Is Maine Ready for EVs?

E2Tech
October 19, 2017

Barry Woods
Director of Electric Vehicle Innovation
ReVision Energy
About ReVision Energy

**Experience:** 5,000+ solar energy systems installed since 2003

**Credentials:** NABCEP Certifications, Master Trade Licenses, extensive professional training & certification

**Vision:** Transition Northern New England to a clean, solar energy powered economy while creating positive social change
Overview

• What level of disruption is coming & why?
• Where is Maine now?
• How can Maine best prepare for EVs?
• What level of disruption is coming & why?
Where is Maine now?
Plug In Electric Vehicles
<1000 registered plug in’s (PHEVs/BEVs)
Dealer engagement/availability-ZEV state!

Charging Station Infrastructure
Public Level 2 Chargers 101 sites +/-
Public DC Fast Chargers 13 sites
(Tesla has 3 Supercharger clusters)

EV Friendly Policies & Strategy
Only ZEV state without EV adoption goals
State/Agency EV or EVSE policies?
  -Building codes? Incentives? eVMT?
Utility policy? Rates? Pilots?
Long distance travel corridors?
Regional Planning?
How can Maine best prepare for EVs?
Create a Transportation Electrification Strategy
1. Engage Electric Utilities in EV Planning
Engage Utilities & Provide Favorable Regulatory Environment

– EVs and the Grid- improve grid efficiency using off-peak generation & offer storage options
  • Utility pilots needed for how to play with this smart appliance
    – Leverage existing smart grid investments
    – TOU rates/ DR charging Infrastructure/load balancing
  • Lower T &D rates through use of more flexible load- more efficient use of assets & grow state economy through cheaper rates

– EVs and Renewables- Solves Intermittency/Creates new renewable demand
  • Stop fighting over solar and grow the pie!
  • 3000 kWh= 10000 miles- and vehicle range capability keeps increasing!
  • Avg Maine household uses 6372 kWh annually

– EVs benefit state economy
  • use domestic energy & save consumers energy costs

– Conclusion: Maine should open an EV docket and develop a plan for utility engagement with EVs and Charging Infrastructure
2. Develop Regionally Interlinked DCFC corridor
New Hampshire
DCFCers
10 Sites
5 are Tesla
New Hampshire
DCFCers
10 Sites
5 are Tesla
Governor LePage and Quebec Premier Couillard Announce Electric Vehicle Corridor Initiative

March 9, 2016

“Tourism is our biggest industry, and it is critical that we ensure we have the electric vehicle infrastructure to ensure that the people of Quebec can continue to visit our beautiful state,” said Governor LePage. “The history of the Quebec and Maine relationship is strong, and we must maintain our connectivity with modern transportation infrastructure. Electric vehicles have made significant progress and are coming to Maine. It’s vital we have a plan to make Maine open to this important technological change.”
3. Harness VW and Tesla funding to build charging infrastructure
Why will the next three years be disruptive?

Settlement Breakdown

- Vehicle buyback and modification (consumers)
- Zero Emission Vehicle investment (national and CA)
- Environmental Mitigation Trust (states)

$10 Billion

$2 Billion

$2.7 Billion
DESTINATION CHARGING

CONVENIENT CHARGING AT HOTELS & RESTAURANTS
4. Support Maine’s only EV Stakeholder Group
Drive Electric Maine

A Public/Private stakeholder group whose primary goal is to harness the economic, social and environmental benefits of EVs for the state of Maine.

Areas include:

- Public Outreach & Education - RnD
- Auto Dealer and Utility Engagement
- Tourism/Workplace/Commercial Charging Hosts
- State Incentives and EV Friendly Policy
Drive Electric
New Hampshire
Thank you!

I've Experienced Electric
Questions/Comments?

Barry Woods, Director of EV Innovation
barryw@revisionenergy.com
207-494-4440 (direct)
Twitter- @barrytwoods
www.driveevs.com