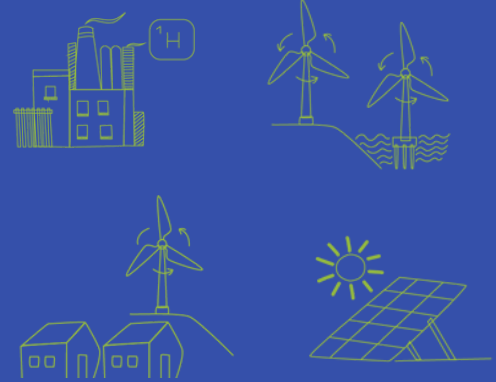




Accelerating India's Energy Transition for People, Nature and Climate

India Habitat Centre, New Delhi
July 22-23, 2024



DAY 1

JULY 22, 2024

Registration begins at 10 am

10:30-11:30

Inaugural Session: Accelerating India's Energy Transition for people positive, nature positive and climate positive outcomes

11:30 – 12:00

Tea / Coffee break

12:00-13:30

Thematic Session 1: Energy transition for All: Access to resources for inclusive and equitable transition

India has made significant progress on household electrification over the last decade. However, despite the significant increase in electrification of homes, reliable supply continues to be a challenge – especially for the rural healthcare, education, MSMEs, agricultural and livelihood sectors. With intermittent and unreliable supply, these end users are forced to rely on expensive and polluting diesel generators, if they can afford it, severely impacting the possibility of socio-economic development outcomes.

With the Indian government announcing a host of policy measures and targets – including the 500 GW of renewable energy capacity target by 2030, there is a significant opportunity to link the unmet and under-met electricity demand, with the achievement of these renewable energy targets. In addition to grid-based solutions, decentralized renewable energy solutions could also provide a significant opportunity to power remote and rural schools, healthcare, farms, MSME and livelihood facilities. However, this will require better understanding of the scope and extent of the gaps, as well as the design and implementation of appropriate finance and policy measures to overcome the gaps.

Equally important is the opportunity for the rising tide of India's renewable energy transition to lift all boats across society. And this will require an all-of-economy approach to the energy transition – which will need to look at India's food, land and water issues and how the energy transition can support food, nutritional and water security, as well as create new jobs and work opportunities – especially for the bottom 50% of the population.

12:00-12:15

Presentation by the WRI India

12:15-13:15

Panel Discussion

13:15-13:30

Q&A

13:30-14:30

Lunch

Thematic Session 2: Achieving the Energy Transition: Challenges and Opportunities

14:30-15:45

This session will help gain an understanding of the state of play of technological solutions for economy-wide decarbonization, this session will focus on opportunities and challenges facing the transition – especially in terms of implementation. Specifically, the session will look at the role of finance, carbon markets, institutional arrangements and regulations in India's energy transition efforts. The session will also focus on what states are experiencing in India's energy transition story, and what more needs to be done to help achieve India's targets.

14:30-14:35

Keynote Address

14:35-15:30

Moderated Panel Discussion

15:30-15:45

Q&A

15:45-16:00

Tea

Thematic Session 3: Accelerating Decarbonization: Opportunities through Emerging Technologies

16:00-17:30

Clean energy is crucial for climate action. In 2020, energy consumption contributed to 75.6% of global greenhouse gas emissions. Despite progress in renewable energy and electrification, less than 20% of global energy consumption is electricity, and only 40% of that is from low-emission sources. To achieve net-zero by 2050, the IEA roadmap calls for a fourfold increase in renewable energy, greater electrification of transport and industry, use of hydrogen and carbon capture, and improvements in energy efficiency. Technology innovation, particularly in renewable energy, storage, and smart grids, is essential for this transition. Given this context, the panel will explore key discussion points including innovations in renewable energy technologies, energy storage requirements, and technology pathways. They will address the electrification of transport and industry, prospects for green hydrogen, and challenges with critical materials. Additionally, next-gen energy systems like artificial intelligence, machine learning, and smart grids will be discussed.

16:00-16:15

Keynote Address on Innovation for accelerating Energy Transition

16:15-17:15

Moderated roundtable discussion

17:15-17:30

Q&A and closing remarks

18:00 – 19:30

India Battery Circularity Alliance: Developing Circular and Sustainable Battery Value Chains

India's clean energy transition is fueled by expanding renewable energy generation and the growing adoption of electric vehicles, increasing reliance on lithium-ion batteries (LIBs). From 2021 to 2030, India's cumulative LIB demand is expected to grow from 22 GWh to over 600 GWh, with battery manufacturing capacity scaling up to 150 GWh annually. Access to critical minerals is essential for localizing the battery manufacturing value chain and ensuring energy security. The Government of India is securing critical mineral supplies through global partnerships and domestic mining. Establishing a circular LIB ecosystem can enhance energy security by recycling batteries to reduce import dependency. The session on 'Developing Circular and Sustainable Battery Value Chains' will launch the India Battery Circularity Alliance, promoting policy, implementation, and R&D solutions for optimizing battery circularity in India.

18:00-18:05

Opening Remarks

18:05-18:10

Presentation: Circular and Sustainable Battery Ecosystem in India

18.10-18.15

Academic Address: State of Battery Recycling Technology

18.15-18.20

Industry Address: Techno-economic Opportunities and Challenges for Recycling at Scale

18.20-18.25

Special Address: Standards and Partnerships for Battery Circularity

18.25-18.30

Keynote Address: Looking Ahead to a Circular Battery Economy in India

18.30-18.35

Launch of India Battery Circularity Alliance

18.35-19.25

Panel Discussion: Policy and Implementation Frameworks for Battery Circularity

19.25-19.30

Closing Remarks

19:30 onwards

Dinner

----- DAY 1 ENDS, SCROLL FOR DAY 2 -----

Registration begins at 9 am**09:30-12:00****Thematic Session 4: Decarbonizing India's building sector-
Research goals for the future**

India has set an ambitious target to achieve a net zero economy by 2070. The commitment demands all sectors to align their development strategies towards this goal. As India's building and construction sector is growing at a rapid pace, the demand for essential construction materials like steel, cement, aluminum, bricks, and others is expected to increase multifold. Buildings consumed a third of India's total electricity production in 2023-24. As per CSTEP's systems dynamics model *Sustainable Alternative Futures for India (SAFARI)*, the building sector's contribution to India's total GHG emissions in 2020 was estimated at approximately 26%. To achieve decarbonization goals, strategies must address embodied operational and end of life carbon from buildings. This session will invite organizations to deliberate on key gaps in current research on reducing carbon across the whole building life cycle in India.

9:30-12:00**Roundtable Discussion****12:00-12:30****Closing Remarks from the roundtable discussion****12:30 - 12.45****ACE Closing Address****12.45
onwards****Lunch**

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