





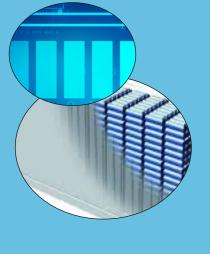


Decarbonising for Net Zero

India Hydrogen Dialogue India Renewable Dialogue

18 -19 February 2022 Mumbai, India

The key pillars of decarbonising the global energy system are energy efficiency, behavioural change, electrification, renewable, hydrogen and hydrogen-based fuels, and CCUS.



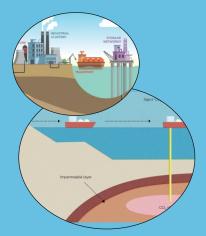


IREC a step towards Net Zero

Salient features of India's renewable energy future

- Prime Minister of India Narendra Modi launched the National Hydrogen Mission
- The renewable energy target of 175 GW by 2022 uplifting the wind power programme in India -Narendra Modi, Prime Minister of India
- India's aims achieving net zero emissions by 2070
- India is set to spend USD 200 Million over the next
 5-7 years for promoting the use of Hydrogen in India
- India's renewable energy sector is expected to boom with a likely investment of over \$15 billion in 2022
- 52 solar parks have been sanctioned with a cumulative capacity of 37.92GW in 14 States
- Green hydrogen to account for 10% of the overall hydrogen needs of Indian refiners & 15% for the

- India plans to increase its non-fossil energy capacity to 500 GW by 2030 and meet 50% of its energy requirements from renewable energy by 2030
- Wind and solar power will become 20-50% cheaper by 2030 as the technology develops
- Wind and solar power are cheap, climatefriendly, and set to become mainstays of future energy supplies
- Electric vehicle charging stations (EVCSs) with solar rooftop photovoltaic (SRTPV) facility are economically more viable than those with grid
- The requirement for battery storage is huge in India and is estimated at 120 GWh by 2030
- India generates more than 50,000 tons of lithium-ion battery waste every year indicates opportunities for investment





Developing countries with good renewable energy resources could produce green hydrogen locally, generating economic opportunities, and increasing energy security by reducing exposure to oil price volatility and supply disruptions. Decarbonising existing and future energy production can be achieved only through technological innovation

India's renewable energy sector is expected to boom with a likely investment of over \$15 billion in 2022 as the government focusses on electric vehicles, green hydrogen, manufacturing of solar equipment as well as achieving the ambitious 175GW renewable capacity target.

According to the market estimates, India generates more than 50,000 tons of lithium-ion battery waste every year and it is growing in the range of 40-80 per cent depending on different models used for computing electric vehicle growth in India. 30 per cent of the value of a lithium-ion battery cell is the value of metals which make it up, which include cobalt, lithium, nickel, and graphite.

Total installed capacity for Renewable in India (31 May 2021)

Wind power: 39.44 GW BioPower: 10.34 GW

Solar Power: 41.09 GW Small Hydro Power: 4.79 GW

Decarbonising existing and future energy production can be achieved only through technological innovation

Event Focus

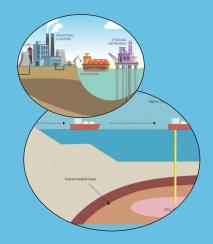
- Robust Policy & its implementation
- Market & Future Growth
- Hydrogen Economy
- Solar & Wind energy
- Electric mobility & EV battery
- Energy Storage challenges & solutions
- Carbon Capture Utilization & Storage

- Digital transformation
- Technology developments
- Infrastructure
- Financial incentives & funding
- Smart Energy management
- EV battery recycling

IREC 2022 Technical Committee

- Debi Prasad Dash, Executive Director, India Energy Storage Alliance (IESA)
- Parul Chopra Vice President, Rystad Energy
- · V. Manjunath, Underwriters Laboratories Inc.
- Dr. Arunkumar Ranganathan, AVP, Head DCG- Energy Utilities & Services, Infosys
- Dr. Prashant Jadhawar, Lecturer in Petroleum Engineering, University of Aberdeen
- Batterywali Dr. Rashi Gupta, Managing Director, Vision Mechatronics Pvt. Ltd., India
- Ayushi Jain, Vice President External Relations, MoEVing

- Milind Godbole, Senior Trade Adviser Energy (Western India), Department for International Trade, British Deputy High Commission
- Dr.MAYILVELNATHAN V, Professor, Solar Expert, Frugal Innovation, Carbon free Startups, Member Secretary (IRC-Research), Mohamed Sathak Engineering College, India
- Suresh Jambunathan, Owner/Principal, Energy and Water Development LLC, USA
- Varun Patel, Founding Board Member \
 I-elektrik, India
- Kamlesh Umale, Founder, Lenergy Mobility India





Conference Program

India Hydrogen Dialogue 18 February 2022

Panel 1: How will Hydrogen value chain become a reality in India - Decarbonising for sustainable future?

- Hydrogen Roadmap and Policy Actions for achieving net zero
- Global Partnerships & Collaboration
- Technology and innovation initiatives & developments

Panel 2: How are energy companies navigating the energy transition?

- What role do oil majors envisage for themselves in the future
 - What elements of traditional oil and gas supply chains will support a clean energy future
- Haw does oil producing companies see the shift away from oil and gas
- What does the energy transition mean for the future of balance oil & gas reserves

Panel 3: Is the Industry ready: Supply, Demand & Pricing

- Market segments
- Business models for investing in hydrogen economy
- Hydrogen production planning to meet the future demand

Panel 4: Engineering and construction for building hydrogen production plants

- Identifying and addressing infrastructure gaps
 - Hydrogen Infrastructure Assessment & planning
- Overcoming the infrastructure hurdles for commercialization of a project
- Logistics for hydrogen projects

India Renewable Energy Dialogue 19 February 2022

Panel 1: EV battery & energy storage challenges & solutions

- Standardization in the EV battery segment
- Analysing Lithium-ion batteries costs & performance
- Potential of smart technologies and innovation for growth in battery storage
- Battery storage benefits throughout the electricity value chain

Panel 2: Electric mobility & hydrogen

- Use of Li-Ion battery to decarbonise transportation
- Hydrogen-powered fuel cell as a future for mobility
- Battery charging stations or swapping stations
- Challenges for mobility of large vehicles

Panel 3: Energy management system & EV battery recycling

- Monitoring, controlling, and conserving energy
- Growth of lithium-ion batteries for electric vehicles
- End-of-life management of the batteries
 - Circular economy.
- Innovations to extract valuable materials from existing battery packs

Panel 4: Renewable for a cleaner & greener environment

- How are wind & solar energy contributing towards net zero targets
- Will switching over to renewable help in reducing the carbon footprint

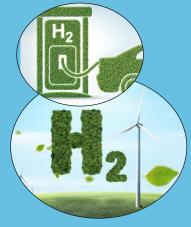
How are the industry segments adopting to the use of cleaner source of energy











TAKEAWAY FROM THE CONFERENCE

- Through in-depth case study presentations, you will have access to the latest cutting edge technical solutions being deployed and implemented across the industry.
- To build your professional network for gaining valuable resources & referrals.
- · Exposure to future projects that can impact future results
- Solutions and approaches being used by energy companies and their project partners for some of the most complex challenges facing the renewable industry.
- Meeting new vendors and suppliers to learn more about the current business climate.
- · Join and network with more than 300 conference delegates sharing both strategic and technical experiences
- Opportunity for knowing any M & A, asset sale & purchase opportunities
- Meet the technical experts behind cutting edge innovations from over 15 countries & acquire new technical insights by attending focussed technical discussions

A Sponsor would reap the following benefits

At such focussed platforms an extra edge in your marketing activities could lead to various potential business opportunities by using the right tools to spread information about your organization's expertise, goals and vision.

A Sponsor would have the right opportunities to inform the attendees in detail about their organization' services/products through various branding Activities, Pre and Post Show Marketing Tools and discussions about your diverse portfolio through numerous channels.

Our Conference Team would be constantly Interaction with your management to understand your focus agenda for the conference and aligning the conference marketing activities in parallel with your goals.

A Sponsor would have an Opportunity to disseminate maximum information about their organization using brochures, standee, banners, email blasts, Post show Report etc.

Your logo and participation would be constantly marketed over to major energy giants and key dignitaries of your area of interest via numerous activities to generate the right platform for you to channel your services and product line.

For Speaking and Sponsor opportunities

Mohit Kapoor

+ 91 9769 345 348

mohit@ojme.net

Nikhil Kapoor + 91 9820636899 nikhil@innoconcepts.co.in

For Branding & Delegate registration

CleanTech Partner



Organized by





Principal EV Media Partner





Supporting Association





