## **Electric Vehicles 101**

## **U.S. Charging Options**

Note: Different cars can charge at different rates, but all can charge at Level 1 & Level 2.

Level 1 (no additional cost - unit comes with car)

- WHERE FOUND: The cordset is supplied with your car. Plugs into your existing 120VAC household wall outlet.
- WORKS WITH: All U.S. plug-in cars.
- CHARGING SPEED1: 3-5 miles of driving range added to car per hour charging. 25-40 miles range added during 8 hour workday.
- ALSO KNOWN AS: "trickle charge"



Level 2 (provides complete charge overnight empty to full; common public charging)

- WHERE FOUND: Residential garage or carport; public charging at malls, parking lots, etc. At home hard-wired or plugged into 240VAC line with 40 amp circuit.
- WORKS WITH: All U.S. plug-in cars.
- CHARGING SPEED1: 10-25 miles of driving range per hour charging. "Highspeed" stations (70 amps) can charge at 38-56 miles range per hour.



DC Quick Charging (Fastest charge; commercial locations only; certain vehicles only)

CHAdeMO (80% charge in 30 minutes for LEAF & i-MIEV)

- WHERE FOUND: Growing presence in metropolitan areas and inter-urban highways in California, Oregon, Washington, Arizona, Texas, Tennessee and Chicago.
- WORKS WITH: Nissan LEAF (with CHAdeMO option) and Mitsubishi i-Miev.
- CHARGING SPEED1: 60-80 miles range in under 30 minutes



Tesla Supercharger (roadtrip solution for Tesla vehicles)

- WHERE FOUND: Along interstates. Projected to be available in most metropolitan areas by Fall 2013, and to allow coast-to-coast travel by Winter 2013.
- WORKS WITH: Tesla Model S and future Tesla models only.
- CHARGING SPEED1: Up to 130 miles in about 20 minutes



SAE DC Combo (80% charge in 20 minutes for Spark EV & i3)

- WHERE FOUND: San Francisco Bay Area, Los Angeles basin, San Diego region, and SMUD in Sacramento
- \* WORKS WITH: Chevy Spark EV, BMW i3, and soon all other US and European PEV models
- CHARGING SPEED1: Up 60-80 miles range in 20 minutes



1 Charging rates may vary depending on specifications of charge station and vehicle, and state of charge of battery. Plug In America would like to thank the following sponsors:





