

Introduction

What: Eco Experience Building

Where: Minnesota State Fair – 1265 Snelling Ave North, Saint Paul, MN

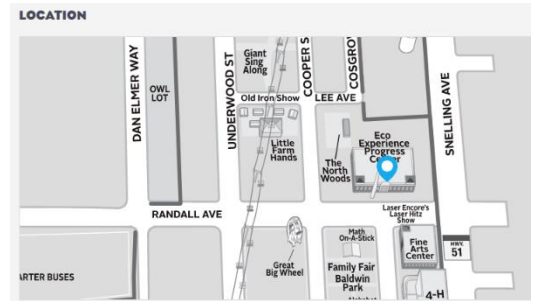
Eco Experience Building is on the north east side of fair grounds on the corner of Cooper St & Randall Ave

When: Thurs, August 22, 2024 – Mon, September 4, 2024

Eco Experience Building Daily Hours:

Thursday, August 22 – Monday, September 2

9 am – 9 pm



The Eco Experience is a huge exhibit at the Minnesota State Fair, filled with hands-on activities, demonstrations and resources. Check it out during the 12 days of the [Minnesota State Fair](https://www.mnstatefair.org/)

Keeping our air clean is everyone's job. The air quality exhibit features a displays and ideas of things people can incorporate into their garage that have a positive impact on the environment. Battery-powered equipment, including a vehicles, mower, snow blower, string trimmer, chain saw, leaf blower, etc. are on display and include messaging about lower emissions, less noise and maintenance, and ease of use.

Additional messages about air quality, vehicle tampering, and electric vehicles will be part of the air quality exhibit.

On site in the Eco Experience:

- Rivian R1T
- Tesla Cybertruck
- Tesla Model 3 – outside west doors
- Electric school bus – outside west doors
- Outside at Xcel: Alfa Romeo Tonale PHEV & Polestar 3
- Charging Station demonstrations
- Green garage with EV charging setups
- Electric lawn equipment
- Electric bikes

Additional EV Fun:

- Saturday, August 24, 2 pm: Electric cars + heavy duty vehicles in MN State Fair Parade
- Wednesday, August 28, 10 am: EV Owners panel at the Sustainability Stage in the Eco Experience
- Wednesday, August 28, 2 pm: Electric cars + heavy duty vehicles in MN State Fair Parade
- Pump & Meter will have a booth in Home Improvement building: EVSE demos for home & office

MN Plug-in Electric Vehicle Owners members will be onsite to answer questions and provide additional information about driving electric in Minnesota.

Short cut to Eco Experience from transit bus hub: It is a lot quicker, if not a lot shorter, to get to building if, instead of going in the main gates by the transit hub you walk to the north end of the parking lot, take a right onto Randall street and go in gate 18. Randall goes straight to our building. That avoids having to fight your way through the Sweet Martha's cookie crowd, go past the grandstand, wind past the butterfly garden, etc. Here is a link to the state fair map: <https://www.mnstatefair.org/general-info/maps/>

Responsibilities

Admission to the State Fair: Any time you enter the State Fair Grounds you will be required to use a fair ticket. Volunteers will have received their tickets in the mail.

Dress Code:

- **T-shirts:** if you have from previous events; please wear. T-shirts can be found at info booth.
- Please **wear your EV OWNER** button. New volunteers can receive a button at the Eco Experience Information booth.
- Remember that you will be standing most of your shift so dress accordingly. Wear comfortable shoes – you are on concrete.

Shifts: Please report to the Eco Experience **15 minutes prior** to your scheduled time to relieve the volunteer before you or to open the exhibit for the day. Map enclosed.

REMINDER 1st shift Volunteers must come in through the large garage door on the north side as the visitor doors are locked until exactly 9:00

Volunteer duties include:

- Answer questions
- Direct guests to EVs on site
- Refill information (brochures, handouts) these are in the storage area
- Keep exhibit clear of trash and litter
- Straighten up throughout the day

Opening Tasks

- Refill any empty materials (brochures/handouts behind gray curtains)
- Pick up any trash/cups/literature that does not belong

Closing Tasks

- Straighten up the overall exhibit
- Refill any empty materials (brochures/handouts behind curtain area)

861
station locations

2,205
EV charging ports

Filters chosen:

- Minnesota
- Electric
Types: DC Fast, Level 2
- Access: Public & private
Status: Available, Planned

Contact Information

In the event of an emergency or for immediate assistance, consult the staffing manager at the information booth. Also let them know if you would be arriving late.

Name	Cell Phone	Email Address	
Kelly/info booth	651-757-2344	kelly.amoth@state.mn.us	Eco Experience Coordinator
Info Booth – Staff	651-643-6152	If you are running late or	Need to cancel – call booth

If you know ahead of time that you will be unable to cover your assigned shift, please [update your slot on volunteer signup form](#), check volunteer page for a replacement and as last tactic call or email [Kelly/information booth](#) as soon as possible so we can find an alternate volunteer for your shift. Saturdays & Sundays are busy feel free to stop in to volunteer even if you don't have a shift.

What you can see and do

Electric vehicles are in the Air Quality area this year, where there will be a 2 electric vehicles, literature and charging infrastructure.

Rivian R1T

Range 328-420 miles
Battery charge time: Up to 140 miles added in 20 minutes
Driveline: All-wheel drive
Zero-60: As low as 2.5 seconds / 3.0 seconds as shown.
Cargo: Gear Tunnel: 11.4 cu ft
Front Trunk: 11.1 cu ft
Bed: 29.2 cu ft
Rear Compartment: 7.3 cu ft
Starting at \$71,000

Cybertruck

11,000 LBS Towing Capacity
Range: 340 Miles (EPA Est.)
2,500 LBS Payload
67 Cubic Feet Lockable Storage
18.5" Infinity Touchscreen
Starting at \$93,000

Literature:

- EV Info lists
- EV Owners cards
- EV Fact sheets
- EV Battery Recycle Update
- EV Scavenger Hunt – September 27 – October 2

The **Electric Garage**, where you can learn about EV charging options and ways to reduce air pollution and save money in your home garage. Turn on the electric mower to hear how quiet it is. Observe the difference in air quality between an electric and gas mower. Check out the electric bike station as well next to the garage.

Charging Station available in Minnesota

As of August – 861 sites have charging available at public and private sites. This includes 2,205 level 2 and DCFC until outlets. We anticipate a great increase in the coming year due to Electric Nation project, VW funding, NEVI program and EV Spot Network to name just a few programs.

Xcel Energy Garage outside:

Alfa Romeo Tonale PHEV has 33 electric miles and starts at \$43,845 at base trim level

Polestar 3 has 280-310 mile range and starts at \$73,400 at base trim level

West Side Eco Experience outside:

Tesla Model 3EV has 263-353 miles range and starts at \$38,990 at base trim level
Electric school bus -

Getting there:

Traffic and parking and crowds are always worse than we think they will be, so please allow plenty of extra time to get there. I highly recommend the park and ride system.

During the fair, check our [Parking Updates](#) page for Park & Ride lot updates.

Please note: If lots fill, they will reopen throughout the day as space becomes available.

- [Printable list of Park & Ride and Express Bus locations](#)

The parade goes past Eco Experience building at 2:00 making it even more difficult to get around so please allow extra time to arrive.

Health Update & Expectations:

MPCA will be following the advice of the state fair. The latest on their website is here: <https://www.mnstatefair.org/updates/> Be safe, your choice to wear mask or no mask.

Frequently asked Questions:

What are electric vehicles?

Electric vehicles (EVs) help address many modern transportation challenges while being less expensive to operate and better performing than many gasoline vehicles. EVs dramatically lower overall emissions of harmful pollutants, including greenhouse gases. They require less general maintenance and less or no petroleum, save money, and reduce vulnerability to volatile oil prices.

Plug-in electric vehicles are typically either pure battery electric vehicles (BEVs) or plug-in hybrid electric vehicles (PHEVs). Both types of vehicle store energy from the electricity grid in on-board batteries that power an electric motor, providing propulsion.

BEVs—like the Chevy Bolt, Nissan LEAF, or any Tesla vehicle—use an electric drivetrain and can often travel hundreds of miles before re-charging

PHEVs—like the Chevy Volt, Kia Niro PHEV, Mitsubishi Outlander PHEV, or Toyota RAV4 Prime—can often travel 20 to 50 miles on battery power for everyday commutes, while retaining the use of a downsized internal combustion (gasoline) engine to travel longer distances when needed. All PHEVs are also approved to use E15, a lower carbon fuel blend of 15% ethanol and 85% gasoline

Why are electric vehicles Clean Air Choice® options?

Depending on the model, EVs can reduce pollution by 90% or more compared with the cleanest conventional vehicles today.

All-electric vehicles produce zero direct emissions to help improve air quality, especially in urban areas. Plug-in hybrid electric vehicles (PHEVs), when operating on gasoline, produce evaporative emissions from the fuel system as well as tailpipe emissions. However, because most PHEVs are more efficient than comparable conventional vehicles, they still produce fewer tailpipe emissions even while running on gasoline.

It's important to consider sources of electricity to power EVs. Advancements in renewable energy technology, such as wind and solar, are making sources of electricity more environmentally friendly. As our electrical grid becomes cleaner, so do EVs.

The full life-cycle greenhouse gas emissions of an EV depend on the mix of fuels used by the local power utility for electricity generation. EVs will almost always be cleaner than gasoline-powered vehicles. Electric engines are more efficient than combustion engines, lowering both emissions and fuel costs. Cost is about 2 to 3 cents per mile for electricity.

Click Evolution tool to find vehicle best for you: <https://evolution.es.anl.gov/vehicle-inputs.php>

Xcel Energy Mini House will include a rotation of vehicles in the garage throughout the 12 days and Energy Resources staff to share the overview of programs on EVs & EVSE.

What are other benefits?

Cost. When you consider purchase price and operating costs over the life of the vehicle, EVs are often less expensive to own due to lower fuel and maintenance costs

Performance. An electric vehicle delivers instantaneous torque and quiet acceleration

Availability. Dozens of EV models are now available and new ones are being introduced each year, including a growing number of trucks and SUVs. Visit www.EVinfoList.org

Important Information About Tax Credits:

Congress passed legislation—the Inflation Reduction Act of 2022—which changes credit amounts and requirements for clean energy vehicles. For the latest and most updated information visit the FuelEconomy.gov website.

[Preliminary guidance from the Internal Revenue Service](#)

- [All-electric](#), [plug-in hybrid](#), and [fuel cell electric](#) vehicles purchased new in 2023 or after may be eligible for a federal income tax credit of up to \$7,500.
- The availability of the credit will depend on several factors, including the vehicle's MSRP, its final assembly location, battery component and/or critical minerals sourcing, and your modified adjusted gross income (AGI).
- Pre-owned [all-electric](#), [plug-in hybrid](#), and [fuel cell electric](#) vehicles purchased *on or after January 1, 2023*, may be eligible for a federal income tax credit. The credit equals 30% percent of the sale price up to a maximum credit of \$4,000.
- The credit is nonrefundable, so you can't get back more on the credit than you owe in taxes. Also, you can't apply any excess credit to future tax years.
- [All-electric](#) and [plug-in hybrid](#) vehicles purchased new from 2010 through 2022 may be eligible for a federal income tax credit of up to \$7,500. The credit amount will vary based on the capacity of the battery used to power the vehicle.
- **New credits available!** Plug-in and fuel cell electric vehicles purchased after 2022 may be eligible for [a new federal tax credit](#).

Clean Cars Minnesota Overview:

Adopting these standards preserves consumer access to the cleaner, more efficient vehicles that Minnesotans have enjoyed for years. With cleaner air, more car options, and less money spent on gas, every Minnesotan benefits from these standards.

The clean car standards consist of the low-emission vehicle standard and the zero-emission vehicle standard.

The clean car standards only apply to new light- and medium-duty vehicles for sale in Minnesota. The clean car standards:

- Do not apply to off-road or heavy-duty vehicles or equipment like farm equipment or semi-trucks
- Do not apply to existing vehicles or used vehicles for sale
- Do not require emissions testing
- Do not require anyone to purchase an electric vehicle (EV)
- Do not affect biofuels or prevent Minnesota from supporting cleaner fuels

The low-emission vehicle (LEV) standard sets limits for tailpipe pollution for auto manufacturers, meaning it requires manufacturers to deliver new light- and medium-duty vehicles to the Minnesota market that produce lower emissions of greenhouse gases and other air pollutants. The auto industry has been successfully meeting this standard since 2012.

LEV-certified vehicles are already what's for sale on Minnesota lots. Because the federal emissions standard and the LEV standard were the same from 2012 until 2020, all new vehicles sold in Minnesota from 2012-2020 have been LEV-certified vehicles. The LEV standard preserves consumer access to the cleaner, more efficient vehicles that Minnesotans enjoy today.

The zero-emission vehicle (ZEV) standard requires auto manufacturers to deliver more vehicles with zero tailpipe emissions for sale in Minnesota, increasing each year.

There are more makes and models of EVs available in states that have adopted the ZEV standard than Minnesotans can easily acquire here. As manufacturers announce more new electric SUVs, trucks, and cars on the way, Minnesota should be at the forefront of receiving this new technology and more options for consumers. More new EVs on the market here could lead to more used EVs becoming available for consumers, too.

Building our EV infrastructure

To support EV use and increase access to this cleaner technology, Minnesota needs a statewide charging network to fuel EVs – not just in the Twin Cities metro area. That's why the MPCA is using funds from Minnesota's share of the national Volkswagen (VW) settlement to build charging infrastructure across the state.

Minnesota will receive a total of \$47 million from the national VW settlement by 2028. MPCA is using funds from the VW settlement to clean up air pollution in Minnesota today and invest in a cleaner transportation system for our future.

In 2019, MPCA awarded more than \$1.4 million in grant funds to install 22 EV fast-charging stations along highway corridors in Greater Minnesota. From 2020 to 2023, the agency will invest an additional \$3.5 million in EV charging stations. This next phase will expand the charging network by more than 2,500 miles, enabling EV drivers to travel longer distances throughout the state without worrying about where they can refuel.

Electric school bus grant program

In 2020, the MPCA launched its innovative electric school bus pilot project. As part of this initiative, the agency provides grants to school districts across the state to replace old, diesel-powered buses with electric alternatives. Changing from diesel to all-electric buses can reduce GHG emissions by at least 29 tons per vehicle. In total, awarded grant projects are anticipated to reduce pollution from GHG emissions by 1,120 tons.

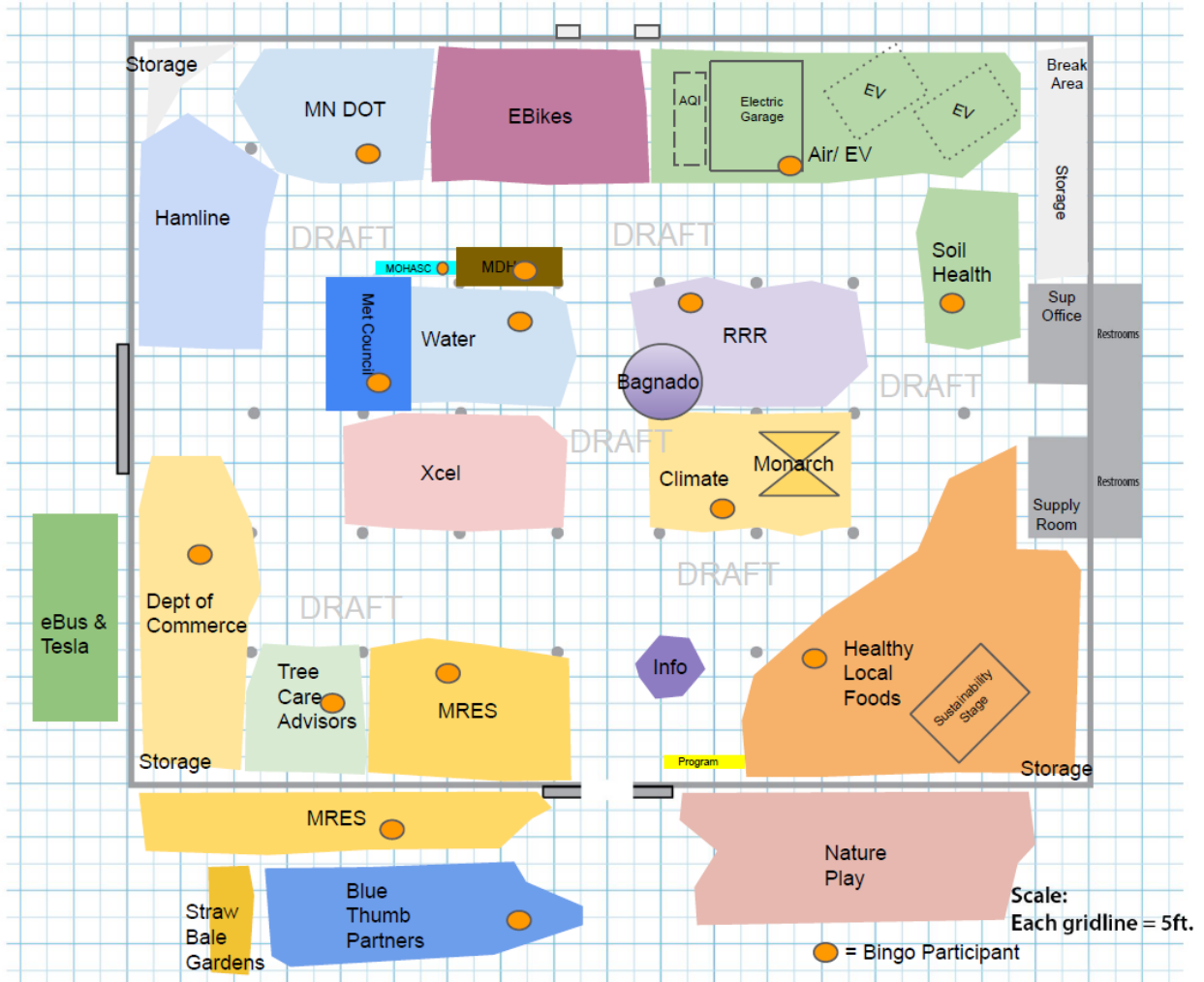
In addition to removing older, more polluting diesel buses off the roads, the pilot project is designed to help determine the viability of electric bus technology in Minnesota's cold climates. During the grant period, grantees will provide the MPCA with quarterly data on bus operation and performance, maintenance, and energy use.

So far, eight new electric school buses are servicing five Minnesota school districts.

- Faribault Transportation Services, Inc. will service a bus to Faribault Public Schools
- Monarch Bus Service, who will service one bus to St. Paul Public Schools or Columbia Heights Public Schools
- Morris Area School District, who will service two buses in their district
- Northstar Bus Lines, LLC, who will service three buses to the Osseo Area Schools
- Ottertail Coaches Inc., who will service one bus to Fergus Falls Public Schools

Lessons learned from the pilot project will inform future electric school bus projects. The pilot project is also funded by the Volkswagen settlement.

Eco Experience 2024



MINNESOTA STATE FAIR 2024

- ATMs
- Accessible Parking
- Entrance Gates
- Blue Ribbon Bargain Book Carts
- Care & Assistance
- Drinking Fountains/Water Bottle Refill Stations
- First Aid
- Hand Wash Stations
- Information Booths
- Lost & Found
- Music/Performance Stages
- Parade Route (2 p.m. daily)
- Park & Ride and Metro Transit State Fair Express Bus Drop-Offs & Pick-Ups
- Police
- Public Parking
- Accessible Restrooms with Baby Changing Stations
- Accessible & Family Restrooms with Baby Changing Facilities
- Restrooms
- Restrooms with Baby Changing Stations
- Rideshare Apps Drop-Offs & Pick-Ups
- Severe Weather Shelters
- Shopping/Merchandise
- Smoking - Designated Areas
- Trolley Routes
- Wheelchair, Electric Scooter, Stroller & Wagon Rentals
- Wi-Fi Hotspot

All information subject to change.

