



Platinum Pro-Claim Restoration

Zero-Emission Medium and Heavy Duty
Vehicle Adoption Case Study

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 CLEAN ENERGY CANADA



Tell us a little bit about the company's current fleet.

Platinum Pro-Claim is a company focusing on fire and water/flooding restoration, as well as viral disinfection and environmental remediation. The company is headquartered in Richmond, B.C., with offices in other parts of the province.

Currently, Platinum Pro-Claim has 88 vehicles ranging from light-duty vehicles to medium-duty vehicles. **Within their fleet, about 25 are full battery-electric or plug-in hybrid electric vehicles (PHEV)—this represents about 28% of the company's fleet.** About 13 of the vehicles are battery-electric and include a class 6 Lion6 box truck, two Ford E-Transits, one Chevy Bolt, two Tesla Model 3s, and seven Tesla Model Ys; about 12 of the vehicles are PHEVs, and include four Ford Escapes and eight Chevy Volts.

The workhorse of Platinum Pro-Claim's fleet has been cargo vans, which comprise 53 of 88 total vehicles. The balance of the gasoline and diesel fleet are pickups and SUVs.

Telematics data has shown these vehicles drive a range of 60-100 km per day, on average 62 km per day. These vehicles mostly work in the Metro Vancouver area, and so have relatively short commutes and work largely within urban and suburban areas.

When did the company start their fleet electrification journey and why did they choose to begin electrifying their fleet?

Platinum Pro-Claim began its electrification journey back in 2016. The company was moving into a large facility and they knew they would be consuming a lot more natural gas and energy. This prompted the company to embark on being climate smart.

The company conducted an energy-use assessment of the facility and found that the three largest sources of emissions were heating and cooling, waste and disposal from business activities, and transport emissions moving goods and people. In fact, 65% of the company's emissions came from transport. Platinum Pro-Claim wanted to take a holistic approach to reducing emissions, so it made sense to address the largest piece of the emissions pie.

The company did not go all-in on EVs right away. In fact, they started in steps and eventually moved to larger EVs such as cargo vans and trucks. Platinum Pro-Claim started with a handful of EVs that were available in the market in 2016. This included the Nissan Leaf, Chevy Volt, and Tesla. The vehicles were hard to get at that time as it was still considered early to get into EVs. Even working with their leasing partner it took some convincing to be able to have access to these vehicles, but Platinum Pro-Claim remained adamant and kept pushing for them.

What have been the best things about going electric?

The fuel savings from going electric have been substantial. Platinum Pro-Claim's fuel cost was roughly \$200,000-\$280,000 per year. From their EVs alone (both light-duty and medium-duty), they have saved \$316,000 in fuel purchases since 2016. In addition, maintenance costs (particularly for transmission), lube oils, and filter costs have been removed completely. They have also faced less downtime because of less maintenance with the vehicles. In addition, there are significant benefits to revenue generated from the Low Carbon Fuel Standard (LCFS).

What have been the challenges?

1) Wait times for vehicles and vehicle right-sizing.

Getting access to medium- and heavy-duty vehicles is difficult. Even though Platinum Pro-Claim is interested in purchasing a Ford E-Transit, it has been difficult getting their hands on one. Similarly, with the Lion6 trucks there is a waitlist and the wait time can add up.

Even with the vehicles that are available like the Lion6, Platinum Pro-Claim has found it does not meet their needs exactly the way they need it. The truck is about 10 feet longer than their three tonne moving truck—this makes it more difficult for the drivers to maneuver, especially downtown. There are also airbrakes on the vehicles, which require a specific driver certification. Finally, class 6 vehicles have different regulations than other vehicles, and that needs to be taken into account with the drivers. The Ford E-Transit has been one cargo van that the company was excited about. The range is a bit short, but they expect as battery technology improves this will also improve. For example, the E-Transit has a range of about 202km. Other cargo vans like the BrightDrop do offer longer ranges going upwards of 400 km, but also come with a higher price tag.

2) Addressing service vehicles that are not able to charge at a depot. While many of the electric light-duty vehicles and the box truck are able to charge overnight at the depot or between shifts, it has been a bit more difficult to find a solution for the cargo vans. Some of the cargo vans that have been purchased are emergency vehicles and are generally taken back to the home of the driver. Many times, the driver does not have the capability to charge the cargo van at their home.

3) Access to capital, particularly in an inflationary environment. In Platinum Pro-Claim's expansion plans, they have found themselves at a crossroads: some capital decisions that were made two years ago may be more difficult to justify now with inflation and affordability top of mind. This means all new vehicle purchases (including gasoline/diesel) are more difficult to justify. While the company has set targets for 50% EVs by 2026, this needs to be taken into account.

While light-duty EVs continue to reduce their upfront price gap drastically, this demonstrates the importance of vehicle incentives (particularly for medium- and heavy-duty vehicles) that will likely have a larger price gap (sometimes multiples more) over the next few years. **In B.C., when stacking provincial and federal incentives it can remove up to \$20,000 for many cargo vans and up to \$200,000 for a class 6 box truck. For a new electric cargo van starting at roughly \$71,000 (e.g. the Ford E-Transit T350), that can reduce the upfront price by close to 27%.¹** An upfitted electric cargo van could go for about \$60,000 (e.g. GMC cargo van)—compared to a gasoline cargo van with similar trims (e.g. Ford Transit T350) between \$62,000-\$74,000, this reaches much closer to price parity (e.g. Ford Transit 350T). This does not include revenue from carbon credits from the LCFS, and lower maintenance and fuelling costs for electric models.

How did you understand the right infrastructure for your project?

Platinum Pro-Claim started investing in charging infrastructure over a period of time. Initially, they began with two level 2 chargers (J1772 charging head) that were not wifi enabled in 2016—they were “basic chargers”. The reason the basic chargers were chosen was to save costs. At the time, there were no incentives being given to track charging data through a wifi-enabled charger. The cost for a wifi-enabled charger was \$2,400 vs. \$800 for a basic charger. Even with a 50% rebate this did not make sense for the company at that moment.

Tesla then donated four stations to Platinum Pro-Claim in 2018 that are level 2 chargers. They were donated so that the chargers could be used as a public charging station on Tesla's destination map.

In 2022, Platinum Pro-Claim revisited their decision to only purchase basic chargers and decided to get wifi enabled chargers. All the chargers were Siemens. This has helped Platinum Pro-Claim collect charging data to

¹ Platinum Proclaim paid closer to \$85,00 for their Ford E-Transit. This was early pricing when the model was newer. The price has likely gone down since then.

be able to claim LCFS credits. As the need to track and measure charging data started, they moved away from the basic chargers to the wifi-enabled chargers.

Now, Platinum Pro-Claim also has a DCFC charger for their Lion6 truck, which only has DCFC capability.

Platinum Pro-Claim made the decision to not get stuck in an analysis paralysis and to act. While they believe they ended up on the right path in the end, in hindsight they believe they could have moved to wifi-enabled chargers sooner.

The next phase of having medium- and heavy-duty vehicles is exploring vehicle-to-grid options to be able to discharge the unused electricity back to the grid, which would also help lower the overall demand on the grid.

Did you hire any new staff or did current staff change their day-to-day operations for this transition?

No additional staff were hired for the vehicles. The founder and the fleet manager pioneered the transition themselves. They conducted the research and cost comparisons on the ground.

What programs and incentives did you use?

Currently, Platinum Pro-Claim has been generating their own carbon credits from the LCFS and this has been a large benefit. While they're still waiting to sell a carbon credit, based on recent credit prices they expect to generate almost double the revenue than what it costs to charge those vehicles. Essentially, Platinum Pro-Claim will be paid for charging their vehicles.

What insights would you pass on to other fleets looking to electrify?

- 1) Start small and phase the transition to going electric step-by-step.** Platinum Pro-Claim initially focused on its light-duty vehicles within its fleet, trialing PHEVs and BEVs. Once drivers and staff were more used to charging and driving with battery technology, the next phase focused on cargo vans and box trucks. While there have been some bumps in the road, this has been a learning experience that has overall netted out positive. Taking small, tangible steps rather than being stuck in an “analysis paralysis” can be one way to begin electrifying a company’s fleet.
- 2) Consider wifi-enabled charging, even with the higher upfront price tag—it can be worth it, particularly when looking at carbon credits through the LCFS or Clean Fuel Regulation (CFR).** While the upfront cost of wifi-enabled charging is higher, it has added benefits such as aggregating charging data. This can be used in jurisdictions to account for revenue generated through carbon credits from charging the vehicle (i.e., LCFS or the CFR).
- 3) Understand vehicle charging requirements before making a vehicle purchase.** Initially, when Platinum Pro-Claim purchased the Lion6 they did not know that a DCFC charger was needed. A fleet operator should work with the OEM to understand what the specs are for the vehicle and whether or not additional charging infrastructure is needed to be installed.
- 4) Consider a change management plan that helps get all staff onboard with driving an EV.** When approaching a new technology, drivers can initially be hesitant. Working with drivers and staff early on about education and awareness in using these vehicles would have helped address perceived issues around aspects such as range anxiety or charging needs.

