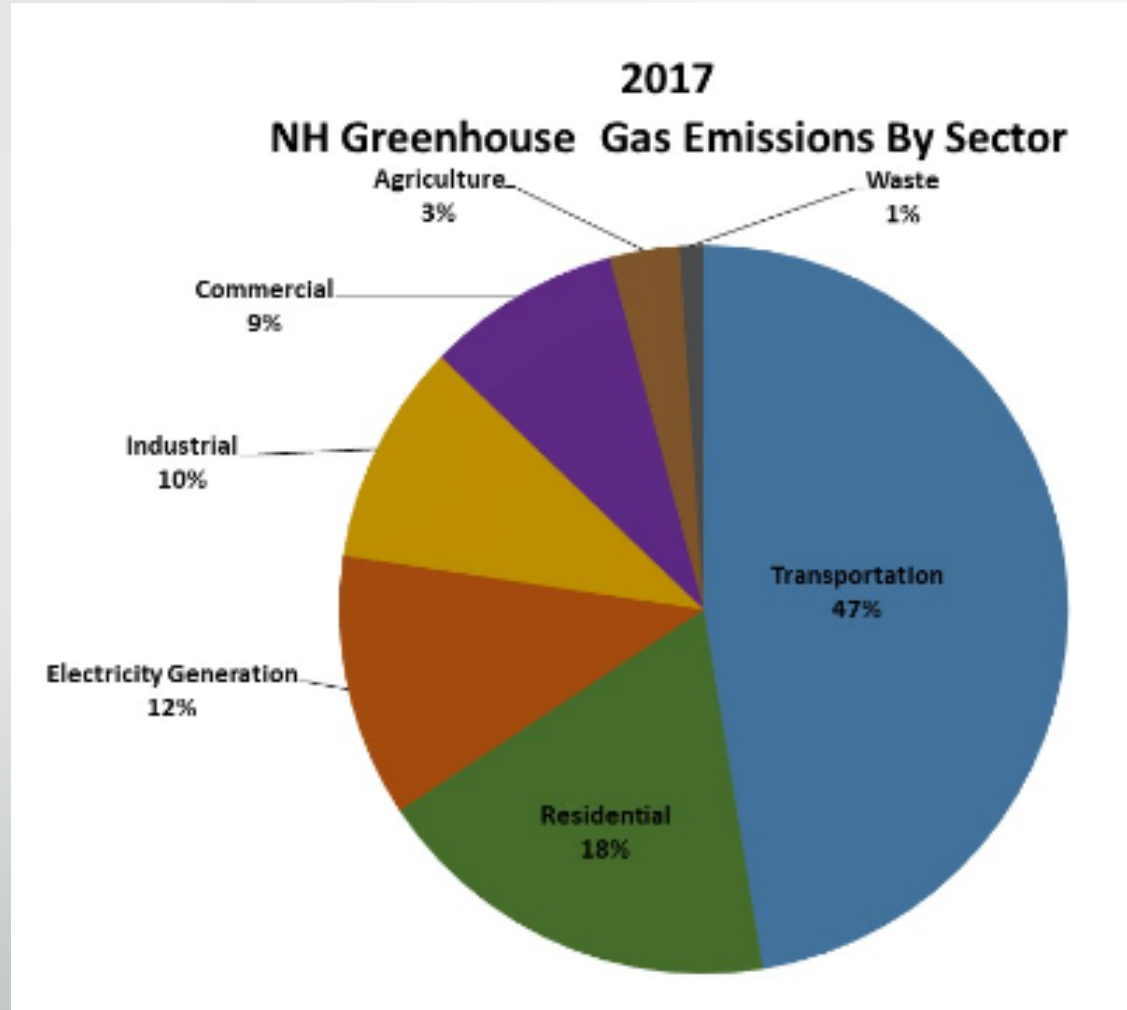


# Electric Vehicle Charging Infrastructure in NH

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# Why Go Electric?



# EVs are not just coming – they are here!

- Volkswagen unveils new electric ID. Buzz - descendent of iconic hippie microbus
- Ford Sales Are Soaring All Thanks To Its Electric Vehicles
- GM unveils \$30,000 electric SUV
- Nissan unveils all-new electrified X-Trail
- Dodge unveils electric concept muscle car
- Jeep unveils plans for electric future with 4 EV SUVs by 2025
- BMW unveils new electric i3 based on 3 Series
- Can-Am Unveils Two Electric Motorcycles
- Cadillac Unveils Electric Vehicle to Compete with Bentley
- Mercedes-Benz Unveils Electric Semi With 310-Mile Range
- Bowlus Unveils The First All-Electric RV

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## Vehicle Cost Calculator

This tool uses basic information about your driving habits to calculate total cost of ownership and emissions for makes and models of most vehicles, including alternative fuel and advanced technology vehicles. Also see the cost [calculator widgets](#).

ASSUMPTIONS

### Choose vehicles to compare

Select up to eight vehicles to compare from the makes and models below or [create your own custom vehicle](#).

2022

▼

Make

▼

Model

▼

ADD >>

[Create Custom Vehicle](#)

### Tell us how you use your car

Because vehicle efficiencies vary depending on how you use your car, this information allows the tool to more accurately calculate fuel usage.

# Types of Charging

## Level 1

2 to 5 miles of range per hour of charging  
(full charge in 11-20 hrs.)

Standard 120v AC Wall Outlet

1.4 kW – 2.4 kW



## Level 2 (J1772)

10 to 25 miles of range per hour of charging  
(full charge in 8 hrs.)

Requires 240v outlet and dedicated 40-amp circuit – the same kind used by a clothes drier or stove

3 kW to 19 kW (Avg 9.6 kW)



## DCFC

60 to 80 miles of range per 20 minutes of charging\*

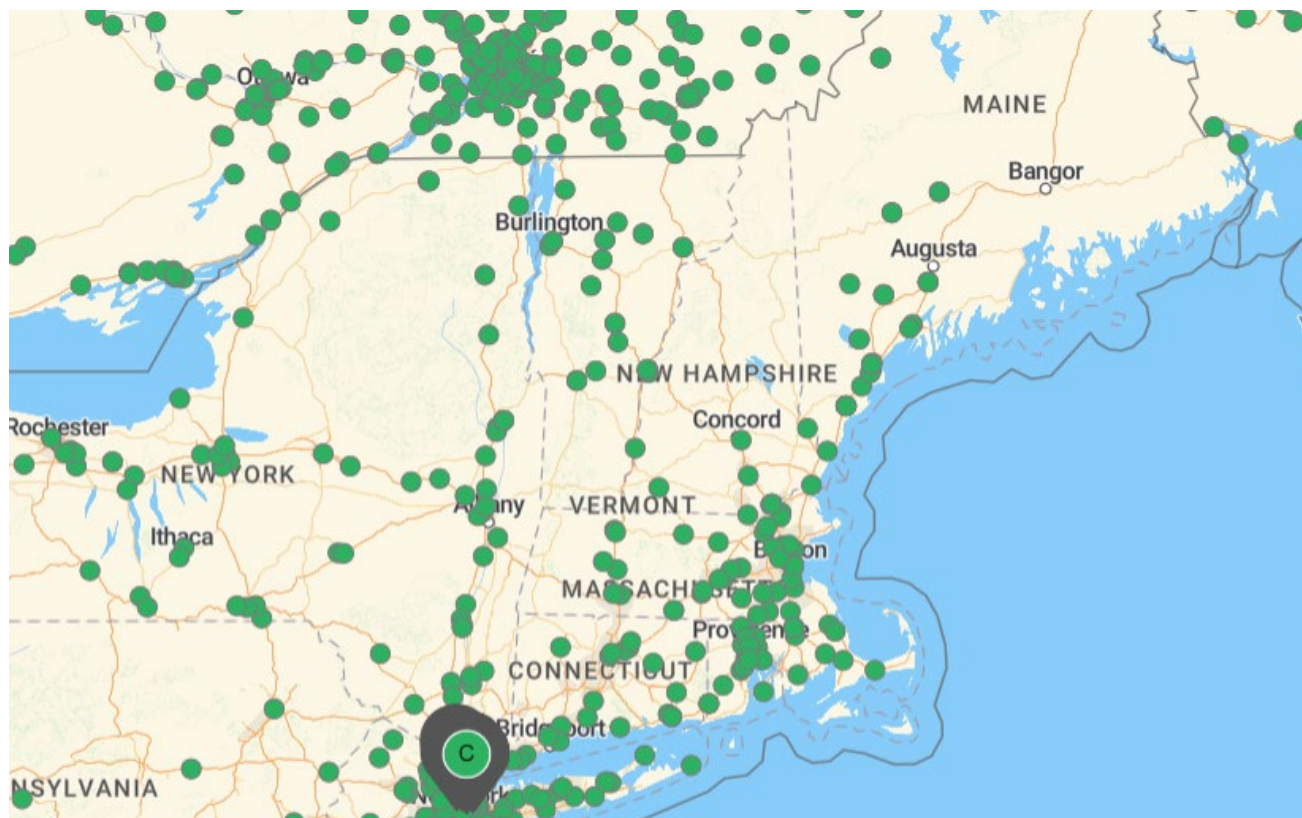
Generally requires three-phase 480v AC electric circuit

Needs to be mounted on an equipment pad

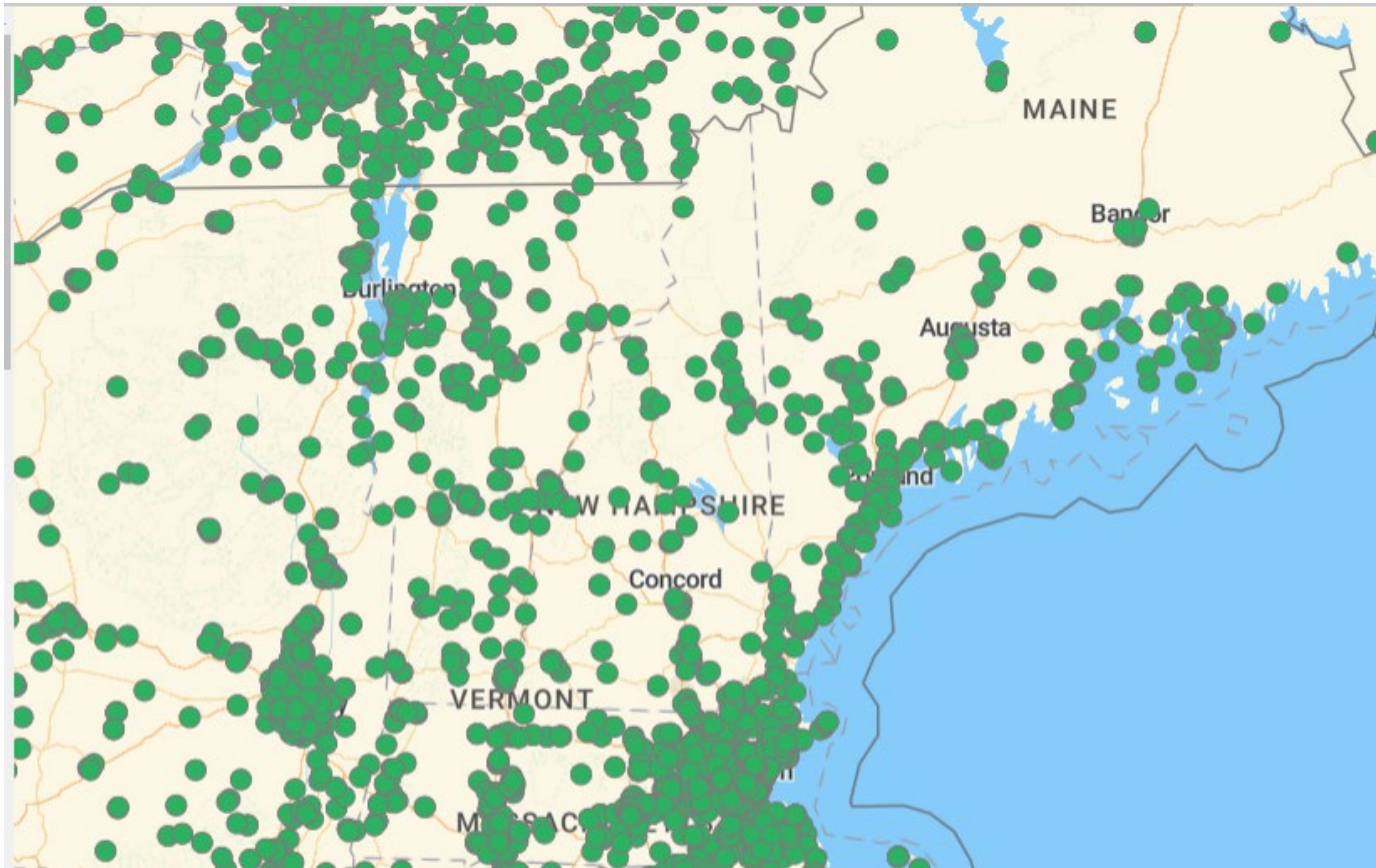
50 kW – 150 kW – 350 kW







# Existing DC Fast Charging



# Existing Public Level 2 Charging

# Some Limiting Factors for EVs and EVSE

- Hard to find EVs in NH
- Higher initial purchase price – barrier being addressed by Inflation Reduction Act (IRA) incentives - \$7500 tax credit through 2023 and is up front payment, not a rebate
- Cost to Install and Operate Chargers
  - Infrastructure costs – transformers, etc.
  - Demand Charges
  - Time of Use Rates



# NH Volkswagen Trust funds for DC Fast Charging

- Publicly Accessible Sites:
  - $\geq 2$  DCFC + L2 – networked
  - $\geq 50$  kW DCFC
  - Connectors: CCS & CHAdeMO
- 9 Travel Corridors
  - US 3
  - US 2
  - Route 16
  - US 302
  - I-93
  - I-89
  - Route 11 / 103
  - Route 9 / 202
  - Route 101



# NH Volkswagen Beneficiary Mitigation Trust Funding for EV Charging Stations

- Up to \$4.6 million of NH VW Trust may be expended for EVSE
- Request for Proposals released late 2021 – proposals submitted February 2022
- Eligible locations based on US DOE designated Alternative Fuel Corridors
- 43 qualifying EVSE deployment options proposed
- Proposals evaluated on location, equipment proposed, operational model, cost, qualifications of the project team and other considerations
- Anticipate approval of contracts by Governor & Executive Council this Fall