









Co - Host Utilities







ORGANIZER



India SMART UTILITY Week 2024

Supporting Ministries













CENTRAL ELECTRICITY AUTHORITY

Session 2: EMERGING TECHNOLOGIES FOR UTILITIES

ITES & Net Zero Energy future

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How international collaborations can enable Utilities to

- 1. Leverage technologies and be future ready
- 2. Accelerate the path to energy sufficiency
- 3. Create a roadmap to net zero



CONTEXT

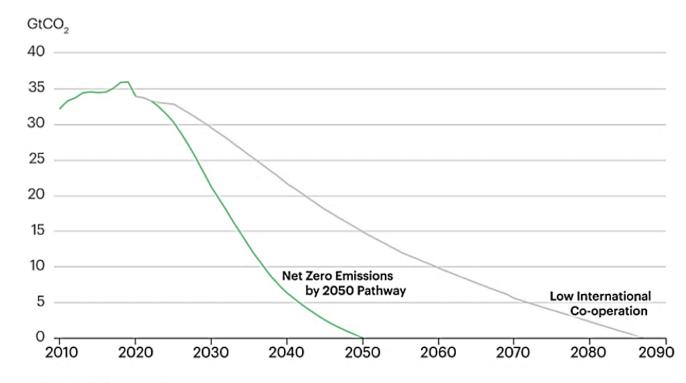




The Net Zero pathway relies on unprecedented international collaboration, especially on innovation and investment

This is not simply a matter of governments and companies seeking to bring their emissions to Net Zero – it means tackling global challenges through coordinated actions

Global energy-related CO₂ emissions in the net zero pathway and Low International Co-operation Case



Note: Gt = billion tonnes.



RELEVANCE





- ITES is a part of the UK-India Net Zero Innovation Virtual Centre to promote innovation between the two countries under the landmark agreement signed between the two countries
- Energy Systems Catapult (ESC) supports Mission Innovation and plays part of the secretariat function.
- ITES helps Innovators and industry stakeholders who struggle to find the best solution from a systems perspective and help ease the barriers to innovation

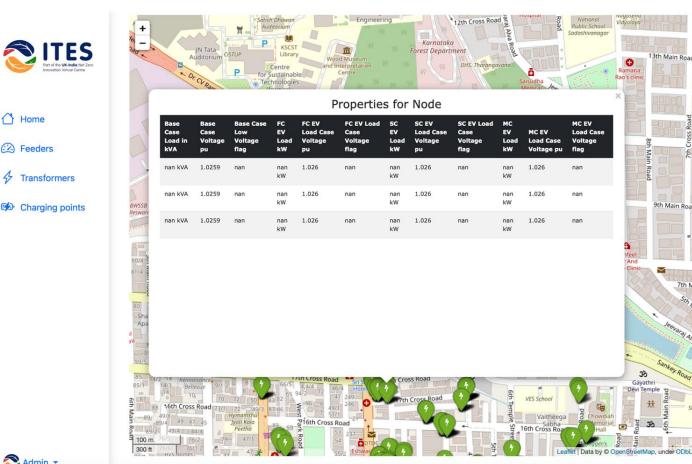
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CHARGE POINT OPTIMISATION MODEL





- Electric charge point optimisation modelling project with Energy Systems Catapult, Indian Institute of Science & Bengaluru Electric Supply Company
- ITES can support research focused or innovator pilots / demonstrations like this for industry and government stakeholders





ITES SOLVES THESE CHALLENGES FOR INNOVATORS IN Week 2024







Innovation Landscape

...nurturing innovators to incubate, steer new models and access markets.



Infrastructure and Operations

...supporting services or activities for the focus sectors. Including charging providers, fleet optimization and logistics.



Uncertainty, **Awareness and Knowledge**

...research, academia, evidence-base for businesses and consumer concerns and uncertainty.



Gov. Support, **Policy and** Strategy

...national, regional and state actions, as well as broader planning and strategy with respect to the Net Zero transition.



Supply Chain and Manufacturing

...pipeline of technology, parts, assembly, maintenance and skills of Net Zero solutions.



Business Models and Economic **Feasibility**

...new business models with the possibility to accelerate Net Zero transition, as well as evidence bases for economic potential and scale up of these.



KEY TAKEAWAYS / RECOMMENDATIONS





Access to innovators

ESC and IISc each have a wide international network of quality innovators that can, and will, contribute to projects. Their focus **includes alternative energy sources**, **battery management**, **battery recycling**, **charging solutions**, **grid stability & energy storage** among others.

Thought & sector leadership

Be recognised as a thought leader and catalyst for change in transport and energy decarbonisation. Support of an ITES project is an impactful demonstration of a commitment to sustainability.

Market development

The ITES network will help navigate local partnerships, manage complex projects, engage stakeholders and support market entry for new business models and technologies.

Partnerships & networking

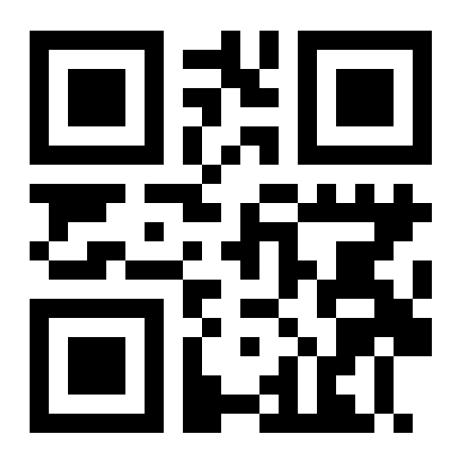
Partners can effectively forge **cross-sectoral relationships and build partnerships** that extend beyond the initiative. Significant opportunities for JVs, knowledge exchange, demonstration and business growth.



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Get in touch:

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THANK YOU

For discussions/suggestions/queries email: isuw@isuw.in

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Links/References (If any)

