



## Today's Agenda

- Brief Forth infomercial
- Electric transportation: why care?
- What the heck is going on?
- PNW action & opportunities
- Lively discussion





Forth's mission is to electrify transportation by bringing people together to create solutions that reduce pollution and barriers to access.

WHY SHOULD  
I CARE?

## Economics

- 2nd highest household expense
- Key to economic opportunity
- Fuel for ~\$1/gal – and stable
- Keeps billions of dollars local
- Increases local tax revenue

## EPR1

### The Electric Vehicle (EV) Price Stability Advantage: Electricity vs. Gasoline

#### Technical Brief — Electric Transportation

The recent dramatic rise of oil prices has shown the US dependence on global supply chains. This volatility is not seen in electricity prices.

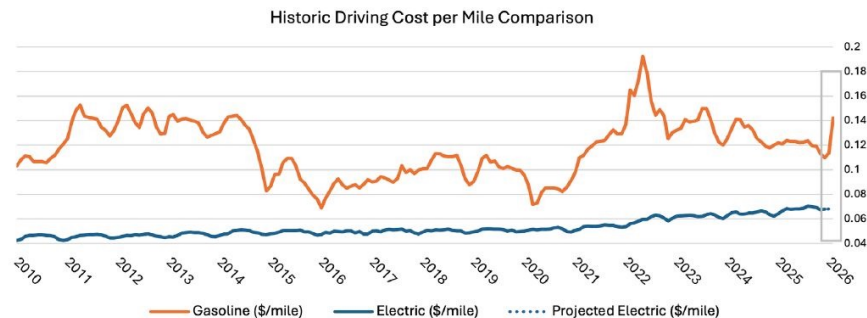
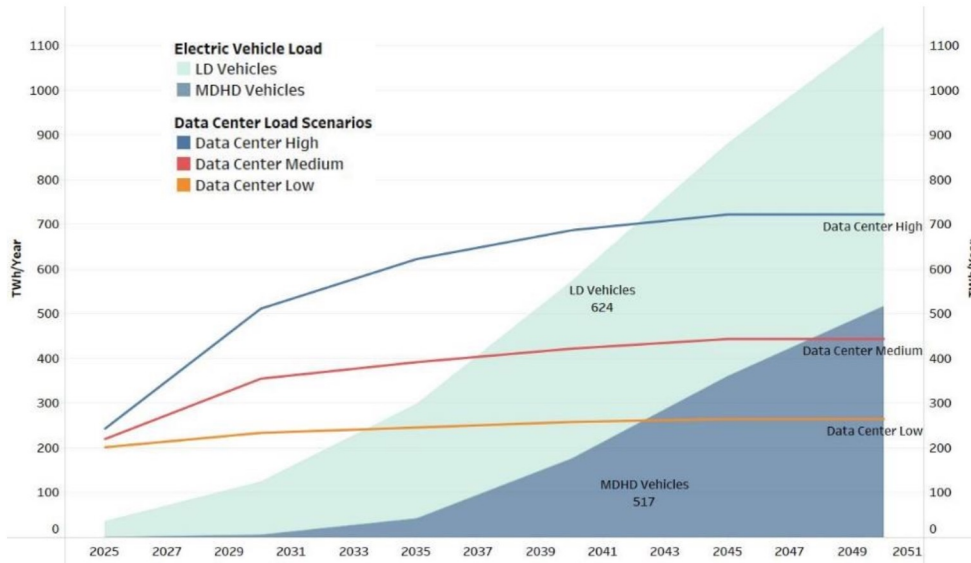


Figure 1. Driving Cost per Mile Over Time: Electricity vs Gasoline

## Nationwide eRoadMAP Load Growth together with Data Center Load Scenarios

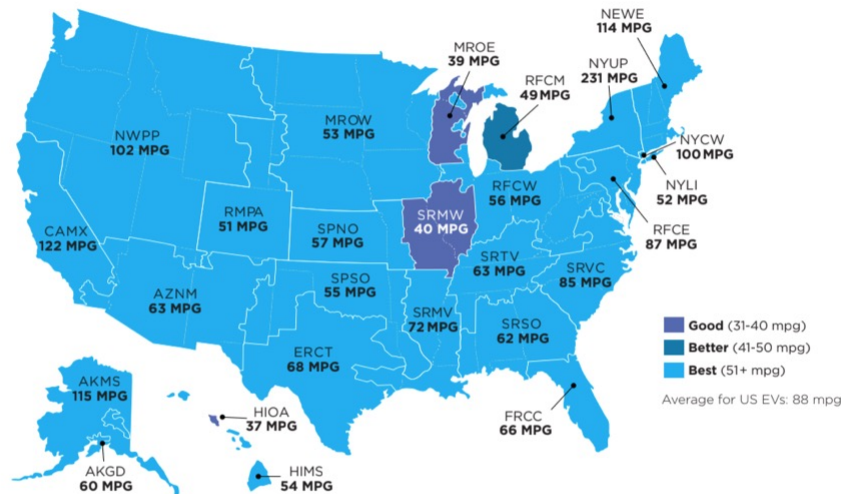


## Lower Utility Bills

- More load than data centers
- Largest load growth is also most flexible
- Naturally trends off peak
- Downward pressure on rates 10% - 20%

Source: EPRI. Electric Vehicle Load: [eRoadMAP](#); Data Center Load: [Powering Data Centers 2024](#)

# Climate Change



For each region of the US electricity grid, UCS calculated how the global warming emissions of charging and driving an average EV compare with those of a gasoline vehicle. The miles-per-gallon (mpg) value listed for each region is the combined city/highway fuel economy rating of a gasoline vehicle with emissions equivalent to the average EV. Nationally, the average EV is equivalent to a gasoline car that gets 88 mpg.

NOTES: Regional global warming emissions are based on 2018 power plant data in the eGRID2018 database (EPA 2020b). Comparison includes gasoline and electricity fuel production emissions estimates for processes including extraction, transportation, and refining, using the GREET 2019 model (ANL 2019). The 88 mpg US average is a sales-weighted average based on where EVs were sold from January 2011 through September 2019.

- National average 88 MPG or ~80% reduction
- Every year vehicles get cleaner as grid gets cleaner
- Similar or better numbers for trucks, buses, etc.
- No way to meet our carbon goals without electrifying everything that moves, quickly.

## Odds and Ends

- National security – reduce oil demand, diversify fuel supply...
- Trade
- Air pollution: Zero tailpipe emissions
- Fun! Instant torque at any speed



# Everything is Going Electric

- Everything that moves
- Bikes, buses, trucks, ATVs, tractors, excavators, boats, airplanes, mining equipment...



The Iran War Is Driving a Global Surge of Interest in Electric Vehicles

Another iconic auto brand is taken down by low EV sales

## What's the 'natural demand' for EVs in the U.S.? We're about to find out

PUBLISHED MON. SEP 29 2025-7:30 AM EDT | UPDATED MON. SEP 29 2025-9:36 AM EDT



Tesla Is Worth More Than All Big Car Companies in the World Combined



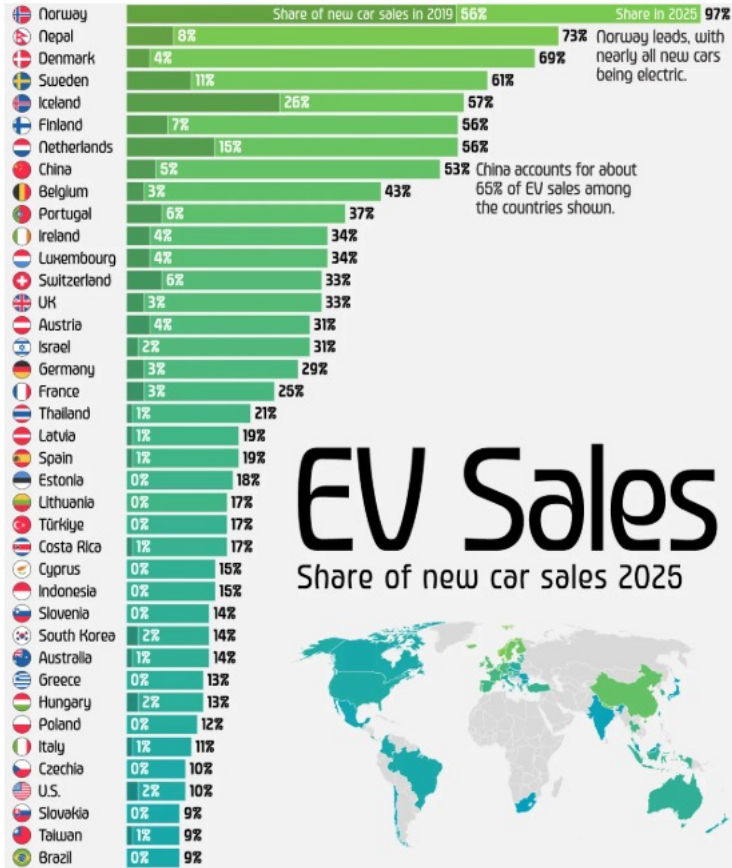
Trump admin reopens \$5B EV charging program after losses in court

California bans the sale of new gas-powered cars by 2035

PUBLISHED THU, AUG 25 2022-4:51 PM EDT | UPDATED THU, AUG 25 2022-8:33 PM EDT

*Fuel Prices Drive Sales of E.V.s, Just Not in the U.S.*

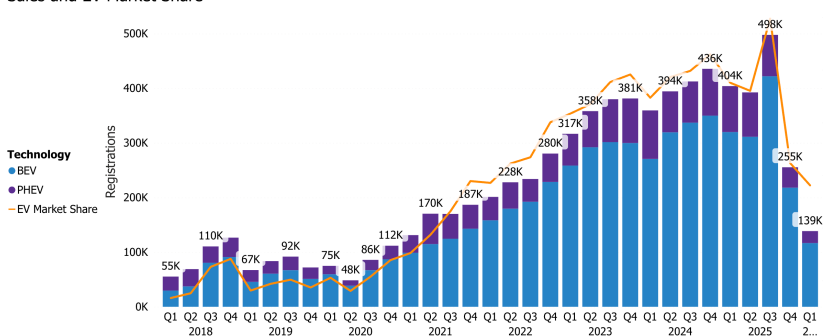
Electric vehicle sales have soared in Europe and much of the rest of the world, but Americans are still hesitant.



## Global EV Sales

- Surging fast
  - Europe up 27% year over year
  - Mexico up 33% year over year
  - Thailand 10% -> 50% in one year
  - Ethiopia >60% new car sales
- Mostly Chinese EVs
- Global South is leading
- “Existential Threat” – Ford CEO Jim Farley

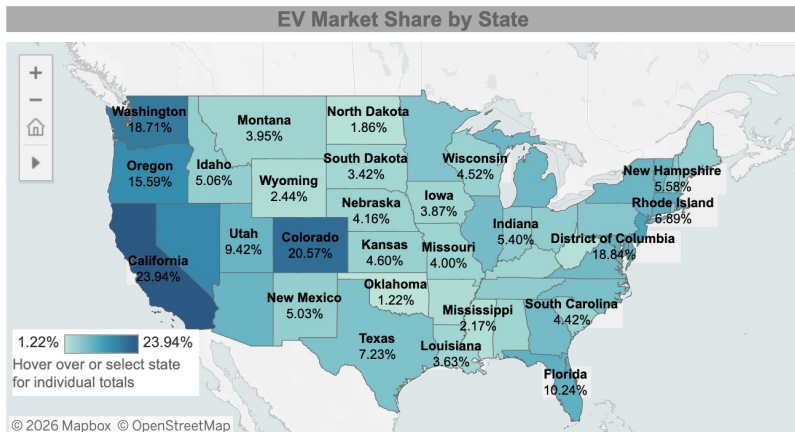
Sales and EV Market Share



## EV Sales in the US

“The future is already here – it’s just not very evenly distributed.”  
–William Gibson

- Highly concentrated – by state and within states
- Climbing last few years
- Chaotic last year
- Used EV sales surging, new sales still down



# EV Manufacturing

- China produces 1/3 of all the world's vehicles today
- Europe #2; US is 3<sup>rd</sup> with <20%
- Roughly \$20B in US EV manufacturing investments cancelled in 2025
- Most major OEMs writing down billions in losses, slowing plans

## EV Restructuring Has Cost Automakers Over \$70 Billion So Far

BY ANDY KALMOWITZ | MARCH 13, 2026 1:56 PM EST





## What is PNW Doing?

- Leading on EV sales and charging buildout
- Investing – by pricing carbon
  - Climate Commitment Act
  - Clean Fuels Programs
- Some good policies and programs
- Uneven by state and region

## PNW Opportunities

- Strengthen execution and technical assistance
- Connect efficiency and electrification
- Emphasize economic benefits
- De-politicize (on both extremes)





## Learn More

- Join our free email list, webinars, papers, etc.
- Follow us @ForthMobility
- Personal: test drive!
- Organizational: Have a fleet? Electrify it! Have a business? Install charging!
- Donations welcome :)



# FORTH ROADMAP CONFERENCE

September 13-15, 2026 | [roadmapforth.org](https://roadmapforth.org) | Seattle Convention Center

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The nation's  
**leading** electric  
transportation  
**conference**

1,000

Over **1,000**  
**attendees** from  
**10 countries** and  
**40+ U.S. states**



In **Seattle**, a **hub**  
for clean energy  
innovation and  
sustainable  
mobility



Unmatched  
opportunities for  
**networking**,  
**collaboration**, and  
**sponsorship**

In a time of **rapid policy shifts** and evolving transportation priorities, staying connected has **never been more essential**.

***“The Stone Age didn't end for lack of stone, and the oil age will end long before the world runs out of oil.”***

**-Don Huberts, Royal Dutch/Shell Economist, July 1999**

**Jeff Allen, Executive Director, Forth**  
**[jeffa@forthmobility.org](mailto:jeffa@forthmobility.org)**  
**[www.forthmobility.org](http://www.forthmobility.org)**