# GO ELECTRIC FLEET

## Learn More: Telematics The Data Driven Approach

### Telematics is a powerful tool for choosing the right EVs, saving money, and reducing environmental impact.

As more organizations switch to electric vehicles (EVs), using data to make smart choices is key. Telematics is a technology that collects real-time data from vehicles, helping fleet managers decide which vehicles should be replaced with EVs.

**How Telematics Work:** Telematics relies on a small device called an OBD-II (On-Board Diagnostics) scanner, which plugs into a vehicle's OBD-II port. This port is typically located under the dashboard and is used by mechanics to diagnose vehicle issues. The OBD-II device collects data such as speed, fuel use, engine performance, and route patterns. This data is then transmitted to a cloud-based system where fleet managers can analyze it to make informed decisions about EV adoption.

#### How Telematics Help Fleet Managers:

- 1. Picking the Right Vehicles: Telematics tracks how vehicles are used, including how far they travel, how much fuel they use, and how long they sit idle. This data helps managers figure out which vehicles can be switched to EVs based on their daily driving needs.
- 2. **Planning for Charging:** By studying driving patterns, telematics helps determine where and when EVs will need to charge. This ensures that vehicles don't run out of power and that charging stations are placed in the best locations. Fleet managers can also use this data to plan for peak charging times and optimize electricity costs.
- 3. Understanding Costs: Telematics helps compare the costs of gas-powered and electric vehicles, including fuel, maintenance, and repairs. Since EVs typically have lower maintenance costs due to fewer moving parts, telematics can help predict long-term savings. This allows businesses to see how much money they can save by switching to EVs.
- 4. Measuring Environmental Benefits: Telematics shows how much pollution gas-powered vehicles create. This helps businesses understand how switching to EVs can reduce emissions and support their sustainability goals. With precise emissions tracking, organizations can also meet government regulations and qualify for incentives promoting EV adoption.
- 5. Improving Driving Habits: By monitoring driver behavior, telematics helps train drivers to drive more efficiently. Hard acceleration, sudden braking, and excessive idling can drain an EV battery quickly. By promoting smoother driving habits, businesses can maximize the driving range of EVs and reduce battery wear, ensuring they last longer.

#### The Role of OBD-II Devices in Telematics:

The OBD-II device plays a critical role in telematics by providing direct access to a vehicle's engine control module (ECM). This device gathers real-time data such as:

- Speed and Acceleration: Helps determine if an EV can handle required performance needs.
- Fuel Consumption: Identifies which gas-powered vehicles are the most expensive to operate.
- Battery Voltage and Charge Levels: Essential for monitoring EVs and ensuring they are adequately charged.
- Route Efficiency: Identifies inefficient routes that may be optimized for EVs to maximize range
- How to Use Telematics

Businesses should connect telematics with fleet management systems to automatically analyze EV suitability. Working with telematics providers who specialize in EV data ensures accurate results. Running small test programs before switching entirely to EVs can help confirm the best choices. Additionally, fleet managers should regularly review telematics reports to adjust routes, schedules, and charging strategies for optimal EV performance.

#### **CleanBC Go Electric support:**

The CleanBC Go Electric Rebates Program and Fleet Charging Program make it easier for B.C. businesses and organizations to transition to electric fleets. Administered by Plug In BC, these programs offer rebates for conducting fleet analysis using Telematics, installing charging infrastructure, and purchasing various types of electric vehicles.

Visit pluginbc.ca/fleets or email fleets@pluginbc.ca for more information



Plug In BC is a program of the Fraser Basin Council and works in collaboration with government, industry, academic institutions, EV owners, NGOs and utilities to advance the uptake of electric vehicles in British Columbia.

The CleanBC Go Electric Fleet Charging Program is one of a suite of programs offered under the Province of BC's CleanBC Go Electric Program. The program is funded through the Ministry of Energy and Climate Solutions and is administered by the Fraser Basin Council Society.