



WORLD SUSTAINABLE DEVELOPMENT SUMMIT

PARTNERSHIPS FOR A RESILIENT PLANET

FEBRUARY 15-17, 2018
INDIA HABITAT CENTRE,
LODHI ROAD, NEW DELHI

#Act4Earth

SUMMIT BULLETIN | DAY 2

15-17 February 2018 | India Habitat Centre, New Delhi, India

INAUGURAL CEREMONY AT THE VIGYAN BHAVAN



PRIME MINISTER'S ADDRESS

Sitting (left to right): Dr Ajay Mathur, Mr C K Mishra, Mr Yasuo Takahashi, Ms Patricia Apeageyi, Mr Lekey Dorji, Dr Harsh Vardhan, Shri Pawan Chamling, Mr Aiyaz Sayed-Khaiyum, Ms Christine St-Pierre, Ms Monique Barbut, Mr Ashok Chawla

The inaugural ceremony of the World Sustainable Development Summit, 2018, was held at Vigyan Bhavan in New Delhi. The Hon'ble Prime Minister of India, Shri Narendra Modi, delivered the inaugural address on the occasion. The Welcome Address was delivered by Shri Ashok Chawla, Chairman, TERI, and in his address he emphasized that the WSDS is a unique global summit and a very important platform to discuss about issues that were affecting the planet. He also highlighted that partnerships built during the summit will further strengthen the global action and

commitments in the field. Addressing the inaugural gathering, Dr Harsh Vardhan, Hon'ble Minister of Environment, Forest and Climate Change; Science & Technology; and Earth Sciences, termed climate change as one of the biggest threats to civilization. He said that India is conscious of the fact that some of the effects of climate change were irreversible and, therefore, the country is investing in adaptation actions in vulnerable sectors through a dedicated National Adaptation Fund. Dr Ajay Mathur, Director General, TERI, delivered the vote of thanks at the inauguration.



MR ASHOK CHAWLA

Chairman, TERI

“WSDS is a unique global summit and an important platform to discuss issues affecting our planet.”

WSDS 2018 PARTNERS

www.wds.teri.in.org

<p>Supported by</p>	<p>Corporate Conclave Partner</p>	<p>Star Partner</p>	<p>Senior Partners</p>	<p>Banking Partner</p>	<p>Associate Partners</p>	<p>Co-associate Partners</p>	<p>Subscribers</p>	<p>Outreach Partners</p>
----------------------------	--	----------------------------	-------------------------------	-------------------------------	----------------------------------	-------------------------------------	---------------------------	---------------------------------



INAUGURAL ADDRESS BY THE HON'BLE PRIME MINISTER OF INDIA, SHRI NARENDRA MODI

"I am very happy to be here at the inauguration of the World Sustainable Development Summit. This summit is a re-inforcement of India's commitment to a sustainable planet, for ourselves and for future generations. As a nation, we are proud of our long history and tradition of harmonious coexistence between man and nature. Respect for nature is an integral part of our value system.

Recently, National Geographic's Greendex Report of 2014, which assesses the environmental sustainability of consumer choice, ranked India at the top for its greenest consumption pattern. Over the years, the WSDS has spread consciousness about our actions to preserve the purity of Mother Earth to all parts of the world. This common desire was on display at COP21 in Paris in 2015. Nations took a stand to come together and work towards the common cause of sustaining our planet. As the world committed to bring about change, so did we. India believes in growth but is also committed to protecting the environment.

We must also stress on climate justice for all vulnerable populations. We in India are focussed on ease of living—through good governance, sustainable livelihood, and through cleaner environment. The campaign for clean India has moved from the streets of Delhi to every nook and corner of the country. We also

recognize the need to tackle the issue of water availability, which is becoming a major challenge. That is why we have introduced the massive Namami Gange initiative. This programme, which has already started giving results, will soon revive the Ganga, our most precious river.

Our country is primarily agrarian. Continued availability of water for agriculture is of importance. The Pradhan Mantri Krishi Sinchayee Yojana has been launched to ensure that no farm goes without water. Our motto is 'More crop, per drop.'

India has a fairly decent report card on biodiversity conservation. With only 2.4% of the world's land area, India harbours 7–8% of the recorded species diversity, while supporting nearly 18% of human population. India has gained international recognition for 10 out of its 18 Biosphere Reserves under UNESCO's Man and Biosphere programme. This is a testimony that our development is green and our wildlife is robust.

We are also on track to meet the 2030 Nationally Determined Contribution. The UN Sustainable Development Goals put us on the path of equality, equity, and climate justice. While we are doing everything that is required of us, we expect that others also join in to fulfil their commitments based on common but differentiated responsibility and equity." 🌍

Excerpts from the Prime Minister's Inaugural Address at WSDS 2018



Sitting (Left To Right): Dr Ajay Mathur, Mr C K Mishra, Ms Patricia Apeageyi, Mr Yasuo Takahashi, Mr Lekey Dorji, Dr Harsh Vardhan, Shri Narendra Modi, Shri Pawan Chamling, Mr Aiyaz Sayed-Khaiyum, Ms Christine St-Pierre, Ms Monique Barbut, Mr Ashok Chawla

Standing (left to right): Mr Drew Johnson, Mr Chencho Norbu, Mr Yuri Afanasiev, Ms Frances Beinecke, Mr Rana Kapoor, Ms Laurence Tubiana, Mr Kazuhiko Takeuchi, Mr Joshua Wycliffe, Dr Annapurna Vancheswaran

WSDS 2018 PARTNERS

www.wds.teri.in.org

Supported by 	Corporate Conclave Partner 	Star Partner 	Senior Partners 	Banking Partner 	Associate Partners 	Co-associate Partners 	Subscribers 	Outreach Partners
-------------------------	---------------------------------------	-------------------------	----------------------------	----------------------------	-------------------------------	----------------------------------	------------------------	------------------------------

CORPORATE CONCLAVE

INAUGURAL: SOLAR REVOLUTION THE NEW GLOBAL NORM

Welcome Address: Dr Ajay Mathur, Director General, TERI

Special Remarks: Mr Rana Kapoor, Founder, MD&CEO, YES Bank; Mr Upendra Tripathy, IDG, International Solar Alliance

Special Address: Mr Anand Kumar, Secretary, MNRE, Government of India

Keynote Address: Shri Jayant Sinha, Hon'ble Minister for Civil Aviation, Government of India

Dr Ajay Mathur welcomed the distinguished speakers and mentioned that there lies a huge opportunity for the range of corporates in solar energy deployment globally and locally. Mr Rana Kapoor emphasized the need for easing the regulatory process for financing of solar energy projects, defining the priority lending sector criteria, and bundling and securitization of projects. Mr Upendra Tripathy mentioned the five programmes by the ISA. It includes solar pumping, solar e-mobility, solar storage, and solar rooftop. He deliberated on the need for centres of global excellence on R&D for building the ecosystem. He also spoke about the 'Infopedia platform' of ISA that aims at exchanging the best practices across different countries.

Mr Anand Kumar spoke about the initiatives taken by the MNRE for the deployment of renewable energy in the country in the last 2-3 years and plans/targets for the future for RE deployment. He mentioned that energy access at affordable rates essential and improvement in technology, new solar materials, better efficiency, and energy storage is now the focus of the government. Shri Jayant Sinha, in his keynote address, said that a significant driver of India's rapid solar capacity expansion is the positive response created after solar



SHRI JAYANT SINHA

Hon'ble Minister of State for Civil Aviation, Government of India

“We have an ability to transform the entire two-wheeler ecosystem by using distributed energy with solar panels.”



Left to right: Dr Ajay Mathur, Mr Rana Kapoor, Mr Upendra Tripathy, Mr Anand Kumar, and Mr Jayant Sinha



Release of the TERI-YES Bank report titled, *Electric Mobility Paradigm Shift: Capturing the Opportunities* by Shri Jayant Sinha during the corporate conclave

deployment, which is creating 'positive feedback loops'. These 'loops' are of immense significance to the sustainable development community, because of the impact they've had in India's renewable energy push. Reiterating the pace of solar technology innovation, and the corresponding beneficial impact on the price of solar energy; the infusion of the Internet of Things (IoT) and Artificial Intelligence (AI) is enabling India to put in place distributed power systems, and manage them under controlled parameters that would have been unimaginable and unconceivable five or ten years ago. He also said India must make 'very big bets' to unlock the potential of this big ecosystem, referring to the technology standards and regulations needed. This also necessitates interaction with industry leaders, working with global leaders, and fine-tuning strategies dynamically. 'Electric Mobility Paradigm Shift: Capturing the Opportunities' Report was also released by Shri Jayant Sinha during the conclave.

PANEL DISCUSSION: ACCESSING FINANCE FOR INTERNATIONAL SOLAR ALLIANCE PROGRAMMES WITH FOCUS ON SOUTHEAST ASIA, AFRICA, ISLAND COUNTRIES, AND INDIA

Chair: Dr Prodipto Ghosh, Distinguished Fellow, TERI and Former Secretary, Government of India

Panelists: Mr Jiwan Acharya, Energy Specialist, Asian Development Bank; Mr Drew Johnson, Chairman, CENERGIST Limited and BIG Solar Limited UK; Mr Manoj Kohli, Executive Chairman, SoftBank Energy; Mr Randal Newton, Vice President- Enterprise Engineering, Ingersoll Rand; Mr Praveer Sinha, CEO & Managing Director, Tata Power Delhi Distribution Limited



Left to Right: Mr Praveer Sinha, Mr Drew Johnson, Dr Prodipto Ghosh, Mr Jiwan Acharya, Mr Manoj Kohli, and Mr Randal Newton

The chair of the panel discussion Dr Ghosh emphasized the need for access to finance and encouraged discussions around ways to reduce the cost of finance. One of the panelists Jiwan Acharya, said in solar financing the question is always how much money and how many projects are available. He added that ADB has invested \$29 billion in this field and is trying to raise more money. He also emphasized that solar power is a high priority for them and will continue to remain so. He also informed that ADB will invest \$6 billion in related projects. Mr Drew Johnson emphasized on mobilizing the investments and creating solar investment bank as an SPV for asset management and encouraging new technology at the same time. Mr Kohli mentioned the issues of longevity of financing and cost of financing which is presently high. He emphasized to improve the quality of PPA's w.r.t guarantees of off-take and payment and termination compensation. Mr Newton spoke about innovations w.r.t thermal energy storage solutions for solar energy. Mr Praveer spoke about the need of doing financing towards small-scale projects on energy access rather than large MW-scale solar energy projects.

KEYNOTE ADDRESS

INDIA AND THE URBAN AGENDA FOR 2030

Mr H S Puri, Hon'ble Minister of State (IC) of Housing and Urban Affairs, Government of India

Moderator: Dr Ajay Mathur, Director General, TERI

In a candid session to address 'India and the Urban Agenda for 2030', Mr H S Puri and the Director General, Dr Ajay Mathur, discussed the Sustainable Development Goal (SDG) 11 and beyond. Mr Puri spoke how the new SDGs have a bottom-up approach and bring all the stakeholders into account. He highlighted India's importance in the scheme of things and mentioned that the success or the failure of the SDGs by 2030 will depend on India. He further added that to build the India of 2030, we need 700–900 million sq. m of urban land space of



which 70 per cent is yet to be built. He negated the fact that India is a reluctant urbanizer by saying that India had a large population and its agro-based economy should not be compared to other countries, such as Brazil or Mexico which have thrice the land area and one-sixth

population. The main programmes that he focussed on were the Swachh Bharat, the Pradhan Mantri Awas Yojana, and the Smart Cities Mission. He also highlighted that planned urban cities of India needed their urban local bodies (ULBs) to raise funds. 🌍

PLENARIES

LANDFILL-FREE CITIES: A CIRCULAR ECONOMY APPROACH

Chair: Dr Suneel Pandey, Senior Fellow and Director, TERI

Panelists: Mr Mahesh Babu, Managing Director, IL&FS Environmental Infrastructure and Services Limited; Dr Christian John Engelsen, Senior Research Scientist, Department of Architectural Engineering, SINTEF; Mr Ashish Mathur, Managing Director, JUSCO; Mr Nitin Prasad, Chairman, Shell Companies of India, Shell; Mr Venkatesh Valluri, Chairman & Managing Director, Valluri Technology Accelerators and Valluri Change Foundation

During the plenary session, panelists discussed that India generates 62 million tonnes of municipal solid waste (MSW) every year and its management is a huge task. There are issues of segregation and managing organic waste at the source. Currently, a lot of mixed waste is reaching the landfill sites and these landfills are reaching new capacities in most of the large cities. These landfills are now also a source of problems such as pollution and landfill fires



DR CHRISTIAN JOHN ENGELSEN

Senior Research Scientist, Department of Architectural Engineering, SINTEF

“The whole idea of a circular economy is to keep materials and energy in a never ending cycle.”

value-added products and increasing the life of the products to reduce the waste reaching the landfill sites. These are the elements of a circular economy and are closely linked to SDG12 which is related to sustainable consumption and production. One of the panelists stressed that construction and demolition waste needs increased attention. Mr Ashish Mathur shared that Jamshedpur is a zero-discharge city, the only one in the country that manages to treat 40 million litres per day of liquid waste. Mr Nitin Prasad shared



that emit black carbon, methane, and carbon dioxide. Remanufacturing, upcycling, and redesigning is now being looked at instead of simple recycling for creating

examples of Shell's innovations in waste management technologies where an input of mixed waste can be processed into BS4 fuel. 🌍

INNOVATIVE FINANCIAL MECHANISMS: RAISING THE TRILLIONS FOR LOW-CARBON INVESTMENTS & CLIMATE RESILIENCE

Chair: Mr Dipak Dasgupta, Distinguished Fellow, TERI & Former Principal Economic Adviser, Ministry of Finance, Government of India

Panelists: Mr Douglass Sims, Director of Strategy and Finance, Center For Market Innovation, NRDC; Dr Gireesh Shrimali, Director, Climate Policy Initiative, India; Ms Laurence Tubiana, CEO, European Climate Foundation; Mr Krishan Dhawan, CEO, Shakti Sustainable Energy Foundation; Ms Namita Vikas, Group President & Global Head, Climate Strategy & Responsible Banking, YES Bank; Dr Leena Srivastava, Vice Chancellor, TERI School of Advanced Studies



In this plenary session, Ms Namita Vikas spoke about the rupee-denominated green bond issued by the International Finance Corporation in 2015, which was listed on the London Stock Exchange. The proceeds

of the bond were invested by IFC in a green bond issued by YES Bank to be further invested in renewable energy projects. She also highlighted the risk-sharing mechanism and the ability of a AAA-rated development

finance institution to raise mainstream capital from investors and then plough that back into the emerging countries. She said more participation from development financial institutions was needed to bring additional innovative financing mechanisms.

Dr Leena Srivastava said there are new instruments for making finance available for renewable energy and there is reduction in cost of greener technology at a pace that ensures that the need for finances may not be as large as anticipated. She added that the challenge, however, remains to assess whether they are actually reaching the bottom of the pyramid. She also said stakeholders need to ask themselves if they were doing enough for adaptation and resilience building. She acknowledged there were a number of areas where capacity building needs to be done. She said more than the volume of the available finance, it was important to assess the manner in which it is deployed and the outcome it generates. 🌍

PARTNERING TO CREATE A GREEN, CLEAN, AND PROSPEROUS WORLD

Chair: Ambassador Ajai Malhotra, Distinguished Fellow, TERI

Panelists: HE Mr Laurent Fabius, Former President of COP21, UN Environment Patron on Environmental Governance, Constitutional Council of France; Ms Christine St-Pierre, Minister of International Relations and La Francophonie, Government of Quebec; Shri Pawan Chamling, Hon'ble Chief Minister, Sikkim; Mr Aiyaz Sayed-Khaiyum, Attorney-General and Minister for Economy, Public Enterprises, Civil Service and Communications, Government of Republic of Fiji; Mr Lyonpo Lekey Dorji, Hon'ble Minister of Economic Affairs, Royal Government of Bhutan



In this plenary session, an eminent panel of environmentalists, policymakers, ex-diplomats, and academics convened to discuss the various aspects of aligning climate commitments with the SDGs, and the roles partnerships can play in connecting the two agendas.

It was also discussed that it is more important than ever before to ensure the goals of biodiversity conservation and economic development are not conflicting but are mutually reinforcing. This and only this will bring about what we call 'environmentally sustainable' economic development. Climate actions can strengthen the sustained development of society as a whole. However, these two processes are presently operating as largely parallel to each other, despite areas

of overlap and convergence, and there is scope for complementary actions.

Mr Pawan Chamling pointed out that the world today had become a dumping ground for chemical contaminants. As a solution, he offered that all countries must "promote organic agriculture as a fashionable profession to attract all age groups of people across nations. Available data suggests that if we convert this earth into an organic world, we can contain carbon emissions by 50% in the future."

Mr Aiyaz Sayed-Khaiyum said that to address the grave issue of climate change, "there is a need to involve both public-private partnerships in particular".



SHRI PAWAN CHAMLING

Hon'ble Chief Minister, Sikkim



"Sustainable development for quality of living and for economic development largely depends on lean and green environment."



SPECIAL SESSION

ENHANCING RESILIENCE AND ACHIEVING LAND DEGRADATION NEUTRALITY IN MULTIFUNCTIONAL LANDSCAPES

Chair: Mr Nitin Desai, Former Under Secretary General of the United Nations and Distinguished Fellow, TERI

Keynote Address: Ms Monique Barbut, Under Secretary-General of the United Nations and Executive Secretary, United Nations Convention to Combat Desertification (UNCCD)

Panelists: Hon. Patricia Appiagyei, Deputy Minister for Environment, Science, Technology and Innovation, Ghana; Mr Chencho Norbu, Secretary, National Environment Commission, Bhutan; HE Mr Aiyaz Sayed-Khaiyum, Attorney-General and Minister for Economy, Public Enterprises, Civil Service and Communications, Government of Republic of Fiji; Dr Sanjaasuren Oyun, Chair, Global Water Partnership (GWP)



In the special session, environmentalists, policymakers, and academics deliberated over sustainability goals and their interlinkages representing the three dimensions of sustainable development. Ms Monique

Barbut felt that India will not be immune to geopolitical challenges as 30% of India's land was already degraded. She stressed on the fact that India will be the world's most populous country by 2050. Two-thirds of Indians

derive their livelihood from climate sensitive sectors, such as farming, fisheries, and forestry. Due to increasing hardships and climate change problems, Indians already migrate to urban cities in large numbers seeking a better quality of life, and by 2025, 40% of the Indian population would be urban. The solution to balance the scale, she believed, was to avoid further degradation of new land, and restoring degraded land. Mr Nitin Desai felt that land, water, and biodiversity were undeniably interconnected. Conservation, therefore, needs a much broader perspective instead of looking at specific problems in isolation. Citing an example of this interconnectivity, he talked about the Punjab farmers who are now forced to relocate the bee hives from the trees to the fields because of the mass deforestation and loss of green cover.



WSDS 2018 PARTNERS

www.wds.teri.in.org

<p>Supported by</p>	<p>Corporate Conclave Partner</p>	<p>Star Partner</p>	<p>Senior Partners</p>	<p>Banking Partner</p>	<p>Associate Partners</p>	<p>Co-associate Partners</p>	<p>Subscribers</p>	<p>Outreach Partners</p>
----------------------------	--	----------------------------	-------------------------------	-------------------------------	----------------------------------	-------------------------------------	---------------------------	---------------------------------