



# Electric Vehicles

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# Questions for You



**Carbon Dioxide is fouling our air**

**Would you be interested in a vehicle that generates no emissions?**

**Oil is getting harder to find – drilling is becoming riskier**

**Do you want to stop using up oil?**

**Gasoline costs you about 14 cents a mile**

**Are you interested in a fuel that costs you 2 cents a mile?**

**Last year we imported \$488 Billion of oil**

**Would you like to use a fuel we make in the US?**

# Some Definitions



Battery Electric Vehicle (BEV)



Extended Range Electric Vehicle (E-REV)



Parallel Plug-in Hybrid (PHEV)

# Some Definitions



PHEV's charging at Level I  
(Household current)



EREV charging at Level II  
w J1772

BEV Charging  
on a DC  
Charger



# Charging Stations – North America



Model	Application	Level	Power	Connector
CT1000	Commercial	Level 1	120V 16A	Nema 5-20 Outlet
CT2100	Commercial (Dual Level)	Level 1	120V 16A	Nema 5-20 Outlet
		Level 2	208/240V 32A	SAE J1772™
CT2000*	Commercial	Level 2	208/240V 32A	SAE J1772™
CT500*	Home, Light Commercial	Level 2	208/240V 32A	SAE J1772™
CT3000**	Commercial	Level 3	50kW, DC	TEPCO

\*Target Q3, 2010

\*\*Target Q4, 2010

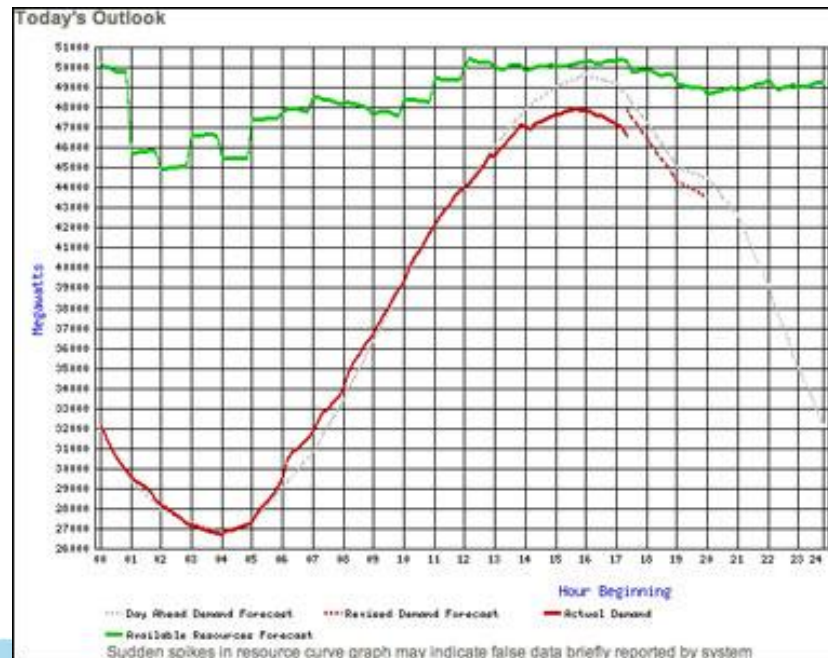


# Grid Impact



## How will grid load be managed?

- Need ability to shed grid load during peak hours
- Need ability to manage charge times



# Plug-In Vehicles are Here, More are Coming



BMW Mini E



Ford Transit Connect



Daimler Smart EV



Nissan Leaf



Citroen C-Zero



Hyundai i10



Toyota Prius



GM Chevrolet Volt



Fisker Karma



BYD F3DM

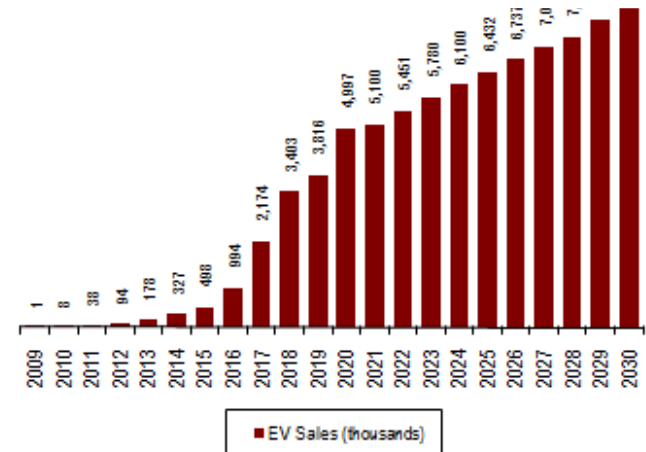
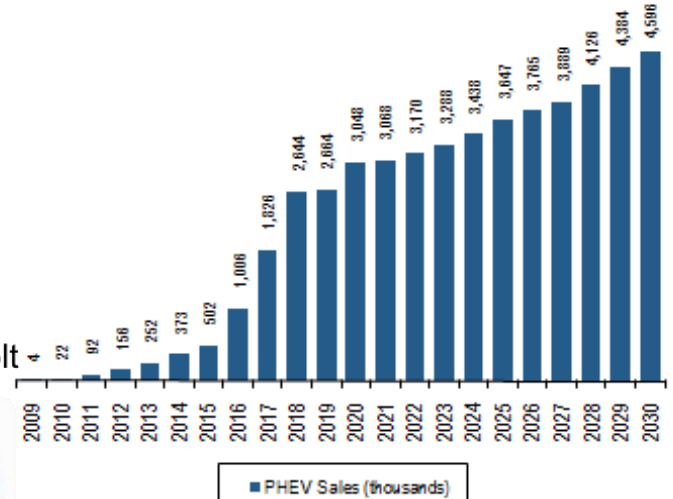


Ford Focus EV



Mitsubishi iMiEV

- 2010 - 10 major auto manufacturers with 10 production models
- 2012 - over 20 production models available
- Industry Consensus - 3 Million Plug-in Cars in use by 2015 worldwide



# What Can You Do?



- 1. Order a Chevy Volt, a Nissan Leaf, a Tesla Roadster, or whatever other vehicle that suits your needs**
- 2. Ask your City Council to install some charging stations around town**
- 3. Ask your public officials to buy clean vehicles**
- 4. If you live in an apartment or condominium, talk to your landlord or association about installing charging stations to enable you to buy an EV**
- 5. Talk to your legislators and policy makers about supporting this transportation transformation**
- 6. If you own a business, talk to Coulomb about getting free stations**



# Questions for You



- 1. Would you be interested in a vehicle that generates no emissions?**
- 2. Do you want to stop using up oil?**
- 3. Are you interested in a fuel that costs you 2 cents a mile?**
- 4. Would you like to use a fuel we make in the US?**



**THANK YOU**