

# The Cost of Getting it Wrong

**THIS GUIDE WILL  
LOOK AT THE  
OVERALL COMPLEXITY**  
behind fleet electrification

When properly implemented into your fleet, electric vehicles (EVs) deliver significant benefits including a lower total cost of ownership (TCO) and an extended service life. So why do organizations hesitate when given an opportunity to integrate EVs into their fleet? The short answer is that it's not an easy or straightforward process, especially if you don't have the right partner in your corner.

This guide will look at the overall complexity behind fleet electrification, address the fear and uncertainty of going electric, highlight what happens when you get it right... and uncover the cost of getting it wrong.

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# The Complexity Behind Electrification

Fleet electrification isn't just a way to reduce costs and lower your greenhouse gas emissions, it represents the first viable alternative to how a business can run their vehicle operations in over 120 years. While today's EVs offer similar capabilities to their internal combustion engine (ICE) counterparts, fleet managers cannot simply order these vehicles, hand drivers a fuel card, and expect things to run smoothly.

Due to the challenges and complexity behind fleet electrification, the most successful fleets have full operational alignment prior to developing a strategy. The right partner can help you plan out an electrification road map that lets you take advantage of all the benefits EVs have to offer.

When working with fleet managers who don't know how to get started, we often find three major complexities as the underlying cause.

## **1. A New Ecosystem and Managing Change**

Unlike traditional ICE vehicles, an EV fleet requires charging infrastructure to operate – and presents a learning curve for both fleet drivers and managers. Instead of refueling as needed at the gas station, charging station compatibility, optimizing charging schedules, and ensuring seamless integration with existing fleet management systems comes into play.

Change management plays a part here, too. Drivers should learn best practices for operating an EV and your HR and facilities teams might need to implement home charging reimbursement policies and get training on maintaining charge stations at your depot.





## The Complexity Behind Electrification

### 2. New Vendors and Technology

Just about every ICE vehicle manufacturer (OEM) has released, or plans to release, EVs to market. When you investigate the right vehicles for your fleet, you will also come across EV-only OEMs, like Tesla, Polestar, Rivian, and Lucid. Selecting EVs for your fleet is not as simple as choosing which of the Big Three pickup trucks you will be ordering.

### 3. Meeting Each Vehicle and Driver's Specific Use

Unlike refueling gasoline and diesel vehicles, charging a fleet of EVs requires fleet managers to accommodate driving patterns, route distances, and downtime availability. The right vehicles and range are only one part of the equation – your charging strategy should balance operational efficiency with cost-effectiveness, as the fastest solution might not be necessary for your fleet. For example, to match your organization's use case, you might need access to both level 3 fast-charging stations for drivers with long routes, and slower, level 2 overnight charging for vehicles with predictable usage patterns. Getting this right requires deep fleet data analysis and a partner that is industry agnostic to develop an ecosystem that fits the unique needs of your fleet.



## Standard Range

These models have smaller batteries, check the Monroney sticker when researching.

## Extended Range

These models have larger batteries and can cost thousands more than a base model with a standard range.

## Dual Motor

These EVs include a front and rear motor, increasing the power output of the vehicle while allowing for all-wheel drive.

## V2L

If an EV includes vehicle to load, this allows drivers to use bidirectional charging and power equipment through the charging connector, usually via an adapter. This is not included in all EVs but might be a game changer for your drivers.

## Charging Connectors

Tesla models use the NACS connector type and other OEMs have agreed to produce future vehicles using this port. J1772 is the most common port type on other EVs. This is important to keep in mind if your drivers will rely on public charging.

# ARE YOU FAMILIAR WITH THIS NEW EV LINGO?

Here are some common terms to look out for when exploring models:



# Vehicle Incompatibility

Gasoline or diesel? Standard or extended bed? FWD or AWD? Most fleet managers can answer these questions about ordering ICE vehicles with their eyes closed. However, when electrifying your fleet, charging requirements and compatibility issues come into play. Fleets that take off-the-shelf approach might be able to “go electric” more quickly, but it could end up being a costly mistake in the long run.

Fleet managers must carefully consider the use case for each vehicle and the driver before deciding if the charging infrastructure is available. Relying on a partner who only works with a single vendor or provides a standardized solution may fail to address the unique requirements of each vehicle in the fleet.





01

Is there an EV model available that fits the needs of my driver's current vehicle type?

02

Will the battery allow them sufficient range to handle their day-to-day workload?

03


Will my drivers rely on a public charging network on their routes?

04

Does the vehicle charge fast enough for them to avoid extended downtime?

05

Do we need to supply our drivers with port adapters?



## WITH FLEXIBILITY IN MIND,

think of these compatibility questions as you develop an electrification strategy



## When Vehicle Selection Goes Wrong

Fleet managers shared these anecdotes with us about challenges they faced during their EV pilots. Keep this in mind when developing your own fleet electrification strategy.

A fleet in the process of an EV pilot ordered a single make of EVs. During their pilot testing, every single vehicle had to be taken out of service due to a safety recall. The downtime required costly short-term rentals and highlights the importance of testing multiple solutions and staying OEM and vendor agnostic when it comes to building out an electric fleet.

Another fleet developed an EV adoption strategy based on projected OEM supply numbers. The OEM later delayed production and limited output, causing the fleet to fall behind on their timeline. This shows the value of continuously evaluating vehicles and technology solutions while adjusting your plan as needed to avoid falling behind.



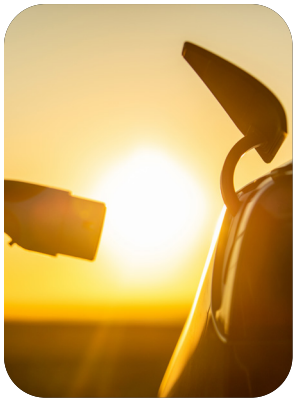
# Who's Behind Your **ELECTRIFICATION PROJECT?**

For fleet electrification to be a success, it requires careful orchestration between vehicles, chargers, energy provision, and software to tie it all together. Trying to tackle all of this on your own or with your current fleet management company (FMC) might seem like the easiest way to achieve your electrification goals. Instead, many fleet managers in this situation will find themselves managing multiple vendors with varying levels of investment in the success of their fleet.



# THIS BREAKDOWN SHOWS THE NUMBER OF PARTNERS YOU WILL NEED

to manage depending on how you  
approach your electrification project:



## Multiple Vendors – Increased Expense with Greater Risk and Potential for Delays

EV Supply Companies  
Facilities  
Installers  
Utility Providers  
Vehicle OEMs  
FMC Service Provider

## One Partner, Fully Committed to Your Success

eFMC manages all aspects of your  
fleet electrification plus all the FMC  
services you rely on.

 **Inspiration**





Can assist with change management, including training, energy reimbursement, vehicle remarketing, and create custom solutions as needed.



Makes future-proofing your infrastructure and vehicle choices a priority when developing an electrification strategy.



Offers different levels of service, from basic to white glove, instead of a preset option(s).



Ensures your customized ecosystem will work together and guarantees performance.



Can provide different types of charging for your fleet at different locations as needed.



Works across all levels to secure available grants and incentives for your project.



## USE THIS CHECKLIST

to help decide on a partner for your electrification project.

# The Cost Of Getting It Wrong

How does making the wrong choice for fleet electrification equate to a dollar figure? If you work with an FMC that outsources your project, you'll be spending anywhere from 10% to 50% more compared to a single eFMC provider. There are three major pain points to consider.







## 3 Major Pain Points To Consider

### Wasted Time

Your team can spend hundreds of hours on payroll managing vendors, projects, and timelines. That's time that could be spent optimizing the efficiency of your fleet! When coordinating so many vendors, it's easy for your projects to get delayed, pushing commissioning dates back and having vehicles on site before charging is installed.

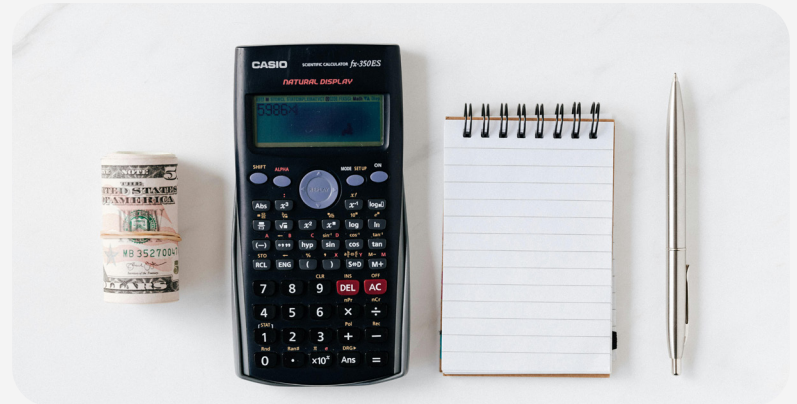
### Wasted Resources

Without a partner who is fully invested in your electrification project, you might need to consider costly short-term rentals or temporary charging solutions to avoid downtime. Every dollar spent here eliminates the TCO benefits of EV fleet adoption.

### Overspending

If your electrification partner offers a one-size-fits-all solution, you might be acquiring vehicles that are over spec'd for the needs of your fleet or installing charging hardware that is overpowered for your use case. For a fleet of 2,000 vehicles, time and cost overruns can cost an extra \$2.6M<sup>1</sup> or more!

<sup>1</sup>Assumptions: Fleet of 1k take-home vehicles & 1k depot-based vehicles, \$12M total installed Capex, 50 depots and 260 hours of staff time at \$100/hr managing installation projects.



# Doing It Right

Even with the right partner, fleet electrification is a complex process to undertake. Every fleet is unique and will have different expectations and electrification goals, but every successful project will end with:

- Optimal vehicles and chargers for every use-case
- Aligned timing between EV deliveries and charging infrastructure deployment
- Change management procedures give drivers the tools and resources to be happy with the transition to EVs
- Operational and compliance requirements met with minimal disruptions
- Available grants and incentives captured to maximize your TCO savings







## The proof is in the numbers.

The following TCO analysis shows how much you could save per vehicle when properly implementing EV Sedans or SUVs into your fleet.

ASSET TYPE	NUMBER OF VEHICLES	ANNUAL MILES	YEARS IN SERVICE	COST SAVINGS PER VEHICLE, \$ TOTAL	TOTAL FLEET SAVINGS, \$ LIFECYCLE
Sedan	3300+	20000	6	Approx. \$11,500	Over \$37,500,000
SUV	1250+	20000	6	Approx. \$2000	Over \$750,000

# Conclusion

At Inspiration, we know there are many ways you can approach your fleet electrification project. As the industry's first Electrification Accelerator, our experts can ensure your fleet avoids costly risks and is positioned to fully take advantage of the benefits of EV technology.

We are wholly committed to driving decarbonization in North America through electrification, with tailored, turnkey solutions that enable our customers and partners to achieve their business and sustainability goals as quickly as possible, with minimal risk.

Ready to learn more? Our Fleet Analysts can assist with developing an electrification plan to meet the needs of your future EV fleet. Contact us at 202-650-0858 or [reach out to us online](#).

## Just getting started on your electrification journey?

Our **Electric Vehicle Opportunity Assessment** is a great place to start! Visit [inspirationmobility.com](https://inspirationmobility.com) to learn more.