

Organized by:

ENERGY STORAGE & EV POLICY FORUM 2019

Part of India Energy Storage Week (IESW)

September 24, 2019 The India Habitat Centre, New Delhi

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Knowledge Partner:



On the occasion of World Energy Storage Day

An exclusive event for IESA member companies

Tender Roundtable Utility Roundtable 10+ Ministries

30+

Country

50+ Govt. Regulatory & Policy Bodies

Partners & International collaboration Tender Industry stakeholders from energy storage, EV, charging infra, RE (wind & solar), battery, power electronics, smart grid & micro grid companies

200 +

authorities



Introduction

Indian Energy Storage and Electric Vehicle space is in an interesting phase. Energy storage has almost 20 different applications in India such as renewable integration, grid ancillary services, diesel minimization, microgrids for energy access and campuses as well as electric vehicles and charging infrastructure. Indian energy storage and electric vehicle market is growing but still, there is a supply-demand gap. IESA estimates that Indian market would grow to over 300 GWh during 2019-2025 considering ESS and EV opportunities. India is expected to attract over \$3-\$5 Billion in investments to support 50 GWh+ capacities of multiple GIGA factories for li-ion batteries and also witnessing additional investment for alternate energy storage technologies. Already, 1 to 2 GWh of annual assembling capacity is being set up for converting imported Li-ion cells into battery modules by various Indian companies. Opportunities include manufacturing, assembling, energy storage project development, equipment supply, R&D of technology enhancement and much more. This extensive market has intrigued many foreign technology players as well as Indian companies to explore the sector.

We are excited about the recently launched National Mission for Transformative Mobility with Phased Manufacturing Program for li-ion battery manufacturing by NITI Aayog. Ministry of heavy Industries have launched FAME -2 (Faster Adoption and Manufacturing of Electric Vehicles) incentives with a budget of Rs. 10,000 Cr. NITI Aayog is also working on Phased Manufacturing Programme (PMP) to catalyse cell manufacturing and EV component in India. Ministry of New and Renewable Energy is also focused on demand creation in the space of renewable integration for rooftop solar, grid connected large scale solar and microgrids. MoP, MoRTH, MeitY, MoUD and other central ministries are also working on demand creation programme. BIS efforts on creating energy storage standards will create the benchmark for quality and boost the Indian energy storage and electric vehicle market.

Various states like Maharashtra, Kerala, Karnataka, Andhra Pradesh, Telangana, Delhi, Punjab, Uttar Pradesh, Gujarat, and Rajasthan are also taken the first step toward EV and energy storage policy creation to boost the market.

IESA is also part of various state and central government taskforce, expert group and standing committee. IESA is continuously providing its inputs and suggestions to various government institutions by gathering feedback/ suggestions from its members and industry stakeholders.

On 24th September 2019, IESA is organising 3rd India Energy Storage & EV Policy Forum (part of India Energy Storage Week – IESW) to celebrate World Energy storage Day (22nd September). Last year event was attended by 50+ Policymakers, regulators and tender authorities with 100+ Industry stalwarts. In this policy forum, key government bodies that are working on regulations that affect energy storage, microgrids and electric vehicles will be part of the roundtable. Last year's forum saw active participation from government organization like NITI Aayog, MNRE, MoP, CEA, CERC, PGCIL, Skill Council, Invest India, POSOCO, and tender authorities like SECI, NTPC, BHEL, EESL, NLC, REIL and other bodies like Brookings India, ICAT, ARAI, SIAM and many others.

The objective of this forum is to have a dialogue between thought leaders from industry and the policy makers to identify policy priorities that can help drive adoption of energy storage, Micro-grid, and Electric Vehicle technologies in India and make India a global hub for manufacturing of advanced energy storage and EV technologies by 2022. We expect 10+ central government ministries, 50+ government regulators & policy makers, 20+ state government authorities (EV, Renewable and Electricity Grid) and 20+ tender authorities to be part of this forum. As a new initiative, this year we are also inviting 20+ country embassies, trade agency and council to join the event with 10+ International and national organizations like ISA, IRENA, IEA and many others. This will enhance India's role to be a global leader on energy storage, EV and microgrids. We also anticipate 200+ industry stalwarts to be part of this forum.



Invited Participants

Bi-lateral trade agencies

- Argentina Australia Belgium Bolivia Canada Chile China Europe France Germany
- Israel Japan Korea Norway Russia Spain Sweden Switzerland Taiwan UK USA
- Thailand Vietnam MENA

International Co-operation

• ARE • GESA • IEA • IRENA • ISA • SE • ADB • UNIDO • WB-ESP • GEF for all

Indian Government

- BEE BIS CEA CECRI CERC DIPP DST ICAT ICT DHI Invest India ITPD Make in India
- MHI Ministry of Railways MNRE MoEFCC MOP MORTH MOUD MSME NATRIP NIRE
- NISE NITI Aayog NIWE NIWE NRDC NSDC NSGM POSOCO REC SCGJ
- Smart Cities Mission Startup India IREDA MEA MEITY Skill India Airport Authority of India

Tender authorities

- BHEL CEL EESL MES NLC NTPC PGCIL REIL SECI JRDEA WBSEDCL UPNEDA
- MEDA GEDA MPPMCL UPEIDA

State level authorities from Electric Vehicles/Transport/Renewable Energy/Electricity dept.

- Andhra Pradesh Bihar Delhi Gujarat Haryana Karnataka Kerala Maharashtra Orissa
- Punjab Rajasthan Tamil Nadu Telangana Uttar Pradesh Uttarakhand Madhya Pradesh
- Himachal Pradesh

State Government Bodies

- State Energy Regulatory Commission State Electricity Board Smart Cities
- State Transport Corporate Metro Rail Corporate

Utilities

• Adani Electricity • BSES Rajdhani • BSES Yamuna • Tata Power - DDL



Discussion Points

- Plenary Session on Advanced Energy Storage Manufacturing (National Mission on Transformative Mobility & Battery Storage -NMTM&BS, Phased Manufacturing Program – PMP, Programme Framework for Implementing "Giga Scale" *Integration Cell & Battery Manufacturing Plants in India)
- Session on Stationary Storage Policy & roadmap
 - Energy Storage Integration for Renewables Energy (For Grid Scale Solar PV and Wind Applications)
 - Energy storage for grid applications for grid stability, ancillary Services, Transmission Investment Deferral
 - Distribution Utility ESS.
 - Energy Storage for Behind the Meter Applications (Rooftop Solar, Diesel Usage Optimization, Inverter, UPS Back UP, Telecom Tower, Energy Storage for Green Building)
 - o Railways & Defense
 - o Off Grid & Microgrid and Rural Electrification
- Stationary Storage Tender Update (current & future tenders & Industry challenges)
- Session on Electric Vehicle & Charging Infrastctuture Policy & roadmap
 - NEMMP & FAME II
 - o DHI E-Bus & Charging Infrastructure tender update
 - o State level EV Policies & Tenders
 - EV & Charging Infra Standards, Certification, Testing
 - Auto Component manufacturing
 - o Government plans for Charging and swapping
 - Future of passenger EV cars (personal vs commercial/fleet)
 - o Housing Code (Commercial Complex, Residential Society, SEZs) for Charging
 - o Electric Vehicle Industry challenges & constraints

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