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

Theme:

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

Engage, Energize, Empower

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

Draft Programme Outline

Day 1: 22 September 2025

1000 – 1100 hrs	OPENING PLENARY SESSION Durbar Hall

Mission 2047: Energy Pathway to Viksit Bharat

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

Key Discussion Points:

- Achieving the 500 GW non-fossil energy capacity target
- Access to green finance and de-risking investments for clean energy infrastructure
- Smart grids, digital infrastructure, and flexible demand management
- Strengthening manufacturing for robust supply chains
- Job creation, skill development, and ensuring a just transition for workers

AUSTRALIA COUNTRY SESSION Mumtaz Hall (Parallel Session A)	
1045-1130 hrs	**Global Cooperation for Energy Transition**
Clean energy has emerged as a key pillar of collaboration between India and Australia, with the recent **India–Australia Renewable Energy Partnership 2024**. This collaboration sets the foundation for joint work in solar PV, energy storage, green hydrogen, and critical minerals. Discussions will explore shared priorities in supply chain resilience and scaling up low-carbon technologies, paving the way for deeper cooperation in advancing a just and secure global energy transition.	

PANEL DISCUSSION 1 Durbar Hall Track: Innovation for Sustainable Energy Systems (Parallel Session B)	
1100-1145 hrs	**Integrating New Technologies in Nuclear Power**

The National Nuclear Mission has set an ambitious target of 100 GW of nuclear capacity by 2047. This 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 will also address the importance of building public trust through robust safety standards, transparent waste management practices, and sustained awareness efforts. Panellists will outline the policy, regulatory, and investment frameworks needed to realize India's nuclear vision.

Key Discussion Points:

- Expanding India's nuclear capacity to ensure baseload power for clean energy transition
- Accelerating the deployment of indigenous and advanced nuclear reactors and exploring the potential of small modular reactors for decentralised energy applications
- Enhance public awareness and trust in nuclear energy safety and waste management

STANDALONE SESSION Durbar Hall	
1145-1215 hrs	Standalone session

SPECIAL MINISTERIAL SESSION 1 Durbar Hall Track: Collaborations for Greener Future	
1215-1300 hrs	**Policy Innovation and Collaborative Financing for Low-Carbon Transition**

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

Key Discussion Points:

- Mobilizing private capital for low-carbon investments through Public-Private Partnerships, blended finance, and targeted policy incentives
- Structuring bankable Power Purchase Agreements to de-risk renewable energy investments
- Boosting investor confidence through ESG-aligned instruments such as green bonds and a stable, transparent policy environment

1300-1400 hrs	**NETWORKING LUNCH**

SPECIAL MINISTERIAL SESSION 2 Durbar Hall Track: Innovation for Sustainable Energy Systems (Parallel Session A)	
1400-1445 hrs	**Emerging Technologies for Cleaner Mobility**

As the transportation sector contributes about 25% to global carbon emissions, accelerating the adoption of clean transport technologies becomes vital to achieving climate goals. During this session, experts will deliberate on strategies for scaling up emerging alternative fuels in the transport sector (ethanol, CBG, SAF and green hydrogen), strengthening R&D collaborations, and developing resilient and sustainable mobility ecosystems for the future.

Key Discussion Points:

- Forging collaborations for R&D in mobility
- Advancing next-generation battery chemistries beyond lithium-ion
- Commercialising different chemistries in batteries
- Challenges in scaling up blending with biofuels (Ethanol, bio-CNG, CBG, SAF (Sustainable Aviation Fuel), and Green Hydrogen
- Expanding CBG's Role as a future mobility fuel
- Enabling innovation through startups

ITA SESSION Mumtaz Hall (Parallel Session B)	
1400-1445 hrs	**Accelerating Project FIDs in Green Chemicals (Ammonia and Methanol) Sectors in India: *Interventions to Unlock Premium Demand***
	India has rapidly become a top three hub for green industrial projects, with 65+ initiatives worth $150+ billion, 200,000+ jobs, and 140+ $MtCO_2e$ abatement. Green hydrogen derivatives mainly ammonia and methanol lead, backed by low-cost renewables, corporate leadership, and the National Green Hydrogen Mission (NGHM). India ranks third globally for clean ammonia and methanol, with 50 projects the largest pipeline in the New Industrial Sunbelt representing ~$125 billion and thousands of jobs. By 2030, capacity could exceed 6 MTPA, surpassing NGHM's 5 MTPA target, while reducing imports, stabilizing supply chains, and improving food security. Yet progress to Final Investment Decision is slow, with only one project announced due to lack of offtake contracts and uncertain demand premiums. With COP30 spotlighting green trade, India can position itself as a cost-competitive supplier while boosting energy and food security.

PANEL DISCUSSION 2

Durbar Hall

Track: Enlarging Basket to Foster Efficient Energy Access

(Parallel Session A)

1445-1530 hrs	**Transforming Energy Storage for a Resilient Grid**

Storage has emerged as a critical enabler for ensuring round-the-clock supply of renewable energy. This session will explore long-duration storage technologies and innovative solutions to strengthen grid stability, address integration challenges, and support energy transition. Discussions will focus on scaling up storage infrastructure, leveraging digital tools, and unlocking the potential of diverse storage options.

Key Discussion Points:

- Long-duration storage solutions for ensuring 24/7 renewable energy supply
- Overcoming integration challenges and strategies for balancing the grid
- Reducing storage costs to drive wider adoption in energy sector
- Leveraging AI and machine learning for better adoption of storage technologies
- Potential of Pumped Storage Hydropower as energy storage solution
- Challenges in using hydropower, natural gas, green hydrogen for balancing grid
- Scaling up Battery Energy Storage Systems (BESS) for grid stability

STATE SESSION Mumtaz Hall (Parallel Session B)	
1445-1545 hrs	State Session-Madhya Pradesh

PANEL DISCUSSION 3 Durbar Hall Track: Manufacturing for India & the World	
1545-1630 hrs	**Strengthening Critical Mineral Supply Chains for Energy Security**

A resilient and secure critical mineral supply chain is essential for India's clean energy transition. This session will focus on strategies to secure key minerals like lithium, cobalt, and rare earths, reduce import dependency, and build domestic manufacturing capabilities. It will also explore global partnerships and trade agreements to ensure long-term material security and support India's energy ambitions.

Key Discussion Points:

- Reducing reliance on imports through domestic manufacturing
- Global partnerships, like QUAD, for cooperation on critical minerals
- Recycling and circular economy solutions for material security
- Exploring possibilities of strategic mineral asset acquisition
- Enhancing battery recycling and second-life applications for sustainability

PANEL DISCUSSION 4 Durbar Hall Track: Enabling People Centric Transition (Parallel Session A)	
1630-1730 hrs	**IN FOCUS: GST 2.0 and its Impact on Clean Energy**
The rollout of GST 2.0 is set to energize India's clean power journey with reduced rates on renewable equipment and greater clarity on Input Tax Credit (ITC). While aligning prior agreements with the new framework presents an area of careful transition, it also makes green energy more affordable. This panel will discuss how GST 2.0 can streamline costs, boost investor confidence, and accelerate the sector's sustainable growth.	

GERMANY COUNTRY SESSION Mumtaz Hall (Parallel Session B)	
1645-1730 hrs	**Germany & India: Bringing a Paradigm Shift in International Cooperation**
India's rapid economic growth and ambitious climate goals present vast opportunities for international collaboration. Germany, a global leader in technology and sustainable development, shares a strong strategic partnership with India. This dialogue will focus on deepening cooperation to catalyze India's growth by leveraging Germany's expertise in innovation, financing, and workforce development. It aims to highlight pathways for boosting strategic investments, accelerating technology transfer, fostering joint research and startup ecosystems, and supporting India's green transition through collaborative financing and skilling initiatives. The session will highlight the importance of a sustained global partnership to drive inclusive and sustainable growth. **Key Discussion Points:** • Boosting Strategic Investment • Technology Transfer & Innovation • Promoting joint R&D, startup partnerships, and tech exchange • Financing India's Green Transition • Skilling & Workforce Collaboration • Global Collaboration	

PANEL DISCUSSION 5 Durbar Hall Track: Enabling People Centric Transition (Parallel Session A)	
1730-1815	**Skills for Universal Energy Access and Just Transition**

Achieving India's energy transition goals will not only require technological innovation but also a strong focus on human capital. Energy sector faces skill gaps, especially in areas critical to universal energy access and decentralized renewable energy. Addressing this challenge calls for inclusive policies and innovative financing frameworks. The session will examine international best practices in skilling specially in South Asia and Africa region.

Key Discussion Points:

- Skilling and training for deployment, operation, and maintenance of DRE systems, including advanced and emerging energy technologies
- Developing workforce capabilities for grid maintenance
- Ensuring equitable access to clean energy skill-building across gender, regions, and socio-economic groups
- Promoting entrepreneurship in energy-enabled livelihoods like cold storage, food processing, and electric mobility

Day 2: 23 September 2025

SPECIAL MINISTERIAL SESSION 3 Durbar Hall Track: Collaborations for Greener Future	
0930-1015 hrs	**Beyond Boundaries: Creating New Power Markets**

The transition to renewable energy requires a robust ecosystem of investment, innovation, and integration. Drawing from global best practices, this session aims to chart a path toward a sustainable, scalable, and investor-friendly renewable energy future. It will explore 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 will examine the need to undertake R&D, build a resilient supply chain, and strengthen regional collaborations.

Key Discussion Points:

- Attracting investments for scaling up solar and wind energy, supporting R&D and next-generation solar panels, wind turbines, and battery storage
- Integrating FDRE to reduce curtailment and support a 24/7 renewable power supply
- Expanding cross-border power markets and infrastructure, including the India–Sri Lanka transmission line, to enable regional renewable energy trade
- Global learnings and best practices for scaling up solar and wind by 2030

SPECIAL MINISTERIAL SESSION 4 Durbar Hall Track: Collaborations for Greener Future (Parallel Session A)	
1015-1100 hrs	**Global Partnerships for Energy Security in a Changing Geopolitical Landscape**

Shifting alliances, regional conflicts, and trade realignments are influencing energy supply chains. This session will deliberate on strategic diversification, bilateral partnerships, and resilient sourcing to ensure long-term energy security. It will also examine collaborative approaches for integrating hydrocarbons with renewables and tackling the challenges of global price volatility while assessing impact on economic stability, industrial competitiveness and energy transition.

Key Discussion Points:

- Ensuring energy security alongside energy transition
- Discussing price volatility and its effect on economic stability and industrial competitiveness while developing reliable supply chains
- Forming strategic alliances for sustainable energy sources
- Addressing the impact of global geopolitical shifts on India's oil and gas security

STATE SESSION Mumtaz Hall (Parallel Session B)	
1015-1100 hrs	**State Session- Bihar**

PANEL DISCUSSION 6 Durbar Hall Track: Enlarging Basket to Foster Efficient Energy Access	
1100-1145 hrs	**Role of Thermal Power in Renewable-Rich Future**

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

Key Discussion Points:

- Discussing Outlook for thermal energy in India's energy mix and its role in providing baseload power in supporting the grid
- Understanding pricing issues in natural gas power generation
- Addressing challenges in using CCUS technologies using Biomass co-firing

SESSION Durbar Hall Track: Enabling People Centric Transition	
1145-1230 hrs	**Enhancing Solar Access for Rural Economy**

This session will explore 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 will examine how these programs are enabling decentralized and rooftop solar adoption, particularly in underserved regions. The discussion will highlight agrivoltaics as a transformative dual-benefit model, enhancing farm incomes while generating clean energy. Experts will also delve into strategies to unlock private sector participation, streamline regulatory frameworks, and scale solar solutions across the country. The session aims to identify actionable pathways to accelerate equitable and sustainable solar energy deployment at the grassroots level.

Key Discussion Points:

- Discussing policy and financing mechanisms to support rural solar deployment across regions
- Assessing Agrivoltaics as a dual-benefit model for enhancing farm income while generating solar power
- Unlocking private sector investments in decentralised and rooftop solar systems

PANEL DISCUSSION 7

Durbar Hall

Track: Enlarging Basket to Foster Efficient Energy Access

(Parallel Session A)

1230-1315 hrs	**Power Procurement Through PPAs or Trading: A Discom Dilemma**

This session will focus on power procurement models to mitigate financial losses faced by distribution companies. Power Purchase Agreements (PPAs) offer long term stability by mitigating market risks while power trading allows for real-time adjustments based on demand fluctuations. As DISCOMs face increasing pressure to enhance financial viability while ensuring a reliable power supply, optimizing power procurement strategies becomes imperative. This session delves into cost-effective procurement models, the critical role of the merit order of dispatch, and the strategic balance between PPAs and trading. Panellists will explore how these tools 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 Discussion Points:

- Bringing efficiencies in discom finances
- Developing cost-effective power procurement models
- Assessing the relevance of the merit order of dispatch

STATE SESSION Mumtaz Hall (Parallel Session B)	
1230- 1315 hrs	State Session- Karnataka

1315 – 1400 hrs	NETWORKING LUNCH

SPECIAL MINISTERIAL SESSION 5

Durbar Hall

Track: Manufacturing for India and the World

1400-1500 hrs	**Local Manufacturing for Global Energy Systems**

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 will highlight the importance of strengthening MSMEs and their manufacturing capacity for critical transmission equipment such as transformers, switchgear, and grid interface technologies. The session will also focus on aligning with international quality standards, leveraging trade agreements, and enhancing India's competitiveness in global supply chains. Key enablers such as policy support, industrial infrastructure, and supply chain resilience will be examined to drive an export-oriented renewable manufacturing ecosystem.

Key Discussion Points:

- Scaling India's domestic manufacturing of renewable energy technologies to meet global demand while focusing on exports of solar modules, wind turbine components, electrolysers, batteries and supporting MSMEs in the renewable energy manufacturing ecosystem
- Strengthening policy environment, industrial infrastructure and supply chain capabilities to support large-scale export-oriented renewable manufacturing
- Aligning with international quality and certification standards, leveraging trade agreements and enhancing India's competitiveness in global supply chains

PANEL DISCUSSION 8

Durbar Hall

Track: Collaborations for Greener Future

(Parallel Session A)

1500-1545 hrs	**Modelling Carbon Credits Framework to Promote Net-Zero**

As the global push for decarbonization intensifies, trading in renewable energy and other green attributes offers a powerful avenue for achieving net-zero goals. This session explores mechanisms for trading green energy under a carbon credits framework, with a focus on regulatory bottlenecks and the evolving landscape under Article 6.2 and 6.3 of the Paris Agreement. Discussions will highlight opportunities and challenges in enabling cross-border and bilateral carbon credit trades. The panellists will discuss the path towards a robust, transparent, and scalable green trading ecosystem. They will also explore pathways to operationalize India's Emissions Trading Scheme (ETS), strengthen carbon markets, and align with global carbon pricing frameworks.

Key Discussion Points:

- Trading in RE and other forms of green energy
- Addressing regulatory bottlenecks in the carbon credit framework
- Enhancing the credibility and global integration of carbon markets by ensuring transparency, integrity, and robust offset mechanisms
- Preparing industries for global carbon pricing and operationalizing India's Emissions Trading Scheme (ETS) with international linkages
- Using Article 6.2 and Article 6.3 for bilateral trade in carbon credits

PANEL DISCUSSION 9 **Mumtaz Hall** Track: Innovation for Sustainable Energy Systems **(Parallel Session B)**	
1500-1545 hrs	**AI & Digital Solutions for Next-Gen Energy Reforms** **(Presentation on India Energy Stack and Utility Intelligence Platform followed by chat with CEOs on dais)**

The future of energy lies at the intersection of technology and sustainability. This session will spotlight the transformative role of Artificial Intelligence and digital innovation in reshaping India's energy landscape. With a focus on the India Energy Stack and Utility Intelligence Platform, the session will showcase how next-gen digital tools can break down data silos, enhance grid resilience, and drive efficient energy management.

Key Discussion Points:

- Overcoming data silos in utilities and improving digitalization for better energy management
- Strengthening frameworks to protect digital energy assets from cyber threats
- Using AI-driven forecasting to enhance grid flexibility and RE integration
- Leveraging blockchain for peer-to-peer energy trading and carbon credit verification

CLOSING PLENARY SESSION Durbar Hall	
1545-1630 hrs	**CLOSING PLENARY WITH STATE ENERGY MINISTERS**
Affordable and quality power is key to economic and social development. Power being a concurrent subject in the Indian Constitution, broader vision and policies are laid out by the centre but it is the states that play a pivotal role in implementation. From ensuring reliability to driving renewable integration and innovation, states are central to India's energy future. This session will explore how State leadership translates national policies into real impact on the ground and how they can adopt best practices from among them.	

1630 hrs	**Event Concludes**

Please scan the QR code to access the ***"Energy Transition Investment Monitor"***