



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 CO₂/year (from tailpipe)
- + BEV = 2,600 lbs CO₂/year (from power plant)
- + Reduction of 6,700 lbs CO₂/vehicle/year (3 metric tons)
72% CO₂ 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

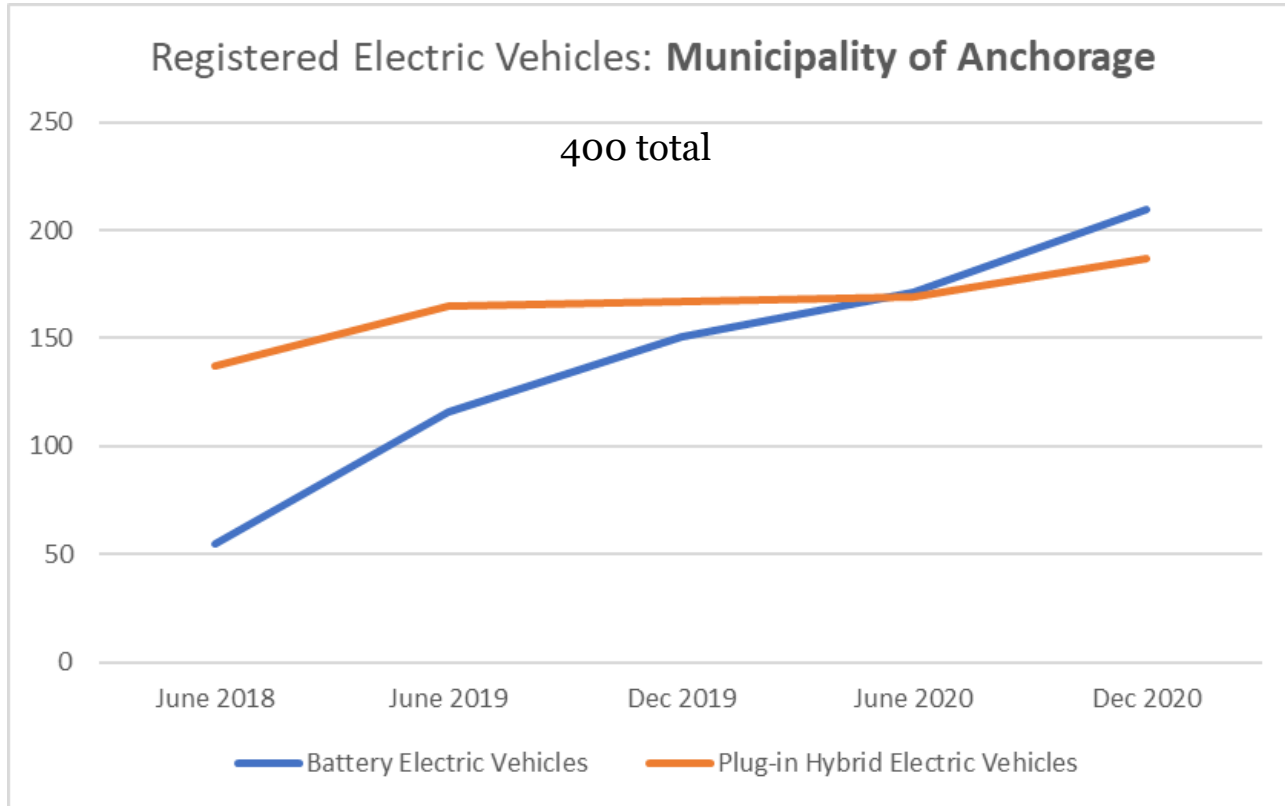
10,000 miles per year = **\$704**

42% Cost Reduction

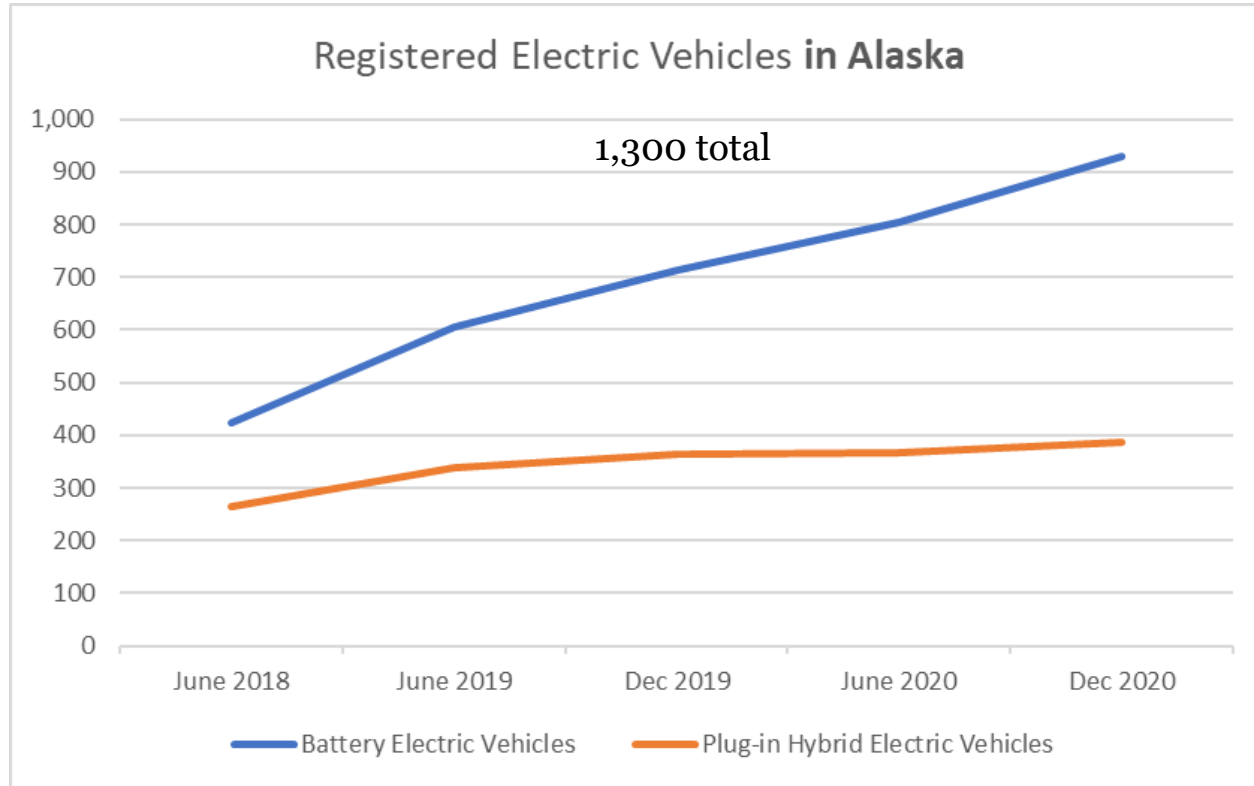


Hyundai Ioniq 5 (expected 2021)

Number of Electric Vehicles in Anchorage



Number of Electric Vehicles in Alaska



Future Electric Vehicles in Anchorage

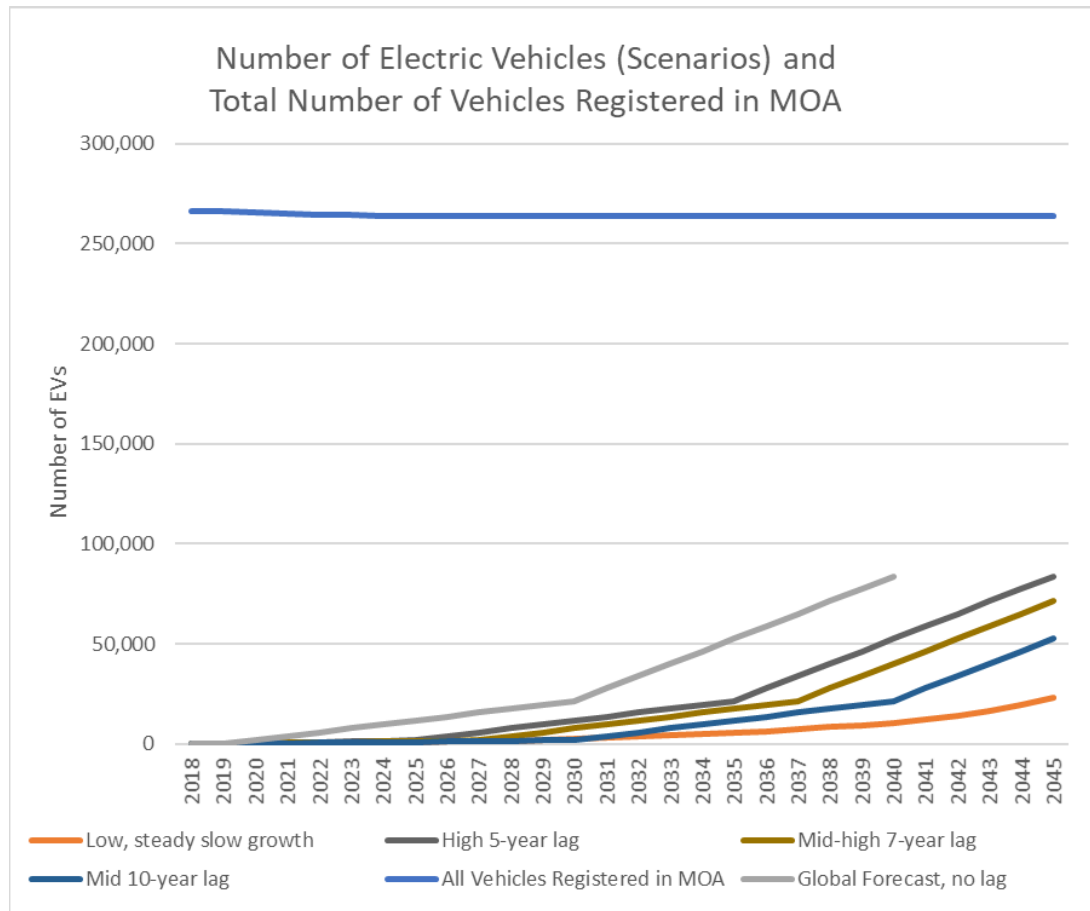
+ Electric vehicles currently represent 0.15% of all passenger vehicles and pickups in Anchorage

+ 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 CO₂ 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)

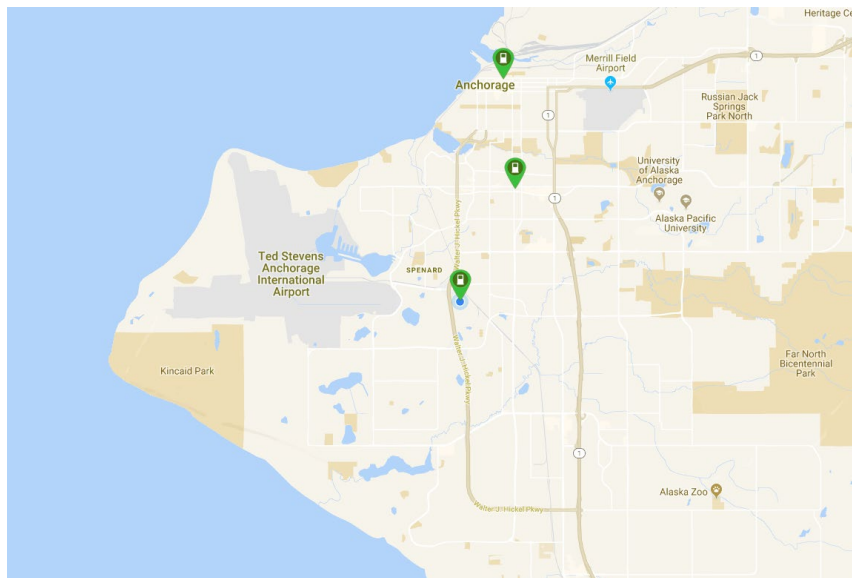


www.chugachelectric.com

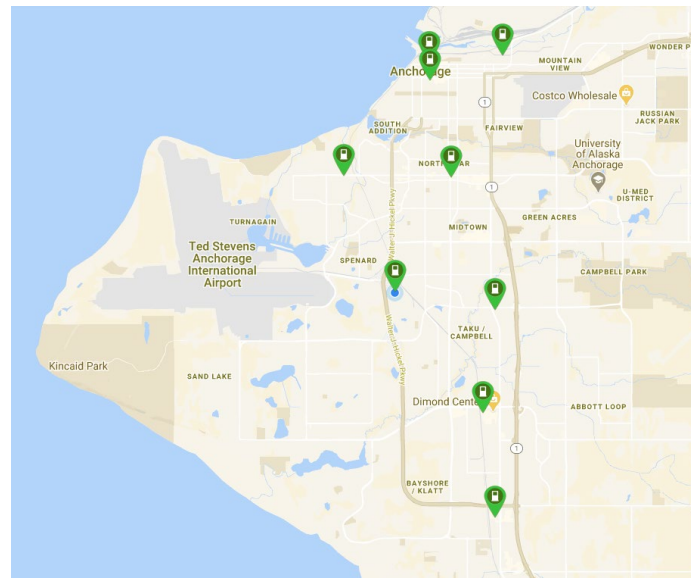
WE'RE GROWING

Public Charging Stations (PlugShare.com)

+November 2018



+February 2021



Resources

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