Roadmap for Electric Transportation: Policy Guide

Fact sheet
Policy Guide
Legislative options from states
Power point

Raponline.org/EV-roadmap
Action Plan for Electrification of Transportation

- Plan Your Destination
- Provide Incentives for EVs
- Remove Roadblocks
- Rev Up Regulators: Empower and Guide Them
MOU on regional west EV plan

• Coordinate on EV charging station locations to avoid redundancy;

• Create voluntary minimum standards for EV charging stations, including standards for administration, interoperability, operations, and management;

• Identify opportunities to incorporate EV charging station infrastructure into planning and development processes, such as building codes
Removing Roadblocks: Interoperability

- Standardizing practices between charging companies makes their networks more accessible to EV owners and helps promote EV adoption.

- EV charging equipment interoperability standards generally fall into three categories:
  - Physical connection between the EVSE and vehicle;
  - Billing and payment systems; and
  - Data and communications protocols (i.e., network interoperability).
Removing Roadblocks: Building Codes

- Home charging, most common practice in US.
- 30% of housing stock is comprised of structures with 3+ dwelling units.
- Legislation could enable:
  - An update to multi-unit, and commercial bldg. codes to accommodate EV charging.
  - Allowing the addition of charging points to existing garages for renters.
  - The “right to charge” which make it harder for a property management to prevent residents from installing charging stations when certain conditions are met.
Essential Public Charging Network: New Jersey/Florida

• Provide sufficient geographic coverage to ensure that most EV drivers will have access
• Not all the charging that will eventually be required
• Meant to:
  • address critical unmet needs of the early market
  • stimulate accelerated EV adoption
  • seed the market for long term growth
Utility roles in EVSE

Figure 4. Potential roles for utilities in EV charging infrastructure

Utility provision of EVSE

• Different structures:
  • Limited utility investment – up to make-ready stage, limited duration
  • Utility managed EVSE charging network
  • Utility as provider of EVSE charging services
• Importance of time-of-use rates
Integrated planning

Does the IRP process:

- Require utilities to make use of EV charging to meet flexible demand?
  - EV load is flexible with TOU rate; therefore, utilities can influence when drivers charge their cars, encouraging them to charge when cheap renewable energy is abundant.
- Require utilities to consider utilizing the storage capability of EVs?
- Does it require utilities to utilize all cost-effective energy efficiency, demand response and renewable energy to meet EV charging needs?
About RAP

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