























Country Partner



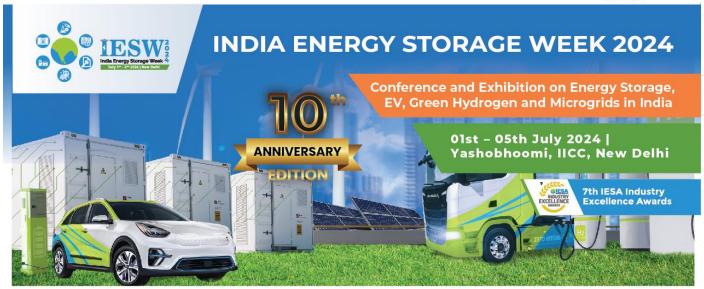






BUSINESS **FINLAND** 





#### **EXHIBITION (IST-2ND JULY 2024)**

EV & EV Infra Expo

Manufacturing & **Supply Chain Pavilion** 

Green Hydrogen Expo

Start-Up Pavilion

**Recycling Pavilion** 

Stationary Storage Expo

**Innovation & Research Pavilion** 

Indigenous Battery **Cell Showcase** 

#### **CONFERENCE (1ST-4TH JULY 2024)**





02nd July Manufacturing & Supply chain



03rd July Stationary Energy Storage



04th July



05th July

India EV Infra Forum

India Recycling & Reuse Forum

India LDES Forum

### **KEY HIGHLIGHTS**











CXO Roundtable 1st July 2024







LDS Round Table & Networking Dinner 3rd July 2024





Workshops by WRI, Shakti Foundation 1st - 4th July 2024





Date	Main Conference Hall Amaltas Hall - Conference Room (B1)	Seminar Hall EXPO Hall 1B	Roundtable Room EXPO Hall 1B	
1 <sup>st</sup> July	India EV Day Conference (10:00 – 18:00 IST)	Future Energy Learning Centre (FELC) in association with ISA (11:00 – 13:00 IST)		
	10.00 101)	3 <sup>rd</sup> India Battery Safety Forum in association with ULSE (14:00- 16:30 IST)	<b>CXO Roundtable</b> (17:00-18:30 IST)	
	7th IESA Industry Excellence Av	vards & Gala Dinner (19:00	HRS IST onwards)	
		Forum in association with ULSE (14:00- 16:30 IST)  e Awards & Gala Dinner (19:00 HRS IST onwards)  Start-Up Pitch Session (11:00 - 13:00 IST)  Industry Workshop for EV Battery Supply Chain in association with Shakti Foundation (14:00 - 16:00 IST)  Future Energy Learning Centre (FELC) in association with ISA (16:00 - 17:30 IST)  Founders Networking Dinner (19:30 IST onwards), Amaltas Hall, IICC		
Ond	la dia Dattara Manafastania a Dav	EV Battery Supply Chain in association	(14:00 - 15:00 IST)  Tech Ignition Session	
2 <sup>nd</sup> July	India Battery Manufacturing Day Conference (10:00 – 18:00 IST)		Investors Talk	
		EV Battery Supply Chain in association with Shakti Foundation (14:00 – 16:00 IST)  Tech Ignition Session (15:00 - 15:45 IST)  Investors Talk (15:45 - 16:30 IST)  Future Energy Learning Centre (FELC) in association with ISA (16:00 – 17:30 IST)  Women in Energy Roundtable (16:30 - 18:00 IST)  Founders Networking Dinner (19:30 IST onwards), Amaltas Hall, IICC		
	Women in Energy Felicitation, Leadership Talk and Networking Dinner, Supported by IGEF (18:30 IST onwards), Amaltas Hall, IICC			
		Prototyping Centres	Iders Meeting on Rapid for Battery Innovation Kenar Hall (403), IICC	
3 <sup>rd</sup> July	India Stationary Storage Day Conference (10:00 – 18:00 IST)	LDES Roundtable, Supported by LDES Coun (16:30- 18:00 IST), Kenar Hall (403), IICC		
		Happy Hours & Networking Dinner for LDES Roundtable Participants (18:30 IST Onwards), Amaltas Hall, IICC		
4 <sup>th</sup> July	India Green Hydrogen Day Conference (10:00 – 18:00 IST)	National Dialogue on Addressing G	Hydrogen Growth: Sub- Catalysing Change for Growth Hurdles	
	Knowledge Session on <b>Green Hydrogen Certification for Export to EU</b> (12:15 - 13:15 IST) by IGEF-SO	(co-organized with <i>WRI</i> ) (11:00 - 13:00 IST), Kenar Hall (403), IICC		
5 <sup>th</sup> July	<b>Tech Tours</b> (On registration and approval)	<ul><li>Track 1: BSES Raj</li><li>Track 2: BSES Yar</li></ul>	·	





	India EV Day (1st July 2024) Conference Program			
Time	Session	Topic	Speakers	
09:00 –	10.00 Registration			
10:00 – 11.15	Inauguration Session	<ul> <li>India's Roadmap for Vehicle Electrification</li> <li>Key Central and State government policies</li> <li>Current Status of EV manufacturing and future potential</li> <li>Ways to increase EV adoption.</li> <li>Export opportunities and key bottlenecks to address.</li> </ul>	<ul> <li>Shri Sunil Barthwal, Secretary, Ministry of Commerce, and Industry</li> <li>HE Mr Philip Green OAM, Australia's High Commissioner to India</li> <li>HE May-Elin- Steiner, Ambassador of Norway to India</li> <li>Dr. Hanif Qureshi, Additional Secretary, Ministry of Heavy Industries</li> <li>Sudhendu J Sinha, Adviser (Infrastructure Connectivity &amp; E-Mobility), NITI Aayog</li> <li>Vishal Kapoor, CEO, Energy Efficiency Services Limited (EESL)</li> <li>Dr Reji Mathai, Director, Automotive Research Association of India (ARAI)*</li> <li>Vikram Gulati, Country Head &amp; Executive V.P. (Corporate Affairs &amp; Governance) Toyota Kirloskar Motor</li> <li>Rubin Pather, Chief Operating Officer, Reliance Jio-BP</li> <li>Swadesh Srivastava, Head, Emerging Mobility Business Unit, Hero MotoCorp</li> <li>Stephen Fernands, President, Customized Energy Solutions</li> <li>Dr. Rahul Walawalkar, President &amp; MD, CES India &amp; President, IESA</li> </ul>	
11:15 – 11.45	Networking Tea and Expo Visit			
11:45 – 13.00	Panel discussion	<ul> <li>Growth Story of India's Electric Vehicles</li> <li>Journey of the Indian Electric 2W, 3W industry</li> <li>Electric Cars – yet to see mass adoptions In India</li> <li>Hybrids – the immediate way for decarbonization</li> <li>Key challenges and opportunities</li> <li>Investment in EV Start-ups</li> <li>Entrant of Global EV makers in the Indian market</li> </ul>	<ul> <li>Moderator: Debi Prasad Dash, Executive Director, IESA</li> <li>Vikram Gulati, Country Head &amp; Executive V.P. (Corporate Affairs &amp; Governance) Toyota Kirloskar Motor</li> <li>Suman Mishra, Managing Director &amp; CEO, Mahindra Last Mile Mobility</li> <li>Haresh Bhere, Chief Technology Officer, Jio-BP Mobility Ltd</li> <li>Christine Vincent, Venture Principal, Shell Venture</li> <li>Vijay Kedia, Long-Term Investor, Kedia Securities*</li> <li>Sri Purisai, Founder &amp; Managing Director, Chakra Growth Capital</li> <li>Shekhar Mishra, Senior General Manager-EMBU, Hero MotoCorp</li> </ul>	
13:00 –		Networking Luncl	·	
14:00 – 15:00	Panel discussion	<ul> <li>EV Infrastructure – the need of the hour</li> <li>Charging Infra – Key enabler for electric 4W and</li> </ul>	<ul> <li>Moderator: Gurusharan Dhillon, Director, Electric Mobility, IESA &amp; CES</li> <li>Awadhesh Jha, Executive Director, GLIDA</li> <li>Vikas Almadi, Chairman and Managing</li> </ul>	





		<ul> <li>buses in India</li> <li>Key challenges in the Growth of EV charging in India</li> <li>Govt policies to support charging infra-adoptions.</li> <li>Key learning from current installations</li> </ul>	<ul> <li>Director, VNT</li> <li>Inge André Espedal, Chief Executive Officer, Sagavolt</li> <li>Jagjit Singh, Director of BD, APAC and Global Markets, EVOS Energy Pty</li> <li>Anshuman Divyanshu, Chief Executive Officer - EVSE Division, Exicom</li> <li>Varun Shahani, General Manager-Head Energy Infrastructure, Hero MotoCorp</li> </ul>
15:00 – 15:15	Tech Session	Lift Off – Soaring beyond Intercalation – The future is here	John Wood, Chief Executive Officer, Gelion
15:15 – 16:00	Tech Session	EV Powertrain & EV Components Manufacturing - Opportunity for a Decade.  Indigenous Powertrain development & manufacturing  Capturing the opportunities  Advanced Materials for EV Powertrain  Battery Packs developments and key learnings  Battery Management System (BMS)	<ul> <li>Moderator: Dr. Rahul Walawalkar,         President &amp; MD, CES India &amp; President,         India Energy Storage Alliance</li> <li>Dr. A K Jindal, Design and Development-         Electric and Defence Vehicles, Tata Motors</li> <li>Sharan Aiyappa, OEM Director - Sales &amp;         Marketing, MacDermid</li> <li>Sebastian Weyermann, Sr. Business         Development Manager-CMD, Thermofisher         Scientific</li> <li>Vikas Aggarwal, Managing Director, Ipower         Batteries</li> <li>Rajiv Kumar Singh, R&amp;D Lead- Platform,         Hero MotoCorp</li> <li>Vinay Solanki, Business Head, Nash Tech         Labs.</li> </ul>
16:00- 16:25		Networking Tea and E	xpo Visit
16:25- 16:30	IEEE Address	Need for Climate Change and Sustainability	Dr Saifur Rahman, Past President, IEEE
16:30 16:45	Tech Session	Automotive Testing and Validation	S Ramanathan, Managing Director, Automotive Test Systems
16:45 – 17:45	Plenary Session	Panel Discussion: Way Forward to Accelerate Electric Mobility, Manufacturing, R&D and Safe Adoption in India via Innovation  Export-Import opportunities  Global Partnerships and tech transfer  R&D and Innovation in Battery and Electric Mobility  New Battery Technologies  Driving Innovation for Next-Gen EV with the Power of Virtualization  Vehicle to Grid	<ul> <li>Moderator: Anjan Merkap, Engagement Manager, Customized Energy Solutions</li> <li>Venkat Rajaraman, CEO, Cygni Energy</li> <li>Sandeep Gambhir, CEO, Vertelo</li> <li>Mukesh Dadhich, Head-Business Development, Sustainability &amp; Clean Technology, BSES Yamuna</li> <li>Utkarsh Mishra, Global Innovation Portfolio Lead, Hero MotoCorp</li> <li>Dr Barry Pearce, Strategic Key Accounts Manager- Clean Energy, Thermofisher Scientific</li> <li>Dr. Desikan Sundararajan, India MD, Equinor</li> <li>Ankit Adhiya, Sr. Manager, Application Engineering, Ansys India</li> </ul>
17:45 – 18:00		Summary of the Day	and Vote of Thanks





Time (HRS IST)	Session	Topic	Speakers		
09:00 –10.00 <b>Registration</b>					
10:00 – 11.15	Inauguration Session	<ul> <li>India's roadmap for Advanced battery manufacturing</li> <li>Government policies to support the manufacturing of batteries (ACC-PLI, Niche PLI, Stationary storage PLI etc.)</li> <li>Key challenges and bottleneck</li> <li>Global Partnerships in Manufacturing</li> <li>Battery Supply chain, raw materials and recycling</li> </ul>	<ul> <li>V.L Kantha Rao, Secretary, Ministry of Mines</li> <li>Rajesh Agrawal, Additional Secretary, Ministry of Commerce</li> <li>Vijay Mittal, Joint Secretary, DHI, Ministry of Heavy Industries</li> <li>Dr Preeti Banzal, Adviser/ Scientist 'G', Government of India</li> <li>Vijayanand Samudrala, President, Amara Raja Batteries Ltd.</li> <li>Raj Surendran, CEO, Tianqi Lithium Australia Energy Limited</li> <li>Sadashiv Samantaray, CEO, KABII</li> <li>Vikram Handa, MD, Epsilon Carbon</li> <li>Debi Prasad Dash, Executive Director, IESA</li> <li>Rajat Verma, Founder and CEO, LOHUM</li> <li>Rakesh Malhotra, Founder, Livguar</li> <li>Dr. Rahul Walawalkar, President &amp; MD, CES India &amp; President, India Energy Storage Alliance</li> </ul>		
11:15 - 11:45	Networking Tea and Expo Visit				
11:45 – 12.45	Panel discussion	Battery Cell Manufacturing, Upcoming Giga Factories and Other Advanced Battery Manufacturing  Lithium Cell Manufacturing landscape in India and key challenges  Upcoming Giga factories in India  Other Advanced Battery tech (VRB, Sodium Ion and Solid- state batteries) manufacturing in India	<ul> <li>Moderator: Dr. Rahul Walawalkar,         President &amp; MD, CES India &amp;         President, India Energy Storage         Alliance</li> <li>Vijayanand Samudrala, President,         Amara Raja Batteries Ltd.</li> <li>Anil Kumar, Chief Operating Officer,         Nash Energy</li> <li>Vishal Chaturvedi, Business Head         Ola Cell, Ola Electric</li> <li>Avishek Kumar, Co-Founder and         CEO at VFlowTech</li> <li>Sriram Ramanoudjame, Director,         Strategic Marketing, Blue Solutions</li> <li>Gurpreet Bhatia, Managing Director         &amp; CEO, Livguard</li> <li>Oda Marie Ellefsen, Technical Sales         Manager, Morrow</li> </ul>		
12:45 – 13:00	Tech Session	Battery manufacturing quality assessment and failure analysis solutions	Victoria Pope, Global Sales     Development Manager, Clean     Energy, Thermo Fisher Scientific		





14.00- 15.00	Panel discussion	Battery Component Manufacturing & Manufacturing Process  • Why India Should focus on Graphite.  • Upcoming Anode and cathode manufacturing  • Electrolyte, Separator, Adhesive, Binders  • Global opportunities  • Manufacturing process  • Automation	<ul> <li>Moderator: Debi Prasad Dash,         Executive Director, IESA     </li> <li>Akash Saraf, Manufacturing and         Supply Chain Consultant,         Customized Energy Solutions     </li> <li>Sunit Kapur, Chief Executive Officer,         Epsilon Advanced Materials     </li> <li>Puneet Thakur, Head of Invest In         and Innovation Collaboration,         Business Finland     </li> <li>Arvind Kakru, Vice President —         Industrial Automation, Schneider         Electric     </li> <li>Kirti Varma, Co-Founder and COO,         ALTMIN     </li> </ul>
15.00- 16.00	Panel Discussion (Supported by Western Australia)	Battery Raw materials Availability in India & Global Partners –      Global Partnerships for Battery Raw materials     Lithium, Manganese, Copper, Nickel, Aluminium     Raw materials constants     Opportunities in Mining, Refining and Processing	<ul> <li>Session Chair: Dr. Veena Kumari Dermal, Joint Secretary, Ministry of Mines</li> <li>Moderator: Rohit Laumas, Mining &amp; Supply Chain Consultant, CES</li> <li>Nashid Chowdhury, WA Trade &amp; Investment Commissioner, Government of Western Australia</li> <li>Raj Surendran, CEO, Tianqi Lithium Australia Energy Limited</li> <li>Kunal Daga, Founder &amp; Director, Molsynth</li> </ul>
16:00 – 16:30		Networking Tea and Exp	oo Visit
16:30 - 16:45		Recent Innovations in Analytical Technologies for Battery Manufacturing and Quality Control	Dr Kyle D'Silva, Director, Clean Energy, Analytical Instruments Group, Thermofisher Scientific
16:45 – 17:45	Plenary Session	Battery Recycling (Key government policies market dynamics, BWMR and EPR guidelines for Recycling, refurbishment and Second Life)  • Global Recycling Market Overview  • Key challenges and opportunities  • Import-export scenarios of battery waste and black mass.  • Battery waste collections, Black mass production  • Recycling technologies to get metal salts  • Battery Second life	<ul> <li>Moderator: Bhupesh Verma,         Manager, Market Research, CES &amp;         IESA</li> <li>Dr. Sandip Chatterjee, Sr. Director,         Ministry of Electronics and         Information Technology (MEITY)*         V P Yadhav, Scientist E &amp; DH,         Central Pollution Control Board         Pratyush Sinha, VP- Special         Projects, Lohum         Deepak Mohapatra, Senior Officer –         Business and Market Development,         Alliance for Rural Electrification         (ARE)         Dr Debaraj Mishra, Managing         Director, Sangeel India Recycling</li> </ul>
17:45 – 18:00		Day Summary of the Day	and Vote of Thanks





In	India Stationary Energy Storage Day (3rd July 2024)			
Time (HRs IST)	Session	Topic	Speakers	
09:00 -1	0.00	Registrat	ion	
10:00 - 11:15	Inauguration Session	Energy Storage for 500 GW Renewable, Grid Modernization, and Decarbonization of the C&I Sector  • Key central & state government policies • Industry adoptions • Role of energy storage in the electricity value chain • BESS systems for Indian Grid • Other form of Energy storage beyond batteries	<ul> <li>Bhupinder Singh Bhalla, Secretary, Ministry of New &amp; Renewable Energy</li> <li>Ghanshyam Prasad, Chairperson, CEA, Ministry of Power</li> <li>Jishnu Barua, Chairperson, Central Electricity Regulatory Commission</li> <li>Gauri Singh, Deputy Director-General, International Renewable Energy Agency (IRENA)</li> <li>Dinesh Jagdale, Joint Secretary, Ministry of New and Renewable Energy</li> <li>S R Narasimhan, Chairman and Managing Director, GRID India</li> <li>R P Gupta, Chairman &amp; MD, Solar Energy Corporation of India (SECI)</li> <li>Rajnath Ram, Adviser (Energy), NITI Aayog</li> <li>Hemanth Pandey, Chief Engineer, Ministry of Power*</li> <li>David Pearce, General Manager, Sales &amp; Distribution, Kardinia Energy</li> <li>Thomas Coughlin, President, IEEE</li> <li>Mr. Hiren Pravin Shah, Executive Director &amp; CEO, Replus Engitech</li> <li>Akash Kaushik, Co-Founder, Good Enough Energy</li> <li>Dr. Rahul Walawalkar, President &amp; MD, CES India &amp; President, India Energy Storage Alliance</li> </ul>	
11:15 - 11:30 11:30 - 12:30	Panel discussion	Energy Storage Tender and Projects in India  Key Learnings from developed BESS projects in India  Upcoming Tenders and projects  Understanding the key bottlenecks in Project development  Learning from the global projects	<ul> <li>Moderator: Harsh Thacker, Director, Emerging Tech, Customized Energy Solutions</li> <li>Satish Talmale, Chief Operating Officer, Indigrid</li> <li>Rupam Raja, Chief Commercial Officer, Fluence</li> <li>Adam Bloom, CEO, Edina</li> <li>Sai Charan Kuppili, Technical Director, South &amp; Central Asia, Jinko Solar</li> <li>Sunil Sharma, Commercial Executive, BSES Yamuna Power</li> <li>Naveen Nagpal, Asst. Vice President (Renewables, BESS &amp; new initiatives), BSES Rajdhani</li> </ul>	
12:30 – 13.00	Tech Session	BESS Technology, System Design and Development	<ul> <li>SECI/ NTPC/ GUVNL*</li> <li>Akash Kaushik, Co-Founder, Good Enough Energy</li> </ul>	





			<ul> <li>Rajendra Narkhede, Senior Vice President, Gexcon</li> </ul>
13:00 – 14:00		Networking Lu	
14:00 – 15.00	Panel discussion	Energy storage for decarbonization of the Commercial & Industrial Sector  • Energy Storage for decarbonization of the C&I sector  • BESS for Telecom and data center and Railway  • Learning from the current installation  • Key Challenges in project development  • Capex vs. Opex of such projects  Long Duration Energy	Session Chair: J K Jethani, Scientist F, MNRE Moderator: Netra Walawalkar, VP, India Markets, Customized Energy Solutions  Kenneth Bodahl, CEO, Pixii AS A.K. Shukla, Founder and MD, Sanvaru Dr Manne Venkateswarlu, CTO, Khushmanda Power Ltd Rukshan Sheriff, CEO, Eco33 Pte Ankur Arora, Head of Sales (Critical Power) - India & SAARC, Exicom  Session Chair: Kuldeep Rana, Scientist / Director MNRE
16.00	discussion	<ul> <li>Storage Technologies for India</li> <li>Key LDES Technologies and it's future</li> <li>Understanding the key changes</li> <li>Need for government framework.</li> <li>Setting up the target for LDES deployment</li> </ul>	<ul> <li>Director, MNRE</li> <li>Moderator: Nehal Divekar, Director-Emerging Technologies, Customized Energy Solutions</li> <li>Julia Souder, CEO, LDES Council</li> <li>Saurav Mitra, Director, Market Development, Energy Storage Business, Sumitomo SHI FW</li> <li>William Tope, CEO, LiNa Energy</li> <li>Mukesh Kolhe, Advisor, Green Gravity</li> </ul>
16:00 – 16:30		Networking Tea	
16.30- 16.45	Special Session	Learning from Global BESS Projects	Inder Bhambra, Chief Business Officer - India Region, Envision Energy
16:45 – 17:45	Plenary Session	Addressing the Challenges in Rapid Energy Storage Deployment  VGF scheme for 4000 MWh Energy Storage Projects Energy Storage for Peak shifting, RE-RTC, FDRE Key financing challenges Modernizing the electricity grid Central govt. policy framework & state level support	<ul> <li>Session Chair: Rajesh Kumar, Chief Engineer, Energy Storage Systems, CEA, Ministry of Power</li> <li>Moderator: Vinayak Walimbe, VP- Emerging Technologies, Customized Energy Solutions</li> <li>Peter Mockel, Principal Industry Specialist, IFC</li> <li>Mr. Pinaki Bhattacharyya, Founder, MD and CEO, Ampln Energy</li> <li>Aditya Agrawal, Head of Battery Business, Waaree Energy</li> <li>Professor Scott Hamilton, Senior Advisor, Smart Energy Council</li> <li>Wilhelm Von Butselaar, VP-APAC Growth, Fluence</li> <li>Artur Zawadski, CEO, Sunrise CSP</li> <li>Jørgen Festervoll, CEO, Heimdall Power</li> </ul>
17:45 – 18:00		Summary of the Da	ay and Vote of Thanks





	India Green Hydrogen Day (4th July 2024)			
Time Session (Hrs. IST)		Topic	Speakers	
09:00 –10.00		Registration		
10:00 – 11:00 Inauguration Session Hydro & Dep • De • Ro • Ke dep			<ul> <li>Mr. Sudeep Jain, Additional Secretary, Ministry of New and Renewable Energy</li> <li>Cristian Valdes Carter, Country Director &amp; Commercial Counsellor - India, Innovation Norway</li> <li>Denise Eaton, Trade and Investment, Commissioner, Austrade</li> <li>Dr. Anita Gupta, Head of Scientific Divisions (HOD), DST*</li> <li>Dr. Jeewan Prakash Gupta, Managing Director, Greenstat Hydrogen India Pvt Ltd.</li> <li>Madhav Pai, CEO, WRI India</li> <li>Dr. Rahul Walawalkar, President &amp; MD, CES India &amp; President, India Energy Storage Alliance (IESA)</li> </ul>	
11:00 – 1	1:15	Networking Tea		
11:15 – 12:15	Tech Session	Electrolyzer & BOP Manufacturing Opportunities in India  Opportunities for electrolysis BoP manufacturing  Updates on the electrolyzers PLI  Components and supply chain  Technology updates  Analytical Technologies for Hydrogen Value Chain	<ul> <li>Moderator- Dr. Ajinkya Kamat, Sr. Manager, IESA &amp; Customized Energy Solutions</li> <li>Shekhar Kashalikar, Chief Executive Officer, John Cockerill Greenko Hydrogen Solutions</li> <li>Siddharth Mayur, Founder, Managing Director &amp; CEO, h2e Power Systems</li> <li>Daniel Fini, Director of Engineering, Cavendish Renewables Tech</li> <li>Hitender Grover, Director CAD MSD, India &amp; South Asia</li> </ul>	
12:15 – 13:15	Panel Discussion	Knowledge Session on Green Hydrogen Certification for Export to EU (Supported by IGEF- SO)	Opening Remarks and Presentation on the Study and Recommendations for the Development of Internationally Compatible Green Hydrogen Standards in India  • Mr. Krushna Kaant Gupta, GIZ  Panel Discussion on "Green Hydrogen Certification for Export to EU"  Guest of Honor: Dr. Prasad Chaphekar, Deputy Secretary, Ministry of New & Renewable Energy  Moderator: Dr. Deepak Yadav, Council on Energy, Environment and Water	





13:15 – 14	.15	Motocoule	<ul> <li>Speakers:</li> <li>Prof. Dr. Aravind Kumar Chandiran, Department of Chemical Engineering, IIT Madras</li> <li>Tapas Kapadia, RWE</li> <li>Ms. Rimali Batra, Partner, DSK Legal</li> </ul>
	_		ng Lunch
14:15 – 14:30	Policy Session	Hydrogen Valley Innovation Clusters in India to Drive R&D, Manufacturing, & Pilots	DST, Govt. of India
14:30 – 14:45	Tech Session	Hydrogen Regulations, Codes, Standards, & Safety	<ul> <li>Dr. R. Venugopal, Ex-Joint Chief Controller of Explosives, PESO</li> </ul>
14:45 – 15:00	Tech Session	Green Hydrogen Storage and Transportation	Yngve Schrøder Tufteland,     International Sales Manager, UMOE     Advanced Composites
15:00 – 16:00	Panel Discussion	<ul> <li>Global Green Hydrogen Partnership for Growth</li> <li>Partnership for growth</li> <li>Export and import opportunities</li> <li>Optimizing Electrolyzer Performance with Cutting- Edge Catalysts</li> <li>Technology collaboration</li> </ul>	<ul> <li>Moderator: Debi Prasad Dash, Executive Director, IESA</li> <li>Arjun Mehta, India Lead - Business Development &amp; Strategy, Fortescue</li> <li>Nishaanth Balashanmugam, Country Manager—India, Green Hydrogen Organization (GH2)</li> <li>Surbhi Goyal, Senior Energy Specialist, World Bank</li> <li>Manish Sanghai, Sr. Director, Laboratory Products, Asia Pacific Japan, Thermofisher scientific</li> </ul>
16:00 – 16	3:30	Network	•
16:30- 16:45		GH Components Manufacturing	• TBD
16:45 – 17:45	Plenary Session	Key Application Areas for Green Hydrogen in the Industrial and Mobility Sector  Refining Specialty Chemicals Fertilizers Steel Sector Mobility	<ul> <li>Moderator- Dr Deepak Kundalkar,         Manager - Green Hydrogen Initiatives,         Customized Energy Solutions     </li> <li>Dr. Vishnu Budama, CEO, Pune         Hydrogen Valley     </li> <li>Aravind Kumar Chandiran,         Associate Professor, Department of             Chemical Engineering, IIT Madras     </li> <li>Dr. Vijay Bhooshan Kumar, Senior             Manager at Advanced Engineering,             Ashok Leyland</li> <li>Sanjiv Kanwar, Country Manager,             Yara India</li> <li>Abhijeet Dande, Deputy Director,             Aker Solutions</li> </ul>
17:45 – 18	3:00	Summary of the	Day and Vote of Thanks

<sup>❖</sup> All above 4 main conferences are open to all registered delegates





# **3rd India Battery Safety Forum**

## 1st July 2024, Seminar Hall, 1B, IICC, New Delhi

Opening Panel	14:00 – 14:30 IST	<ul> <li>Rajeev Sharma, DDG Standardization-I, Bureau of Indian Standards, Bureau of Indian Standards (BIS)*</li> <li>Ujjwala Karle, Deputy Director (Technology Group), ARAI</li> <li>V. Manjunath, Regional Standards Manager, South Asia &amp; Sub-Saharan Africa, UL Standards &amp; Engagement Inc (ULSE)</li> <li>Dr. Rahul Walawalkar, MD, CES India &amp; President, IESA</li> <li>Dr. Kuldeep Rana - Scientist/ Director, Ministry of New and Renewable Energy (MNRE)</li> <li>Rajnesh Singh - Director - Ministry of Heavy Industries*</li> <li>Dr. Suresh Babu Muttana, Scientist E / Director, Department of Science and Technology (DST)</li> </ul>
Current BIS Standards for ESS and Batteries	14:30- 14:45 IST	<ul> <li>Neeraj Kushwaha, Scientist C and Member secretary, ETD 52, Bureau of Indian Standards (BIS)</li> </ul>
Battery Cell level and BESS level safety	14:45- 15:00 IST	<ul> <li>V. Manjunath, Regional Standards Manager, South Asia &amp; Sub-Saharan Africa, UL Standards &amp; Engagement Inc (ULSE)</li> </ul>
EV Battery safety	15:00- 15:15 IST	Dr. Madhusudan Joshi, Head of Technology & Business, International Centre for Automotive Technology (ICAT)
Power Electronics/     EVs/FC impedance     Measurement/Motor     testing/Battery     testing     Advanced     Analytical Solutions     for Testing Energy     Storage Devices	15:15- 15:45 IST	<ul> <li>Utsav Sharma, Manager (R&amp;D) - HIOKI India Pvt Ltd</li> <li>Rajwar Chandra, Product Specialist, Agilent Technologies India Pvt. Ltd</li> </ul>
Fire detection/ Suppression System	15:45- 16:00 IST	Fire advisor, DG, fire services, MHA*
Vote of Thanks & Summary of the Day	16:00- 16:10 IST	Debi Prasad Dash, Executive Director, IESA

<sup>❖ 3&</sup>lt;sup>rd</sup> India Battery Safety Forum is open to all registered delegates





# Workshop on Battery Circularity in India: Policy, Regulations & Implementation Strategies (Organised by WRI India)

## 2<sup>nd</sup> July 2024, Roundtable Room, 1B, IICC, New Delhi

WRI India invites you to a workshop on 'Battery Circularity in India: Policy, Regulations & Implementation Strategies'. The workshop will facilitate a discussion on the existing policies and regulations governing battery circularity in India and gather insights from industry and experts, on policy and regulatory gaps as well as the status of, and challenges in, implementation of systems and processes for battery circularity. Participants will further brainstorm potential solutions and enabling strategies for creating an efficient and circular economy for li-ion batteries in the country.

The workshop on **Battery Circularity in India: Policy, Regulations & Implementation Strategies** will reflect on these challenges and explore potential solutions to promote battery circularity through the supply chain. Bringing together a wide range of industry stakeholders and subject experts, this workshop will provide a unique opportunity for participants to have a timely discussion on the status of battery circularity in India, the key opportunities and challenges facing the ecosystem, and the necessary next steps for optimizing the circularity of the fast-growing battery supply chain.

#### **AGENDA**

Time	Session	Details
11:00 – 11:05	Context Setting	Introduction to the Roundtable Discussion
11:05 – 11:15	Opening Remarks	<ul> <li>Role of battery circularity in making India a global LIB manufacturing hub</li> <li>Chaitanya Kanuri, Associate Director - Electric Mobility, Sustainable Cities &amp; Transport, WRI India</li> <li>Mr. Narayankumar Sreekumar, Associate Director - Electric Mobility, Shakti Sustainable Energy Foundation</li> </ul>
11:15 – 11:35	Research Presentation	Policy and regulatory gaps as well as proposed solutions for enabling battery circularity based on primary and secondary research.  • Mitradev Sahoo, Junior Program Associate, WRI India
11:35 – 12:50	Roundtable discussion	<ul> <li>Roundtable discussion anchored on the following themes:</li> <li>Status of battery circularity in India</li> <li>Challenges in implementing a circular battery supply chain in India and potential solutions.</li> <li>Current gaps and missing links in policy, regulations, standards framework, and potential solutions for enabling battery circularity in India.</li> </ul>
12:50 – 1:00	Concluding Session	Concluding session and launch of conference proceedings
1:00 PM onwards		Networking Lunch





# **IESW Start-Up Day**

## 2<sup>nd</sup> July 2024, 1B, IICC, New Delhi

11:00 – 11:15 IST	Welcome Note & Introduction	Vinayak Walimbe, VP , Emerging Tech, CES
11:15 – 13:00 IST	NEW ENERGY COMPANY SHOWCASE  Pitch Sessions by 7 start-ups (8 mins to pitch and 7 mins of Q& A)	<ul> <li>Jury Members:</li> <li>Pratik Agarwal, Vice President, Singularity AMC LLP*</li> <li>Christine Vincent, Venture Principal, Shell Ventures</li> <li>John Wood, Founder, Noab Ventures</li> <li>Saiesh Reddy, Managing Partner, Chakra Fund Growth</li> <li>Rakesh Malhotra, Founder of SAR Group</li> <li>Mahavir Sharma, Chair TIE India Angels and RAIN (Rajasthan Angels)*</li> <li>Sandeep Tandon, National Project Manager, FLCTD Project, UNIDO*</li> <li>Vinayak Walimbe, VP, Emerging Tech, CES</li> <li>Biplab Hazowary, Manager - Innovation Strategy, Hero MotoCorp</li> <li>Amararaja*</li> </ul>
13:00 -14:00	IST Networking Lur	nch & Expo Visit
14:00 - 15:00 IST	FOUNDERS ROUNDTABLE Session Topic: Strategies for building resilient startups. Points for discussion Identifying sources of uncertainty Building resilience and adaptability Learning from failure and iteration Customer retention and continuous product evolution Leveraging partnerships and financial optimization Overcoming scaling hurdles	<ul> <li>Moderated by: Chandrashekhar Chincholkar, Director of Corporate Advisory, CES</li> <li>Chair: Dr. Jeet Vijay, CEO, Meity Startup Hub, Ministry of Electronics and Information Technology (MeitY)</li> <li>Co-Chair:         <ul> <li>Dr. Mrityunjay Suar, Chairman, BCKIC</li> <li>Dr. Saishyam Narayanan, CEO, IIT-IPTIF</li> <li>Rakesh Malhotra, Founder of SAR Group</li> <li>Faruk Kazi, PI &amp; Coordinator, VJTI-TBI*</li> <li>Dr. Aravind Kumar Chandiran, Associate Professor, IIT Madras</li> <li>Sandeep Tandon, National Project Manager, FLCTD Project, UNIDO*</li> </ul> </li> </ul>
15:00 - 15:45 IST	<ul> <li>TECH IGNITION SESSION</li> <li>7 Habits of Highly Effective EV Startups</li> <li>Ansys Sustainability Solution for EV, Battery management, Green Energy and its storage</li> </ul>	<ul> <li>Prasanna Deshpande, Application Engineering Manager, MathWorks</li> <li>Himanshu Chattwal, Sr. Sales Manager, MathWorks</li> <li>Vinay Sawant, Sr. Simulation Engineer, FEA at 3D Engineering Automation</li> </ul>
15:45 - 16:30 IST	INVESTMENT TALK	<ul> <li>Pratik Agarwal, Vice President, Singularity AMC LLP*</li> <li>Christine Vincent, Venture Principal, Shell Ventures</li> </ul>
16:30 -18:00 19:00 IST On	<u> </u>	





This event is only open for registered/ invited start-ups and investors (not open for regular delegates)

# **IESA-ISA** Future Mobility Learning Centre (FELC)

## 1<sup>st</sup>-2<sup>nd</sup> July 2024, Seminar Hall, 1B, IICC, New Delhi

	Day - 1, July 01, 2024							
SN	Timing	Topic	Speaker					
1	11:15 – 11:30 IST	Opening Remark	<b>Dr Mridula Bharadwaj</b> , Capacity Building Specialist, International Solar Alliance (ISA)					
2	11:30 – 12:00 IST	Advancements in Battery Technologies	<b>Dr Raghvendra Gupta,</b> Researcher, IIT Delhi					
3	12:00 – 12:30 IST	Solar + Storage: Need & Significance	<b>Dr Vikrant Sharma,</b> Deputy Director, National Institute of Solar Energy (NISE)					
4	12:30 – 13:00 IST	Overview of Green Hydrogen	<b>Dr. Deepak Kundalkar,</b> Manger – GH2 Initiative, Customized Energy Solutions (CES)					
Day - 2, July 02, 2024								
5	14:00 - 14:30 IST	E-mobility: Current and Future Trends	Gurusharan Dhillon, Director of Electric Mobility, Customized Energy Solutions (CES)					
6	14:30 – 15:00 IST	EV Charging Infrastructure	Tyag Dharmik, Founder, Cubenz Power Pvt Ltd					
7	15:00 – 15:30 IST	Microgrids: Status and Deployment Concerns	Rupesh Badkhal, Senior Program Associate, Customized Energy Solutions (CES)					
8	15:30 – 15:45 IST	Vote of thanks and feedback	Anurag Jain, Training Coordinator IESA Academy					

❖ FELC is open to all registered delegates, exhibitors, and Visitors





# **Women in Energy Forum**

## 2<sup>nd</sup> July 2024, Seminar Hall, Exhibition Centre, IICC, New Delhi

Time	Session	Discussion Points	Speakers	
16:30 - 18:00 IST (Seminar Hall, Exhibition centre)	Women in Energy Roundtable Discussion	Sustaining Women's Participation in the Workforce:  Recognizing barriers to women's sustained participation.  Creating inclusive workplaces to retain and advance women professionals.  Policy Measures for Ensuring Safety of Women Professionals at Work:  Evaluating current policies' efficacy in safeguarding women.  Proposing stronger policies and enforcement to combat harassment and ensure safety.  Skill Development:  Identifying skill gaps hindering women's career growth.  Implementing accessible skill development programs to empower women.  Improving Work-Life Balance and Men's Support:  Discussing the impact of work-life balance on women's careers.  Engaging men in promoting gender equality and supporting work-life balance initiatives.  Mentorship and Support Networks Within Your Organization	<ul> <li>Dr. Veena Kumari Dermal, Joint Secretary, Ministry of Mines*</li> <li>Divya Sharma, Executive Director, Climate Group</li> <li>Mili Majumdar, Managing Director, GBCI &amp; Senior Vice President, Innovation and Research at U.S Green Building Council</li> <li>Dr. Surekha Deshmukh, Senior Member, IEEE</li> </ul>	
18:00 - 18:	30 IST	Tea break		
18:30 pm - 19:30 IST	Leadership Talk	<ul> <li>Sharing Success Stories of Role         Models in the Energy Sector</li> <li>Journey of the Leaders: Challenges         Faced and Lessons Learned in the         Energy Sector</li> <li>Empowering Future Generations:         Inspiring Young Women to Enter the         Energy Sector</li> </ul>	<ul> <li>Dhanya Rajeswaran, Country Managing Director, Fluence India</li> <li>Netra Walawalkar, Vice President, CES India</li> <li>Gauri Singh, Deputy Director General, International Renewable Energy Agency (IRENA)</li> <li>Dr. Preetam B Yashvant, Joint Secretary, Ministry of Women &amp; Child Development*</li> <li>Denise Eaton, Trade &amp; Investment Commissioner (Resources &amp; Energy), Austrade</li> </ul>	
19:30 - 20:00 IST WE Felicitation ceremony				
20:00 IST onwards Networking Reception				





# Industry stakeholder consultation workshop: Indian EVs & Battery Gigafactories: Imperatives for a Robust Supply Chai

## Powered by CES || Seminar Hall, 1B, Expo Area || 2<sup>nd</sup> July 2024, IICC, New Delhi

India is on the path to a clean energy transition, targeting a 30% electric vehicle (EV) share in registered vehicles by 2030. This will require approximately 600-785 GWh of lithium-ion batteries (LIB) between 2022 and 2030, for EV batteries and battery energy storage systems (BESS) that are required to power this clean energy transition.

Presently, the EV market in the country in 2023 witnessed a penetration rate of 7% with EV battery demand of around 15 GWh in 2023. The EV market in India is expected to grow at a CAGR of 35% from 2023 to 2032 under the business-as-usual case. High demand for EVs and stationary storage has prompted the government to introduce the ACC PLI Scheme which aims to promote 50 GWh of domestic manufacturing of ACC batteries by 2025. With this Scheme, many existing battery players and new entrants have announced their plans to build giga factories in the country.

With the rise in EV adoption followed by an emphasis on manufacturing domestic gigafactories, it's crucial to check the status and address the associated challenges, especially regarding the materials required for manufacturing EV ACC batteries. For this, an enhanced understanding of the material requirements across the supply chain, from upstream to downstream, is indeed essential for all stakeholders involved.

Customized Energy Solutions (CES), along with its knowledge partner with Shakti Sustainable Energy Foundation, is conducting a comprehensive analysis of EVs & battery gigafactories in India, focusing on understanding India's 2032 and 2047 EV and ACC battery demand forecast and scenarios. Under this initiative, CES is delving into crucial aspects such as EV and battery market forecasts across different EV battery chemistries with a key objective of identifying gaps in the present battery supply chain and providing policy recommendations for increased localization and resilient battery supply chain in India.

As part of this initiative, CES is organizing an industrial stakeholder roundtable workshop during India Energy Storage Week (IESW) on 2<sup>nd</sup> July 2024 at the India International Convention and Expo Center (IICC), Dwarka, New Delhi. Your insights and suggestions would be invaluable in shaping this discourse.

We cordially invite you to share your expertise and perspectives at this event. Your participation will greatly enrich the discussions and contribute to the formulation of meaningful recommendations.

1:00 – 2:00 pm	Networking Lunch		
2:00 - 2:10 pm	Welcome and Introduction	Harsh Thacker, Customized Energy Solutions	
2:20 – 2:30 pm	Context Setting Address	Mr. Narayankumar Sreekumar, Associate Director (Electric Mobility), Shakti Sustainable Energy Foundation	
2:20 - 2:40 pm	Research Presentation EVs & Battery Gigafactories: Imperatives for a Robust Supply Chain in India	Monami Dey/ Parth Pandit, Customized Energy Solutions	
2:40 - 3:00 pm	Brainstorming Session Working group formation and brainstorming into groups	Parth, Monami, Akshita, Harsh, Rohit, Bhupesh, Anjan	
3:10 – 3:50 pm	Working Group Presentations Summary of discussions	Monami/ Akshita	
3:50 - 4:00 pm	Concluding Session		
	Summarizing Discussions	Mr. Rishabh Sethi, Programme Manager (Electric Mobility), Shakti Sustainable Energy Foundation	
	Vote of Thanks	Customized Energy Solutions	





## **India LDES Forum**

## Supported by LDES Council || 3rd July 2024, Kenar Hall (403), IICC , New Delhi

In association with the LDES Council, IESA is organizing a dedicated India LDES Forum to advance the deployment of LDES technologies in the Indian energy storage market.

Structure of the India LDES Forum 2024

**Key Discussion Points** 

- Global LDES technologies readiness and global landscape focused on the markets.
- Understanding the key changes in the growth of LDES deployment in India
- Overall costs for decarbonized buildouts, and planning tools for grid decarbonization through LDES technologies.
- Regulatory support is required for implementing LDES projects in India.
- · Setting up the target for LDES deployment for India
- LDES technologies applications and implementation status
- Future implications and limitations

LDES Roundtable Chair:			
	Julia Souder, CEO, LDES Council		
16:30- 18:00 IST	Co-Chair:		
	<ul> <li>Dr. Avishek Kumar, CEO, Vflowtech</li> </ul>		
	<ul> <li>Upma Koul, Sr. VP, Energy Storage Business, Sumitomo SHI FW</li> </ul>		
	Key Panellist:		
	William Tope, Chief Executive Officer, LINA Energy		
	Mani Khurana, Sr. Energy Specialist, World Bank		
	<ul> <li>Yashwanth Mahadevan, VP - Sales, APAC, EOSE</li> </ul>		
	<ul> <li>Shirish Deshmukh, AGM – Special Projects, Godrej-UEP</li> </ul>		
	Vidyadhar Bhise, DGM, Aditya Birla		
	Prasad Joshi, Vice President, Greenko		
	Satish Talmale, COO, Indigrid		
	Vishal Mittal, Founder, Delectrik Systems Private Limited		
	Vaibhav Dalvi, BASF		
	<ul> <li>Prashant Kumar Upadhyay, Sr. Manage, SECI*</li> </ul>		
	Lekhraj Singh, NTPC*		
	Mr. Hiren Shah, Executive Director & CEO, Replus Engitech*		
	<ul> <li>Akash Kaushik, Co-Founder, Good Enough Energy*</li> </ul>		
	Sunil Sharma, Commercial Executive, BSES Yamuna Power		
	<ul> <li>Naveen Nagpal, Asst. Vice President (Renewables, BESS &amp; new</li> </ul>		
	initiatives), BSES Rajdhani		
	Sajan George, Chief General Manager,, GRID India		
	Chalapathi Rao, MNRE*		
	JSW Energy/ Vena Energy		
	• EDINA		
	Ampin Energy Transition		
	Envision Energy		
	O2 Power/ Sterling Wilson		
	Reliance / Cygni		
	ONGC Tripura		
18:30 IST	Happy Hours & Networking Dinner for LDES Roundtable Participants		
Onwards	Tappy Train a tractionaling billion for abab traditation of distribution		





# Roundtable on Green Hydrogen Growth: Sub-National Dialogue on Catalysing Change for Addressing Growth Hurdles

## Organized by WRI || Kenal Hall-403 || 4th July 2024, IICC, New Delhi

The Government of India is implementing the National Green Hydrogen Mission, aiming to position the country as a leading producer and exporter of green hydrogen globally. The mission sets an ambitious goal of producing of 5 million metric tons (MMT) annually by 2030. Under the Mission, the Government of India has introduced various incentives, policy mechanisms, and supportive frameworks to encourage green hydrogen production and electrolyser manufacturing. Following these initiatives, several Indian states including Maharashtra, Andhra Pradesh, Uttar Pradesh, Haryana, Punjab, Madhya Pradesh, Himachal Pradesh, West Bengal, Gujarat, Rajasthan, Odisha, Sikkim, Kerala, Tamil Nadu, and Karnataka have undertaken specific steps to facilitate green hydrogen. The states' approaches range from drafting dedicated hydrogen policies to budgetary allocations, and facilitating projects through respective renewable energy policies, and industrial policies.

These state-level initiatives include various incentives targeted at reducing the cost of renewable energy used to produce green hydrogen and green ammonia, as well as measures to develop a robust manufacturing ecosystem for electrolysers and other critical technologies. Accordingly, significant measures have been proposed in various state government policies to enable industry to ramp up green hydrogen production and exports. These include, incentives aimed at reducing the cost of renewable energy encompass various measures such as exemptions on electricity duty charges, cross-subsidy surcharges, additional subsidy surcharges, intrastate transmission charges, and wheeling charges. Additionally, these incentives extend to land allocation, entailing government land provision at subsidized rates, stamp duty exemptions, and exemptions from other local taxes. Further support is provided through assistance and incentives for innovation and research & development, GST reimbursement, employment subsidies, CAPEX subsidies for electrolyzer and equipment manufacturing facilities, subsidies for green hydrogen utilization across diverse applications, facilitation of water infrastructure development, single-window clearance, and transmission connectivity facilitation.

However, further challenges are anticipated as the industry moves towards implementation of projects. Industry stakeholders have highlighted the lack of domestic offtake, availability of land at suitable locations, access to renewable electricity, and availability of critical equipment and associated infrastructure as some of the crucial pieces. These challenges vary by state or region, requiring a tailored policy approach. It will accordingly necessitate close collaboration among industry stakeholders, research institutions, academia, and the relevant government bodies to identify and execute strategic actions.

This roundtable discussion will seek to facilitate the dialogue between government institutions and industry stakeholders, highlighting the key challenges in the implementation of hydrogen projects in the country, and deliberating how state-level policies could facilitate the process. The aim is to have an open and constructive discussion to identify specific bottlenecks and obstacles and suggest concrete steps that could mitigate them.

Time	Session	Details
11:00 – 11:05	Opening Remarks	Anuraag Nallapaneni, Program Manager – Hydrogen, WRI India
11:05 – 11:15	Context Setting	The necessity of a sub-national dialogue for growth of the hydrogen ecosystem in India  • Dipesh Pherwani, Associate Director – Energy Innovations and Tech, WRI India
11:15 – 11:35	Presentation	Presentation: WRI India
11:35 – 12:50	Roundtable discussion	<ul> <li>Roundtable discussion anchored on the following themes:</li> <li>Developing Green Hydrogen Infrastructure and Market at the State Level</li> <li>Enabling Hydrogen Project Development and Market Growth through Collaboration</li> </ul>
12:50 – 1:00	Concluding Session	Discussion Summary
1:00 PM onwards		Networking Lunch





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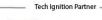






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