

Charging Kerala Forward

Resilient Grids for the EV Era: Managing energy transition and Safety in Kerala

Date: 17 September 2025, 10 AM- 4 PM

Venue: Hotel Dimora, Trivandrum

EV Accelerator Cell of Kerala State Electricity Board Limited (KSEBL), and WRI India, are collaborating to study the grid impact of Electric Vehicles (EV) for strengthening Kerala's Grid for Energy Transition. As part of this effort workshops and webinars are being organized under "**Charging Kerala Forward**". KSEBL has an important role to play to meet the electricity demand of the rapidly increasing EV load. KSEBL, as the designated State Nodal Agency (SNA) for EV charging infrastructure, established the EV Accelerator Cell to strengthen the state's efforts toward a clean mobility transition. The Cell serves as the dedicated planning and coordination unit for all EV-related activities, particularly those concerning grid integration, infrastructure planning, and data-driven analysis. WRI India has been actively engaged in Kerala, focusing on supporting the state agencies including KSEBL to develop strategies for energy transition.

A workshop is planned with key stakeholders to seek **feedback on EV growth and corresponding electricity demand projections** that the EV Accelerator Cell is undertaking, in collaboration with WRI India. Kerala is experiencing significant growth of Electric Vehicles (EV), with a total of 2.8 lakh electric vehicles registered at the end August 2025. Projecting the future EV growth is important for planning of power procurement and grid upgrades. After detailed analysis of EV registration trends in the state, KSEBL EV Accelerator Cell and WRI India have undertaken electricity demand projections for different future vehicle growth scenarios. The results from the study will be presented in the workshop to gather key inputs from key stakeholders.

This workshop will also facilitate discussion on **electrical safety related aspects of EV charging**. Safe operation of charging stations is imperative to sustain EV growth in Kerala. EV charging station safety in Kerala needs to be addressed through dedicated guidelines aimed at preventing accidents and ensuring safe operation. The workshop will bring key stakeholders together to initiate the discussion to improve electrical safety aspects in EV charging stations.

To ensure true decarbonization from EV adoption, it is important to **explore synergies between renewable energy and EV charging**. In the context of Kerala, EV charging during day time is an enabler to integrate more solar energy in the grid. Additionally, with cheaper cost of solar energy, this also effectively works as a bonus for EV charging business models. From a grid management perspective, this also enables management of charging electricity demand from EVs. There are many pathways to integrate different renewable energy technologies for EV charging, and the workshop will explore avenues for Renewable Energy towards EV for Kerala.

Indicative Agenda

9:30-10 AM	<i>Registration</i>
10:00-11:00 AM	<p>Inaugural session</p> <p>Welcome Address: Tirthankar Mandal, Associate Program Director, WRI India</p> <p>Opening Remarks: Minhaj Alam IAS, Chairman and Managing Director, KSEBL</p> <p>Keynote: Puneet Kumar, IAS, Additional Chief Secretary, Department of Power, Government of Kerala</p> <p>Special address:</p> <ul style="list-style-type: none"> • Harshil R Meena IAS, CEO, ANERT • Nagaraju Chakilam IPS, Transport commissioner • Vinod G, Chief Electrical Inspector • R. Harikumar, Director, EMC • Sajeev G, Director, REES, KSEBL <p>Vote of Thanks: Asha P A, Chief Engineer (REES & PED) & Head (EV Accelerator cell), KSEBL</p>
11:00–11:15 AM	Tea break
11:15-12:00 PM	<p>Session on EV growth and associated electricity demand projections and Q&A</p> <p>Cini John, Team lead, EV Accelerator Cell, KSEBL Chandana Sasidharan, WRI India Aparna Vijaykumar, WRI India</p>
12:00-1:00 PM	<p>Panel Discussion: EV growth and Renewable Energy for Electric Vehicles</p> <p>This session will focus on the need for Renewable Energy (RE) to power electric vehicles for Kerala's energy transition and explore pathways to integrate different renewable energy technologies for EV charging.</p> <ul style="list-style-type: none"> • Perspectives for EV growth in Kerala • RE growth in Kerala and its implications on EV growth • Solar based time of use rates for EVs • Explore non-Solar based RE for EV in Kerala • Synergies between RE and EV growth <p>Panellists</p> <ol style="list-style-type: none"> 1. Chandana Sasidharan, WRI India (Moderator) 2. Asha PA, Chief Engineer (REES & PED) & Head (EV Accelerator cell), KSEBL 3. Ramanunni P, CEO, ChargeMOD 4. Diya Popli, Ather Energy

	5. Kaushal, Tata power 6. Biju SS, Expert, Grid Management, Grant Thornton
1:00-2:00 PM	<i>Lunch Break</i>
2:00-2:20 PM	Presentation - EV Charging stations: Safety scenario Seby Chelekat, Assistant Engineer, KSEBL
2:20-3:30 PM	Panel Discussion: Electrical safety aspects for EV charging This session will focus on the existing guidelines for electrical safety for EV charging and discuss the need for improving electrical safety related aspects. <ul style="list-style-type: none"> • Need for preventing accidents during EV charging • Guidelines for safe operation of EV charging stations • Need for climate resilient EV charging infrastructure Panellists <ol style="list-style-type: none"> 1. Aparna Vijayakumar, WRI India (Moderator) 2. Chief Electrical Inspector / Representative 3. Praveen M A, Chief Safety Commissioner, KSEBL 4. Transport Commissioner / Representative 5. Manoharan J, Head (E-Mobility), ANERT 6. Mandar Patil, Manager, RMI
3:30-4:00 PM	<i>Closing session and way forward</i>