

Stock-take of Electric Vehicle Interface with Electricity and Smart Grids Across APEC Economies and the Potential for Harmonization (EWG 11/2011)

Expert Group on New and Renewable Energy Technologies (EGNRET)

Background

Electric and plug-in hybrid electric vehicles are an important opportunity to achieve sustainability outcomes as they can: (i) actively displace the use of oil throughout the APEC region with electricity, including renewably generated electricity; (ii) reduce greenhouse gas emissions; (iii) improve air quality; (iv) improve transport energy end use efficiency; (v) increase local and regional energy security; (vi) improve integration of renewable electricity generation; and (vii) improve resilience in the transport sector.

Objectives of the Project

The objective of the project is to enhance understanding in APEC economies of EV connectivity to electricity grids and identify opportunities to increase the harmonisation of standards and requirements to promote the deployment and integration of EVs, both vehicles and supporting technologies, by providing:

- An assessment of current and planned grid and vehicle interconnection standards and regulations for EV deployment in different APEC economies;
- An assessment of EVs in existing and proposed smart grid deployment projects and policies; and
- Recommendations on opportunities where improved harmonisation in EV – grid connectivity standards and requirements can reduce barriers for trade and promote deployment
- To provide a uniform source of information to car makers and other EV technology investors to minimise public and private costs.

The output generated will provide the necessary background information for APEC to assess actions that may range from local action to an APEC wide accord or standard.

Methodology

This project involves 3 main steps:

1. A survey of APEC economies on existing EV connectivity infrastructure, regulations, and standards.
2. This is followed a by a desktop review of the results, and an analysis to identify areas where harmonization can reduce trade barriers and promote faster deployment.
3. Carry out a workshop to discuss the findings and collect APEC feedback to ensure that the final report is consistent and the all views are properly considered.

Current Outcomes of the Projects

The project is currently at very early stage. To date the project has interacted with other APEC groups and other stakeholders raising awareness of the project. This will be important during the data collection process.

Progress of the Project

The project is currently finalizing an RFP to select a consultant to carry out the research. The RFP will be posted in the APEC website within the next week.