



# Electric Vehicles Are Part of the Anchorage Carbon Reduction Solution

Alaska Common Ground  
February 25, 2021  
Sean Skaling, Chugach Electric

# EVs Help Meet Anchorage's GHG goals

- + ICE = 9,300 lbs CO<sub>2</sub>/year (from tailpipe)
- + BEV = 2,600 lbs CO<sub>2</sub>/year (from power plant)
- + Reduction of 6,700 lbs CO<sub>2</sub>/vehicle/year (3 metric tons)  
**72% CO<sub>2</sub> reduction!**

## Assumptions:

*When charged by Chugach generation mix*

*EPA Average efficiency vehicles of 21.9 mpg and 2.9 mi/kWh*

*Driving 10,000 miles per year*

*ICE: Internal Combustion Engine*

*BEV: Battery Electric Vehicle*



# Fuel Cost

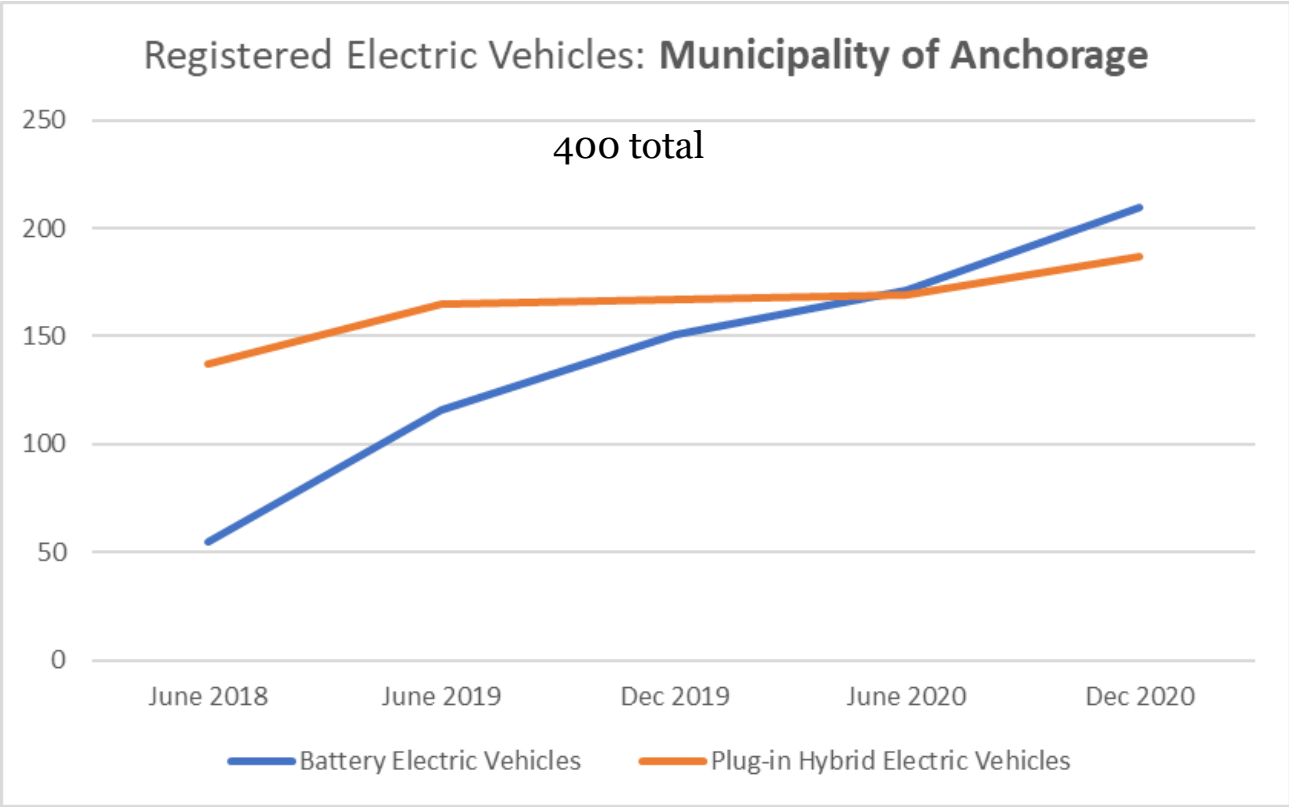
- + Internal combustion engine vehicle
  - 21.9 MPG
  - \$2.65/gallon
  - 12.1¢/mile**
  - 10,000 miles per year = **\$1,210**
- + Electric vehicle
  - 2.9 miles/Kilowatt-Hour (kWh)
  - 20.4¢/kWh
  - 7.0¢/mile**
  - 10,000 miles per year = **\$704**

**42% Cost Reduction**

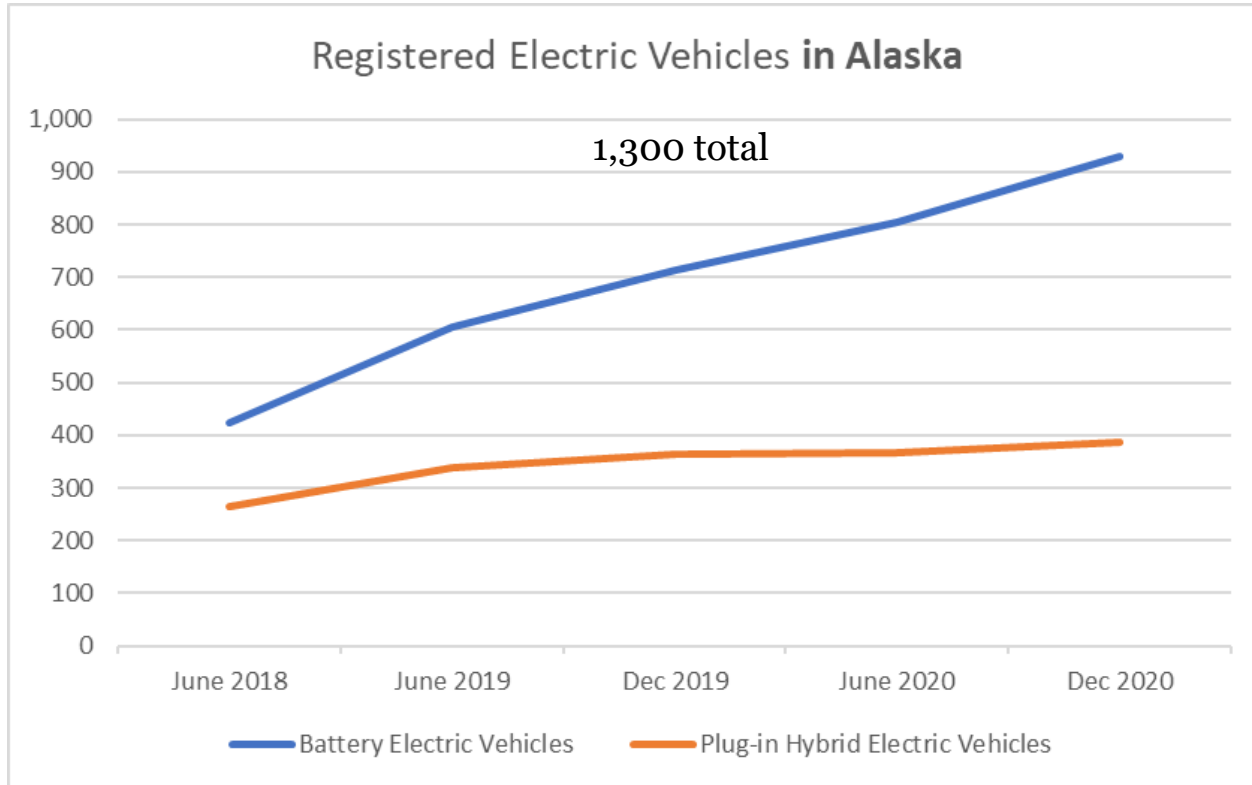


Hyundai Ioniq 5 (expected 2021)

# Number of Electric Vehicles in Anchorage



# Number of Electric Vehicles in Alaska



# Future Electric Vehicles in Anchorage

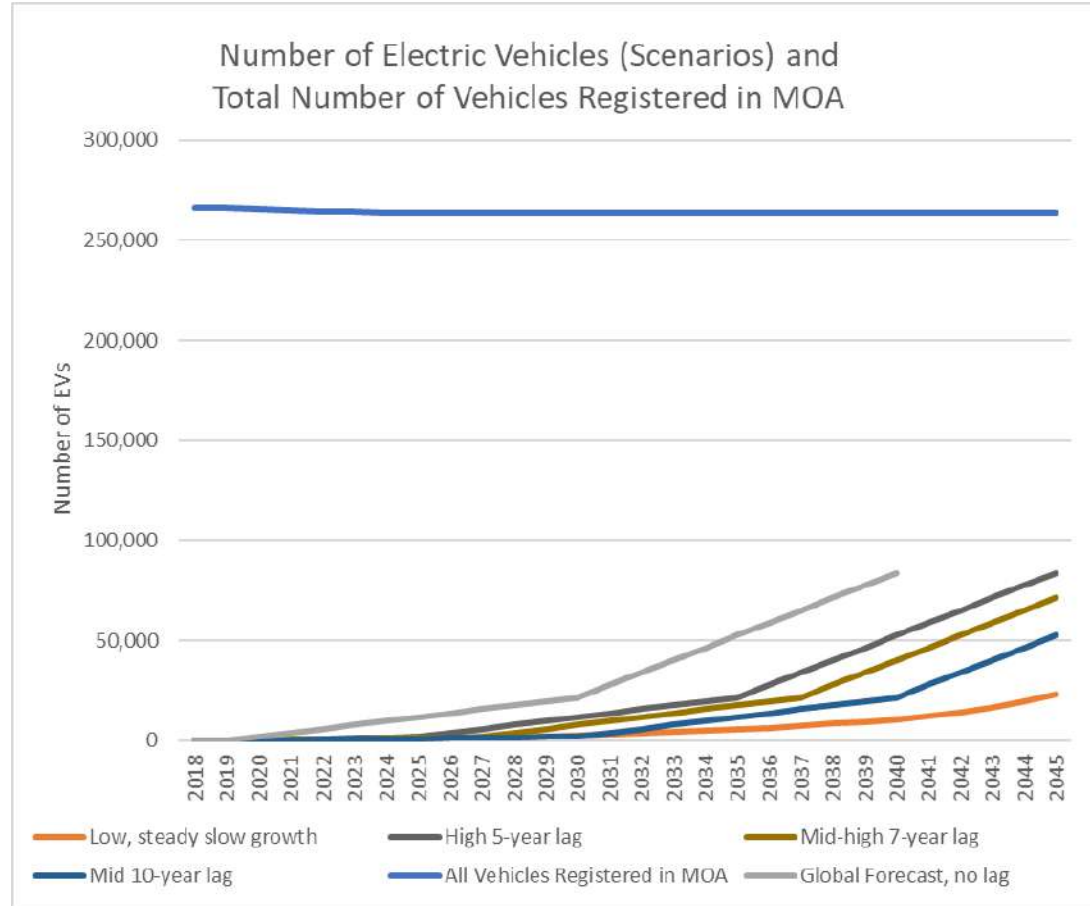
+ Electric vehicles currently represent 0.15% of all passenger vehicles and pickups in Anchorage

+ Using Bloomberg projections of EV sales with 10-year lag for Alaska:

50,000 EVs in MOA in 2045

x 3 metric tons saved per vehicle

150,000 metric tons CO<sub>2</sub> per year



# Chugach Electric EV Programs

- +EV Residential
- +EV Commercial Charging
- +EV Workplace Charging (for employees)
- +EV Hotel Charging
- +EV Fleet Charging
- +EV Rental Test Drives
- +EV Lease (for transportation network drivers)
- +EV Charging Research (fully subscribed)



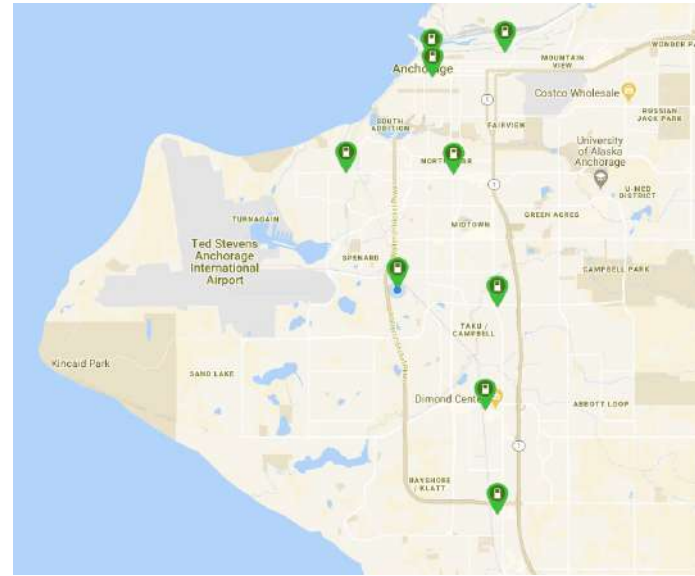
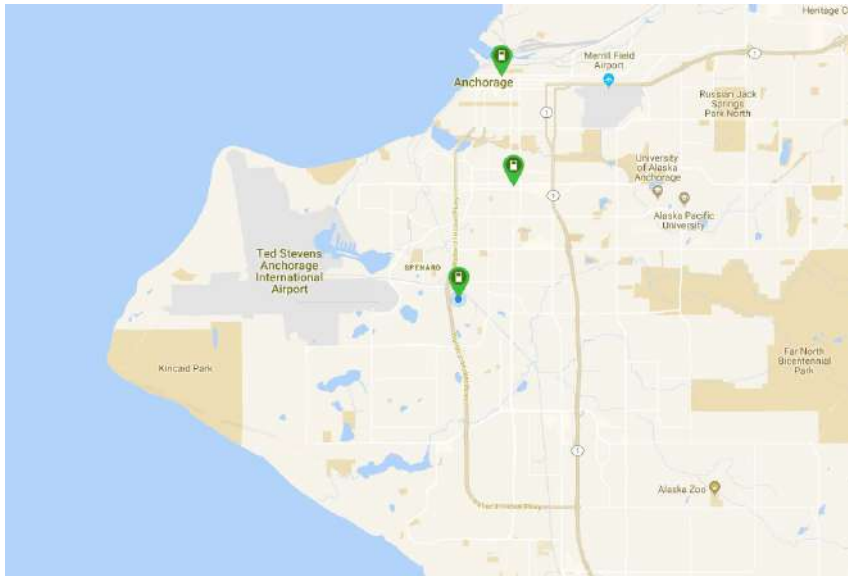
[www.chugachelectric.com](http://www.chugachelectric.com)

WE'RE GROWING

# Public Charging Stations (PlugShare.com)

+November 2018

+February 2021





# Resources

- +Chugach Electric EV web page: [chugachelectric.com/energy-solutions/electric-vehicles](https://chugachelectric.com/energy-solutions/electric-vehicles)
- +List of EVs on the market: [forthmobility.org/showcase/ev-models](https://forthmobility.org/showcase/ev-models)
- +List of EVs coming soon: [caranddriver.com/news/g29994375/future-electric-cars-trucks](https://caranddriver.com/news/g29994375/future-electric-cars-trucks)
- +Charging Station Map: [www.plugshare.com](https://www.plugshare.com)



Volkswagen ID.4 (expected 2021)

# Call To Action

- If you have not driven an EV yet, find one to drive.
  - Rent one when traveling
  - Rent locally through Chugach's test drive program (when rentals become available)
  - Test drive a vehicle (locally or while traveling)
- If your workplace has a vehicle or fleet, consider adding an EV
- EV owners: Apply for a \$200 credit from Chugach for home EV charging (includes PHEVs)



Tesla rental in California



# Q&A

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