

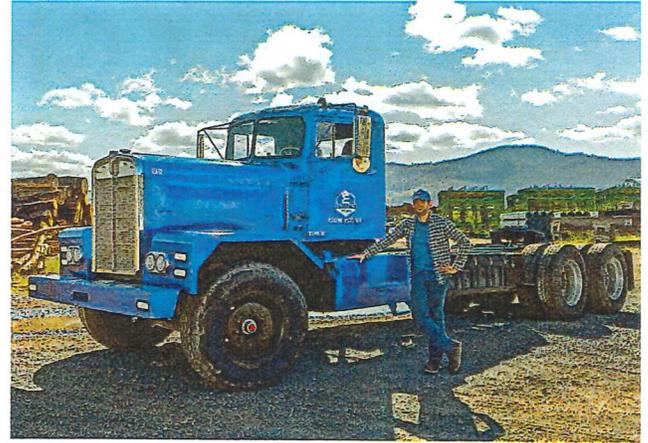
# High School EV Challenge

2026 Edition



# EV Challenge

Founded in 2021, Edison Motors is a Canadian electric truck manufacturing startup company based in British Columbia, specializing in plug-in diesel–electric series hybrid technology for semi-truck prime-mover tractor units, full-size solid axle drive trucks, and heavy solid-axle pickup trucks, combining a generator with electric drive motors and batteries.



Inspired by locomotive technology, the idea was to bring diesel-electric innovation to logging trucks. By climbing mountains on electric power and regenerating energy on the descent, these trucks could achieve nearly net-zero energy use. The electric drive delivers high torque without the need for massive diesel engines, and onboard generators with large fuel reserves eliminate concerns about range.

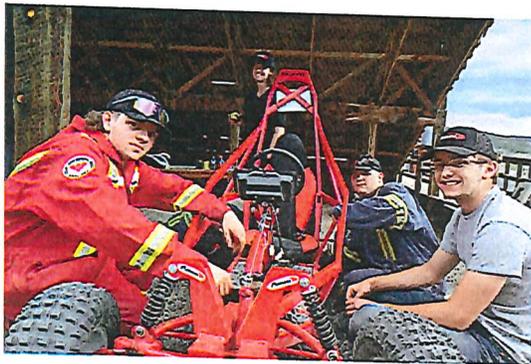
Beginning with the retrofit of a 1962 diesel truck “Carl” using a Tesla motor and CAT generator in 2022 and moving to a ground up build of “Topsy” in 2023, Edison is now moving into production of both Hybrid Diesel Electric production trucks and Traditional Diesel trucks at our new location in Donald BC.



# The Competition

The High School EV Challenge aims to spark interest in electric vehicle (EV) technology among young Canadians as they prepare to enter the workforce. This competition provides an exciting opportunity for students to explore their role in shaping the future of sustainable mobility. This event will take place at Edison Motors manufacturing facility @, 2815 Donald road, Donald BC (near Golden)

Through this initiative, we aim to stimulate and inspire several key teachings:



**Engineering Skills:** Enhancing both mechanical and electrical expertise.



**Critical Thinking & Project Skills** address engineering, performance, and safety challenges efficiently while working within time and resource constraints.



**Creative Problem-Solving:** Encouraging innovative solutions to longstanding engineering problems.



**Teamwork:** Highlighting the value of collaboration in achieving a common goal.

# Challenges



Participating teams will have the opportunity to complete each event as many times as possible within the time limit of the overall competition, allowing thorough testing of their designs and encouraging on the spot repairs and adjustments. Previous years challenges have included:

- Barrel Race
- High Speed Track (Oval)
- Off-road Course
- Speed and Braking
- Engineering presentation



# Provided Equipment & Rules

Participating schools will receive key components for EV construction, such as:

- Driver's seat and seat belts
- Brake and steering system components
- Electric motor, 48V batteries, system controller, and display

To encourage hands-on learning and creative problem-solving, certain components (e.g., the vehicle chassis) will not be provided, nor will detailed construction instructions.

Participants will also receive only basic design and engineering guidance from **Edison Motors staff**, fostering independence and ingenuity.

The resulting EV designs will primarily reflect the creativity and engineering talents of the students involved.



All vehicles must meet these criteria to qualify:

- Maximum operating voltage of 78 volts DC
- Properly installed and undamaged seat belt
- Crash helmet, eye protection and coveralls
- Structurally sound chassis. Roll Bar mandatory
- No dangerous metal protrusions
- Fully operational brakes and steering systems.
- Secure and insulated electrical connections.
- Properly installed main battery cutoff switch.
- Appropriately gauged wiring for all electrical components.

# Location and Details



**EV Challenge Society**, 2815 Donald road, Donald BC, V0A 1H1

**Federal Charity** 775481229

**Date:** Early June, Date TBD

**Insurance Coverage:** \$2,000,000 General Liability, All participants must sign waiver

## **Registration & Inspection**

All participants must arrive at the competition site before the first event to register and undergo a safety inspection conducted by the **Edison Motors Safety Team**.

Vehicles failing the initial inspection will have up to 60 minutes to make adjustments. Vehicles deemed unsafe to drive will not be allowed to compete.





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## **Thank you to our sponsors of the 2026 EV Challenge!**

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