New, Emerging & Strategic Technologies Division
Ministry of External Affairs
Government of India

Confederation of Indian Industry

GOVERNMENT OF INDIA
MINISTRY OF NEW
AND RENEWABLE ENERGY

6th CII International Energy Conference & Exhibition

Driving India's Energy Transition: Pathway to Net-Zero

Engage, Energize, Empower

22 – 23 September 2025 | Hotel Taj Palace, New Delhi

A Retrospect

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EXECUTIVE SUMMARY

India's clean energy transformation stands at a pivotal moment as the nation advances toward the Viksit Bharat 2047 vision. With a target of reaching 1800 GW of renewable energy capacity by 2047 and maintaining its position as the only major economy on track to meet its Paris Agreement commitments, the country is reshaping its energy landscape through ambitious reforms, accelerated deployment, and strategic global partnerships.

International Energy Conference & Exhibition convened government leaders, international representatives, industry captains, and experts to deliberate on building a resilient, inclusive, and self-reliant clean energy ecosystem. The discussions underscored the critical importance of strengthening national missions, modernising regulatory frameworks, and scaling solar, wind, hydro, nuclear, and green hydrogen capacities.

Participants highlighted India's strong economic fundamentals, progressive policy environment, and significant achievements. Across interventions, the event emphasized that the next phase of India's energy transition must be driven by public-private partnerships, resilient supply chains and innovative green finance mechanisms, including the use of insurance surety bonds to unlock capital for investment. Industry challenges around PPAs, land access and regulatory bottlenecks were addressed through a strong commitment to continued collaboration between government and industry.

A major highlight of the platform was launch of three thematic reports, the CII-EY Report Eigenvectors of Net Zero Transition Pathways to Viksit Bharat 2047**,** Industry Paper on India's Transmission Sector and Manufacturing for India and the World.

IECE reaffirmed India's global leadership in the clean energy transition and the collective resolve across government, industry, and international partners to build a sustainable, secure, and prosperous energy future for Viksit Bharat 2047.

Day 1: September 22, 2025

OPENING PLENARY SESSION

Mission 2047: Energy Pathway to Viksit Bharat

Background

As India charts its course towards the Viksit Bharat vision, the energy sector is positioned to play a significant role. India aims to scale up renewable energy capacity to 1800 GW by 2047. The session deliberated on strategies to build a resilient, inclusive and self-reliant clean energy ecosystem. Discussions focussed on strengthening national missions and regulatory frameworks, as well as accelerating the adoption of solar, wind, hydro, nuclear and green hydrogen. The session highlighted India's global leadership and strategic collaborations in shaping a cleaner and more secure energy future.

Key Takeaways

- The session focused on India's renewable energy roadmap, targeting 1800 GW by 2047 and 500 GW non-fossil fuel capacity by 2030, with over 251.5 GW already achieved. It was discussed that India is the only major country on track to meet its Paris Agreement goals.
- It was highlighted that GST 2.0 reform was launched, simplifying tax structures and reducing costs, with expectations of making 99% of goods cheaper and improving ease of doing business.
- The session focused on flagship schemes like PM Suryagarh and PM Kusum, which are driving decentralized clean energy adoption. It was discussed that nearly 48% of rooftop solar beneficiaries now receive zero electricity bills.
- It was discussed that Madhya Pradesh is leading in renewable energy innovation, offering the lowest electricity rates (₹2.70/unit with storage), and implementing projects like floating solar and solar cities.
- The session focused on Maldives' energy transition, aiming for 33% electricity from renewables by 2028, supported by Indian partnerships and multilateral agencies. It was noted that Maldives spends 13.5% of its GDP on fossil fuel imports.
- It was emphasized that public-private partnerships, resilient supply chains, and green finance are essential to accelerate clean energy adoption. Insurance surety bonds were introduced to free up capital for investment.
- The session focused on India's solar manufacturing growth from 2.44 GW in 2014 to nearly 130 GW, with plans for domestic production of ingots, wafers, and polysilicon.

- It was discussed that green hydrogen production is being scaled with 3,000 MW electrolyzer manufacturing and 2.62 MTPA capacity allocated.
- It was highlighted that energy storage and grid stability are being addressed through hybrid models and smart grid initiatives, supported by policy and infrastructure reforms.
- The session emphasized India's strong economic performance (7.8% GDP growth in Q1), driven by reforms, infrastructure investment, and political stability under Prime Minister Narendra Modi.
- It was discussed that industry challenges such as PPAs, land access, and regulatory delays are being actively addressed through government-industry collaboration.
- The session concluded with the release of the CII & EY report "Eigenvectors of Net Zero Energy Transition Pathways to Viksit Bharat 2047," outlining strategic steps for India's clean energy future and reinforcing the collective responsibility to achieve net zero.

Launch of CII-EY Report "*Eigenvectors of Net Zero Transition Pathways to Viksit Bharat 2047***"**

The report frames India's net-zero ambitions as multidimensional challenge balancing energy security, affordability, competitiveness, and sustainability. With a projected US$30 trillion GDP and 1.5 billion population by 2047, the analysis underscores both the scale of the opportunity and the risks that must be managed.

India has already crossed a major milestone in its energy transition, achieving 50% non-fossil power capacity in 2025 five years ahead of its 2030 target.

The findings of report show that India's primary energy supply must triple by 2047, while non-fossil capacity must expand forty-fold to ensure two-thirds of demand is met through clean sources. With energy consumption expected to surge alongside economic growth, the report warns that energy affordability and supply security will be as critical as decarbonization.

Mr Pralhad Joshi, Hon'ble Union Minister for New & Renewable Energy and Consumer Affairs, Food and Public Distribution, Government of India

"India has surpassed 50% of its installed capacity from non-fossil sources—five years ahead of schedule. We are committed to achieving 500 GW of renewable energy and leading the world into a new era of sustainability under the leadership of Prime Minister Modi."

"We are working on domestic manufacturing of solar cells, ingots, and polysilicon. The government is ready to support industry through PLI schemes, viability gap funding, and ease of doing business reforms."

Dr Muaviyath Mohamed, Minister of State, Environment and Tourism, Government of Maldives

"Energy security is a global priority. For small island states like Maldives, transitioning to clean energy is urgent and complex. We aim to generate 33% of our electricity from renewables by 2028 and invite Indian companies to partner with us in this journey."

Dr Mohan Yadav, Hon'ble Chief Minister of Madhya Pradesh

"Madhya Pradesh is advancing rapidly in renewable energy with landmark projects like India's largest floating solar plant and the country's lowest solar tariff at ₹2.70 per unit. We are committed to contributing to India's net-zero goals through solar, wind, and pumped hydro."

Mr Sanjiv Puri, Immediate Past President, CII and Chairman, ITC

"India is not just increasing capacity; it is creating an architecture for its new energy mix to tackle climate change. This is our moment to move forward not as fragmented stakeholders but as one India with one vision for a sustainable, prosperous and net-zero future."

Mr Girish Tanti, CII National Committee on Renewable Energy and CII RE, Manufacturing Council and Vice Chairman, Suzlon

"As we move toward Viksit Bharat 2047, India must aim to contribute 20% to the global clean energy supply chain. Under the stewardship of Prime Minister Modi, we are well on course to meet our net-zero commitments."

L-R: Dr. Praveer Sinha, Chairman, CII National Committee on Power and MD, Tata Power; **Dr Muaviyath Mohamed**, Minister of State, Environment and Tourism, Government of Maldives; **Shri Pralhad Joshi**, Minister of Consumer Affairs, Food and Public Distribution & New and Renewable Energy; **Mr Sanjiv Puri**, Immediate Past President, CII and Chairman, ITC ; **Mr Girish Tanti**, Chairman, CII National Committee on Renewable Energy and CII RE Manufacturing Council and Vice Chairman, Suzlon and Somesh Kumar, Partner EY **releasing the report, *Eigenvectors of Net Zero Energy Transition: Pathways to Viksit Bharat 2047* at IECE 2025**

Inauguration and Walkthrough of Exhibition

Shri Pralhad Joshi, Minister of Consumer Affairs, Food and Public Distribution & New and Renewable Energy of India at the IECE Exhibition

Shri Shripad Yesso Naik, Minister of State for Power and New & Renewable Energy Government of India at the IECE exhibition

Eng.Kumara Jayakody, Minister of Energy, Government of Sri Lanka and **Mr S.S. Sivasankar,** Minister for Transport and Electricity Government of Tamil Nadu at the Energy Dome Exhibition Stall at IECE 2025

Mr S.S. Sivasankar, Minister for Transport and Electricity Government of Tamil Nadu at the exhibition stall of Gautam Solar

AUSTRALIA COUNTRY SESSION

India-Australia Renewable Energy Partnership – Progress and Opportunities

Background

The India- Australia Renewable Energy Partnership (REP) was launched in November 2024 by Prime Ministers Modi and Albanese as a significant milestone to guide our climate and energy cooperation, under three pillars – technology commercialisation, workforce development and two- way investment. Rooftop Solar was identified as a key theme of cooperation as Australia is world's largest deployer of solar rooftops and is well placed to support India's ambition of 10 million solar rooftops by 2027. The session showcased the progress made under REP in one year by both the governments and explored opportunities to expand the scope of partnership, going forward.

Key Takeaways

- The bilateral renewable energy partnership was positioned as a milestone, focusing on workforce development, technology commercialization, and two-way investment.

- Both nations emphasized their complementary strengths: Australia's resources, skills, and technology paired with India's scale, ambition, and manufacturing capability.

- India's rooftop solar and green hydrogen ambitions created urgent demand for a trained workforce.

- The Solar Rooftop Training Academy at PDEU was highlighted as a flagship initiative to skill workers to international standards.

- Participants agreed that moving research from the lab to field deployment was essential.

- Joint efforts would focus on reducing costs of renewables, enabling scaling of hydrogen, storage, and solar technologies, and supporting startups.

- Austrade reported record growth in commercial deals, business missions, and partnerships, showing momentum for Australian clean energy companies in India.

- Offshore renewables, ocean thermal energy conversion (OTEC), and circular economy practices (including recycling of PV materials and critical minerals) emerged as new areas for cooperation.

- Universities, skills councils, and corporates stressed co-creation of curricula, joint R&D, and living labs as practical next steps.

Mr. Sanjiva de Silva, Counsellor (Energy, Resources and Climate Change), Australian High Commission

"I have a lot of faith that the Australia–India partnership can be one that really drives energy transition and delivers value through growth, jobs, and climate action."

Ms. Carly Partridge, Minister-Counsellor, Australian High Commission

"The Australia–India relationship is absolutely at a historic high. No two economies are more complementary than ours, and the green economy is the best way to demonstrate those jigsaw pieces."

Mr. Mukund Narayanamurti, Minister-Commercial and Head of Austrade, South Asia

"Last year alone, Austrade supported 1,100 Australian companies in India, with over 260 deals worth $1.1 billion. Many of these are beachheads in renewable energy, where complementarity between our countries is strongest."

Dr. S. Sundar Manoharan, Director General, Pandit Deendayal Energy University, Gujarat

"We are very pleased to host the Solar Rooftop Academy at PDEU, with more than 10 spokes across India. The challenge is to take rooftop adoption from urban landscapes to the last village and Panchayat."

Dr. Vibha Dhawan, DG, The Energy & Resources Institute (TERI)

"Research alone is not enough—you have to take it to the field. Technology will only survive if we bring costs down. That is where India's markets and Australia's research can complement each other."

Ms Ravneet Pahwa, Vice President, Vice President (Global Engagement) & CEO (South Asia), Deakin University

"India's renewable transition is moving rapidly and requires urgent R&D and commercialization. Joint applied research, pilot plants, and workforce skilling are key areas where Australia and India must scale up collaboration."

L-R: Mr. Sanjiva de Silva, Counsellor (Energy, Resources and Climate Change), Australian High Commission, Moderator; **Ms Ravneet Pahwa**, Vice President, (Global Engagement) & CEO (South Asia), Deakin University; **Mr. Mukund Narayanamurti**, Minister-Commercial and Head of Austrade, South Asia; **Ms. Carly Partridge**, Minister-Counsellor, Australian High Commission**; Dr. S. Sundar Manoharan**, Director General, Pandit Deendayal Energy University, Gujarat and **Dr. Vibha Dhawan**, DG, The Energy & Resources Institute (TERI)

PANEL DISCUSSION 1

Integrating New Technologies in Nuclear Power

Background

The National Nuclear Mission has set an ambitious target of 100 GW of nuclear capacity by 2047. The session will explore the critical role of nuclear energy in providing reliable baseload power to support India's clean energy transition. Key discussions will focus on accelerating the deployment of indigenous and advanced reactor technologies, including the potential of small modular reactors (SMRs) for decentralized and flexible power generation. The session addressed the importance of building public trust through robust safety standards, transparent waste management practices and sustained awareness efforts.

Key Takeaways

- The government has set an ambitious target of 100 GW nuclear capacity by 2047 up from ~8.9 GW today.
- 22 GW is expected by 2032, and ~18 GW is already in various stages of construction or planning.
- Nuclear is viewed as indispensable for baseload power, energy security, and decarbonising hard-to-abate sectors (steel, cement, aluminium), as well as powering emerging high-tech industries.
- NPCIL expects to reach 54 GW, primarily through PHWR fleets (including two additional fleets of 10×700 MW).
- NTPC has announced an intent to add 30 GW, marking significant sectoral diversification.
- Balance capacity will likely come from SMRs, including for industrial, defence, remote, and decentralised applications.
- India continues to move forward with major international collaborations. EDF's proposed Jaitapur EPR project (6×1650 MW) – potentially the world's largest single-site nuclear plant (10 GW).
- Russian and U.S. partnerships (e.g., Westinghouse) also remain active.
- Government has earmarked ₹20,000 crore for developing indigenous SMRs.
- Immediate deployments may come from upgraded versions of India's proven 220 MW PHWR, transitioning later to 200 MW PWR-based SMRs.
- Application areas include, remote/strategic locations and industrial heat and hydrogen.
- Atomic Energy Act and Civil Nuclear Liability Act need amendments to enable private participation and FDI.
- Regulatory processes currently take 7–8 years, contributing to a 13–15-year project cycle.
- The government aims to halve regulatory timelines, enabling project execution within 6–8 years.
- Availability of suitable water-cooled sites is becoming a major challenge.

- Emerging strategies include repurposing retiring coal plant sites for nuclear deployment, prioritising reactors with reduced or zero exclusion zones for industrial co-location.
- India's manufacturing capability particularly L&T's heavy engineering facilities is robust and underutilised.
- L&T currently makes 4–5 steam generators/year at 20–30% capacity; meeting 100 GW would require ~24 SGs/year—well within scalable reach.
- Multiple technology standards (PHWR, EPR, PWR/SMR) will require supply chain diversification and requalification.
- Shifting from imported uranium to thorium-based cycles is critical for long-term self-reliance.
- Fast breeder reactors (BHAVINI) are key enablers in India's three-stage nuclear programme.
- Nuclear tariff must compete with increasingly low-cost renewables and storage.
- Mechanisms required include low- cost financing, long-tenor repayment structures, policy certainty for private investment and potential flexibility in nuclear plant operations.
- India must rapidly scale, design engineering capacity, project management expertise, commissioning teams and operations & maintenance talent. This expansion must move beyond DAE to a broader national ecosystem.
- EDF emphasised a full-lifecycle partnership from mining and fuel fabrication to waste management and decommissioning.
- India–France cooperation includes co-development of a 400 MW SMR with cogeneration, following a 2025 Letter of Intent.

Mr Ghanshyam Prasad, Chairperson, Central Electricity Authority

"*Expanding India's nuclear capacity requires addressing key challenges such as boosting private sector involvement, updating regulations for effective risk management, and shortening project timelines that currently extend up to 30 years. Critical focus areas include strategic site selection, vendor ecosystem growth, and reducing reliance on foreign technology to enhance energy security. With increasing renewable penetration, adapting regulatory frameworks will be crucial to ensure flexible and reliable nuclear power integration into the evolving energy grid*."

L-R: **Mr Anil V Parab**, Whole-time Director & Member of L&T Board heavy Engineering CE & IPDD L&T (Heavy Engineering & L&T Valves); **Mr Ghanshyam Prasad**, Chairperson, Central Electricity Authority and **Dr Kalirajan S**, Managing Director, EDF Nuclear Projects India

SPECIAL MINISTERIAL SESSION 1

Policy Innovation and collaborative Financing for Low-Carbon Transition

Background

Strategic policy interventions and innovative financing mechanisms are key to smooth energy transition. The session highlighted collaborative models, such as PPPs, blended finance and ESG aligned instruments, to unlock private capital and accelerate low-carbon investments.

Key Takeaways

- India must mobilize at least USD 1.5 trillion in additional climate investments by 2030 across renewable energy, industry, and transport.
- The four most carbon-intensive sectors-power, steel, cement, and road transport alone require USD 467 billion in new investment, with steel and cement responsible for about 80 percent due to the cost of deploying carbon capture and storage technologies.
- Renewable energy will require around USD 57 billion, while road transport's transition to EVs and charging infrastructure is expected to require USD 18 billion.
- Public funds cannot meet this scale alone, so significant private sector participation is essential.
- If structured transparently and backed by strong policy alignment, this investment surge can deliver both climate mitigation and job creation, enhancing India's long-term industrial competitiveness.
- The risk-adjusted cost of capital is the single biggest determinant for private capital flows into India's low-carbon sectors.
- India's weighted average cost of capital (WACC) for clean energy remains 200–300 basis points higher than in developed markets due to perceived risks.
- Investors consistently cite payment default risks, policy unpredictability, and weak contract enforceability as primary impediments.
- Each 1% reduction in WACC achieved through credit guarantees, viability gap funding, and central–state policy alignment can unlock billions in annual investment flows.
- Lowering WACC also reduces infrastructure costs in manufacturing, storage, and logistics, making India globally competitive.
- India must evolve its financial architecture to absorb large volumes of private and global green capital.
- Scaling up existing tools, like green bonds and expanding into sustainability-linked bonds, transition bonds, and infrastructure investment trusts (InvITs), will be essential.
- Instruments such as municipal bonds, utility bonds, and securitization of project receivables can broaden sources of debt.
- Currency hedging mechanisms and expansion of institutions like IREDA into climate lending intermediaries can reduce the cost of capital.

- Strengthening disclosure standards and ESG metrics will allow Indian issuers to access international capital pools at 1–2% cheaper rates than conventional debt.
- REC Limited has emerged as a leading climate finance player, with renewable energy comprising nearly 10% of its loan assets (~₹65,000 crore), funding over 46,000 MW of RE capacity.
- REC has raised around ₹16,000 crore through four series of green bonds and ECB issuances since 2017, dedicated primarily to renewable projects.
- PFC has also raised global capital, including a USD 400 million green bond in 2017 and a EUR 300 million bond in 2021, financing RE at competitive rates.
- Both institutions enhance confidence by incorporating risk assessment and mitigation strategies and aligning financial products with evolving policy frameworks.
- REC aims to expand RE's share in its loan book to 30% by 2030, targeting at least ₹3 lakh crore in renewable financing, equivalent to funding 17–20% of India's total RE capacity.
- Traditional public–private partnership (PPP) models are insufficient for the new risks associated with renewable integration, hybrid systems, and storage.
- Blended finance, where public or multilateral capital provides first-loss protection, political risk cover, or interest rate buydowns, is rapidly becoming the foundation for scaling private investment.
- Well-designed PPPs and blended structures reduce upfront risks, making projects bankable and attractive to long-term capital such as pension and insurance funds.
- Success depends on clear risk allocation, robust termination clauses, change-in-law provisions, and scalability across diverse geographies.
- Panellists agreed that blended finance windows are India's clearest opportunity to catalyze private investment in less bankable states and new technologies.
- The Ministry of New and Renewable Energy (MNRE) is considering tax incentives for investors in green bonds, which could significantly attract private capital into climate projects.
- There is also discussion of expanding the mandate of the National Bank for Financing Infrastructure and Development (NaBFID) to act as a sovereign equity fund for critical infrastructure.
- Globally, green bond markets have matured, but the "greenium"—the premium investors once paid for green bonds—has diminished since 2020 due to oversupply and investor backlash.
- Despite this, ESG compliance and transparent project use-of-proceeds remain critical for maintaining international investor confidence.
- REC has already introduced incentives for ESG-compliant borrowers, such as lower interest spreads and preferential repayment terms.
- India should focus less on rigid debt-equity ratios and more on the debt service coverage ratio (DSCR) to determine bankability.
- For RE projects, DSCR thresholds can be as low as 1.05, compared to 1.5 for conventional projects, due to different risk-return dynamics.
- Upfront equity commitments demonstrate promoter seriousness, but long-gestation RE projects require flexible structures to ensure competitive tariffs.

- Panellists also suggested expanding blended finance beyond institutions to include pension funds, corporates, and surplus capital from PSUs, with anchoring from large financial institutions to manage appraisal and governance.

Mr. TSC Bosh, CEO of RECPDCL and Executive Director at REC

"We were the first CPSU to access green bonds and have raised four series totalling ₹16,000 crore. By 2030, we aim to expand our renewable loan book to ₹3 lakh crore, ensuring we fund at least 20% of India's RE capacity."

Mr. Srinagesh Ramabhotla, CFO & President of Ocior Energy

"We should not get stuck on debt–equity ratios. For RE projects, as long as the debt service coverage ratio is healthy, capital structures can be flexible enough to deliver competitive tariffs."

L-R: Mr Vivek Srivastava, CEO, India Business, Suzlon; **Mr. Srinagesh Ramabhotla**, CFO & President of Ocior Energy and **Mr TSC Bosh**, CEO of RECPDCL and Executive Director at REC

Panel Discussion 2

Emerging technologies for Cleaner Mobility

Background

As the transportation sector contributes about 25% to global carbon emissions, accelerating the adoption of clean transport technologies has become vital to achieving climate goals. The session focused on discussions on strategies for scaling up emerging alternative fuels in the transport sector, strengthening R&D collaborations and developing resilient and sustainable mobility ecosystems for the future.

Key Takeaways

- The session focused on the role of cleaner mobility in India's energy transition and achieving net zero targets, given that transportation accounts for nearly 25% of global carbon emissions.
- It was discussed that India has successfully achieved 20% ethanol blending nationwide by 2025, saving foreign exchange, reducing crude oil imports, and cutting carbon emissions significantly.
- It was emphasized that Compressed Biogas (CBG) is emerging as a major alternative fuel under the SATAT scheme, with 108 operational plants and over 1,000 Letters of Intent issued for new projects.
- The session highlighted that Sustainable Aviation Fuel (SAF) will soon become a strategic priority, with production facilities like Indian Oil Panipat refinery preparing to commence supply by 2025.
- It was discussed that LNG and electric trucks offer immediate solutions for decarbonizing heavy-duty transport, which consumes 60% of diesel and is a major contributor to emissions.
- It was emphasized that LNG trucks can reduce carbon footprint by up to 40%, and SR Group is piloting electric trucks and planning large-scale LNG dispensing infrastructure.
- The session highlighted Hyundai's roadmap for multi-fuel mobility, including flex-fuel vehicles (E85, E100), EVs, and hydrogen-powered vehicles, supported by R\&D initiatives like the Hydrogen Valley Innovation Lab.
- It was discussed that enabling infrastructure such as charging stations, LNG/CBG dispensing points, and pan-India fuel distribution for ethanol blends is critical for adoption.
- The session emphasized the need for a technology-agnostic approach, affordability parity among fuels, and collaborative efforts between government, OEMs, and trade bodies.

- It was concluded that future mobility will require a mix of solutions, biofuels, EVs, hydrogen, and hybrid technologies, supported by strong policy frameworks and ecosystem development.

Mr Tarun Sawhney, Chairman, CII National Bioenergy Committee & Vice Chairman & Managing Director, Triveni Engineering & Industries Limited

"Cleaner mobility is about more than reducing emissions; it is about empowering farmers, energising rural economies, strengthening energy security and ensuring inclusive growth."

Mr BC Tripathi, Vice Chairman, Essar Group

"When you talk about heavy-duty trucks, which are the major guzzler of diesel, we import almost more than 150 to 200 billion dollars' worth of crude every year.Converting these trucks from diesel to LNG reduces carbon footprint by as high as 40%. Sox is almost zero, and NOx is down by 40 to 50%."

Mr Puneet Anand, Associate Vice President, Hyundai India

"Future mobility will require a technology-agnostic approach, whether ICE, CNG, EV, hybrid or hydrogen-powered vehicles, to meet diverse needs across India."

L-R: Mr Puneet Anand, Associate Vice President, Hyundai India**; Mr Tarun Sawhney,** Chairman, CII National Bioenergy Committee & Vice Chairman & Managing Director, Triveni Engineering & Industries Limited; **Mr BC Tripathi,** Vice Chairman, Essar Group

SPECIAL MINISTERIAL SESSION 2

Transforming Energy Storage for a Resilient Grid

Background

The discussion focused on long-duration storage technologies and innovative solutions to strengthen grid stability, address integration challenges and support India's energy transition.

Key Takeaways

- Panellists recommended two key strategies: extending Power Purchase Agreements (PPAs) from 15–20 years to 35–40 years to spread costs over a longer timeframe and increasing operational duration to 8–10 hours to distribute costs across a larger energy base. Longer PPAs also facilitate access to long-tenure financing, further enhancing project viability.
- A "PSP Park" model, inspired by India's Solar Park scheme, was proposed. Under this approach, the government could take a 50% role in land acquisition, clearances, and infrastructure, while developers handle design and financing. Developers could secure smaller capacities (e.g., 100 MW from a 1,000 MW PSP) through a down payment, providing market visibility for both parties. This model is expected to promote commercial-scale PSP development beyond the current 10,000–20,000 MW, much of which is being developed for captive use.
- To accelerate sector growth, mechanisms such as Production-Linked Incentives (PLI), Viability Gap Funding (VGF), concessional GST, and net metering—which successfully boosted solar deployment—should be extended to energy storage systems.
- AI can help manage Deviation Settlement Mechanism (DSM) challenges by improving forecasting accuracy and minimizing penalties, becoming a key differentiator for Independent Power Producers (IPPs) as renewable integration deepens.
- AI, along with Machine Learning (ML) and advanced analytics, can enhance storage optimization, improve forecasting accuracy, and support better demand-supply balancing.
- IPPs must focus on developing hybrid and storage-backed solutions that meet the evolving requirements of discoms and grid operators. Forecasting and deviation risks should be explicitly accounted for in tenders and PPAs, as actual deviation rates of 3–5% are significantly higher than the 0.5–1.5% typically assumed by developers.
- Under the National Mission on Advanced and High-Impact Research (MAHIR), India is promoting next-generation energy storage technologies.

- Alternatives to lithium-ion batteries, such as sodium-ion and flow batteries, are being prioritized to diversify the supply chain and reduce dependence on critical minerals.
- Panellists emphasized that promoting battery recycling and second-life applications can reduce costs, decrease import dependence, and enhance environmental sustainability.
- The energy transition will integrate cybersecurity, digital resilience, and cost optimization as core pillars of India's future-ready power system.

Report Release

During the session, Mr Shripad Yesso Naik, Minister of State for Power and New & Renewable Energy launched the *Industry Paper on India's Transmission Sector*. The report highlights key challenges facing the sector, including grid reliability, regulatory uncertainty, financial constraints, and Right of Way (RoW) issues.

It presents actionable recommendations such as developing a national reconductoring framework, standardising voltage levels, and addressing supply chain bottlenecks for critical HVDC components. The paper also calls for streamlined approval processes and enhanced private sector participation to drive sectoral growth.

Emphasising the vital role of transmission infrastructure in integrating renewable energy into the grid, the report advocates for accelerated investments, faster clearances, and a resilient, future-ready transmission network to support India's target of achieving 500 GW of non-fossil fuel capacity by 2030.

Mr Shripad Yesso Naik, Minister of State for Power and New & Renewable Energy

"Stronger global supply chains, coupled with continued industry investments, will serve as powerful catalysts to accelerate the energy transition. Our government is fully committed to enabling the policies and support mechanism. But the true success is of this journey will rest on collaboration among the government, industry and research institution. Together, let us make the energy storage the bridge that connects India's renewable energy ambition with our net zero vision by 2070."

L-R: **Mr Neeraj Menon**, Partner, Trilegal; **Mr Sajay KV**, CEO, Zelestra India; **Mr Shripad Yesso Naik**, Hon'ble Minister of State for Power and New & Renewable Energy Government of India; **Mr Paul Smith**, Senior Vice President Global Sales, Energy Dome and **Mr Kashif Khan**, Vice President, & Head Business Expansion, Hindustan Power Projects Private Limited

STATE SESSION

Madhya Pradesh

Background

Madhya Pradesh has emerged as a national leader in decentralized solar deployment, driven by consistent political commitment and an enabling regulatory environment. The state's progressive approach has facilitated rapid uptake of distributed and hybrid solar models, positioning MP at the forefront of India's clean energy transition. A notable example is the Morena hybrid project, which secured a record-low tariff of ₹2.70/kWh, setting a benchmark for affordability and innovation in the sector and becoming a national reference point for hybrid renewable development.

Key Takeaways

- The Morena hybrid project achieved a record tariff of ₹2.70/kWh, making it a national reference point.
- Developers were required to maintain a flat 220 MW supply not only during solar hours but also for two-hour morning and evening peaks, making it more challenging than conventional peak-shaving designs.
- 95% annual availability, raising the benchmark closer to thermal plants.
- Plug-and-play model with land aggregation and transmission responsibility shared between RUMS and MP Transco.
- Three-tier payment security mechanism to de-risk developers.
- Madhya Pradesh planned to scale from four-hour storage projects to six-hour, ten-hour, and eventually round-the-clock renewable tenders.
- Tenders would remain technology agnostic, encouraging both battery and pumped storage solutions.
- Madhya Pradesh's tender was positioned as the largest decentralized solar program globally (18,000 MW).
- Key reforms included 11 kV injection point to avoid costly distribution upgrades. Reactive power integration, a global first at distribution level, enabling OPEX-based voltage management. Flexible participation model allowing developers to opt with or without CFA (central financial assistance).The scheme attracted a wide spectrum of participants: major bidders, returning diaspora engineers, small entrepreneurs, and farmers.
- GIZ expressed strong support for Madhya Pradesh's innovation and digitalization drive, including the one-stop-shop online approvals system.
- Ongoing and planned initiatives included grid integration strengthening under the Indo-German Solar Partnership, technical assessments of substations in Bhopal, Indore, and Jabalpur for grid readiness, harmonic studies at six critical substations to address power quality. Capacity development workshops, including a five-day intensive program at PM-KUSUM, with over 100 participants.
- Policy advisory and ad hoc support to ensure farmer benefits and grid reliability were not compromised.

- GIZ highlighted that Madhya Pradesh was a national leader in decentralized solar, thanks to its political and regulatory leadership.
- Recently launched, this program aggregated all government buildings with contract load >20 kW across districts.
- RUMS created a centralized data room with surveyed electrical data, rooftop availability, DTR capacity, and recommended solar sizing for each building.
- One developer per district to solarize eligible buildings.
- Smaller rooftops (<10 kW) within protected premises were optional for developers.
- All billing would be digitized and remote-monitored.

- A state-level revolving fund guaranteed cash flow: even disputed bills would receive 90% interim payment.

- If departments defaulted, RUMS would trigger the payment security mechanism, recover dues via the state finance department, and prioritize developer payments.

- The design directly addressed traditional RESCO challenges of commissioning delays, weak billing systems, cash-flow stress, and poor O&M sustainability.

Mr Rakesh Shukla, Minister for New and Renewable Energy, Government of Madhya Pradesh

"*Madhya Pradesh's Morena facility uses battery energy storage to provide renewable energy by storing excess solar power and replenishing from the grid during low-demand night hours to meet peak demand*"

Mr Bhanu Mehrotra, Principal Investment officer, IFC

"*We went to the regulator to seek deviations from national guidelines, and many of them, like termination payments, or payment security mechanisms, or compensation to developers are all very bidder friendly and market friendly.*"

Ms. Zorica Crisolli, Project Director GIZ

"*Madhya Pradesh is a national leader in innovation. From digitalized one-stop approvals to grid integration studies and farmer-centric design, we are proud to partner through technical support, capacity building, and policy advisory*."

Mr Manu Srivastava, Additional Chief Secretary, New and Renewable Energy Department Govt. of MP

"*This is the biggest decentralized project ever-18,000 MW. It brings together global bidders, local entrepreneurs, and even diaspora engineers returning home to build businesses. Our reforms like 11 kV injection and reactive power are cutting-edge, first tried anywhere at the distribution level.*"

Mr Amanbir Singh Bains, MD, MPUVNL

"We have created a data room for every district, with surveyed buildings and recommended solar sizing. Combined with a revolving fund-backed payment security, this ensures bankability and resolves the long-standing issues of RESCO projects across India."

L-R: **Mr Bhanu Mehrotra**, Principal Investment officer, IFC; **Mr Manu Srivastava**, Additional Chief Secretary, New and Renewable Energy Department Govt. of MP; **Mr Muaviyath Mohamed**, Minister of State, Environment and Tourism, Government of Maldives; **Mr Rakesh Shukla**, Minister for New and Renewable Energy, Government of Madhya Pradesh; **Mr Amanbir Singh Bains**, MD, MPUVNL and **Ms. Zorica Crisolli**, Project Director GIZ

GERMANY COUNTRY SESSION

India- Germany Energy Partnership: 'Make in India' Solar, Wind, Storage & Skills for a Global Clean Energy Market

Background

The session brought to fore RE technology manufacturing capabilities and resultant business opportunities specifically in solar, wind and storage, skilling and capacity development. These subjects are priority for both Indian and German entities to realize these business opportunities on the back of implementable models for technology transfer and access to finance.

Key Takeaways

- India and Germany reaffirmed their strategic energy partnership, emphasizing a shift from conventional energy collaboration to renewable energy, green hydrogen, energy storage, and skill development.
- India has already achieved 250 GW of non-fossil fuel capacity, including 123 GW of solar and 52 GW of wind, and met its NDC target five years ahead of schedule. The country now aims for 500 GW by 2030 and 1800 GW by 2047 under its Amritkal roadmap.
- Germany highlighted the importance of private sector-led collaboration, stating that India's renewable energy sector is world-class in scale and ambition. The focus is on business-to-business partnerships rather than traditional government-to-government models.
- The India-Germany Platform for Investments in Renewable Energy Worldwide was launched to facilitate joint ventures, technology transfer, and manufacturing scale-up. It will support local manufacturing in solar, wind, biogas, and storage, and mobilize both public and private capital.
- Four working groups will be activated under the platform starting October 2025: Solar PV, Wind, Storage, and Skills & R&D. These groups will identify investment opportunities, match technologies with market needs, and design financing mechanisms.
- India has developed an annual manufacturing capacity of 100 GW for solar PV modules and 20 GW for wind turbines. The government is promoting integrated manufacturing ecosystems through the Production Linked Incentive (PLI) scheme and quality control frameworks.
- The National Green Hydrogen Mission, with an outlay of ₹19,744 crore, targets 5 million metric tons of production capacity by 2030, supported by 125 GW of additional renewable energy. This initiative is expected to attract over ₹8 lakh crore in investments.
- Energy storage is recognized as a critical enabler for India's renewable energy transition. India will require 60 GW (366 GWh) of storage by 2030, including

pumped hydro and battery systems. Investment needs are estimated at ₹3.5–4 lakh crore.

- Germany expressed strong interest in sourcing solar components from India to reduce dependence on Chinese imports. The ambassador noted that Germany's solar manufacturing collapsed due to Chinese competition and welcomed India's rise as a potential supplier.
- Both countries emphasized the need for harmonized standards, enabling regulatory frameworks, and de-risking mechanisms to facilitate foreign investment and technology exchange. GST 2.0 was highlighted as a major reform to improve India's competitiveness.
- R&D collaboration is a priority. India currently focuses on application-based R&D and lacks basic research infrastructure. Germany's institutions like Fraunhofer can help bridge this gap through joint research and technology development.
- Skill development was identified as a foundational pillar. Germany's vocational training models and digital tools can be adapted to India's scale. The goal is to create a globally mobile and future-ready workforce that supports the clean energy transition.
- The session concluded with a call to action for stakeholders to join the working groups and contribute to building resilient supply chains, advancing technology, and fostering inclusive and sustainable growth in the clean energy sector.

Mr Shripad Yesso Naik, Hon'ble Minister of State for Power and New & Renewable Energy Government of India

"Germany has been a long-standing and trusted partner in India's renewable energy journey. Together, we can leverage Germany's engineering excellence and advanced R&D alongside India's manufacturing scale and growing market demand. By joining forces, we can build resilient supply chains, accelerate technology transfer, and turn energy storage into not just a domestic enabler, but a truly global opportunity for sustainable growth."

H. E. Dr. Philipp Ackermann, German Ambassador to India

"India's private sector has shown how renewables can be a business case, leading the way in scale and innovation. Germany and India share the same goals and approaches, and our partnership must now move from dialogue to action. Through platforms like the India-Germany Investment Initiative, we aim to support local manufacturing in solar, wind, and storage, mobilize capital, and build a skilled workforce."

Shri Shripad Naik, Minister of State for Power and New & Renewable Energy addressing Germany Country Session at the CII International Energy Conference and Exhibition 2025

Panel Discussion 3

Strengthening Critical Mineral Supply Chains for Energy Security

Background

The session focused on strategies to secure key minerals like lithium, cobalt and rare earths to reduce import dependency and build domestic manufacturing capabilities. It explored global partnerships and trade agreements to ensure long-term material security and support India's energy ambitions.

Key Takeaways

- India is no longer content being part of global supply chains - it now aims to lead them.
- Critical minerals such as lithium, cobalt, nickel and rare earths are the backbone of the clean energy transition.
- Every solar panel, EV battery, wind turbine and transmission system relies on them.
- Without secure access to these minerals, India's clean energy ambitions remain vulnerable.
- Current scenario: India is heavily import dependent for lithium, cobalt, nickel and rare earth processing**.**
- It is important to accelerate domestic geological exploration.
- National Critical Minerals Mission (₹16,000 crore) aims to unlock India's mineral potential**.**
- Lithium deposits identified (J&K, Rajasthan), but exploration must lead to domestic processing.
- Build refining, processing and battery-grade chemical capabilities in India.
- Leverage PLI for Advanced Chemistry Cell (ACC) batteries.
- Push R&D on sodium-ion and other alternative chemistries.
- Expand bilateral and plurilateral partnerships.
- Overseas mineral asset acquisition via KABIL.
- Partnerships are strategic and not transactional.
- Recycling is the fourth pillar. Urban mining" must become as important as physical mining.
- Some of the challenges acknowledged long project gestation. High capital intensity, regulatory complexity, social and environmental sensitivities and a need for stakeholder coordination.
- Challenges are not excuses, they are roadmaps.
- Reduce import dependence for key battery minerals by 50% by 2030.
- Move toward near self-reliance by 2040 via exploration, overseas assets, recycling and innovation.
- India needs 3 lakh km of new transmission lines for 500 GW RE by 2030.
- Supply chain constraints could choke the entire RE pipeline.
- A dedicated CII task force on minerals to address bottlenecks urgently.
- EU views critical minerals as strategic assets, not just commodities.

- EU favours collaboration with India on technology transfer, clean energy manufacturing, responsible overseas mineral acquisition and sustainable mining and circular economy.
- Energy security has shifted from oil & gas to manufacturing and mineral supply chains.
- Tariff wars and geopolitics reinforce the need for diversified sources and strong global partnerships.

Mr Mahaveer Singhvi, Joint Secretary, NEST, Ministry of External Affairs, India

"*A resilient and sustainable critical mineral supply chain is foundational to India's long-term energy security and clean energy ambitions. Strengthening domestic exploration, scaling advanced processing and manufacturing, and forging strategic global partnerships will be key to ensuring secure, diversified, and future-ready access to essential minerals that underpin the energy transition*."

Dr Bartosz Przywara, Energy, Climate & Environment Counsellor at Delegation of the European Union to India

"*Building resilient and diversified critical mineral supply chains is central to both the European Union and India's efforts to drive their clean energy transitions. Despite differing geographies, both regions face similar challenges, limited domestic availability of essential minerals, growing demand for green technologies, and rising geopolitical risks that threaten supply stability. In response, the EU is advancing legislation like the Critical Raw Materials Act and implementing strategies such as REPowerEU to boost domestic production, reduce dependency, and promote circular economy practices, including recycling and resource efficiency, to secure long-term mineral and energy security*."

Mr Sanjiva de Silva, Counsellor (Energy, Resources and Climate Change), Australian High Commission

"Australia is taking a strategic shift in its approach to critical minerals, recognising the importance of securing supply chains not only for its own industries but also for trusted partners like India. Moving beyond a purely free-market model, Australia is developing a national critical minerals reserve and introducing policies to retain value onshore, especially in lithium production. Collaborative efforts with India are underway to co-develop supply chains, with Australia focusing on upstream processing and India on downstream value addition. These partnerships aim to create a resilient, vertically integrated supply chain capable of supporting both nations' clean energy goals."

L-R: Ms Jyoti Mukul, Chief, Energy Department, CII; **Mr Arun Sharma**, CEO, Sterlite Power (Resonia); **Mr Mahaveer Singhvi**, JS NEST, Ministry of External Affairs; **Dr. Bartosz Przywara**- Energy, Climate, Environment Counsellor at Delegation of the European Union to India and **Mr Sanjiva de Silva**, Counsellor (Energy, Resources and Climate Change), Australian High Commission

Panel Discussion 4

Decarbonizing through Energy Transition

Background

India, under its Nationally Determined Contributions to the Paris Agreement, has pledged to reduce the emissions intensity of its GDP by 45% from 2005 levels by 2030 and to achieve net-zero by 2070. The session examined decarbonization, including industrial electrification, adoption of CCUS technologies and the expansion of green hydrogen in hard-to-abate sectors, while also highlighting the role of nature-based solutions in balancing growth with sustainability.

Key Takeaways

- Industry is responsible for 30% of global CO_2 emissions, with cement alone contributing nearly 15%.
- Hard-to-abate sectors such as steel, cement, and petrochemicals face challenges due to high heat and chemical processes.
- Green hydrogen is emerging as a key solution, with India targeting 5 MTPA by 2030.
- Carbon capture and storage (CCUS) is at an early stage, with global capacity at ~50 MT/year and India exploring hubs near industrial belts.
- Energy efficiency and waste heat recovery can reduce industrial energy use by 20–25%.
- Captive renewables are increasingly adopted by industries, supported by falling costs.
- India needs $10–15 billion annually for industrial decarbonization, requiring innovative financing and risk de-risking mechanisms.
- India is pursuing an ambitious energy transition, aiming for 500 GW of non-fossil fuel capacity by 2030 and a net-zero target by 2070.
- This transition is characterized by a reaffirmed climate commitment, having already surpassed interim milestones ahead of schedule; inclusivity, with programs such as PM-KUSUM and the rooftop solar initiative empowering farmers and households; clean energy driving economic growth, creating new industries and insulating the country from global price shocks; and a platform for reform across generation, transmission, distribution, storage, and digitalization.
- Key challenges include ensuring grid stability and flexibility, which will require approximately 60 GW of storage by 2030 along with stronger demand response mechanisms; securing reliable supply chains for critical minerals such as lithium and rare earths through domestic exploration and strategic partnerships; and meeting financing needs, supported by regulatory

predictability, transparent tariffs, and schemes like viability gap funding for storage projects.

- The Central Electricity Regulatory Commission (CERC) plans to emphasize market liberalization including new markets for storage, derivatives, and carbon enhanced grid reliability through scheduling reforms, flexible generation, demand response, and cybersecurity measures, digitization and consumer empowerment via smart meters, peer-to-peer trading, and the India Energy Stack, as well as the financial sustainability of utilities through performance-based regulation, loss reduction incentives, and tariff rationalization.
- Madhya Pradesh achieved a record tariff of ₹2.70/unit in a recent renewable plus storage tender, despite strict conditions such as 95% availability and equal supply during solar and non-solar hours.
- The state aims to progress toward a 24-hour flat block supply, gradually scaling storage cycles (4-hour, 6-hour, and 10-hour projects).
- Madhya Pradesh is implementing 18,000 MW of decentralized solar through feeder solarization, with innovations such as: Injecting power at the 11 kV level, effectively doubling substation capacity without new CapEx and using inverters for reactive power management as an OPEX-based solution, enhancing voltage stability.
- The state is designing policies to link data centers with 24-hour RE supply, creating industrial demand and driving growth.
- The guiding principle for tenders is flexibility: the default answer to developer requests is “yes,” unless there is a strong reason to deny, thereby ensuring bankability and investor confidence.
- Suzlon is pursuing a multi-pronged decarbonization strategy by designing low-carbon turbines with lifecycle emissions as low as 6 g CO_2/kWh, building a sustainable supply chain involving 2,500 MSMEs across India, and managing projects over their full 30-year lifecycle to minimize environmental impact.
- Adoption of renewables by commercial and industrial (C&I) consumers is accelerating, driven by open access policies that create demand across sectors such as cement, steel, aluminum, and others.
- Current C&I renewable demand already exceeds 100 GW, with companies actively pursuing their own decarbonization targets.
- Hybrid FDRE projects, combining wind, solar, and storage, are increasingly preferred as they provide cost-effective and reliable solutions aligned with industrial demand profiles.
- With wind and solar now representing the cheapest sources of energy, the transition to renewables has become both an economic and environmental imperative.
- From a financing and investor perspective, a successful energy transition in India requires clear regulations and reduced risks, as demonstrated by

Madhya Pradesh's tender approach; the creation of demand, particularly for storage projects that need assured offtake; and private sector competition, which consistently drives down tariffs and improves efficiency.

- However, several financing challenges remain, including the high cost of capital in India compared to global benchmarks, partly driven by conservative credit ratings; the need to broaden domestic bond and insurance markets, as long-tenor renewable energy projects require stable financing beyond short-term bank resets; and regulatory constraints that limit domestic insurers from participating, even though global investors such as pension and insurance funds are already active in Indian renewable energy.

Mr Jishnu Barua, Chairperson, CERC

"*India's energy transition is not about choosing between green goals and affordability—it is about balancing sustainability, energy security, and reliability at every step*."

Mr Manu Srivastava, Additional Chief Secretary, New and Renewable Energy Department- Govt. of Madhya Pradesh

"*Our philosophy is simple: the answer is yes, unless there is a strong reason to say no. By de-risking and making projects bankable, financing is never a challenge*."

Mr Girish Tanti, CII National Committee on Renewable Energy and CII RE Manufacturing Council and Vice Chairman, Suzlon

"Wind and solar are no longer just sustainable—they are the cheapest sources of power. Economics alone makes the case for going green."

Mr Rajiv Ranjan Mishra, Co Chairman, CII National Committee on Power and MD, Apraava Energy

"If regulations are clear and risks are reduced, the best tariffs will always follow. Financing will flow where projects are bankable and well-structured."

L-R: Mr Rajiv Ranjan Mishra, Co-Chairman, CII National Committee on Power and MD, Apraava; **Mr Jishnu Barua**, Chairperson, CERC; **Mr Manu Srivastava,** Additional Chief Secretary, (New & Renewable Energy) Government of Madhya Pradesh and **Mr Girish Tanti**, CII National Committee on Renewable Energy and CII RE Manufacturing Council and Vice Chairman, Suzlon

Panel Discussion 5

Skills for Universal Energy Access and Just Transition

Background

The session was designed to address the growing demand for industry-ready skills and the need to bridge gaps between education, training, and evolving workforce requirements. With rapid technological change reshaping job roles across sectors, India's skilling ecosystem must adapt to ensure that youth and professionals are equipped with relevant competencies. The session brought together industry leaders, training institutions, and policymakers to discuss emerging skill needs, highlight best practices, and explore collaborative approaches for enhancing employability, upskilling the workforce, and building a resilient talent pipeline for the future.

Key Takeaways

- Technology alone cannot drive the energy transition—people will.
- Skilling is essential for millions who will build, operate, and maintain renewable systems across India and the Global South.
- Shortage of trained manpower for design, installation, O&M, grid maintenance, and emerging technologies (EVs, green hydrogen, storage, smart grids).
- Gap is most visible in rural and last-mile regions.
- Strengthen skilling for RE technologies (solar, wind, hybrid, RTC, storage).
- Develop a robust grid-maintenance workforce as India upgrades and expands its grid.
- Ensure inclusive and equitable skilling across gender, regions, socio-economic groups.
- Promote green entrepreneurship, not just jobs—through livelihood bundles, market linkages, and finance.
- Industry–government co-creation is non-negotiable.
- Current ecosystem is fragmented; skilling must shift from *volume-based* to *outcome-based*.
- Need joint curriculum development, shared certification, and industry-led Centres of Excellence.
- Incentivizing skilling as a national investment. Suggestions include, tax incentives, CSR credits, co-funding models.
- Skilling should move from being a compliance task to a boardroom agenda.
- Best practices from private sector must be scaled.
- Identify high-performing private training programs and scale them with public co-funding, rather than creating parallel government schemes.
- Just transition requires planning for "skilling for what?"
- 20 million depend on coal; reskilling must be tied to real economic opportunities, not generic training.
- Decentralized renewable energy can serve as a seed for local economic revival.
- Upskilling existing workforce is urgent.
- IEA warns that 6 million existing workers globally risk becoming irrelevant without reskilling.

- New technologies (automation, AI, digital O&M, remote sensing) require new competencies.
- Vocational and lifelong training models are essential.
- Swiss/German dual training models prove that practice and theory works.
- Companies like Hitachi Energy mandate lifelong learning hours for all employees.
- On-ground skilling centres show strong results
- Local training centres at project sites demonstrate, high inclusivity, 80% employment outcomes, better local engagement and operational support.
- Complexity of RE systems demands higher-level skills
- Transition from solar - hybrid -RTC -integrated systems requires advanced capability in forecasting & scheduling, data analytics, system integration, safety and quality standards across states.
- Skilling enables dignity, equity, and climate justice.

Dr. Sangita Kasture, Scientist G, Ministry of Renewable Energy

"As India accelerates toward universal clean energy access, skilling must evolve as fast as technology itself. Whether it is solar-wind hybrids, battery storage, green hydrogen or decentralized solutions, our transition will succeed only when we invest equally in human capital. MNRE has been working to strengthen training ecosystems, promote standardised curriculums and build pathways for youth, women and local communities to participate meaningfully in this green economy. A just transition is not only about clean energy—it is about creating opportunity, resilience and dignity for every citizen who will power India's renewable future."

Mr. Sameer Gupta, Co-Chairman, CII RE Manufacturing Council and Chairman and Managing Director, Jakson Group

"*It's the people who will drive the transition. Energy shift is not about gigawatts or megawatts. It's about millions of livelihoods, millions of homes, and the people who will build, operate, and maintain these systems*".

L-R: Dr Mohammad Rihan, Director General, National Institute of Solar Energy; **Mr Neerav Nanavaty** CEO, BluPine; **Mr Sameer Gupta**, Co Chairman, CII RE Manufacturing Council and CMD, Jakson Group; **Mr N Venu**, MD & CEO, Hitachi Energy India; **Dr Rodney Riviere**, Cluster Coordinator Private Sector Development- Skilling and TVET, GIZ India and **Dr Sangeeta Kasture**, Scientist G, Ministry of Renewable Energy

Day 2: September 23, 2025

Special Ministerial Session 3

Beyond Boundaries: Creating New Power Markets

Background

The transition to renewable energy requires a robust ecosystem of investment, innovation and integration. The session charted a path toward a sustainable, scalable and investor-friendly renewable energy future. It explored strategies to attract capital into the solar and wind sectors while emphasizing the growing importance of hybrid solutions for delivering round-the-clock clean power. The discussion will also highlight the role of transnational trading in power such as the India- Sri Lanka transmission line in unlocking regional synergies, optimizing renewable resources and creating new opportunities for wind power purchase agreements. Additionally, the session examined the need to undertake R&D, build a resilient supply chain and strengthen regional collaborations.

Key Takeaways

- The session emphasized the importance of regional collaboration and cross-border energy partnerships to accelerate the energy transition and achieve net-zero goals across South Asia.
- A landmark India–Sri Lanka transmission project was highlighted, involving a 400 kV HVDC line between Madurai and Mannar. This initiative is expected to unlock 20–30 GW of wind potential in Sri Lanka's northern region and enable bidirectional electricity trade, enhancing energy security and regional integration.
- Tamil Nadu was showcased as a leader in renewable energy, with over 25 GW of installed RE capacity, including 11.5 GW of wind and 10.7 GW of solar. The state is advancing hybrid projects, offshore wind, pumped storage, and battery energy storage systems to deliver 24/7 clean power.
- Tamil Nadu has launched several progressive policies in 2024, including the Wind Repowering Policy, Pumped Storage Policy, and Small Hydro Policy, and is developing an integrated renewable energy policy to support innovation and private sector participation.
- Sri Lanka aims to achieve 70% electricity generation from renewables by 2030 and carbon neutrality in power generation by 2050. The country is investing in solar, wind, battery storage, and grid modernization, supported by a $150 million World Bank program and $800 million in expected private investment.
- The session stressed the need for stable policy regimes, transparent long-term PPAs, and risk mitigation mechanisms to attract domestic and international capital for renewable energy infrastructure.

- Speakers called for resilient supply chains, local manufacturing ecosystems, and R&D investments in advanced technologies like offshore wind, battery storage, and smart grid integration.
- The importance of fair market access and responsible supply chains was discussed, especially in the context of global trade dynamics and the monopolization of renewable technology manufacturing.
- The concept of a South Asian Renewable Energy Corridor was proposed, integrating diverse resources, solar in India, wind in Sri Lanka, hydro in Nepal and Bhutan, to create a balanced and scalable regional clean energy market.

Mr S.S. Sivasankar, Hon'ble Minister for Transport and Electricity, Government of Tamil Nadu

"Tamil Nadu stands as one of the largest renewable energy states in India, with over 25 GW of installed capacity. We are creating synergies between solar, wind, and storage to deliver reliable round-the-clock renewable power and are proud to contribute significantly to India's net-zero vision."

"The proposed Sri Lanka–India transmission line connecting Tamil Nadu with Sri Lanka is a landmark project. By linking with Sri Lanka, we are not just strengthening grid connectivity—we are advancing a greener, more resilient future for the region and setting a precedent for cross-border renewable energy exchange in South Asia."

Eng. Kumara Jayakody, Minister of Energy, Government of Sri Lanka

"Sri Lanka has set a goal of achieving 70% electricity generation from renewable sources by 2030 and carbon neutrality in power generation by 2050. Our collaboration with India, especially through the HVDC transmission link, is a vital step toward reliable, secure, and sustainable energy access."

"We are looking to convert Trincomalee into an energy hub through a three-way partnership between India, Sri Lanka, and the UAE. The offshore wind sector can be developed jointly with India to balance power demand and enhance energy security for both countries."

Mr Sanjiv Puri, Immediate Past President, CII and Chairman, ITC

"India's growth story is remarkable not just for its economic performance, but for the fact that it is being powered by a low-carbon trajectory. We are now the third-largest solar power generator globally and have already reached 250 GW of non-fossil fuel capacity. But the challenge of climate change is global and we must come together to create multi-dimensional partnerships to move forward".

L-R: Mr Sujoy Ghosh, Vice President and Country Managing Director-India, First Solar; **Mr Sanjiv Puri**, Immediate Past President, CII and Chairman, ITC; **Mr S.S. Sivasankar**, Hon'ble Minister for Transport and Electricity Government of Tamil Nadu; **Eng. Kumara Jayakody,** Minister of Energy, Government of Sri Lanka and **Mr RPV Prasad**, Managing Director, Envision Energy India Pvt Ltd

Special Ministerial Session 3

Global Partnerships for Energy Security in a Changing Geopolitical Landscape

Background

The session provided a comprehensive overview of India's evolving energy security landscape, examining transition pathways, diversification needs, technological adoption, renewable scale-up, and the rising importance of strategic partnerships in building resilient energy systems

Key Takeaways

- The session highlighted that the nature of energy security has fundamentally changed. Rather than focusing solely on availability, countries must now contend with geopolitical risks, conflicts, supply chain disruptions, and price uncertainty. India's energy system has remained resilient, but the panel stressed that long-term planning, diversification, and strategic reserves will be essential to navigate future shocks.

- India's high reliance on imported crude oil (close to 90%) and increasing dependence on imported LNG and coal were highlighted as structural vulnerabilities. The discussion emphasized diversifying both suppliers and energy sources, expanding collaboration with resource-rich geographies, and leveraging India's diplomatic relationships to secure long-term stability.

- A common viewpoint across the panel was the critical role of partnerships with global oil majors for exploration, with technology players for innovation, and with regional neighbours for energy trade. These collaborations can accelerate exploration, bring advanced technologies into India, and reduce investment risks in frontier basins.

- The panellists agreed that India's energy demand will continue to grow for decades, requiring a dual strategy: maintaining strong investments in oil and gas while aggressively scaling up renewables, hydrogen, biofuels, geothermal, and storage. Fossil and non-fossil fuels were framed not as competing pathways but as complementary pillars of India's evolving energy system.

- Technological adoption from advanced seismic imaging to digital oilfields, AI-enabled monitoring, and improved refining efficiency was recognized as essential for enhancing productivity and reducing emissions. The panel stressed that technology leadership will determine competitiveness in the future energy ecosystem.

- The transition to clean energy is increasing the strategic importance of lithium, cobalt, rare earths, and other critical minerals. India's efforts to expand domestic exploration and secure overseas assets were viewed as vital steps to support its manufacturing ambitions in EVs, storage, and solar.

- The visiting Minister highlighted the unique challenges of a small island nation dependent on imported diesel and vulnerable to climate shocks. Maldives is actively pursuing solar especially floating solar while seeking closer collaboration with India on technology transfer, financing, and capacity building.

- Despite global energy disruptions, India has maintained uninterrupted fuel supplies, improved LPG access, and enhanced electricity reliability. The panel expressed confidence that with integrated planning and collaborative action, India can continue leading the region on energy resilience.

Dr Ranjit Rath, CMD, Oil India Ltd.

"Diversification is essential. India must balance conventional energy development with a strong push towards clean and sustainable alternatives."

Mr BC Tripathi, Operating Partner and Senior Advisor, Essar Group

"Gas will remain critical for India not just as a transition fuel but as a long-term component of our energy mix."

Mr Prabh Das, CEO & MD, HPCL-Mittal Energy Ltd.

"Critical minerals are emerging as the new strategic assets just as important as oil and gas were decades ago."

Dr Muaviyath Mohamed, Minister of State, Environment and Tourism, Government of Maldives

"Collaboration, not competition, is the only way to build energy resilience in the region. We look to India as a trusted partner to help us secure cleaner and more reliable energy systems."

L-R: Mr Prabh Das, MD & CEO, HMEL; **Dr Ranjit Rath**, Chairman and Managing Director, Oil India & Chairman, CII National Hydrocarbon Committee; **Mr Muaviyath Mohamed**, Minister of State, Environment and Tourism, Government of Maldives; **BC Tripathi**, Operating Partner and Senior Advisor Essar group and **Ms Soma Banerjee**, Deputy Director General, CII

STATE SESSION

Bihar

Background

Bihar has seen a major transformation in its power sector over the past decade, moving from severe shortages to becoming one of India's strongest performers in electrification, financial stability and infrastructure growth. Bihar leads the country in smart metering in installed prepaid meters and is developing a Central Command Centre and Centre of Excellence for smart metering.

Key Takeaways

- The session focused on Bihar's remarkable transformation in the power sector over the past decade, highlighting its journey from chronic power shortages to becoming one of the best-performing states in terms of electrification, financial turnaround, and infrastructure development.
- It was discussed that Bihar has achieved 100% household electrification, with 24x7 power supply in urban areas and over 23 hours in rural areas. This was made possible through strong political will, over ₹75,000 crore in investments, and efficient execution by the state's power utilities.
- The session highlighted that Bihar's DISCOMs have turned profitable, with expected profits exceeding ₹2,000 crore in FY 2024–25. AT&C losses have been reduced from nearly 60% to below 15%, surpassing national targets.
- The state's leadership in smart metering was emphasized, with over 77 lakh prepaid smart meters installed, making Bihar a national leader in prepaid metering. The state is also planning a Central Command Centre and a Center of Excellence for smart metering skills.
- The session emphasized Bihar's ambitious investment roadmap, with over ₹2 lakh crore projected across generation, transmission, and distribution by 2050. This includes major projects like the 2,400 MW Pirpainti thermal plant and a 300 MW solar + 400 MWh BESS project at Kajra.
- It was noted that Bihar has launched progressive policies such as the Renewable Energy Policy 2025, Pumped Storage Promotion Policy 2025, and Industrial Investment Promotion Package 2025. These offer incentives like 50% capital subsidy, 100–300% SGST reimbursement, and land at ₹1 per acre for qualifying projects.
- The session also focused on Bihar's potential in renewable energy, especially floating solar on water bodies, pumped storage, and distributed RE. The state aims to develop 13 GW of RE capacity based on its resource adequacy plan.
- Speakers discussed the importance of aligning policy, regulation, and execution. Bihar was praised for its proactive governance, investor-friendly environment, and alignment between DISCOMs and regulators.

- Industry leaders from Adani, L&T, Intellismart, and others shared their positive experiences working in Bihar, citing fast approvals, responsive administration, and smooth project execution.
- The session concluded with a strong call to action for investors, emphasizing that Bihar is not only ready for large-scale energy investments but is also setting benchmarks in policy innovation, infrastructure readiness, and administrative efficiency.

Mr Manoj Kumar Singh, Secretary, Power, Govt. of Bihar & CMD, BSPHCL

"Bihar's power sector has seen a phenomenal turnaround. From being nowhere on the map to becoming one of the best-performing DISCOMs in the country, we are now expecting profits of over ₹2,000 crore this year."

Mr Ghanshyam Prasad, Chairperson, Central Electricity Authority

"Bihar's strength lies in its willingness to innovate and remain consistent in its approach. While many states rolled back prepayment metering, Bihar continued with determination, and today, with more than 7.7 million smart prepaid meters, it stands as a national leader in advancing financial discipline and empowering consumers. This reform has not only strengthened the cash flow of DISCOMs but also fostered a culture of accountability and consumer satisfaction."

Mr Jitendra Srivastava, Chairman and Managing Director, REC Limited

"REC is very bullish on Bihar. We are ready to finance viable projects with strong revenue streams. The state's responsiveness, political will, and administrative efficiency make it a highly attractive investment destination."

L-R: Mr Rahul Kumar, MD - NBPDCL & BSPTCL; **Mr Jitendra Srivastava**, Chairman and Managing Director, REC Limited**;Mr Ghanshyam Prasad**, Chairperson, Central Electricity Authority**; Mr Kundan Kumar**, Managing Director, Bihar Industrial Area Development Authority & Investment Commissioner for Bihar; **Mr Manoj Kumar Singh**, Secretary, Power, Govt. of Bihar & CMD, BSPHCL and **Mr Deepak Kumar Nayak**, Vice President & Business Head (Renewables India),

Panel Discussion 6

Role of Thermal Power in Renewable Rich Future

Background

Thermal Power has held continued relevance in India's energy mix. It plays a particularly critical role in India's energy basket, particularly critical role in India's energy basket, particularly in providing baseload electricity and ensuring grid stability. The session addressed pricing challenges in natural gas-based power generation and the strategic role thermal plants play in complementing intermittent renewable sources. The session also explored challenges in deploying carbon capture, utilization and storage (CCUS) technologies, alongside the potential of biomass co-firing as a decarbonization strategy.

Key Takeaways

- Thermal power remains essential to India's energy system, providing grid stability, reliability, and energy security. Despite the growth of renewables, thermal generation continues to serve as the backbone of the power sector, especially for managing peak demand and renewable intermittency.
- India's energy demand is rising, with per capita electricity consumption still significantly below global averages. As the country moves toward becoming a developed economy by 2047, thermal power will be critical in meeting growing energy needs.
- Thermal plants play a key role in balancing the grid, especially during evening peak hours when solar generation drops. Coal-based plants are currently the only large-scale, dispatchable source capable of rapid ramping to manage renewable variability.
- Flexible operation of thermal plants is becoming increasingly important. NTPC and other generators are working to reduce minimum load operations from 55% to potentially 40%, though this poses technical and economic challenges, especially for supercritical units.
- Frequent ramping and part-load operations introduce thermal stress and reduce efficiency, increasing operational costs. Compensation mechanisms from regulators (e.g., for heat rate degradation and auxiliary power consumption) are essential to sustain such operations.
- Biomass co-firing is being adopted to reduce emissions and support decarbonization. NTPC and Vedanta are actively using non-torrefied and torrefied biomass, though high costs and limited supply chains remain challenges. Municipal solid waste is also being explored as a fuel source.
- Carbon Capture, Utilization, and Storage (CCUS) is seen as a long-term solution for decarbonizing thermal power. While still in early stages in India, CCUS is gaining traction globally and could help hard-to-abate sectors meet net-zero goals.

- Policy and regulatory support is critical to enable the transition of thermal power into a flexible, cleaner, and more sustainable role. This includes support for flexible operations, biomass co-firing, and CCUS through incentives, compensation mechanisms, and clear guidelines.
- Thermal power and renewables must coexist in a complementary manner. A balanced energy mix that includes both dispatchable thermal and variable renewable sources is essential for a resilient and affordable energy transition.
- India is at a strategic advantage to design a future-ready energy ecosystem by learning from global experiences and avoiding pitfalls, such as over-reliance on renewables without adequate backup, as seen in recent blackouts in countries like Spain and Portugal.

Mr Arun Goyal, Former Member, Central Electricity Regulatory Commission and Former, Secretary, Government of India, PMG

"Even with 35% of our installed capacity coming from solar and wind, their contribution to actual generation is only about 12%. Managing the grid during evening peaks, when solar is unavailable, is already a challenge. Thermal power remains the only large-scale source capable of ramping up quickly to meet this demand, making it indispensable for grid stability and reliability."

L-R: Mr Rajinder Ahuja CEO, Vedanta Power ; **Mr Arun Goyal** Former Member, Central Electricity Regulatory Commission and Former Secretary, Government of India, PMG ; **Mr Partha Nag** ,Chief General Manager-Operation Services, NTPC and **Mr Shuboday Ganta,** Director – Power & Utilities, EY

Panel Discussion 7

Enhancing Solar Access for Rural Economy

Background

This session explored global best practices driving rural solar energy deployment. It will also go into policies and financing mechanisms in India, with a focus on initiatives like PM-KUSUM and PM Surya Ghar. It examined how these programs are enabling decentralized and rooftop solar adoption, particularly in undeserved regions. The discussion highlighted agrivoltaics as a transformative dual-benefit model, enhancing farm incomes while generating clean energy. The session aimed to identify actionable pathways to accelerate equitable and sustainable solar energy deployment at the grassroots level.

Key Takeaways

- Energy access in rural areas is often discussed only in terms of electrification, but quality, reliability, and affordability remain major gaps.
- Rural economies are closely linked to nature, making them ideal for renewable energy integration.
- Decentralized RE has the potential to support agriculture, livelihoods, and quality of life, not just basic electricity needs.
- The session explored different models of rural solarization in India and abroad, and their economic and social impacts.
- Madhya Pradesh has launched one of the largest decentralized RE programs in the world, with bids totalling 18 GW.
- The program was designed to be commercially viable, not charity-driven, ensuring large-scale private sector participation.
- The feeder solarization model is structured to help discoms directly reduce the need for costly transmission and distribution upgrades, provide real-time solar supply to rural customers and address reactive power management through inverter-based solutions.
- By aligning with discom needs, the model positions RE as a solution to conventional sector challenges rather than as a threat.
- Recent storage-linked tenders in the state achieved record-low tariffs (₹2.70/unit), showing strong investor confidence.
- Over 400 million people in Africa still lack electricity, and many rural areas will not see the grid in the foreseeable future.
- Small decentralized solar applications have had transformative impacts, including: Solar cold storage in Djibouti, enabling communities to produce and store cheese, creating stable livelihoods, Solar water pumping replacing diesel sets, providing reliable drinking water and even powering streetlights.

- Madagascar pilot under the Quad Climate Initiative, where a simple 1 HP solar pump enabled irrigation of tomato fields and created linkages to a ketchup factory.
- Even 1 kW systems can be life-changing in rural contexts, proving that decentralized RE is not just about gigawatt-scale projects.
- Panel highlighted that energy access must go beyond electrification and be tied directly to livelihood opportunities in rural areas.
- Panel highlighted the importance of end-to-end ecosystem support-financing, training, and maintenance so that rural communities can sustainably adopt RE solutions.
- Noted that productive use of energy is key to ensuring renewable energy projects are economically viable and socially impactful.
- Concerns exist that solar water pumps may lead to over-extraction of groundwater, particularly in water-scarce regions like Rajasthan.
- States such as Rajasthan have linked pump sanctions to mandatory water harvesting structures, creating checks against depletion.
- Research by the International Water Management Institute (IWMI) across India, Nepal, Bangladesh, and Sri Lanka found no significant evidence of water table depletion where solar replaced diesel pumps.
- Panellists agreed that policies should be evidence-based and region-specific, balancing energy access with water security.

Mr. Manu Srivastava, Additional Chief Secretary (New & Renewable Energy), Government of Madhya Pradesh

"Let us not think of rural solarization as charity—it is a highly viable commercial activity. By solving discoms' problems, we make RE a partner, not a competitor, to the conventional sector."

Mr. Praphul Sharma, Distributed Solar Specialist, International Solar Alliance (ISA)

"In many African countries, even one kilowatt of solar can be a boon. The impact of a small pump or a cold storage unit on livelihoods is far greater than we often realize."

Mr. Mohan Hegde, CEO, SELCO Solar Light Pvt. Ltd

"Energy access must go beyond electrification-it has to be tied directly to livelihood opportunities so that rural communities can sustainably adopt renewable energy solutions."

L-R: Ms Jyoti Mukul,Chief – Energy, CII; **Mr Manu Srivastava**, Additional Chief Secretary, (New & Renewable Energy) Government of Madhya Pradesh **; Mr Mohan Hegde**, CEO-SELCO Solar Light Pvt Ltd and **Mr Praphul Sharma,** Distributed Solar Specialist, International Solar Alliance

Panel Discussion 8

Power Procurement Through PPAs or Trading: A Discom Dilemma

Background

The session focused on power procurement models to mitigate financial loses faced by distribution companies. The session delved into cost-effective procurement models, the critical role of the merit order of dispatch and the strategic balance between PPAs and trading. Panelists explored tools that can be leveraged to reduce costs, improve financial health and support the evolving energy landscape, unpacking the challenges, opportunities and practical approaches that can redefine power procurement for DISCOMS.

Key Takeaways

- The session explored the evolving landscape of power procurement for DISCOMs, emphasizing the need to move from a binary choice between long-term Power Purchase Agreements (PPAs) and short-term trading to a hybrid procurement model that balances reliability, cost-efficiency, and flexibility.
- Long-term PPAs have historically played a critical role in ensuring resource adequacy, attracting investment, and enabling transmission planning. However, they are increasingly seen as rigid and financially burdensome for DISCOMs due to fixed costs and lack of flexibility in adapting to changing demand and cleaner, cheaper technologies.
- Short-term markets and power exchanges are gaining traction, with their share in total transactions growing to around 12.5%. However, their limited volume and high price volatility currently restrict their broader adoption for base load procurement.
- The implementation of Market-Based Economic Dispatch (MBED) and Security Constrained Economic Dispatch (SCED) is expected to enhance market depth, reduce system costs, and improve dispatch efficiency. MBED is targeted for rollout by January 2026.
- Capacity contracts were strongly recommended as a solution to reduce DISCOMs' exposure to long-term energy off-take obligations while ensuring availability. These contracts would allow DISCOMs to secure capacity without being locked into fixed energy purchases, enabling more dynamic market participation.
- Contract for Difference (CfD) models were proposed as a way to share risk between generators and DISCOMs. CfDs can incentivize innovation while protecting DISCOMs from price volatility, especially in renewable energy procurement.
- Resource adequacy planning and demand forecasting were identified as critical gaps in DISCOM operations. Improved forecasting, supported by

smart metering and data analytics, is essential for optimal procurement planning.

- Renewable energy developers are increasingly adopting overbuild strategies (e.g., building 2.5x capacity for a 100 MW PPA) to meet round-the-clock (RTC) and firm dispatchable renewable energy (FDRE) requirements. This is organically reducing the reliance on "must-run" status for renewables.
- Merchant renewable energy is becoming a significant component of the market, with developers relying on short-term trading for 20–30% of their generation. This trend underscores the need for deeper, more liquid markets.
- SECI's evolving tender designs—from plain solar/wind to hybrid, RTC, FDRE, and solar-plus-storage—are helping DISCOMs meet peak demand and resource adequacy requirements more effectively.
- Regulatory frameworks, such as the 2023 Indian Electricity Grid Code by CERC, are pushing for comprehensive resource adequacy and operational planning across generation, transmission, and distribution segments.
- The session concluded that India is at a critical inflection point. By adopting capacity markets, CfDs, and granular dispatch mechanisms (like 5-minute dispatch), DISCOMs can transition to a more flexible, cost-effective, and resilient power procurement ecosystem.

Mr Manoj Kumar Singh, Secretary, Energy Department and Chairman and Managing, Director, Bihar State Power Holding Company Ltd, Government of Bihar

"PPAs have been instrumental in building India's power capacity and ensuring stable supply, but over time they become financially burdensome for DISCOMs. Even when cheaper and cleaner power is available, we are locked into long-term contracts and must pay fixed costs, whether we use the power or not. This rigidity also limits our ability to transition to renewables efficiently. We need to move from an exclusive PPA regime to a hybrid model where market-based procurement plays a greater role. With the implementation of MBED and market coupling, we can increase traded volumes, reduce system costs, and ultimately benefit the consumer. But for this to succeed, we need a deeper market and regulatory support for capacity contracts and shorter PPA tenures."

L-R: Mr Abhishek Ranjan,CEO, BSES Rajdhani; **Mr Alok Kumar**, DG, All India Discom Association & Member, India Energy Stack Taskforce; **Mr Manoj Kumar Singh,** Secretary, Energy Department and Chairman and Managing Director, Bihar State Power Holding Company Ltd Government of Bihar ; **Mr Manish Chaudhari,** Joint Chief, CERC; **Mr Sivakumar V Vepakomma** ,Director, Power Projects SECI and **Mr Nishit Mehta**, Chief Business Officer, Serentica Renewables

STATE SESSION

KARNATAKA

Background

The session provided a comprehensive overview of India's evolving energy security landscape, examining transition pathways, diversification needs, technological adoption, renewable scale-up and the rising importance of strategic partnerships in building resilient energy systems.

Key Takeaways

- Karnataka has achieved 67% renewable energy in its power mix, supported by abundant wind and solar resources.
- Installed RE capacity stands at 24 GW, comparable to leading global renewable nations.
- Daily RE contribution ranges between 40%–90%, depending on seasonal wind and monsoon patterns.
- The state plans to increase total installed capacity from 36 GW to 60 GW by 2030, adding 19 GW of new wind and solar.
- Additional growth includes battery storage, pumped hydro projects, thermal, and possibly nuclear to ensure long-term resource adequacy.
- Recent amendments to the Karnataka Land Reforms Act simplify land conversion for wind and solar projects.
- Policies now explicitly recognize renewable energy uses, enable leasing, and reduce bureaucratic hurdles.
- Feedback from investor summits drove rapid policy upgrades.
- Karnataka is expanding transmission infrastructure with 100+ substations and 27 RE-focused substations through competitive bidding.
- Major corridors evacuate power from northern RE hubs (Gadag, Ballari, Koppal) to Bengaluru and southern load centers.
- The state has largely avoided curtailment by careful planning, distributed RE deployment, and balancing with hydro.
- Grid modernization and digitalisation are emphasized to manage variability and maintain stability.
- New tenders emphasize solar + battery and solar + wind + battery hybrids to improve firm power supply.
- Pumped hydro is being pursued aggressively with 3-5 identified sites, and one already under active development.
- Most RE capacity is developed by private EPC players, supported by streamlined approvals and state responsiveness.
- Success stories include large parks like Pavagada Solar Park, now planned to expand from 2 GW to 4 GW.
- Industry representatives highlighted Karnataka's high wind density, strong hybrid potential, and rapid year-on-year RE additions (~18%).
- Right-of-way issues remain significant, especially in dense RE corridors.
- The state coordinates closely with district administrations and offers support to developers like Power Grid, Renew, and others.

- Panellists stressed the need for digital grid management, system integration, reactive power management, and updated protection systems.
- Karnataka leads India in EV sales and public charging infrastructure with ~5900 charging stations.
- Policies from 2017 supported manufacturing, charging infrastructure, and consumer incentives.
- Tools like EV Mitra help users locate charging points, and tariff policies enable easy domestic charging connections.
- Need for end-to-end digitalization to monitor generation-to-consumption patterns.
- Increasing role of data centers (24/7 loads) expected to accelerate green power demand.
- Emphasis on designing integrated solutions combining wind, solar, and storage rather than isolated projects.
- Karnataka is preparing for growing demand in Tier-2 cities, not just Bengaluru.
- 220 kV and 400 kV grids are being expanded to secure supply for upcoming industrial and urban clusters.
- The state coordinates with other regions (e.g., UP, Punjab) for seasonal banking and swapping to manage variability during low-wind or low-hydro years.

Mr Gaurav Gupta, Additional Chief Secretary (Energy), Govt. of Karnataka

"Land challenges are real, but we are reforming policies to make RE development smoother. Our planning ensures Karnataka remains energy-secure while supporting the national grid."

Mr R.P.V. Prasad, MD, Envision Energy India

"Karnataka is one of the most wind-rich states, with wind density far above national averages. Hybrid systems wind, solar, and storage will take renewable energy to the next level."

Mr Sanil Namboodiripad, COO, Indigrid

"Quality assets, modern inverters, and reactive compensation are essential for grid stability. Digital control will play a major role manual grid management is no longer feasible."

Mr Atul Agarwal – Director (Projects & Operations), Hexa Climate

"Unlike many states, we see almost no curtailment in Karnataka due to strong evacuation planning."

L-R: Sanil Namboodiripad, COO**,** Indigrid; **Gaurav Gupta,**Additional Chief Secretary**,** Government of Karnataka; **RPV Prasad,** Managing Director, Envision Energy India Pvt Ltd; **Atul Agarwal,** Director (Projects & Operations)**,**Hexa Climate

Special Ministerial Session 5

Local Manufacturing for Global Energy Systems

Background

India is poised to become a global hub for renewable energy manufacturing, with rapidly expanding capabilities in solar modules, wind turbine components, batteries, electrolysers and transmission technologies. This session will explore strategies to scale domestic manufacturing to meet rising global demand while boosting export potential across the clean energy value chain. Discussions highlighted the importance of strengthening MSMEs and their manufacturing capacity for critical transmission equipment such as transformers, switchgear and grid interface technologies. The session also focussed on aligning with international quality standards, leveraging trade agreements and enhancing India's competitiveness in global supply chain resilience were examined to drive an export-oriented renewable manufacturing ecosystem.

Key Takeaways

- India's clean energy journey has progressed from potential to momentum and is now moving towards global leadership. This transformation is being recognized globally, as evidenced by foreign direct investment (FDI) inflows exceeding USD 10 billion into the clean energy sector over the last five years. With this shift, India is not only focusing on "Make in India" but is also positioning itself as a global manufacturing hub with the vision of "Make for the World."
- To maintain global competitiveness, the Indian government has identified three critical areas of focus: speed, standards, and supply chains. Enhancing the speed of approvals and reducing factory setup times are enabling Indian manufacturers to reach global markets ahead of competitors. Infrastructure reforms under the PM Gati Shakti initiative — which integrates planning of roads, ports, and industrial corridors — are significantly improving logistical efficiency, reducing export timelines by up to 30%.
- In addition to faster execution, stringent quality standards are being prioritized. The government is promoting BIS certification and the establishment of international testing laboratories to align Indian products with global benchmarks such as IEC and UL. These measures ensure that Indian-manufactured solar, wind, and grid equipment not only compete on price but also on quality and reliability.
- Recent policy reforms, such as the reduction in GST on renewable energy components from 12% to 5%, and the introduction of mandatory domestic sourcing norms for solar cells and wind turbine components, are further strengthening the domestic manufacturing ecosystem.

- In parallel, the government is addressing the critical need for innovation and skill development. The Anusandhan National Research Foundation (ANRF), established with a ₹1 lakh crore budget, is aimed at enhancing India's research, development, and innovation capabilities.
- Furthermore, to address upstream challenges in the supply chain, the National Critical Mineral Mission — with an allocation of ₹34,300 crore — is focused on securing access to essential minerals such as lithium, cobalt, and rare earth elements. This mission combines domestic exploration, recycling, and international collaborations to ensure a resilient and globally competitive manufacturing base.
- A significant area of concern remains the skill gap in the renewable energy sector. Currently, the industry employs approximately one million people. However, this figure is projected to rise to 3–4 million by 2030 and may reach 10–15 million by 2047. To meet this demand, a focused strategy on skilling and workforce development is essential.
- India stands at a critical juncture with an opportunity to establish itself as a trusted global supplier in the clean energy value chain. With a global clean energy manufacturing market expected to grow from USD 300 billion today to over USD 750 billion by 2030, India possesses the cost advantage, policy support, and industrial capacity needed to lead. The path forward lies in building an ecosystem rooted in quality, resilience, and innovation — not just assembling technologies but designing, innovating, and owning intellectual property.

Mr Jitin Prasada, Hon'ble Minister of State, Ministry of Commerce & Industry and Ministry of Electronics & Information Technology, Government of India

"It is important to remember that local manufacturing is not only about Aatma Nirbharata; it is also about global relevance. Our goal is not just to install megawatts domestically but to export innovation worldwide. It is about creating jobs for our youth, ensuring competitiveness for our industries, and providing resilience for our global supply chains. As we move towards a Viksit Bharat 2047, our aim is clear: India must become the most trusted and reliable partner in clean energy manufacturing".

Report Launch

A report was formally unveiled during the session, titled *Manufacturing for India and the World* by Shri Jitin Prasada, Hon'ble Minister of State, Ministry of Commerce & Industry and Ministry of Electronics & Information Technology, Government of India during and the panellists.

The report provides an in-depth analysis of India's manufacturing ecosystem across critical clean energy sectors, including solar, wind, green hydrogen electrolysers, battery energy storage systems, transmission equipment, and

emerging technologies. It highlights the strategic role of India in advancing the global clean energy transition, while ensuring sustainable growth and energy security at home.

L-R: Mr Sameer Gupta, Co Chairman, CII RE Manufacturing Council and CMD, Jakson Group; **Mr Jitin Prasada** ,Hon'ble Minister of State, Ministry of Commerce & Industry and Ministry of Electronics & Information Technology, Government of India; **Mr B. Thiagarajan**,Chairman, CII Indian Green Building Council (IGBC) and Managing Director, Bluestar and **Dr Amit Paithankar**,Whole Time Director & CEO, Waaree (Moderator)

Panel Discussion 9

Modelling Carbon Credits Framework to Promote Net-Zero

Background

The session explored mechanisms for trading green energy under the carbon credits framework, with a focus on regulatory bottlenecks and the evolving landscape under Articles 6.2 and 6.3 of the Paris Agreement. Experts deliberated on opportunities and challenges in enabling cross-border and bilateral carbon credit trades. Discussions also focused on strategising a path towards a robust, transparent, and scalable green trading ecosystem, while also exploring avenues to operationalise India's Emissions Trading Scheme (ETS), strengthen carbon markets, and align with global carbon pricing frameworks.

Key Takeaways

- There is a need to clearly define what qualifies as "renewable or green energy" for generating carbon credits. Global acceptability and credibility of definitions are essential for interoperability and integrity in carbon trading.
- A robust regulatory framework is needed to govern carbon markets, ensure transparency, and prevent double-counting. Integration between the domestic Emissions Trading Scheme (ETS) and the international carbon market must be guided by clear government rules under Articles 6.2 and 6.4.
- India has signed its first bilateral agreement with Japan under Article 6.2, establishing a precedent for future international carbon trading partnerships. Article 6.4 mechanisms are still evolving globally, and India is closely monitoring developments to align domestic systems.
- Need for a certification and verification ecosystem with accredited agencies to prevent fraudulent or low-quality credits. Tradability of credits on domestic exchanges and integration with international platforms via blockchain for secure, traceable transactions would allow investors to participate as intermediaries and improve liquidity for project developers.
- Investors should view carbon credits as supplementary returns, not primary revenue drivers. Creating liquidity and a functioning secondary market would attract both domestic and global investors, accelerating India's low-carbon transition.
- Carbon credit prices are currently highly volatile, often hovering between $1–$5 per tonne, which discourages long-term project investments. Floor and ceiling price mechanisms can provide predictability and stability for investors and project developers.

- The government should provide policy and fiscal incentives for projects that deliver co-benefits, such as afforestation, community benefits, or biodiversity

enhancement. Incentives could include tax benefits, priority certification, or additional carbon value multipliers for socially beneficial projects.

Dr Ajay Mathur, Former Director General, International Solar Alliance

"Five areas are of great importance with respect to carbon credits — defining what constitutes renewable electricity and green energy for carbon credits, establishing regulatory frameworks for seamless trading, ensuring transparency and integrity in markets, preparing industry to use carbon credits, and aligning all efforts with Articles 6.2 and 6.3 of the Paris Agreement."

Mr Wayne Sharpe, CEO and Founder, Carbon Trade eXchange

"The key to driving India's transition to a net-zero economy is incentivising real projects on the ground. Voluntary carbon markets reward proven emission reductions, while emission trading schemes are government-issued allowances. If India can successfully link the two and allow voluntary credits to transition into the regulated market, similar to the Californian Scheme, it can truly scale its carbon market."

Mr Vijay Agarwal, Managing Director, Equirus Capital

"We should create a central digital registry where carbon credits are dematerialised, like shares in a DMAT account, and made tradable on exchanges. With certified agencies ensuring authenticity and blockchain-based tracking, India can build a seamless, transparent, and globally tradable carbon credit market."

Mr Vijay Anand, Head HSE and Carbon Credits, Hero Future Energies

"To build a credible and transparent carbon market in India, we need robust methodologies, strong monitoring and verification systems, faster project approvals, and predictable pricing. Credibility, integrity, and long-term policy visibility are key to giving buyers confidence and scaling quality carbon projects."

Dr Prasad Arvind Chaphekar, Deputy Secretary, Ministry of New and Renewable Energy

"India has already taken the first step under Article 6.2 by signing an agreement with Japan for carbon trading between countries. As the framework for Article 6.4 evolves, we'll be better positioned to integrate with the global carbon market."

L-R:Mr Vijay Anand ,Head HSE and Carbon Credits Hero Future Energies; **Dr Ajay Mathur**, Former Director General , International Solar Alliance; **Dr Prasad Chaphekar**, Deputy Secretary, MNRE; **Mr Vijay Agarwal**, Managing Director, Equirus Capital; **Mr Wayne Sharpe**, CEO and Founder, Carbon Trade eXchange (Online)

Panel Discussion 10

AI & Digital Solutions for Next-Gen Energy Reforms

Background

The session highlighted the transformative role of Artificial Intelligence and digital innovation in reshaping India's energy landscape. It focused on India Energy Stack and Utility Intelligence Platform. The session showcased that next-gen digital tools can break down data silos, enhance grid resilience and drive efficient energy management.

Key Takeaways

- The India Energy Stack is still in its design and architecture stage, with the goal of completing the framework within one year.
- The panel emphasized that a robust architecture is critical, noting lessons from Aadhaar, where careful design helped avoid costly rework later.
- The design process is considering whether entity identification should be tied to grid connection or remain independent, and whether IDs should include embedded intelligence or remain simple numbers.
- Harmonizing legacy IT and operational systems with new protocols and gateways will be one of the most difficult challenges.
- Despite progress through programs such as R-APDRP, many utilities still do not have complete asset mapping, leaving blind spots in their networks.
- The industry views the IES as a timely and essential step for grid stability, renewable energy integration, and consumer empowerment.
- According to panel, the ongoing smart meter rollout, which is expected to expand from 250 million to 350 million by 2030, is creating a much-needed digital backbone.
- Integration challenges persist because there are no common APIs or standardized interfaces for smart meters, EV chargers, and distribution automation systems.
- Larger OEMs have begun deploying advanced tools such as digital twins and distribution automation, but MSMEs often remain stuck with fragmented and outdated systems.
- Cybersecurity risks remain a major concern, with insider threats and poor operational practices, such as password sharing, posing serious vulnerabilities.
- The sector also faces a skills gap, since it must transition from manufacturing hardware to providing real-time digital services, requiring significant reskilling.
- Data privacy and consumer trust will be critical, and masking of personal data will be necessary to comply with emerging protection laws.

- Smart meters are widely regarded as the foundation of India's energy digitalization, since they generate the consumer-level data on which all further integration depends.
- They support digital transformation by making siloed data accessible in a uniform manner across utilities.
- They also play a crucial role in grid stability and renewable energy integration by enabling AI-driven forecasting of demand and supply.

Smart meters empower consumers by allowing them to participate as both buyers and suppliers of energy, particularly through rooftop solar and EV integration.

- They improve efficiency by helping utilities pinpoint transmission and distribution losses, which remain between 15 and 30 percent in many states.
- India's metering-as-a-service model, delivered by AMISPs, has scaled quickly, as utilities avoid CapEx by contracting on a per-meter-per-month basis over 10 years.
- The panel agreed that AI and digitalization are transformative forces for renewable energy integration and grid management.
- AI-based forecasting is improving the accuracy of both demand predictions and renewable energy generation estimates.
- Digital twin models of wind turbines allow operators to predict failures and optimize performance over the full 25–30 year life of the machines.
- Remote monitoring through sensors and drone inspections reduces downtime and ensures continuity of energy generation.
- Cybersecurity is a critical concern for both IT systems and operational technologies, such as turbines and storage systems, which must be secured against both insider and external threats.
- The company noted that AI has become a catalyst across every industry, and in the renewable sector it is enabling more reliable forecasting, energy trading, and grid stability.

Dr Ram Sevak Sharma, Chair, India Energy Stack Task Force and Former Mission Director of UIDAI

"Architecture and design is extremely important—you cannot rewrite later. Once we finalize the entity identification and numbering system, we can assure a globally significant digital framework for the power sector."

Mr Sunil Singhvi, Group Head Public Policy. Secure Meters Limited

"Managing India's grid without integrated information flow will become impossible. Lack of common APIs has slowed down smart meter and EV integration. Cybersecurity and skills are now as important as hardware."

Mr Naveen Munjal, Director, Apraava Energy

"Smart meters are the backbone of India's energy stack. They enable digital transformation, renewable energy integration, consumer empowerment, and loss reduction. But regulators and implementers must act—data alone is not the solution."

Mr PR Gopan, Chief Technology Officer, Envision

"AI is a catalyst for transparency and efficiency. With digital twins and predictive analytics, we can ensure turbines operate reliably for 30 years. But cybersecurity across IT and OT layers must be at the core."

L-R: Mr Reji Pillai, President, ISGF ; **Mr PR Gopan,** Chief Technology Officer, Envision; **Dr Ram Sevak Sharma,** Chair, India Energy Stack Task Force and Former Mission Director of UIDAI ; **Mr Naveen Munjal,** Director, Apraava Energy; **Mr Sunil Singhvi,** Group Head Public Policy, Secure Meters Limited

Closing Plenary Session

Closing Plenary with State Energy Ministers

Background

Affordable and quality power is key to economic and social development. Power is a concurrent subject, and states play a critical role in implementation. States are central to India's energy future. The session explored state leadership that translates national policies into real impact on the ground and how they can adopt best practices.

Key Takeaways

- The session focused on the role of states in driving India's energy transition and emphasized that national targets can only be achieved through state-level innovation, implementation and leadership.
- It was discussed that renewable energy must be scaled with reliability in mind. High penetration of solar and wind brings operational challenges, and states must balance this with flexible thermal, hydro, and storage solutions.
- One state highlighted that it now meets peak demand with renewable energy exceeding total demand on some days, while on others it falls short. This variability requires robust grid management and investment in pumped storage and battery systems.
- The importance of transmission infrastructure was emphasized, with states investing in high-voltage corridors to evacuate renewable energy from resource-rich zones to demand centers.
- Rooftop solar adoption was noted as a key area of progress.
- The role of biomass and compressed biogas (CBG) was discussed as a viable pathway for rural energy and waste-to-energy solutions. One state has set a target to establish CBG plants in every district.
- Green hydrogen was acknowledged as a future opportunity, though concerns about cost and scalability remain. States are exploring biomass-based hydrogen as a potentially more affordable alternative.
- Floating solar was identified as a strategic direction for states with limited land availability but abundant water bodies. States are encouraging developers to explore this potential.
- The need for inclusive and equitable energy transition was emphasized, with a call to ensure that rural and underserved regions benefit from clean energy investments.
- Officials stressed that energy diplomacy and international collaboration are essential for building resilient supply chains and accelerating innovation in clean technologies.

- The session concluded with a shared commitment to continue the momentum, convert ideas into action, and ensure that India's energy transition is not only ambitious but also inclusive, reliable, and sustainable.

Mr. S.S. Sivasankar, Hon'ble Minister for Transport and Electricity, Government of Tamil Nadu

"I came to witness the session because I addressed it earlier today. I request CII to bring this kind of event to the state level as it will unite more people and help drive progress across regions."

Mr. Arvind Kumar Sharma, Hon'ble Minister of Energy & Urban Development, Government of Uttar Pradesh

"In the last three years, Uttar Pradesh has added almost as much generation capacity as was built in the previous seventy years. Our energy needs are growing exponentially, and we are committed to meeting them through both traditional and renewable sources. We are leading in rooftop solar installations under PM Surya Ghar and are number one in compressed biogas production. Our policies in solar, bioenergy, and hydrogen reflect our commitment to net-zero goals."

Mr. Heeralal Nagar, Hon'ble Minister of State (Independent Charge) for Energy, Government of Rajasthan

"Rajasthan is committed to producing 115 GW of renewable energy by 2030. We are leading in solar and wind energy, and our farmers are becoming energy producers through the Kusum scheme, strengthening the rural economy."

Mr. Rakesh Shukla, Minister for New and Renewable Energy, Government of Madhya Pradesh

"Madhya Pradesh has land, water, and air, everything needed for renewable energy. We are moving forward with floating solar, large-scale tenders, and rooftop solar. Our Kusum-C tender saw participation from over 500 developers, with a capacity of 18–20 GW."

Mr. Mahaveer Singhvi, Joint Secretary, NEST Division, Ministry of External Affairs

"Energy diplomacy today is not just about oil fields and gas pipelines—it's about critical minerals, hydrogen ecosystems, offshore wind corridors, and digital energy platforms. India must be at the table where the rules of the future energy economy are being written. The energy transition must be inclusive and equitable. India's approach is rooted in sustainability but conscious of developmental imperatives. We must ensure that our energy future is affordable, reliable, and accessible to all."

Mr. Santosh Kumar Sarangi, Secretary, Ministry of New & Renewable Energy, **Government of India**

"Schemes like PM-KUSUM can unlock 100–120 gigawatts of solar capacity. These are extremely relevant and offer states a way to reduce agricultural subsidy burdens while promoting decentralized renewable energy. States are equal stakeholders in the energy transition. They understand the relevance and positive externalities of renewable energy better than anyone else."

Mr. Narendra Bhooshan, Additional Chief Secretary, Government of Uttar Pradesh

"Our fossil fuel capacity currently stands at 69%, but by 2030, we aim to shift the balance with renewable energy reaching 60% of our total capacity. We are actively contracting 72 GW of new capacity and rolling out tenders across solar, battery storage, and bioenergy."

Mr. Gaurav Gupta, Additional Chief Secretary, Government of Karnataka

"Karnataka's renewable capacity stands at over 24 GW—67% of our total installed capacity. This places us among global leaders, comparable to countries like Denmark and Portugal. We are leading in electric mobility with over 6 lakh EVs and 6,000 charging stations. Our clean mobility policy and EV hub near Bengaluru Airport are examples of our integrated approach to energy and transport transition."

L-R: Mr Mahaveer Singhvi, Joint Secretary, NEST, Ministry of External Affairs**; Mr Sameer Gupta,** Co-Chairman, CII RE Manufacturing Council and CMD, Jakson Group; **Mr S.S. Sivasankar,** Hon'ble Minister for Transport and Electricity, Tamil Nadu; **Shri Narendra Bhooshan, IAS,**Additional Chief Secretary, Energy and Additional Sources of Energy,Govt of UP and Chairman UPNEDA**; Mr Santosh Kumar Sarangi,** Secretary, Ministry of New & Renewable Energy,Government of India; **Mr Arvind Kumar Sharma,** Hon'ble Minister of Energy & Urban Development, Uttar Pradesh (Online); **Mr Rakesh Shukla,** Minister for New and Renewable Energy, Madhya Pradesh (Online)**; Shri Heeralal Nagar**, Hon'ble Minister of State (Independent Charge), Department of Energy, Government of Rajasthan (Online)

CEO Roundtable with Union Minister of Power at IECE

The Roundtable Discussion took place on **22 September 2025 on the sidelines of IECE 2025.** The session provided an exclusive opportunity to eminent industry leaders to engage in a meaningful dialogue on the evolving energy landscape, policy frameworks, and avenues for collaboration in advancing sustainable growth.

Shri Manohar Lal, Union Minister of Power and Minister of Housing and Urban Affairs, at the CEO roundtable at IECE, 2025

The power sector has seen transformative reforms. This has signalled a serious commitment to making India's power sector more transparent, resilient and future-ready. The Ministry of Power has played an important role.

The increase in integration of renewables, introduction of electricity derivatives and launch of digital platforms is gradually aligning India's power sector with global practices while addressing domestic challenges of reliability, efficiency and sustainability. The roundtable discussion has been an opportunity to discuss the way forward for continued engagement with the Ministry as industry and government work collectively towards a cleaner, smarter and more reliable power sector.

Hon. Eng. Kumara Jayakody, Minister of Energy, Government of Sri Lanka Roundtable Interaction with Indian CXOs

Hon. Kumara Jayakody, Minister of Power and Energy of Sri Lanka, opened the session on September 24 by reaffirming Sri Lanka's commitment to strengthening its energy partnership with India. He expressed Sri Lanka's openness to increased collaboration with India, noting that the country is prioritising Indian partnerships over other international engagements in the renewable energy space.

The Minister highlighted that several Memorandums of Understanding have already been signed with India, including agreements with NTPC and leading solar energy agencies. He emphasised that India is well-positioned to play a key role in integrating renewable energy projects in Sri Lanka, given its technological expertise and experience in both transmission and generation.

L-R: Mr Dhanuskha Kottahachchi, PS to Minister**;** (**Eng.) Kumara Jayakody**, Minister of Energy, Government of Sri Lanka and **HE Lakshmendra Dissanayake**, High Commission of Sri Lanka at the roundtable with CXOs at CII Central Office, New Delhi

B2B Meetings at IECE 2025

One of the key highlights of IECE was the **exclusive B2B Meeting Platform**, which enabled participants to network with a wide spectrum of industry stakeholders including CEOs/CXOs, startups, entrepreneurs, diplomats, and government representatives. A total of **255 B2B meetings were conducted** at Taj Palace, New Delhi.

The **B2B meetings** played a crucial role in fostering personal connections that are essential for building and sustaining long-term business partnerships. By engaging directly with the people behind corporate brands, companies can collaborate more effectively and operate as unified teams. These meetings also offered a dynamic platform to explore new products, services, and growth opportunities. Interacting with industry peers encourages innovation, broadens market reach, and strengthens existing alliances by enabling open dialogue around shared goals and challenges. Additionally, B2B interactions helped businesses stay ahead of industry trends and market shifts, positioning them to capitalize on emerging opportunities. To streamline these meetings, CII launched an online portal: https://iece.b2bmeeting.in/

B2B interactions at IECE 2025

B2B attendees gave their feedback ranking B2B services at the Summit. The overall feedback from most delegates rated their experience as very good across most parameters, with appreciation for the B2B Portal and the quality of meetings. Delegates found the meetings fruitful and beneficial, and many expressed keen interests to participate in similar B2B engagements in the future.

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