing in probiotics instead of antibiotics for healthier animals.

Jiang:

"People talk about geo-political issues, but global issues are something people cannot avoid."



From left to right: **Mr Sumant Sinha**, Co-Chairman, CII Climate Change Council, Chairman and Managing Director, Renew Power; **Mr Nitin Desai**, Chairman, The Energy and Resources Institute; **Mr Jiang Wei Ming**, Country President for China, DSM



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