Midwest on the Move: Legislative Strategies to Boost Electric Vehicle Adoption July 21, 2024





About the Electrification Coalition

The **Electrification Coalition** is a nonpartisan, nonprofit organization that develops and implements a broad set of strategies to facilitate the widespread adoption of electric vehicles to overcome the economic, public health, and national security challenges that stem from America's dependence on oil.

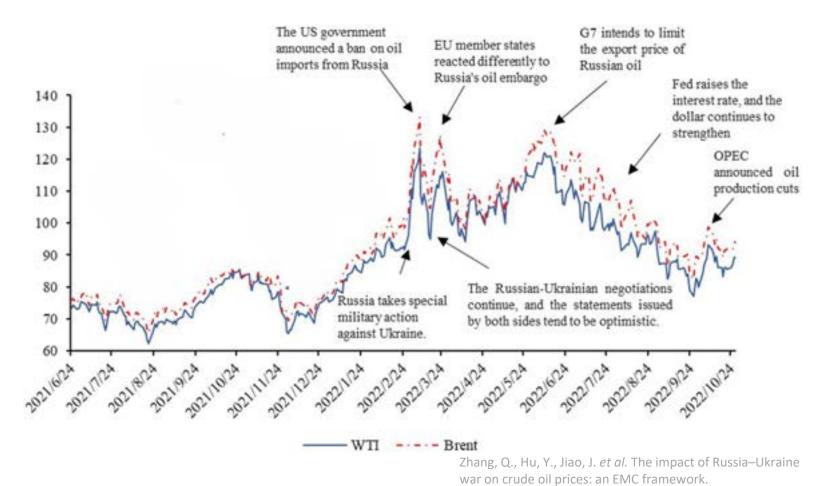




National Security

Prices of WTI and Brent Crude Oil,

June 2021 to October 2022



The Case for Electrification



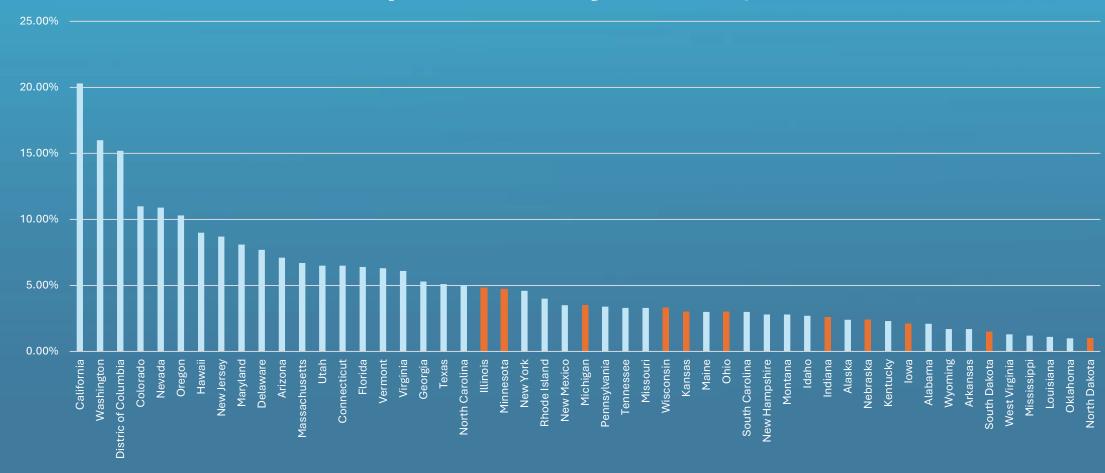
Electricity is 100% domestically produced, and rates have stayed low and consistent, insulating consumers and fleets from oil price volatility.

Electric mobility is one of the best scalable alternatives for reducing U.S. oil dependence, and EVs are the only vehicles that will get cleaner over time.



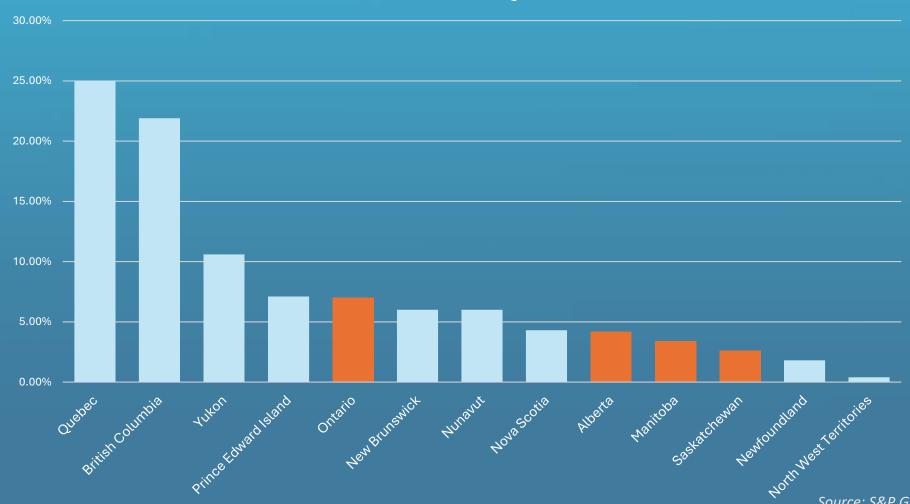
Where are we now?

EV Adoption Rate by State, Q2 2024



Where are we now?

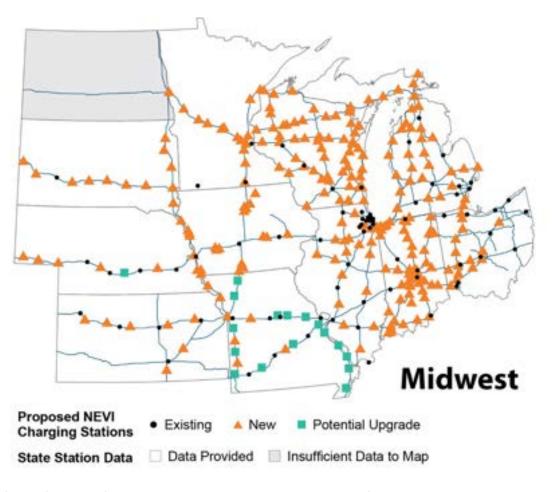
EV Market Share Q1 of 2024





Policies Drive Market Growth:

National Electric Vehicle Infrastructure Plan (NEVI)



\$5 billion (USD) over five years to create a highway fast-charging network

Source: Annual Report Plan Year 2022-2023, Joint Office of Energy and Transportation

Legend: need level for DC fast charging 1 = Low 2 + Medium Low 3 = Medium Electrification 4 + Medium High

Policies Drive Market Growth:

Zero Emission Vehicle Infrastructure Plan (ZEVIP)



\$680 million (CAD) through 2027 to expand charging and alternative refueling infrastructure across Canada

Source: NRCan EC Charging Planning Map



Policies Drive Market Growth

 States and provinces with higher adoption don't get there by accident—they have policies that support and incentivize growth

Examples:

- Utility rebate programs to offset cost of home charging
- New and used vehicle purchase tax credits
- Municipal fleet incentives
- EV-ready building codes



Policies Drive Market Growth-Binational EV Corridor

First US-Canada EV Corridor signed in May 2023.

From Kalamazoo, MI to Quebec City, QB (nearly 900 miles)

 Corridor passes through Michigan (Detroit), Ontario (Windsor, Toronto), and Quebec (Montreal, Quebec City).

• 215 stations along Canadian highways – 61 between Detroit/Toronto, 154 between

Toronto/Quebec City.



Major Policy Trends

	Number of State with Policies	
Policy Subject	Number	Precent
Charging service provider regulations	44	88%
Electric utility charging and vehicle incentives	44	88%
Charging Incentives	33	66%
Direct sales provisions	32	64%
EV annual fees	32	64%
Vehicle purchase incentives	26	52%
Zero-emission vehicle (ZEV) program	26	52%
EV-ready building codes and parking requirements	13	26%
Public EV fleet targets	13	26%
Low-carbon/Clean fuel standard	3	6%
Road usage fee	3	6%







Co-Benefits of EVs

Lower Utility Rates For All

- Higher utilization of generation facilities in off-peak hours where there is excess capacity leads to higher revenues for the utility and overall **lower rates** for all customers.
- Managed charging programs like time of use rates can lower costs and make the cost savings for EVs even stronger.

Lower Total Cost Of Ownership For Public Fleets

- Given that fuel and maintenance **costs are so low** for EVs, public fleets for local or state governments can **save significant taxpayer dollars**
- They can then allocate those savings to other programs or add to reserve funds



Co-Benefits of EVs

Vehicle to Grid Capability and Disaster Resiliency

- EVs, especially electric school buses, can be utilized in emergency situations and extreme weather events and power homes, appliances, and buildings
- After disaster flooding in Kentucky last year, two Ford F-150 Lightning trucks were deployed to provide emergency services and provide power to medical equipment

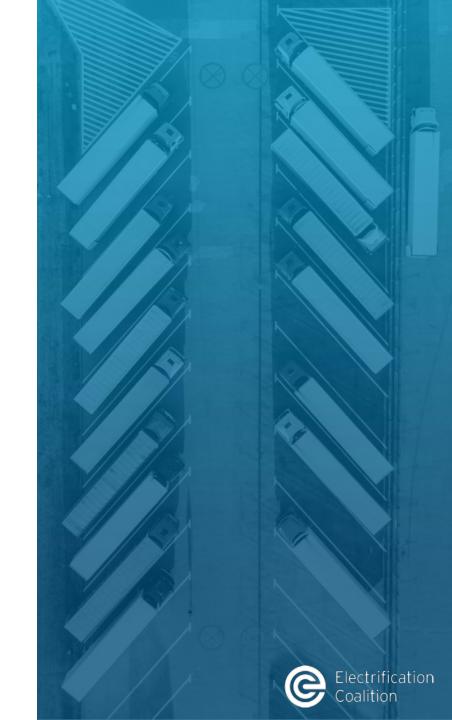
Jobs and Workforce Development

- The US and Canada are experiencing huge job growth across the EV supply chain, from mining to parts manufacturing to vehicle maintenance,
- **25,000-100,000 new jobs** in Canada by 2040 (FOCAL)
- More than 160,000 new jobs in the U.S. by 2032 (ICCT)

Manufacturing Benefits of EVs

- Foreign Entity of Concern and Build American,
 Buy American provisions to prioritize North
 American economic development
 - This will ensure price/supply chain stability across geopolitical conflicts

 Much of the minerals and battery supply chain is centered in China, so the US and Canada have heavily subsidized onshoring and friend-shoring these resources



Manufacturing Benefits of EVs

Notable EV Manufacturing Investments in Midwestern North America

BHP Potash Mine Saskatoon, Saskatchewan \$4.9 billion

> Honda Alliston, Ontario \$15 billion

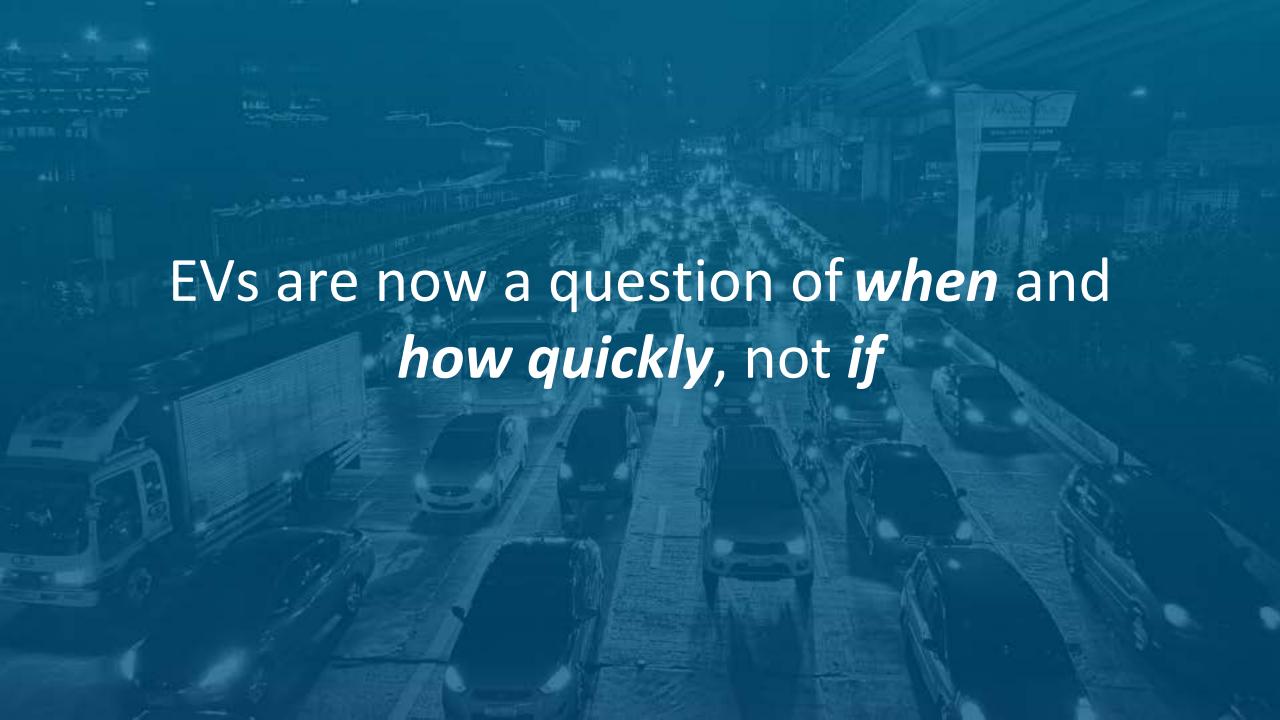
Ford Marshall, Michigan \$2.2 billion

> Rivian Normal, Illinois \$1.5 billion

Entek Youngstown, Indiana \$1.5 billion









Distribution is Key

 Rural drivers drive 20% more and spend 18% more on transportation than their urban counterparts

• The market will not distribute evenly on its own, so **policy is needed** to make sure rural and low-income drivers can reap the cost benefits

The more you drive an EV, the higher your ROI

