



Webinar on 'Business Models for E-Mobility & Storage'

28 January 2021 || 15:00- 17:45 HRS IST

Background

The transport sector is estimated to be responsible for nearly a quarter of global energy-related CO_2 and impacting on the quality of urban life, including social inequities, and about the effects of its pollution on health and buildings. At a time when global emissions need to be going down, transport emissions are on the rise, with improvements in vehicle efficiency more than offset by greater overall volume of travel.

The world is poised for a big energy transmission lead by renewable energy and storage and transport sector will be one of the key beneficiaries of this change. Electric Vehicles (EVs) have emerged as one of the key torchbearers to this continuing transport conundrum. Ambitious policy announcements have been made by many of the countries which is stimulating the electric-vehicle rollout in major vehicle markets in recent years.

More recently, efforts have been on integrating Solar with EVs especially with regards to Solar powered charging and for facilitating Vehicle to Grid and Grid to Vehicle Integration. A lot of business models have emerged since then for sustainably deploying EVs on ground and for encouraging citizens to adopt EVs include public charging, solar powered EV charging corridors, solar Off-Grid EV solutions, local/small businesses initiatives, solar charging combined with battery swapping, plug & play and pay as drive systems. Many of the automakers, now EV manufacturers are themselves taking a lead in piloting such initiatives.

Batteries are not only a critical component but also a critical driver in enabling EV deployment and contribute around 40 to 50 percent of the cost of vehicle. The technology development in batteries and storage space would have a major implication on the cost of electric vehicles in the future. The stationary battery energy storage systems are used for smoothing the demand and supply around power generated from variable energy sources particularly renewables. It ensures that electricity is available even when generation from renewables is not available.

The opportunities in both EVs and Storage space is immense with wide multitude of applications and potential. Both these technologies need to be focused in order to aid in our Green Recovery of economies.

The ISA has been working closely with its Member Countries to enable solar deployment by providing support in the areas of demand aggregation, capacity building, access to affordable financing, knowledge dissemination and technical assistance. Currently, there are 88 countries who are signatories to the ISA framework agreement. Among various initiatives taken by ISA, capacity building of member countries in solar and allied technologies is an important one.

In the above context, ISA is planning to host a dedicated webinar on 'Business Models for E-Mobility & Storage' to provide a platform for discussing various facets related to technology options, business models, financing and benefits of such projects.

The objective of this webinar is bring all the key stakeholders which include ISA Member countries, Industry representatives, Technology suppliers, Project developers, Project



Management consultants etc. working in the development of E-Mobility infrastructure to have fruitful discussions and enable development of an actionable roadmap for implementation of such projects in the member countries. The webinar would also cover practical aspects regarding technology landscape and on-ground challenges for such projects.

The tentative agenda for the webinar is as follows:

| 15:00- 15:05 Hrs. | Welcome and Opening Remarks |
|-------------------|---|
| | H.E. Upendra Tripathy, Director General, ISA |
| 15:05-15:10 Hrs. | Context Setting |
| | Mr. P.K. Mahapatra, Chair (ISA Project Committee) and |
| | Regional Coordinator (LAC Region), ISA |
| 15:10- 15:20 Hrs | ISA's Programme on E-Mobility and Storage |
| | Dr. Philippe Malbranche, Director (Programme), ISA |
| 15:20- 15:35 Hrs. | Experience for EV adoption and V2G in USA |
| | Presentation By Dr. Rahul Walawalkar, Customized Energy Solutions Limited |
| 15:35- 15:50 Hrs. | Standalone PV Charging Station |
| | Presentation By Hervé Mathiasin, Smart Green Charge |
| 15:50- 16:05 Hrs. | Integrating Solar Energy for EV Charging infrastructure |
| | Presentation By Sreenivasa Uppuluri, SB Energy |
| 16:05- 16:20 Hrs. | Innovative charging infrastructure and battery swapping solutions |
| | Presentation By Anant Nahata, Exicom |
| 16:20-16:35 Hrs. | Establishment of Charing stations: Indian experience. Presentation By Mohan N, EESL |
| 16:35-16:50 Hrs. | Battery swapping & Intelligent Energy Platform |
| | Presentation By Mr. Chandrashekhar Bhide, Lithion Power |
| 16:50- 17:05 Hrs. | Charging Station implementation experience Europe and India |
| | Presentation By Mr. Awadhesh Kumar Jha, Fortum |
| 17:05- 17:15 Hrs. | Strengths of Sweden in E-mobility. |
| | Ms. Arati Davis, Sweden-India Business Council (SIBC) |
| 17:15- 17:35 Hrs. | Interventions by Member Countries/ Other participants |
| 17:35- 17:45 Hrs. | Concluding remarks |
| | Mr. Arun Mishra, Senior Advisor, ISA |
| 17:45 Hrs. | Vote of Thanks |
| | Mr. Ramesh Kumar, Additional Director, ISA |