

Energy Storage leaders calls for policy measures for Atmanirbhar Bharat this World Energy Storage Day

- The India Energy Storage Alliance (IESA) emphasized upon the importance of policy incentives, business leadership, skilled workforce, and inter-industry collaboration to make India *Atmanirbhar* in the energy storage space
- Urged policymakers and business leaders to take bold steps towards building the local capacity for energy storage
- The event featured 75+ global thought leaders and policymakers, who deliberated upon the policy, technology, and business landscape across the world

New Delhi, 22nd September 2020: Marking the importance of energy storage as part of industrial progress and sustainable lives, the 4th World Energy Storage Day was celebrated today. On this occasion, India Energy Storage Alliance (IESA), India's leading alliance on energy storage & e-mobility organized a unique virtual Global Conference & Expo with the aim to bring together industry leaders, policymakers, academia, researchers, and professionals and deliberate upon the need for nurturing a global ecosystem for energy storage. The participants engaged over insightful discussions on four critical aspects of the energy storage ecosystem, i.e., policy and government initiatives, stationary energy storage, e-mobility and latest innovations and developments in the sector.

The significance of energy storage as an integral part of the electrical grid has been acknowledged by several stakeholders, including large consumers, renewable developers, utilities, grid system operators and regulators. Moreover, the Government of India has set a target of installing 175 Gigawatt (GW) of renewable energy capacity by the year 2022 and 450 GW by 2030. A large proportion of this capacity will come from hybrid projects, where energy storage will play a very key role. IESA, thus emphasized upon the importance of building a robust energy storage ecosystem, supported by the policy incentives, business leadership, skilled workforce, and inter-industry collaboration to achieve this vision and make India Atmanirbhar in the energy storage sector.

Advanced energy storage technologies are also critical for the upcoming emobility manufacturing sector. With the advances in various battery chemistries and reducing prices, experts predict that this decade will belong to the electric vehicles. India is little late to invest in the R&D and manufacturing of these technologies, but with the government support and commitment from Industry, we can still catchup with in next 3-5 years. It is estimated that India needs to set up at least 50 GWh of annual manufacturing capacity.

NITI Aayog has taken leadership in drafting the Advanced Chemistry Cell Battery Manufacturing Mission as part of National Mission for Transformative Mobility and Battery Storage. As part of already announced Phased Manufacturing Plan, the Government has charted out a roadmap for incentivizing the local players by imposing 10-12% import duties on cells. The Government will also provide up to US\$ 30 per kWh as incentive for advanced chemistry cell manufacturing in the country. Therefore, the first movers in the country are certain to have an assured market opportunity.

At the conference, IESA also highlighted the huge employment opportunity presented by India's energy storage space. However, to unlock this opportunity, there is a need for skill development, reskilling, and upskilling the existing workforce in the country to make them a strategic fit for the energystorage industry. As the energy storage sector evolves further, it will require interdisciplinary skill sets. To bring in the new

skill sets and bridge the existing skill gap, there is a requirement for more intense industry-academic alliance. IESA, through its IESA Academy is leading the crusade on this front.

Shri Narendra Modi, Prime Minister of India, in his letter to IESA said *“I am pleased to learn that India Energy Storage Alliances and its partners are holding a digital World Energy Storage Day Conclave and Expo. Energy security and sufficiency are pivotal for self-reliant India. We are constantly striving to ensure that electricity reaches everyone, there is sufficient electricity for everyone, and that our environment remains clean. We are also making sure that our resolve towards clean and renewable energy is taken care of in every aspect of life. For, energy access and energy sustainability, we are focused towards building a robust storage capability in the country. Efforts like Global Conclave and Expo strengthen this vision. The presence of policy makers, technical experts and other participants from various countries reflects mankind’s commitment to sustainable development.”*

Summing up the key discussions and insights at the event, Dr Rahul Walawalkar, President, India Energy Storage Alliance says *“The world is at the cusp of a 21st century industrial revolution. Energy storage will be at the epicentre of this revolution. The discussions and insights here have set the tone for many strategic interventions across the world towards building a global ecosystem for energy storage in the power & transportation sector. The event emerged as catalyst towards highlighting the potential of energy storage for future businesses and sustainable living.”*

“There is a lot of innovation taking place in the energy storage ecosystem. India presents a significant opportunity of stationary energy storage technologies. In next 5 years, we are entering into an unprecedented area, where thermal plants will have to pay down 30 percent which is not an ideal situation. At the same time, we do expect that the market for e-vehicles is set to pick up beyond 2022-24. We are coming up with a new report on e-mobility. Due to persistent efforts by various ministries in the last five years, energy storage has picked up rapidly and the technology advancements have also been accelerated. We must focus on building capacity for integrating existing projects and making India a global hub of innovation and R&D. We urge the Indian business leaders to take a lead in terms of investing towards the future. As the event highlighted, there is also a need for the right policy and regulatory support, beyond announcements. These initiatives will boost the local ecosystem, make India self-reliant economy for energy storage, and become the global benchmark. I am confident about the future.”

Mr. Amitabh Kant, CEO, NITI Aayog, said *“NITI Aayog is working with the World Bank to pilot various energy storage points and projects across the power sector in India. Battery Storage is the undisputable leader in overall Energy Storage Portfolio. The potential demand for advanced battery storage applications till 2030 in India is expected to reach 230 GW on a Year to Year basis while on cumulative basis, the domestic market demand of 1116 GWh has been estimated. With high priority accorded to Make in India, the government shall soon launch the incentive schemes to invite global companies through the transparent competitive process to set up Mega Manufacturing plant in advanced technologies areas such as Solar Photovoltaic Cell and Advanced Battery Storage in India. The Government stands by its renewable energy generation target as part of its Paris Agreement. The target is 200 GW by 2022 and 240 GW by 2050. Renewables can become dispatchable replacing fossil fuels.*

Moreover, the next wave of job creation will come from energy storage in renewable energy. India has the potential for being the fastest-growing market for electric vehicles and the government is committed to the same with policy framework like FAME II for a smoother transition. The government is set to launch a tender to global companies for developing future solar. India is taking concrete steps to develop a favourable business environment for a greener economy. The coming age is the age of cutting-edge energy storage technology.”

H.E. Upendra Tripathy, Director General, International Solar Alliance (ISA) stated, *“One of the most important aspects in energy storage is e-vehicles. In order to promote its adoption, Solar cost should be*

affordable for the masses. Talking about storage economy, the aim is to solarize the storage to generate employment. ISA is closely working with member countries to understand the kind of storage requirements they have. In a first, the World Solar bank is aimed at infusing around \$10 billion toward addressing solar projects in the member countries. Storage will play an important role in realizing the ambitious goal of “One World, One Sun, One Grid” - a term coined by the Prime Minister of India.”

Shri Ghanshyam Prasad, Jt. Secretary, Ministry of Power added, *“The day itself talks about the importance of energy storage. Any disruptions that takes place in the electricity sector is an opportunity to grow. The renewable energy was introduced in the electricity sector ten years back along with its drawbacks. The very first goal was to achieve 175 GW by 2022. In terms of advantages of batteries, as Ministry of Power, we look at it as grid element ensuring electricity to every household without any interruptions. There are variations as seasonality to renewable sources of power generation. To maintain reliability of power supply, there has to be some source to take care of the variability and storage is the answer to the same. The plan is to integrate energy storage at grid element level in the imminent future.*

Prof. Stanley Whittingham, 2019 Nobel Laureate in Chemistry in a recorded message said, *“Lithium battery are already changing the way we store our future energy. The future is bright for the storage and Li-ion batteries are raring to go. Clearly, battery is not only the medium, hydrogen, pumped hydro and supercapacitors will also be some active contenders for future energy storage requirements. Let’s make, 2020 the decade of energy storage!”*

2019 Nobel Laureate in Chemistry, Dr Stanley Whittingham, who is currently working as a professor of Chemistry in Binghamton University, State University of New York, delivered the keynote at the event. He shared insights about advances in the technology and assured delegates that we are just at the cusp of the decade of energy storage. The event brought together 75+ global thought leaders and policy makers to share insights on latest developments and trends in the policy, technology, and business landscape. Delegates from over 60 countries keenly attended these sessions.

To celebrate the growing importance of energy storage, the Global Energy Storage Alliance started celebrating 22 September as World Energy Storage Day (WESD) in 2017. Over the past three years, the IESA and its partners celebrated WESD with various national-level events to spread the word within each region. This year, with COVID-19 limiting international travel, all the alliances had decided to opt for a virtual platform to jointly celebrate the WESD with this unique conference. For the first time a marathon online event dedicated to the energy storage and EV industry was organized on this scale.

WESD Global Conference was supported by over 30 partners including, International Solar Alliance and World Bank- ESMAP. Niti Aayog, Invest India and Department of Science and Technology were the India partners and Government of Australia was the partner country. The event received support from global alliances and organisations, such as the Alliance for Rural Electrification; The Associated Chambers of Commerce of India (Assocham), The Australian Energy Storage Alliance; BVES- the German Association of Energy Storage Systems; California Energy Storage Alliance; China Energy Storage Alliance; The US Clean Energy States Alliance; Dii Desert Energy; The US Energy Storage Association; European Alliance for Storage of Energy; European Battery Alliance (EBA250); Green Hydrogen Coalition; Indo German Energy Forum, Innovation Norway; Institute of Management Consultants of India; Irish Energy Storage Alliance, New Energy and Industrial Technology Development Organization, South Africa Energy Storage Association. Customized Energy Solutions was the presenting partner for the event and Amararaja, Exicom, Okaya, UL, BASF, Keysight Technologies, and Curtis have also joined as partners for this global event. For more details, please check (<https://energystorageday.org/event/partners/>)



Annexure:

The most eminent speakers at the event included Mr. Praveer Sinha- MD & CEO, Tata Power, Dr Sanjay Bajpai- FNAE, Head (Technology Mission Division: Energy & Water), Department of Science & Technology (DST), Mr. Kaushik Burman, Vice President, New Business Development & Strategic Partnerships, Gogoro; H.E. Shri Upendra Tripathy- Director General, International Solar Alliance, Shri Ghanshyam Prasad, Joint Secretary, Ministry of Power, Mr. Amitabh Kant, CEO, Niti Aayog, Mr. Saurabh Kumar, Executive Vice Chairperson, EESL Group of Companies, Mr. Vijayanand Samudrala, CEO, Amara Raja Batteries Ltd and Mr. Anshul Gupta, Director, Okaya Power group to name a few. Coming forward for contemplation are some of the most prominent global speakers such as Dr. Tudor Constantinescu, Principal Advisor, Directorate General for Energy, European Commission, Mr. Chris King, Senior VP, e-Mobility, Siemens, Mr. David Schlosberg, VP, Energy Market Operations, Global Energy Services, e-Mobility EnelX, Mr. John Zahurancik, COO, Fluence Energy, Mr. Steve Blume, President, Smart Energy Council, Mr David Morgado, Senior Energy Policy Specialist, Alliance for Rural Electrification, Mr. Austin R. Bryan, Senior Director, CLP Holdings Limited, Ms. Carla Peterman, Senior Vice President Regulatory Affairs, Southern California Edison, Mr. Brieux Boisdequin, Vice President, Automotive and Materials, BASF India, Mr. Yoshiro Kaku, Chief Representative, New Energy and Industrial Technology Development Organization, etc. Refer to (<https://energystorageday.org/event/speakers/>) for an entire list of speakers.

Why 22nd September?

The sun – the largest source of natural energy – has held much importance through the ages and people have gathered throughout time to worship the sun during the days of solstice and equinox with special rituals. The Autumnal equinox occurs on 22nd September and the day and night are of approximately equal duration i.e. the day is balanced. Energy storage has played a huge role in grid balancing, power supply demand management and frequency regulation and to acknowledge the balancing effects of Energy Storage, 22nd September was chosen as an apt date for the World Energy Storage Day.

About India Energy Storage Alliance (IESA)

The India Energy Storage Alliance (IESA) was launched in 2012 to assess the market potential of Energy Storage Technologies in India, through an active dialogue and subsequent analysis among the various stakeholders to make the Indian industry and power sector aware of the tremendous need for Energy Storage in the very near future. IESA aims to make India a Global Hub for research and manufacturing of advanced energy storage technologies by 2020. During past 8 years IESA membership has grown from 5 to 100+ and covers verticals from Energy Storage Manufacturers, Research institutes & universities, Renewable Energy companies and Power electronics companies.

IESA website: www.indiaesa.info