

## Smart Mobility

*Minnesota is committed to developing, building and promoting sustainable solutions. The state views electric vehicles and smart mobility as a key solution to reducing greenhouse gas emissions.*

We pioneered open heart surgery and supercomputing, invented hearing aids and the pacemaker, and are the birthplace of the concrete grain elevator, post-it notes, and waterskiing. We have a long history of building things that change the global economy for the better. We're a state unlike any other.

Our state is home to more than 5.5 million Minnesotans, and our diversity of culture, environment and economic landscape means that we're telling the honest truth when we say there's something for everyone here. Most importantly, if you start a business here, it has a better chance of surviving, and thriving, than in any other state.

#1

Fortune 500  
Companies  
Per Capita  
(large metro areas)

#2

Best Overall  
State in  
America

#3

Best State  
for Economic  
Opportunity

#4

Five Year  
Business  
Survival Rate

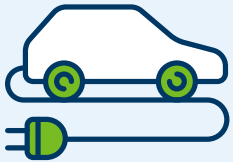


### INDUSTRY PLAYERS

Renowned transportation companies headquartered or operating in the state include:

- **3M** (sensors, tools, sealants, filters)
- **Polaris** (ATVs, motorcycles, snowmobiles)
- **Arctic Cat** (ATVs, snowmobiles)
- **Lund Boat Corp** (boats)
- **Honeywell Aerospace** (aerospace)
- **Collins Aerospace** (aerospace)
- **Cirrus Design Corp** (aerospace)
- **Tesla** (electric vehicles dealership)
- **Perbix** (engineering outpost for Tesla)
- **Phillips** and **Temro** (electric vehicle charging)
- **ZEF Energy** (electrification solutions)
- **Rosenbauer** (RT Electric Fire Trucks)
- **Stratasys** (3D printed components)
- **Zeus** (electric truck chassis manufacturer)
- **Automotive Enviro Testing** (low temperature test facility year round)

# Minnesota is committed to developing, building and promoting sustainable solutions



## ELECTRIC VEHICLES (EV)

- **Nearly 19,800 vehicles (2021):** 14,341 battery electric vehicles; 5,425 plug-in hybrid electric vehicles.
- **520 public charging stations** and 1,257 EV charging outlets.
- **4,000 jobs** in clean vehicles.



## GLOBAL IMPACT

- **Exports of \$2.1 billion in smart mobility components** in 2021 (electrical, electronic and vehicle), up 36% since 2020.
- **Ranked 11th among states**, up from 15th in 2020.
- **Top Markets:** Canada, Mexico and China.



## GOVERNMENT SUPPORT

- **Accelerating Electric Vehicle Adoption:** A Vision for Minnesota: goal of powering 20 percent of the light duty cars in the state with electricity by 2030.
- **Minnesota Department of Transportation (MnDOT) Clean Transportation Pilot Funding Program:** \$2 million annually in grants.
- **Connected and Automated Vehicle (CAV) challenge grants** seeks to advance emerging technology to improve transportation in the state



## EDUCATION

### University of Minnesota:

- Center for Transportation Studies focuses on intelligent vehicles.

### University of St. Thomas:

- Electric vehicle market and technologies

### Community Colleges:

- Technical degrees in transportation.
- They support vehicle companies such as Polaris, Volvo Penta, Yamaha, Arctic Cat and Harley-Davidson, among others.



## OEM SUPPLIERS

- **Computer and electronic components:** 43,000 employees; ranks 6th nationwide; location quotient: 2.13
- **Electric vehicle batteries:** Duluth, MN, holds enough copper, nickel and cobalt to manufacture hundreds of millions EV's.
- **3D Printed Components:** Fast customization and lower cost.



## INCUBATORS/ACCELERATORS

- Launch Minnesota
- University of Minnesota Technology Commercialization
- Finnovation Lab
- Minnesota SBIR/STTR Accelerator
- Cleantech Open Midwest
- TechStars
- Grid Catalyst: Supports clean energy development, integrating renewables and innovation into utility and energy systems



## RENEWABLE POWER CAPACITY

- **#1 in the Midwest** for energy efficiency
- **New generation capacity added in 2021:** 98.5% wind and solar
- **57,390 Minnesotans** work in clean energy



## AUTONOMOUS VEHICLES PILOT PROJECTS:

- White Bear Area
- Mayo Clinic, Rochester Minnesota
- C.H. Robinson self-driving trucks

Join us and build what matters.

JoinUsMN.com