

# WORLD SUSTAINABLE DEVELOPMENT SUMMIT 2020

## TOWARDS 2030 GOALS MAKING THE DECADE COUNT

January 29-31, 2020, India Habitat Centre, Lodhi Road, New Delhi, India



#Act4Earth

SUMMIT BULLETIN | DAY 1

29 January 2020 | India Habitat Centre, New Delhi, India

### INAUGURAL SESSION

- Welcome Address:** Mr Nitin Desai, Chairman, TERI
- Presentation of the Sustainable Development Leadership Award**
- Making the Decade Count – Flag off:** Dr Ajay Mathur, Director General, TERI
- Inaugural Address:** Mr Prakash Javadekar, Hon'ble Union Minister of Environment, Forest & Climate Change, Govt of India
- Vote of Thanks:** Dr Annapurna Vancheswaran, Senior Director, TERI



Dignitaries on stage during the inaugural session

The World Sustainable Development Summit (WSDS) 2020 laid focus on the last decade before the realization of the 2030 Sustainable Development Goals.

In his welcome address during the inaugural session, Mr Nitin Desai emphasized on the need for practical expression of the term 'sustainable development', acting as a bridge to integrate the agendas of development and environment.

It was TERI's honour to felicitate Prof. Jeffrey D Sachs with the Sustainable Development Leadership Award 2020 for his contribution in the field of sustainable development. In his acceptance address, Prof. Sachs stated the importance of shifting the geopolitics of tomorrow from the current politics of power and crime to politics of problem solving.

In his welcome address, Dr Ajay Mathur stressed on the urgent need to assess the present situation and take steps to restore our ecosystems to achieve the 17 SDGs and the Paris Agreement. He also highlighted the importance of fostering new partnerships and strengthening existing



### MR PRAKASH JAVADEKAR

Hon'ble Union Minister of Environment, Forest & Climate Change, Government of India

“India presents a new example on how to follow multilateral treaties and thus gains the status of a responsible country”

ones. Dr Mathur welcomed the Summit delegates to the first edition of a joint venture with IFAT Delhi, focusing on technological innovations in the sector of water and waste management solutions.

In his inaugural address, Mr Prakash Javadekar expressed his satisfaction in India's role in sustainable

consumption and emphasized on an urgent need of change in lifestyle as mentioned in the preamble of the Paris Agreement. He pointed out that India realizes that climate action has a cost and thus, there is an emerging need for open source technology for climate change innovations. He listed India's accomplishments in the field of sustainable development including an increase in green cover and aggressive afforestation.

Enumerating the Summit sessions that will set a path for action and 'make the decade count' for a brighter future for the next generation, Dr Annapurna Vancheswaran concluded the session by thanking the Summit partners and delegates across the sector for their presence and taking part in the Summit deliberations.

The Delhi chapter of Messe München India's trademark show, IFAT, was launched alongside the WSDS 2020. The exhibition focused on upcoming clean technologies which included water, sewage, solid waste, and recycling innovations.

### WSDS 2020 PARTNERS

Supported by	Country Partners	Corporate Conclave Partners	Co-Located Exhibition
Associate Partners	Subscribers	Outreach Partners	

### THEMATIC TRACK PARTNERS

### Sustainable Development Leadership Award (SDLA)

A significant feature of the WSDS is the Sustainable Development Leadership Award which was instituted by TERI in 2005. This Award felicitates global leaders for their contributions in the field of sustainable development and environmental protection.



Prof. Jeffrey D Sachs was awarded the Sustainable Development Leadership Award 2020. Recounting his long association with the Summit platform, he said, **“it has been a profound honour for me to be a part of this wonderful and unique Summit for 20 years. Time flies in the blink of an eye, and each year we continue to debate, learn, and discuss the challenges ahead.”** However, he added, that the problem remain unsolved. Moreover, the world continues to face dire environmental crises. Mega forest fires in many parts of the world caused devastation while air pollution peaks in many cities of India. **“This Summit continues to have the perseverance, knowledge, intelligence, and leadership that is keeping up the fight. I have been here for many years, and I will keep coming till this job is done.”**



Prof. Jeffrey D Sachs, University Professor, and Director, Center for Sustainable Development, Columbia University, felicitated with the SDLA 2020 for his contribution in the field of sustainable development

The past recipients of the award from 2005 to 2019 include:

- 2019** Rear-Admiral (Retired) Josaia V Bainimarama, CF (Mil), OStJ, MSD, jssc, psc, Hon'ble Prime Minister of Republic of Fiji
- 2016** Mr Pawan Kumar Chamling, Hon'ble Chief Minister, Sikkim
- 2015** Dr José Manuel Durão Barroso, Former President of European Commission and Former Prime Minister of Portugal
- 2014** Mr Anand Mahindra, Chairman and Managing Director, Mahindra & Mahindra Ltd
- 2013** HE Mr James Alix Michel, President of the Republic of Seychelles
- 2012** HEMs Tarja Halonen, President of Finland

- 2011** Dr Manmohan Singh, Hon'ble Prime Minister of India
- 2010** HE Mr Yukio Hatoyama, Prime Minister of Japan
- 2009** HE Mr Ban Ki-moon, Secretary-General, United Nations
- 2008** HE Mr Maumoon Abdul Gayoom, President of Maldives
- 2007** HE Mr Arnold Schwarzenegger, Former Governor, State of California, USA
- 2006** HE Prof. Ernesto Zedillo, Former President of Mexico and Director, Yale Centre for the Study of Globalization, USA
- 2005** Dr Shoichiro Toyoda, Honorary Chairman and Member of the Board, Toyota Motor Corporation, Japan

### About IFAT

A world leader in the truest sense of the word, IFAT—the world's leading trade fair for Water, Sewage, Solid Waste, and Recycling—is active across the globe offering innovations, resources, and solutions, specifically to tackle those challenges present across various markets. In addition to the event in Munich, IFAT also hosts individual trade fairs in China, India, Turkey, and South Africa as part of a global network for decision makers in businesses operating in the environmental technology sector.



### LAUNCH OF IFAT Delhi 2020

#### North India's Trade Fair for Water, Sewage, Solid Waste, and Recycling

The first edition of IFAT Delhi is being co-located with the WSDS 2020. IFAT Delhi was inaugurated by Mr Prakash Javadekar, Hon'ble Union Minister of Environment, Forest & Climate Change, Government of India during the WSDS 2020 on January 29, 2020. With the launch of the first edition of IFAT trade fair in New Delhi, Messe München India (MMI) aims to establish the trade fair as a strong platform for the environment community in the country's north.

The trade fair is showcasing the latest technologies for waste water treatment, water extraction, waste management and recycling, waste-to-energy, and air pollution.



## THEMATIC TRACKS: GROUP A

### Forest – A Tool for Adaptation and Mitigation of Climate Change

**Chair:** Dr Rajiv Garg, IFS, Principal Chief Conservator of Forests and Head of Forest Force, Uttar Pradesh Forest Department

**Speakers:** Mr Subhash Chandra, IFS, Principal Chief Conservator of Forests, Goa Forest Department; Dr J V Sharma, Director, TERI; Mr Kundan Burnwal, Technical Advisor, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH; Dr David R. Easterling, Director, National Climate Assessment Technical Support Unit, Centre for Weather and Climate, NOAA's National Centres for Environmental Information; Dr Kenneth E Kunkel, Lead Scientist for Assessments North Carolina State University



### DR RAJIV GARG

IFS, Principal Chief Conservator of Forests and Head of Forest Force, Uttar Pradesh Forest Department

“Trees outside forest shall play a key role in achieving India's forestry sector NDC targets”

on 'Meeting the Challenges of Human-Wildlife Conflict Reconciliation in Dudhwa Tiger Reserve'.

Dr J V Sharma highlighted the importance of India's NDC targets, specifically emphasizing on creating an additional carbon sink of 2.5 to 3 billion tonnes of CO<sub>2</sub> equivalent through additional forest and tree cover by 2030. Mr Kundan Burnwal emphasized on the need to work on reducing the fuel wood dependence on forests for energy needs of the local communities. Dr Kunkel and Dr Easterling highlighted the importance of climate modelling as a tool for regional studies in determining climate scenarios.

Forests in India are treated primarily as social and environmental resources, only secondarily as commercial resource. The thematic track 'Forest – A Tool for Adaptation and Mitigation of Climate Change' geared up discussions during the session on strengths, gaps, and opportunities of the climate change adaptation and mitigation by the forestry sector. The discussion focused on the major challenges being faced in the forestry sector which are deforestation, degradation, overgrazing, conversion to other land uses, forest fires, excessive fuel wood collection, weak institutions and poor governance, socio-economic factors, and the impacts of globalization.

The chair for the thematic track, Dr Rajiv K Garg delivered the welcome address. The session started with the release of the policy brief on 'Carbon Finance - Solution for Mitigating Human-Wildlife Conflict In and Around Critical Tiger Habitats of India' and a strategy brief



### Energy Management Solutions for SMEs

**Welcome Address:** Dr Girish Sethi, Senior Director, TERI

**Inaugural Address:** Mr Amal Sinha, CEO, BRPL

**Keynote Address:** Prof. Kazuhiko Takeuchi, President, Institute for Global Environmental Strategies, Japan

**Speaker:** Mr Milind Deore, Director, Bureau of Energy Efficiency, Govt of India

**Chair:** Dr Girish Sethi, Senior Director, TERI

**Panelists:** Mr Toshizo Maeda, Deputy Director of Kansai Research Centre, IGES; Mr Toshinori Hamaguchi, Programme Manager, IGES; Mr Kengo Akamine, Senior Representative, JICA; Ms Aimi Iseda, Representative, JICA; Mr Yuki Yoshida, Second Secretary (Environment), Economic Section, Embassy of Japan in India; Dr Anand Shukla, Senior Thematic Advisor, Swiss Agency for Development and Cooperation (SDC); Mr Debajit Das, National Project Coordinator, UNIDO; Mr A K Asthana, Senior Technical Specialist, GIZ; Mr A Chandra Sekhara Reddy, CEO, APSECM; Mr Subrata Chakrabarty, Manager, Climate, WRI; Dr Debalina Sengupta, Associate Director, Texas A&M Energy Institute; Mr Debidas Goswami, Senior Advisor, International Copper Association; Mr Ajay Kaundal, HOG (Demand Side Management), Tata Power DDL; Ms Disha Sharma, Energy Efficiency Analyst-India, International Energy Agency; Mr Sambit Nayak, Mitigation Specialist Asia Pacific, Climate Technology Centre & Network (CTCN)



### DR DEBALINA SENGUPTA

Associate Director, Texas A&M Energy Institute

“Life cycle assessment approach and process integration, a must for better solution”



The thematic track titled 'Energy Management Solutions for SMEs' focused on developing sustainable, low-carbon pathways for the growth of the SME sector. Senior representatives from policy, technology providers, business associations, financial institutions, and support organizations attended the event.

Delivering the welcome address, Mr Girish Sethi said that IGES and TERI are proposing to build on the ongoing initiatives undertaken in the SME sector to accelerate the

adoption of clean, energy-efficient solutions through development and replication of cluster-level energy management models in selected energy-intensive MSME clusters/sectors. Adding to that, Prof. Kazuhiko Takeuchi briefed about Japan-India Technology Matchmaking Platform (JITMAP) which has supported B2B through awareness/capacity building events, feasibility studies of new technologies, and policy dialogue.

Mr Milind Deore gave a brief introduction on the various activities of BEE, such as PAT scheme for large

industries, SME programme for capacity building, technology demonstration, energy mapping, and SIDHIEE knowledge portal on SMEs.

Three areas were primarily discussed to benefit SMEs: (i) identification of suitable technology, (ii) viable business model, and (ii) supporting policy for large-scale replication of energy-efficient technologies.



## Tracking India's NDCs: Methodologies and tools for tracking progress on mitigation and adaptation policies/actions in India

**Speakers:** Mr R R Rashmi, Distinguished Fellow, TERI; Dr Henning Wuester, Director- Initiative for Climate Action Transparency (ICAT); Mr Jyoti Prasad Painuly, Senior Researcher, UNEP-DTU Partnership; Mr Anand Kumar Singh, Director, Department of Heavy Industry, Ministry of Heavy Industries and Public Enterprises, Government of India; Mr Pankaj Bhatia, Deputy Director, Climate Programme and Director, GHG Protocol, WRI; Dr J R Bhatt, Scientist G, MoEF&CC, Government of India; Dr Siva Prasad Bitragunta, Scientist and Head, Bio Technology Division and National Adaptation Fund for Climate Change, EPTRI, Telangana; Mr Abhishek Kaushik, Associate Fellow and Area Convener, TERI; Dr J R Bhatt, Scientist G, MoEF&CC, Government of India; Dr P C Maithani, Scientist G, MNRE, Government of India; Mr Vijay Menghani, Chief Engineer, Renewable Project Monitoring, Central Electricity Authority, Ministry of Power, Government of India; Ms Swati Pillai, Research Associate, TERI; Dr M Prabhakar, Principal Scientist, NICRA-ICAR; Mr Saba Kalam, Programme Officer, Climate Change and Energy, UNDP

Mr R R Rashmi, during the opening session, stressed on the need to look into the MRV framework that can help countries to report on their progress on climate change action under the Paris Agreement. He highlighted some of the key challenges that India is facing while developing such frameworks. This was followed by the Summit Mr H Wuester who highlighted the activities being undertaken as part of the Initiative on Climate Action and Transparency (ICAT) in both mitigation and adaptation. The first session on MRV frameworks for mitigation began with a presentation on TERI's recent involvement in preparing MRV frameworks for the renewable energy, transport and building sectors. Discussants further highlighted the need to progress at the sub-national level and incentivize data holders regarding their contribution to India's international communications. The second session on MEL frameworks for adaptation actions in India began with a presentation on efforts undertaken in India towards developing frameworks to monitor progress of actions in the agriculture sector. The panel discussion elaborated on the progress and MEL activities for major adaptation-relevant initiatives like National Initiative on Climate Resilient Agriculture and Resilient Agriculture Households. This was followed by highlights of WRI's recent initiative on building capacity as an aid to strengthen the development of MEL frameworks.



### DR JR BHATT

Scientist G, Ministry of Environment, Forest & Climate Change, Government of India

“The countries that can mitigate are richer than those who have to adapt”

## Mainstreaming Development and Enhancing Climate Resilience: New Opportunities for States in India

**Chair:** Dr Prodipto Ghosh, Distinguished Fellow, TERI

**Presentation by:** Ms Neha Pahuja, Fellow, TERI

**Speakers:** Mr Mudit Kumar Singh IFS, PCCF & HoFF and Nodal Officer, Chhattisgarh State Centre for Climate Change; Dr Lokendra Thakkar, General Manager and Coordinator State Knowledge Management Center on Climate Change; Dr Hemant Kumar Badola, Former Advisor to Chief Minister, Government of Sikkim on Biodiversity, Climate Change & Green Think Tank Facilitator, and Ex Scientist G Freelance Expert (Biodiversity Conservation & Climate Change); Dr Ravinder Palakurthy, Assistant Professor, Mahatma Gandhi Institute for Combating Climate Change; Dr Nisha Mendiratta, Advisor and Scientist 'G' Department of Science and Technology (DST); Dr Ashish Chaturvedi, Director - Climate Adaptation & Climate Finance GIZ; Dr Preeti Soni, Chief-Climate Change, Resilience & Energy United Nations Development Programme; Dr Divya Datt, Programme Manager, United Nations Environment Programme, India; Mr Soumik Biswas, Senior Consultant - Climate Finance Network, Oxford Policy Management Limited; Dr Sebastian Helgenberger, Research Group Leader, Institute for Advanced Sustainability Studies, Postdam

Development and climate change often seem to be in an uncomfortable juxtaposition. But, in this age of awareness of sustainability and climate action, especially after the introduction of NAPCC and the SAPCCs under them, it does sound possible for development and climate action to go hand-in-hand.

Dr Prodipto Ghosh, who was the Chair of the thematic track, said that mainstreaming of development and enhancing climate resilience is the “underlying philosophy” of the NAPCC and the SAPCCs. The implementation of these action plans were on the “intersection of two sets” which is the need of the hour for sustainable development and to achieve climate resilience.

Ms Neha Pahuja emphasized on the lack of technical expertise, interdepartmental coordination, finance, and lack of granular data.

Other speakers spoke about the challenges in their respective states. Mr Mudit Kumar Singh remarked that the SAPCC for Chhattisgarh merely remained on paper without much satisfactory action.

Dr Ashish Chaturvedi said that distributed leadership and orientation are utmost priorities, and science-based

data and policy framing should be taken into consideration. Dr Preeti Soni said, “SAPCCs cannot be a standalone plan, it has to be mainstreamed in different plans”.

Closing the event, Dr Sebastian Helgenberger made a pertinent point and said, should we want climate action to accelerate, the market needs to open up to a lot of players, as old players play along archaic lines and fail to open up to new opportunities.



### DR LOKENDRA THAKKAR

General Manager and Coordinator, State Knowledge Management Center on Climate Change

“Science-based policy making is not a myth. Science is a factor for policymaking in climate change”



Mr SP Singh Parihar, in his keynote address, highlighted the transition in the field of air pollution monitoring from manual to automatic to finally satellite-based products. The discussions ranged from air pollution scenario in India to being a regional issue and not just city centric. Interventions on sectoral and regional levels as documented in National Clean Air Programme (NCAP) policy were applauded. In all the addresses, the emphasis was on collaborative approach being followed in air pollution between scientific community and policy makers. Some of the high polluting sectors such as transportation, open agricultural residue burning, residential (use of biomass for cooking), and so on were discussed in depth. The role of urban governance in combating the menace of air pollution was stressed. The session concluded with the launch of the report ‘Accelerating City Progress on Clean Air: Innovation and Action Guide’.



## Multi-level Actions to Strengthen NCAP

**Speakers:** Mr S P Singh Parihar, Chairman, CPCB; Mr Satyendra Kumar, Deputy Secretary, MoEF&CC; Mr O P Agarwal, CEO, WRI; Dr Niveta Jain, Principal Scientist, ICAR-IARI; Mr Karthik Ganesan, Research Fellow, CEEW; Dr Tom Matte, Vital Strategies;

**Moderator:** Dr Sumit Sharma, Director, TERI

## Air Quality Management at City Level

**Speakers:** Dr Prashant Gargav, Member Secretary, Central Pollution Control Board; Dr M Sudheendra Rao, Chairman, Karnataka State Pollution Control Board; Ms Frances Beinecke, President Emeritus, NRDC; Dr Ashok Ghosh, Chairman, Bihar State Pollution Control Board; Dr Anju Goel, Fellow, TERI

**Moderator:** Ms Priya Shankar, Indian Director, Environment Programme, Bloomberg Philanthropies

The session was majorly aimed at state level air pollution issues along with various city level initiatives taken in Karnataka, Bihar, Gujarat, and NCT of Delhi. The discussion stressed on the sources outside the city boundary, which contribute to the depreciating air quality of the city. Role of cost benefit analysis (CBA) in the action plan management was also highlighted as it allows for sustainable and holistic development of policy.

## Managing Intermittency of Demand and Supply at Electricity Distribution-level

**Welcome Address:** Dr Ajay Mathur, Director General, TERI

**Inaugural Address:** Lord Adair Turner, Chair, Energy Transitions Commission

**Special Remarks:** Mr Jarnail Singh, Deputy Director, MacArthur Foundation

**Key-Note Address 1:** Prof. (Dr) S C Srivastava, Department of Electrical Engineering, Indian Institute of Technology, Kanpur

**Key-Note Address 2:** Dr Anindya Narayan Biswas (IAS), Commissioner, Department of Power, Government of West Bengal

**Vote of Thanks:** Mr A K Saxena, Senior Director, TERI

**Panel Discussion:** DER Integration and Demand-side Dynamics: Issues, Challenges & Way Forward

**Chair:** Mr K Ramanathan, Distinguished Fellow, TERI

**Panelists:** Mr Rajib Kumar Das, Deputy General Manager (Planning), CESC Limited; Mr Mukesh Dadhich, Assistant Vice President (Sustainability & Clean Technology), BSES Yamuna Power Limited; Dr Chandrasekhar Reddy Atla, Principal Engineer, Power Research & Development Consultants Pvt. Ltd.; Dr Adarsh Nagarajan, Group Manager for Power System Design and Planning, National Renewable Energy Laboratory, USA (Remotely)

Dr Ajay Mathur highlighted that Battery Energy Storage System (BESS), energy efficiency, and demand side management will play an important role in reducing the intermittency and improving the reliability of the grid, considering the increase in RE penetration. Prof. (Dr) S C Srivastava briefed about the tasks performed under 'UI-Assist' initiative by IIT Kanpur and TERI. He also emphasized that social surveys are essential for adoption of renewables. Lord Adair Turner highlighted that with India setting up new targets of 450 GW of RE installed capacity by 2030, air pollution is likely to reduce. He also addressed new market mechanism for setting up prices for renewables and highlighted the need for regulatory interventions. Mr A K Saxena concluded the discussion by highlighting the role of BESS in managing demand and supply intermittency as one of the solutions among others.



The panel discussion threw up some interesting and thought-provoking insights on some of the issues pertaining to intermittency in the demand and distribution level, supply side intermittency from DERs, and possible solutions. Mr Mukesh Dadhich discussed the technical impacts of high DER penetration at distribution level like voltage regulation issues, feeder overloading, power-quality issues, and impacts on system protection. Dr Chandrasekhar Reddy Atla spoke about the importance of performing power system simulation studies and the richness of data required for the same. Dr Adarsh Nagarajan emphasized on the importance of studying the possible impacts of DER integration on existing protection schemes of distribution feeders.

## Entrepreneurial Solutions for the Challenges of Climate Change

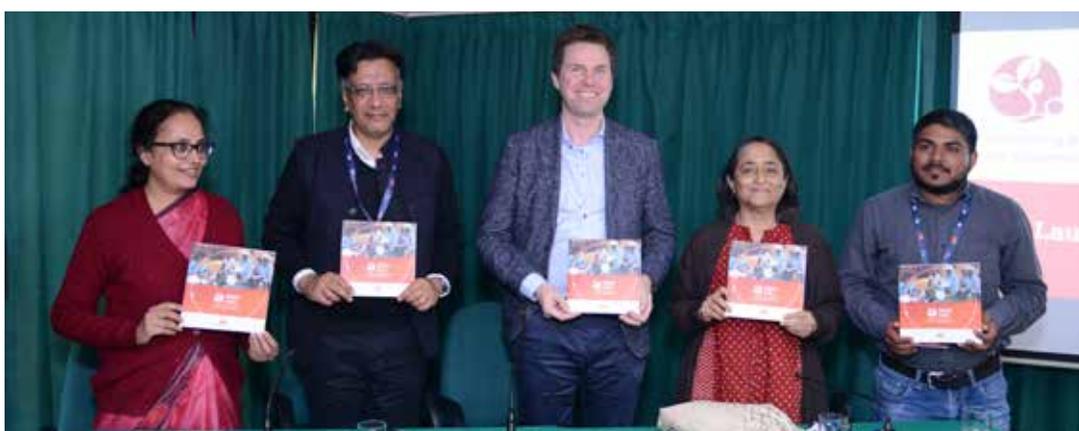
**Chair:** Mr Amarnath Munnolimath, Project Manager, Adelphi

**Speakers:** Mr Jitendra Yadav, Founder & CEO Aikya Organics; Mr Rainer Agster, Director of Operations, SEED; Mr Shrashtant Patara Senior Vice President, Development Alternatives; Poonam Bir Kasturi, Founder, Daily Dump

The thematic track on Entrepreneurial Solutions for the Challenges of Climate Change was led to consider the role of climate-smart socially inclusive enterprises in driving the transition to a green and an inclusive economy. Adelphi supported TERI to lead the thematic track and the launch of Social Entrepreneurship & Ecosystem Development (SEED) INDIA Hub. Mr Amarnath Munnolimath from Adelphi chaired the session and introduced the speakers to SEED, which was launched in 2002 World Summit on Sustainable Development in Johannesburg as a global partnership for action on sustainable development and the green economy.

In the track, two SEED startups provided examples of their success stories. First, Ms Poonam Bir Kasturi from Daily Dump Story, who has made India's first home composter, which turns waste, without smell, into manure with the help of cocopeat, shared her story. She is championing efforts for organized decentralized home composting in India.

Second, Mr Jitendra Yadav from Aikya Organics, who has won the 2019 SEED low carbon award explained his efforts to connect with farmers to



**MS POONAM BIR KASTURI**  
Founder, Daily Dump

“Collaboration should be seen not as scaling up immediately but as a way to reach out to more customers”

## Educate, Inspire, and Empower: Teachers' for a Greener Tomorrow

**Speakers:** Dr Annapurna Vancheswaran, Senior Director, TERI; Mr Koustuv Kakati, Head – Regulatory Affairs, TATA Steel Limited; Mr Jigmet Takpa, Joint Secretary, MoEF&CC, Government of India



This thematic track provided a platform to the educators from remote locations of Jharkhand and Odisha to showcase their local learnings from the community impact projects that were conducted as part of the project. The track also provided the educators with a platform to



**MR JIGMET TAKPA**

Joint Secretary, Ministry of Environment, Forest & Climate Change, Government of India

“Change can happen only if we understand the economics of the region and the psyche of its residents”

collaborate with other stakeholders from different states through which they will strengthen their learning process and will also generate a ripple effect of their learnings. Eminent speakers on the panel shared their knowledge and experiences with the participants. Mr Jigmet Takpa highlighted the role of eco-tourism in motivating the locals of Ladakh to contribute towards conservation of biodiversity in Ladakh. He emphasized on the four major pillars, i.e. culture, economy, nature, and sustainability, which led to the success in increasing the density of snow leopards in the region. The case study presented by Mr Takpa talked about using the opportunities in the location to combat the biodiversity challenges in the region. Participants in the track gained an exposure on how green pedagogy enhances the learnings on environment and sustainability. The speakers also dwelled on green curriculum – sustainable learning; innovative and transformative ideas to solve problems within communities; and barriers to integrating sustainability education into schools.

increase their incomes by implementing another parallel solution with standardization to set viable business models that enable Farmer Producer Organizations.

The panelists explained the need for decreasing transactional costs and setting up an ecosystem that is conducive to startups where innovation and incubation are intertwined with market linkages, consumers, and on-ground reality.



### De-risking Investments in Decentralised Solar Solutions

**Moderator:** Dr Ajay Shankar, Distinguished Fellow, TERI

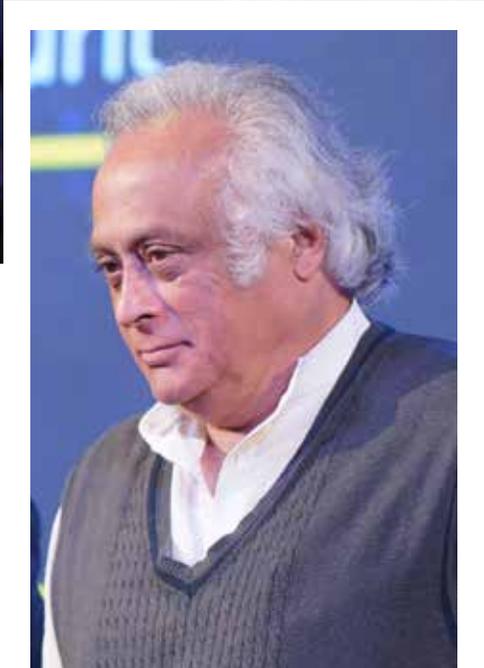
**Speakers:** Mr J K Jethani, MNRE, Government of India; Mr Richard Abel, Green Inv. Grp; Dr Dhruva Purkayastha, UNICEF; Mr Neil Spann, Power Roll; Mr Joerg Gaebler, GIZ; Ms Rixa Schwarz, GermanWatch; Mr Deb A Mukherjee, BCCI; Mr Amit Jain, World Bank; Mr Ravi Verma, AVAADA Group; Dr O S Sastry, TERI-MAXOP R&T Lab; Mr Nisheeth Srivastava, KfW



In this session, the speakers were of the opinion that huge investment is required to push the decentralized solar sector in India, for which foreign investment is essential. They stated that it is possible only if various stakeholders from around the globe work towards a common agenda, which is the mandate of 17 SDGs. The speakers categorized the risk as technical (regularity and certainty) and financial (availability of debt and

right information). Various risk mapping exercises can actually help to minimize the risk. The focus should be to find solutions to the existing challenges rather than figuring out new challenges. The launch of PM-KUSUM scheme can be crucial in the decentralization of solar energy. They stressed that only financial gain should not be considered for solar decentralization. Other add-on services such as good quality food, water conservation,

and green power needs are equally important. Corporate players have to intervene into the sector. RE100 and LEED certification are best initiatives to engage the corporate sector. Debt financing needs focus, for which cost-effectiveness, availability, and transaction cost are crucial. As commercial banks are not much tilted towards the debt financing, development banks can be approached instead.



### In-Conversation: Towards 2030 Goals: Making the Last Decade Count

**Chair:** Dr Ajay Mathur, Director General, TERI  
**Panelists:** Mr Jairam Ramesh, Hon'ble Member of Parliament, India; Lord Adair Turner, Chair, Energy Transitions Commission (ETC)

Dr Ajay Mathur chaired the session. Hon'ble Member of Parliament, Mr Jairam Ramesh in his address mentioned that the least the country can do is to abide by the Paris agreement while emphasizing on the need for accountability and transparency. He further mentioned that it was tempting to go for bolder actions but the need of the hour, particularly for India and China, was to fulfil the existing commitments and win the confidence of the world by doing so. Lord Adair Turner added there is a need for a set of new commitments. He supported his argument by throwing light on the increasing global temperature, heat waves in Asia, Australian bushfires and Indonesian floods. He said "there is no more time left to talk but to act and deliver on the aim of net zero emissions by 2050."

Mr Ramesh said that India has an advantage of making sustainable choices as a developing economy. He further added that there is an opportunity to eye for evolving technologies as 75% of infrastructure is yet to be built. Lord Turner agreed with Mr Ramesh's statement and remarked that there might not be a common benchmark but there must be a need to aim for commitments.

To Dr Mathur's question as to what kind of political choices does India need to make, Mr Ramesh said that America's possible exit from the Paris Agreement would hamper the delivery of 2030 goals. Commenting on the world ranking, he remarked that India would soon take over the US in controlling the carbon emissions. Lord Turner added that even though the initial cost of transition might be high but the end cost for generating electricity from renewable sources will be a lot cheaper. Mr Ramesh concluded the session by stating that an alliance between EU-China-India will be fundamentally wrong. He also said that one must realize that science does what politics allows it to do. Lord Turner said that it is imperative that a debate is created irrespective of the timelines that different countries may incur in achieving goals.

### FIRESIDE CHAT: Status Check On Renewable Energy Financing For C&I Clients In India: The Year that was, Key Challenges, Desired Regulatory Framework & Sectoral Outlook

