10th World Renewable Energy Technology Congress & Expo-2019 held on 21-23 August 2019 at Convention Centre-NDCC, Parliament Street, New Delhi, India

Organised by Energy And Environment Foundation Supported by: Ministry of New and Renewable Energy, Government of India NITI Aayog

THEME: "-Renewable Energy Solutions for a Sustainable Future"

The Energy And Environment Foundation organizing the 10th edition of World Renewable Energy Technology Congress & Expo 2019 and 22nd ISA SUN MEET 2019 from 21st to 23rd August 2019 at Convention Centre-NDCC, Parliament Street, New Delhi, India and serve as an excellent energy platform for the global renewable energy industry to address various industry issues including innovations, new technologies, investment opportunities and project financing. <u>www.wretc.in</u>

Hon'ble Shri R. K. Singh, Minister of State (Independent Charge), Ministry of Power & New and Renewable Energy consent to Inaugural and Special Keynote Address deliver by Shri Anand Kumar, Secretary Ministry of New and Renewable Energy, Government of India to distinguished gathering of delegates attending the 3-day 10th World Renewable Energy Technology Congress 2019.

The Secretary gave away Energy and Environment Foundation Global Excellence awards 2018 to **Dr. Emilio Gabbrielli,** Director, Overseas Business Development Global Sales Water Treatment Toray Membrance USA Inc, Brazil; **Mr. K. R. Raghunath**, Founder & Managing Director KIS Group Singapore.

Delivering the theme address **Mr. Anil Razdan**, Chairman Energy And Environment Foundation said to ensuring access to energy mix though global cooperation by evolving an integrated strategy for meeting the energy needs of the global citizen and a sustainable planet. **Mr. K. S. Popli** CMD IREDA & Co-Chairman Steering Committee, WRETC highlighted that stepping up of private investments and introduction of new investment vehicles, such as masala green bonds, crowd funding have created a positive movement in the renewable energy market across the world. **Mr. Rajinder Kaura**, CMD, Bergen Group of Companies highlighted to government should take care to create an interface between industry and academia for new energy technology forces to rope in renewable energy. **Dr. Ajay Mathur**, Director General, The Energy and Resources Institute & Chairman Steering Committee, WRETC gave away welcome address and said we have to find supporting technologies that can help us to move low cost renewable energy as and when we needed through grid and off-grid solutions. **Dr. Anil K. Garg**, President, World Renewable Energy Technology Congress emphasised the importance of Global Cooperation for Sustainability in Renewable Energy Sector.

10th WRETC-2019 conference deliberated various issues related to Renewable Energy & Energy Efficiency: Emerging the Future, Mobilizing Investments for Renewable Energy Projects, Integration of RE in Smart Grid – Rooftop Solar, Energy Storage and Future of Electric Vehicles, Renewable Energy: Skill Development & Human Capacity Building to meet Future Challenges, Make-in-India : Indigenous Solar Manufacturing, Fuels of Future : Biofuels, Hydrogen, New and Emerging Technologies.

The conference & expo was attended by national and international delegates. The conference brought together leading international and domestic players, policy makers, government officials and technocrats on a common platform. The concurrent conference sessions were comprised of interesting workshops, interactive panel discussions on "Sustainable Energy Options: Energy – Water – Food Nexus", "RE - Clean Water for Sustainable Development Solar Pumps – Ground Water Extraction" and Workshop on "Make-in-India : Indigenous Solar Manufacturing". The conference

had served as an important gateway for worldwide new energy companies to access the Indian market to foster partnerships and collaborations with local players.

All the participants of the 10th WRETC-2019 had appreciated presentations and deliberation by the distinguished speaker of the conference specially by H.E. Ms. Harinder Sidhu, High Commissioner of Australian High Commission to India, Mr. U. P. Singh, Secretary, Ministry of Water Resources, River Development & Ganga Rejuvenation, Govt. of India, Dr. Udit Rai, Hon'ble Member of Lok Sabha, Delhi, Mr. K. S. Popli CMD IREDA, Mr. Rajinder K. Kaura, CMD, Bergen Group of Companies, Dr. V. K. Garg, Former Chairman JERC, Goa & UTs and Former CMD, PFC Limited, Mr. Dennis Abraham, Managing Director, Josab India Pvt. Ltd., Sweden, Dr. Ajay Mathur, Director General, The Energy and Resources Institute & Chairman Steering Committee, WRETC, Mr. Richard Samuels, Counselor for Industry, Innovation and Science, Australian High Commission to India, Mr. Andrew DeLeone, Managing Director, GE Power India limited, Mr. Abhay Bakre, Director General, Bureau of Energy Efficiency, Mr. Venkatesh Dwivedi, Chief Operating Officer, Energy Efficiency Services Limited, Mr. K. R. Raghunath, Founder & CEO, KIS Group, Singapore, Mr. Ashok Haldia, CEO and Managing Director, PTC India Financial Services Ltd., Mr. Christopher Beaton, Senior Policy Advisor and Lead, India Programme, GSI, IISD, Canada, Mr. Jens Martin, Vice-Chair of the SolarPower Europe Emerging Markets Task, Force (E.ON), Belgium, Mr. Manav Bansal, CEO Neev Fund, SBICAP Ventures Ltd., Mr. Sanjeev Gupta, Managing Director, NEXGEN Financial Solutions Pvt. Ltd., Ms. Namita Vikas, Group President & Global Head, Climate Strategy & Responsible Banking, YES Bank, Ms. Kanika Chawla, Senior Programme Lead, Council on Energy, Environment and Water (CEEW), Dr. Ricardo Gorini, Senior Programme Officer & Head Renewables Roadmaps Programme, International Renewable Energy Agency (IRENA), Germany, Mr. Kushagra Nandan, President & COO, SunSource Energy Pvt. Ltd., Mr. Anil Poluru, Senior Manager, Trina Solar, Mr. Deepak Gupta, Former Secretary Ministry of New and Renewable Energy, Government of India, Dr. Rahul Walawalkar, Vice President-Emerging Technologies & Markets, Customized Energy Solutions & Executive Director, India Energy Storage Alliance, Mr. Greg Moran, Co-Founder & Chief Executive Officer, Zoomcar, Dr. P. C. Pant, Director, Ministry of New and Renewable Energy, Government of India, Dr. Srinivas Venu U, Vice President, Amararaja Group, Dr. Praveen Saxena, CEO, Skill Council for Green Jobs, Mr. Ashish K. Jain, Partner, AEON Integrated Building Design Consultant, Mr. Adarsh Das, CEO & Co-Founder, SunSource Energy, Ms. Ritu Lal, Vice President – Business Development and Institutional Relations, Amplus Energy Solutions, Ms. Cécile Martin-Phipps, Director Strategy, Communication & Operations, International Solar Alliance, Mr. N.Y.Dinesh Babu, Team Leader, Sustainable Partnership for Rooftop Acceleration in Bharat, Ernst & Young, Dr. Wolfgang Bauer, University Distinguished Professor, Senior Consultant, Michigan State University, USA, Mr. Paolo Corvo, Head of Sales & Marketing, Business Line Biofuels & Derivatives, Clariant, Germany, Mr. Kyoji KUNITOMO, Vice President, Technology Forum for the Future Asia, Japan, Dr. Kyriakos MANIATIS, DG ENER, European Commission, Belgium, Mr. Satyendra Joshi, Manager-Proposals & Technology Advanced Biofuels & Chemicals, Praj Industries Limited, Dr. Ajit Sapre, Group President, Research and Development, Reliance Industries Limited, Mr. Kobi Ben-Shabat, CEO, UltraCharge, Haifa, Australia, Mr. Ramesh Bhujade, Vice President-Process Engineering, Reliance Technology Group, R&D Center, Dr. R. K. Vij, Former ED & Asset Manager, Oil and Natural Gas Corporation Limited, Dr. Bibek Bandyopadhyay, Former Advisor & Head, Solar Energy Centre MNRE, Mr. Dennis Abraham, Managing Director, Josab India Pvt. Ltd., Sweden

The conference & expo was supported by Ministry of New and Renewable Energy, Ministry of Environment, Forest and Climate Change, Ministry of Micro, Small and Medium Enterprises, Government of India, NITI Aayog, IREDA, Bergen Group of Companies, Trinasolar, GE, SBI, SunSource Energy, Praj Industries, IndianOil Corporation Ltd., KIS Group, Organic Recycling Systems, Josab and a large number of professional associations. AEON & EMPI were the Knowledge Partner of the conference. Participation of academia (future leaders), students was from IIT, RGIPT, UPES, EMPI Institute, Chandradeep Solar Research Institute, KAWA College of Education, Guru Gobind Singh Indraprastha University, JNU, PDPU, Nitte Meenakshi Institute of Technology.

The main features of the resolutions adopted in the conference are:

- 1. Renewable Energy has come to the centre-stage with the support given by various governments through Renewable Energy Generation and Purchase obligations as well as the Nationally Determined Commitments. Developing countires which are setting up new power generation need to focus on renewables, their transmission and integration with the system whenever feasible.
- 2. Financial incentives, their preferential treatment and linking employment generation is necessary for boosting local manufacture of RE Technologies to the same.
- 3. The market based mechanism for spread of RE, needs to be further strengthened by addressing policy, investments and regulatory issues so as to accelerate the 'ease of doing RE business'.
- 4. Capacity building in RE sector from manufacture of generation equipment and pumping equipment to their maintenance is an imperative.
- 5. Given the large opportunities that would be created by the RE markets, development of requisite manpower and generation of employment therein is essential to sustain the momentum that has been generated.
- 6. Off grid solutions, decentralised distributed generation and storage will remain an important component of the RE story.
- 7. Smart Grid and Smart metering will facilitate greater penetration and management of Renewable Energy.
- 8. Increasing urbanization make water management and waste to energy projects an imperative.
- 9. Appropriate technologies, regulatory measures and a market for Roof Top Solar will be necessary to realize the full potential of Roof Top Solar.
- 10. While the electricity component of Solar Power has been harnessed, its heat component is yet to be gainfully utilised.
- 11. Biomass and bio-fuel opportunities are also significant and can complement the solar PV and wind energy in reducing the effects of the intermittent nature of these two sources.
- 12. Electric vehicles and their operational infrastructure need to be developed in tandem.
- 13. Contamination of any water body or source must be made a serious offence.
- 14. To check the excessive extraction of ground water, the mapping of aquifers, and their recharge through a transparent institutionalized auditing needs to be enforced speedily.
- 15. Incentives for investment in the raw and waste water sectors, along with appropriate pricing of water will help its availability and judicious use.
- 16. Water harvesting, conservation and recycling measures must be given due emphasis right from the lowest rungs of urban and rural governance.
- 17. Water treatment based on natural materials should be duly recognize and understood.

The WRETC invites the global green renewable energy and water communities to assemble again at New Delhi, India for the 11th World Renewable Energy Technology Congress & Expo from 9th to 11th November 2020.

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