Electric Vehicles Are Part of the Anchorage Carbon Reduction Solution

Alaska Common Ground
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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
  $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

Registered Electric Vehicles: Municipality of Anchorage

400 total

- Battery Electric Vehicles
- Plug-in Hybrid Electric Vehicles

Timeline:
- June 2018
- June 2019
- Dec 2019
- June 2020
- Dec 2020
Number of Electric Vehicles in Alaska

Registered Electric Vehicles in Alaska

1,300 total

June 2018 | June 2019 | Dec 2019 | June 2020 | Dec 2020
---|---|---|---|---
Battery Electric Vehicles | Plug-in Hybrid Electric Vehicles
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](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)](image-url)
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)