Electric Vehicles Initiative (EVI)

Thematic Area   ENERGY DEMAND

Goals

The Electric Vehicles Initiative (EVI) is a policy dialogue dedicated to accelerating the introduction and adoption of electric vehicles (EVs) worldwide.

Potential Impact

As a potential source of zero emission transportation, electric-drive vehicles are critical to aggressively reducing greenhouse gas emissions. EVI seeks to facilitate the global deployment of 20 million electric passenger vehicles by 2020. While this goal may be aggressive, the International Energy Agency (IEA) has estimated that electric drive vehicles must represent 35% of new vehicle sales by 2035 to limit climate change to less than 2°C, which is consistent with targets agreed to at COP21. This trajectory translates to a total global EV fleet of around 150 million by 2030, a 150-fold increase over the present vehicle fleet.

Why?

After approximately five years of commercial availability, the one millionth consumer EV was sold in 2015. During this initial period, governments have experimented with various policies and programs to support the deployment of EVs and EV supply equipment (e.g., charging stations). Yet despite this success, EVs make up less than 1% of passenger car sales worldwide. Hence, robust, innovative, and aggressive second-generation EV adoption policies that build on the first generation are critical to encouraging mass market adoption. With representation that spans the world's largest economies (both established and emerging), the biggest cities, a majority of the world's automotive manufacturing capability, and global leaders in EV deployment, EVI presents an ideal forum to share information and tools that help policymakers design EV policies and programs.

Activities

The initiative has implemented a 2015–2016 work plan that consists of two prioritized work streams:

- **EV data updates:** Data collection on EV sales, stock, market share; charging infrastructure deployment; government incentives and spending on RD&D. All these data will be analyzed and disseminated to global stakeholders in the 2016 Global EV Outlook publication.
- **Policy assistance:** Catalogues for EVs and EV supply equipment (EVSE), policy assessments, and tailored policy assistance from Lawrence Berkeley National Laboratory to the Government of India to support incentives, policy design, and EV pilot projects.

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Progress

Over the past year, member nations have led global EV sales, co-developed policies for EV systems, funded research and deployment, and led global efforts to advance low-carbon transportation.

- **Led by example through ambitious EV policies:** Germany boosted EV incentives by over €1 billion, China reached over 150,000 electric buses and 200 million electric two-wheelers, India announced a goal for a 100% electric fleet by 2030, and Norway and the Netherlands have taken steps to ensuring that all passenger vehicles purchased from 2025 onward are electric vehicles.
- **Endorsed the COP21 Paris Declaration on Electro-Mobility** to signal member countries' ambition and EVI's role in supporting deployment through best-in-class research, tools, and policy design.
- **Contributed to the global body of knowledge** through its 2016 *Global Electric Vehicle Outlook*, a publication that provides authoritative information on EV deployment progress and policy designs.
- **Supported policy implementation** such as the work of EVI members and researchers working with the Government of India to implement the National Mission on Electric Mobility. This partnership is quantitatively evaluating different country experiences with purchase incentives and its impact on consumer behavior to provide insights tailored to the Indian context. Also, EVI researchers continue to support pilot projects and infrastructure planning in key urban areas.

Next Steps

Over the past year, EVI members have also worked together to develop a new vision for the initiative. This new model of cooperation will pool greater resources from member countries to conduct an ambitious program of research, information sharing, targeted capacity building, and technical assistance. Areas of focus identified by EVI members include:

- Empirical analysis of EV policy effectiveness and identification of global best practices
- Supporting greater dialogue between electric power and transportation decision-makers
- Dedicating resources to EV policy assistance through the Clean Energy Solutions Center
- Incorporate the power sector into the cost–benefit analysis tools for electric vehicles
- Developing a campaign for CEM8 focused on robust support programs to encourage EV infrastructure deployment
- Supporting EV deployment working on the "last mile" aspects of regulatory drafting when converting policy advice into legal text

Lead CEM Government(s)	China, United States of America
Participating CEM Government(s)	Canada, Germany, India, Italy, Japan, Korea, Norway, South Africa, Sweden, United Arab Emirates, United Kingdom
Other Key Partners	Netherlands, Portugal (non-CEM nations); IEA, IEA Implementing Agreement on Hybrid and Electric Vehicles, Paris Electro-Mobility Declaration signatories, ClimateWorks Foundation, International ZEV Alliance, SAE International, SIAC (Shanghai EV Zone)

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