



For Immediate release 15th November 2017

Indian Electrical & Electronics Manufacturers' Association (IEEMA) and India Energy Storage Alliance (IESA) organizing masterclass to develop advanced energy storage manufacturing in India

- Two days' workshop will take place in Mumbai with renowned Industry experts
- Knowledge about 19 energy storage applications in India including Solar, micro grids,
 Diesel usage optimizations and Electric vehicle

Mumbai, India: The Indian Energy Storage market is gearing up for large scale adoption. India is one of the largest markets for lead acid batteries with annual sales of \$6 Billion. India is now poised to adopt advanced energy storage technologies that can act as enablers for 21st century electric grid and transitioning to eMobility. IEEMA in association with India Energy Storage Alliance (IESA) is conducting a two day MASTERCLASS on Energy Storage Technology, Applications & Manufacturing Process at Mayfair Banquets, Worli - Mumbai on 17th- 18th November 2017. This is a unique program to help companies entering into or diversifying in advanced energy storage manufacturing.

India Energy Storage Alliance (www.indiaesa.info), estimates the market opportunity to be 50-70 GW (i.e. 150-200 GWh in terms of energy requirement) by 2022. Opportunities for energy storage in India cover full range of applications covering grid scale energy storage for optimizing T&D investments and enabling renewable energy integration, to providing energy access through microgrids to over 20 crore people, to providing batteries for the ambitious electric mobility program where India is targeting to move to all EVs by 2030.

These opportunities are expected to attract investment in 2-4 Giga factories for advanced Li-ion batteries in India, attracting over \$3Billion in investments in next 3 years. Already, over 1 GWh of annual assembling capacity is being set up for converting imported Li-ion cells into battery modules by various Indian companies. At the same time, for every energy storage project, there is requirement for number of standard electrical components including cables, switches, racks, transformers, containers and power conversion system. This can represent at least 30% of the value of the grid scale energy storage project.

IEEMA and IESA are working closely to help create awareness about this growing opportunity, so that Indian manufacturers can evaluate their existing capabilities to be part of global supply chain for energy storage ecosystem. Also, some of the companies, may be able to diversify and develop new manufacturing capabilities considering the tremendous scope for growth. This





could also create export opportunities for other growing markets such as MENA, Africa and Southeast Asia for Indian companies.

Mr. Shreegopal Kabra President IEEMA opines, "There is a large opportunity emerging in electric vehicle and changing infrastructure space in India. Indian companies should grab this opportunity to enter into new business verticals to create a large sustainable energy storage market. With development of local ecosystem and skill training, energy storage will continue to have accelerated adoption in India in coming years. This should also help companies who are considering setting up manufacturing in India."

Dr. Rahul Walawalkar, Executive Director, Indian Energy Storage Alliance (IESA) & Vice Chair, Global Energy Storage Alliance (GESA) says, "India is already being considered as amongst the top 3 markets for advanced energy storage after China and USA. In recent past, India has missed the manufacturing opportunity while adopting technology transitions such as cellular telephones and solar energy. But we still have time to build a world class manufacturing infrastructure for advanced energy storage. IESA has set a vision of making India a global hub for manufacturing of advanced energy storage systems by 2022. In this context, IESA and IEEMA are hosting a 2 day energy storage master class for Indian companies looking to diversify in energy storage."

The participants will get to know about complete range of energy storage technologies including advanced lead acid, li-ion batteries, flow batteries, flywheels, ultra-capacitors and other emerging technologies. Industry experts will provide insights in various key applications that will drive the adoption of energy storage in next 3-5 years which includes Solar, Microgrids, Diesel usage optimisations and electric vehicles. Global market overview covering North America, Europe, China, and other emerging countries will be provided. Industry experts will also share insights on the manufacturing and various government programs that can help Indian companies in setting up manufacturing as well as acquiring technology and intellectual property rights. The master class will conclude with a session on the business strategy to highlight key decision factors and risks for venturing into this new market segment.

Some of the companies participating in this two days masterclass are Aakash Powertech Pvt.Ltd., Alex Astral Power Pvt. Ltd., Ashok Leyland Ltd., Bharat Heavy Electric Ltd. (BHEL), Chaabi Elecricals Pvt.Ltd., C & S Electric CTR Mfg. Ind. Ltd., Electrical Research & Development Association (ERDA), Eaton Technologies Pvt. Ltd., EVIO Private Limited, Fonroche Saaras Energy Pvt. Ltd, Green Ponds, Godrej & Boyce, KPMG, Sonkul Energy Products Pvt. Ltd., KRYFS Power Components, Hinduja Renewables Pvt. Ltd, Mittal Electronics, Precimeasure Controls Pvt Ltd., Rajasthan Powergen Transformer Pvt. Ltd., Ravin Group of Companies, Relyon Solar Pvt Ltd., Scope T&M Pvt.Ltd., Supreme & Co, Reliance Infrastructure Ltd., Transcon Industries, Veratek Power Solutions, Vikram Solar, Waaree Energies Ltd, and Ministry of Defence - Govt. of India





About IEEMA:

IEEMA is the apex association of manufacturers of electrical, industrial electronics and allied equipment in India. Founded in 1948, IEEMA is the first ISO certified industry association with 800+ member organisations encompassing the complete value chain in power generation, transmission and distribution equipment. IEEMA members contribute to more than 90% of the power equipment installed in India. IEEMA plays a crucial policy advocacy role with government and its agencies. It works closely with standardisation bodies, R&D organisations and testing institutes for formulating Indian standards for developing energy efficient products. IEEMA evolves and operates equitable and uniform PVC Clause and due to its unbiased approach, IEEMA PVCs have gained recognition and credibility over last 3 decades. IEEMA holds product specific conferences, seminars and large exhibitions like ELECRAMA which is world's largest event for T&D equipment industry.

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.

India Energy Storage Alliance (IESA) website: http://indiaesa.info/about-iesa

Press Contact - India Energy Storage Alliance (IESA):	
Debi Prasad Das	Swati Gantellu
Director- IESA	Assistant Manager- IESA
Tel- 9699719818	Tel- 9168429492
Email- ddash@ces-ltd.com	Email- sgantellu@ces-ltd.com