

# **South Carolina Electric Vehicle Charging Infrastructure Deployment Plan**

**In Support of the National Electric Vehicle  
Infrastructure Formula Program**

**(SC NEVI Plan)**

**August 1, 2022**



## **Overview of EV Terminology**

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# Overview of EV Terminology

- **NEVI – National Electric Vehicle Infrastructure Formula Program**
- **IJA – Infrastructure Investment and Jobs Act**
- **BIL – Bipartisan Infrastructure Law**
- **FHWA – Federal Highway Administration**
- **Joint Office – the Joint Office of Energy and Transportation**

# Overview of EV Terminology

- **ICE – Internal Combustion Engine**
- **PHEV – Plug In Hybrid Electric Vehicle (Toyota RAV 4 Prime)**
  - ICE and Battery – short range of electricity ~ 40 miles
- **BEV – Battery Powered Electric Vehicle (Tesla)**
  - Battery Only – extended range of electricity ~ 350 miles
- **HEV – Hybrid Electric Vehicle (Toyota Prius)**
  - ICE and Battery – battery supplements ICE....no plug-in charging
- **EV – Electric Vehicle (any vehicle that uses electric motors for propulsion)**

# Overview of EV Terminology

- **EVSE – Electric Vehicle Supply Equipment (chargers)**
- **Level 1 Charger – Standard wall outlet....110V to 120V....1 kwh**
  - **SLOW.....~ 40+ hours for full charge**
- **Level 2 Charger – Electric dryer plug....240V....3 kw to 19 kw**
  - **MODERATE.....~ 8 hours for full charge**
- **Level 3 Charging – Specialized....400V to 1000V....50kw to 400kw**
  - **FAST.....~ 20 minutes**
- **DCFC – Direct Current Fast Charger – another name for a Level 3 charger**



# Level 1 Charger

Source – [www.cars.com](http://www.cars.com)



# Level 2 Charger

Source – [www.cars.com](http://www.cars.com)





# Level 3 Charger - DCFC

Source – [www.cars.com](http://www.cars.com)



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## Questions?

## Overview of EV Terminology

[www.scdot.org/nevi](http://www.scdot.org/nevi)

