

MAKING THE SHIFT:  
WHAT TO CONSIDER WHEN  
ELECTRIFYING YOUR FLEET

## Why Companies Are Adding Electric Vehicles to Their Fleet

The global push towards sustainable transportation has led to an increasing number of companies considering the addition of electric vehicles (EVs) to their truck fleets. With the advancements in EV technology, and the urgent need to reduce carbon emissions, businesses recognize the multiple benefits of incorporating electric vehicles into their operations.

Companies are choosing to add EVs for a myriad of reasons. Electric vehicles produce zero tailpipe emissions, leading to significant reductions in greenhouse gas emissions and air pollution. By adopting EVs, companies can align their transportation practices with environmental sustainability goals.

Electric vehicles have lower operating costs compared to internal combustion engine (ICE) vehicles. The cost of electricity is lower than gasoline or diesel fuel, resulting in reduced fuel expenses. Additionally, EVs require less maintenance because of the simplified mechanics of electric drivetrains, resulting in lower maintenance and repair costs over the vehicle's lifespan.

Governments worldwide are implementing stringent emission standards and regulations to combat climate change. By introducing EVs, companies can proactively comply with these regulations, avoid potential fines or penalties, and show their commitment to sustainable practices.

While benefits abound, adding EVs to your fleet can be daunting. Along with the vehicles, you have to consider charging and charging infrastructure, technology, navigating the new EV landscape, and maintenance before adding EVs to your fleet.

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## Assess Your Needs

When adding any vehicles to your fleet, especially EVs, you first have to look at your needs. Evaluate the specific requirements of your fleet operations to determine which vehicles can be replaced by electric alternatives. Consider factors such as range, payload capacity, charging infrastructure availability, and the feasibility of integrating EVs into existing workflows.


Research different electric vehicle models that meet the needs of your fleet. Consider factors such as, charging capabilities, cargo capacity, and any specialized requirements for your industry. Compare costs, performance, and features to make an informed decision.

Evaluate the total cost of ownership for EVs compared to ICE vehicles. While electric vehicles may have a higher upfront cost, consider the potential savings in fuel and maintenance costs over the lifespan of the vehicle. Calculate the payback period and the long-term financial benefits of switching to EVs.

Assessing your needs for EV vehicles can be difficult. Many companies are choosing to partner with a provider like Ryder that specializes in fleet management and has vast knowledge of EVs. When it comes to EVs, Ryder electrification advisors assess your vehicle fit, estimate potential emissions and total cost impact, and build out your transition roadmap.



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## Charging

According to the study *Curve Ahead: The Future of Fleet Electrification*, two of the top four barriers to adding EVs are a lack of public chargers and inadequate electric capacity at a company's facility. Before integrating EVs into your fleet, you should conduct a thorough assessment of charging infrastructure needs. Consider factors such as the number of vehicles, their daily mileage, and operational requirements to determine the type and quantity of charging stations required. It is essential to ensure that the charging infrastructure can support the fleet's demand and minimize vehicle downtime.

Installing charging stations may require electrical infrastructure upgrades. It is crucial to ensure that the installation meets local building codes and safety regulations. You should consider factors like power capacity, availability of parking spaces, and proximity to electrical panels when planning the charging station layout.

The placement and accessibility of charging stations within the fleet's operational area are critical. Charging stations should be conveniently located and have minimal disruption to daily operations. You should consider factors like parking availability, proximity to facilities, and charging station visibility when selecting installation locations.

Employing a comprehensive charging management system can enhance efficiency and track charging activities. Such systems can monitor energy consumption, manage charging schedules, and allocate costs accurately. Analyzing data from charging sessions can provide useful insights.

Just as you don't go into business to manage your transportation assets, you don't go into business to wrangle with energy infrastructure. Providers like Ryder leverage relationships with original equipment manufacturers to provide you with a complete charging solution that includes site assessment, chargers, installation, charging software, ongoing monitoring, maintenance, and metrics.

## Technology

Implementing advanced technology like telematics and connectivity is crucial for companies looking to transition to an electric fleet. Telematics and connectivity solutions provide real-time data and insights into vehicle performance, energy consumption, and driver behavior. By leveraging this information, companies can optimize fleet operations, improve efficiency, and reduce costs. They can track vehicle locations, monitor battery levels, analyze driving patterns, and identify areas for improvement, such as optimizing routes or reducing idle time.

EVs have a limited range compared to traditional ICE vehicles. Telematics can provide accurate data on battery levels, range estimates, and charging station locations, enabling companies to plan routes effectively and ensure that vehicles stay within range of charging infrastructure. This helps prevent range anxiety for drivers and minimizes the risk of running out of charge during operations.

By partnering with a company like Ryder, you don't have to worry about implementing technology into your new EVs. Innovative on-board technology and our RyderGyde™ digital platform provide you complete vehicle management and tracking, vehicle range, energy usage, and charging status.


## EV Maintenance

Companies should familiarize themselves with the maintenance recommendations provided by the EV manufacturer. This includes following the prescribed maintenance schedule, recommended service intervals, and specific requirements for battery care and inspections. Adhering to these guidelines ensures the vehicles remain in optimal condition and can help prevent warranty issues.

The battery is a critical component of an electric vehicle. Companies should implement battery health management practices to ensure optimal performance and longevity. This may involve monitoring battery health indicators, performing regular battery inspections, and following charging best practices, such as avoiding extreme temperatures and maintaining an appropriate state of charge.

EVs have unique components and systems that require specialized knowledge for maintenance and repair. Companies should ensure that their maintenance personnel or contracted technicians are properly trained and have the expertise in electric vehicle systems. This can involve providing training programs, certifications, or partnering with service providers experienced in EV maintenance.

EV maintenance cannot be left to just any technician. That's why more companies are trusting lease and maintenance providers like Ryder that include maintenance with the EV lease. With technicians trained specifically for EVs, preventive and corrective maintenance can be performed at most Ryder service locations from coast to coast, or via our leading on-site or mobile maintenance.



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## Incentives for EVs

Many governments are providing financial incentives and subsidies to encourage the adoption of electric vehicles, including commercial trucks. These incentives can include tax credits, grants, and rebates, which help offset the higher upfront costs of electric trucks and make them more economically viable for businesses.

Adopting electric trucks aligns with the growing demand for environmentally friendly practices, and it can enhance a company's public image and brand perception. Consumers and stakeholders increasingly value businesses that prioritize sustainability and take active steps to reduce their carbon footprint.

Finding incentives and applying for grants is timely, especially if you don't know where to start. Ryder's electrification advisors can help with finding and applying for grants for your new EVs.

## Navigating the EV Landscape

Environmental benefits, cost savings, and the need to comply with increasingly stringent regulations drive the growing interest in commercial EVs. While making the switch to electric vehicles may seem daunting, outsourcing fleet management to experienced providers can streamline the transition, offering expertise, infrastructure support, and flexibility.

Enter RyderElectric+, the ultimate turnkey fleet solution that navigates the EV landscape for you and provides electrification advisors, vehicles, chargers, telematics, and maintenance all for one price. Through RyderElectric+ we are powering the future of transportation with a unique solution that simplifies adding EVs to your fleet. By combining our expertise, advisory services, and relationships with vehicle manufacturers and charging companies, as well as our integration with telematics providers, we help you build and maintain an electric fleet that fits your needs.

Discover how RyderElectric+ can make you *Ever better*™ at [ryder.com](https://www.ryder.com).







## About Ryder

Ryder System, Inc. is a leading logistics and transportation company. It provides supply chain, dedicated transportation, and commercial fleet management solutions, including full service leasing, rental, and maintenance, used vehicle sales, professional drivers, transportation services, freight brokerage, warehousing and distribution, e-commerce fulfillment, and last mile delivery services, to some of the world's most-recognized brands. Ryder manages more than 259,000 commercial vehicles and operates more than 350 warehouses, encompassing approximately 95 million square feet. Ryder is regularly recognized for its industry leading practices in third-party logistics, technology-driven innovations, commercial vehicle maintenance, environmentally friendly solutions, corporate social responsibility, world-class safety and security programs, military veteran recruitment initiatives, and the hiring of a diverse workforce.

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