



SUCCESSFULLY DEPLOYING YOUR ELECTRIC TRUCK

THE PATH TO ZERO EMISSIONS SHOULD BE A SEAMLESS TRANSITION HERE'S HOW INTERNATIONAL OPTIMIZES THE FINAL LEG OF THIS REWARDING JOURNEY



Imagine the excitement of homeowners in the early 1900s when their homes were first electrified, replacing oil lamps with incandescent lights and other modern conveniences. Consider the anticipation of business owners of that era who commissioned their first motorized vehicles, opening the door to boundless new markets and capabilities. In both cases, the transition to a revolutionary new technology brought profound changes to daily life.

But moving from old to new also introduced a whole host of additional considerations, expectations and practices. Each of these achievements is best viewed not simply as a single, historic milestone but the culmination of a carefully planned journey.

Commercial fleets have embarked on a journey of similar magnitude - moving from Internal Combustion Engine (ICE) vehicles to battery-electric models. This journey is unique to each organization based on countless variables such as fleet size and mix, vocation, topography, duty cycles, charging infrastructure and more.



International Truck, an industry leader in commercial vehicles, has studied each of these variables as part of its development of a comprehensive, best-practices approach to achieving sustainable mobility. By mastering the complexities of this transition and serving as trusted advisors through each step in the journey, International stands alone in helping body builders and fleets fully realize the health, cost and uptime benefits of powertrain electrification.

This guide focuses on **Deployment** - which extends well beyond taking delivery of a new electric vehicle (EV). In fact, through its extensive experience in guiding fleets through the electrification journey, International has determined that the most successful deployments begin before the order is received and extend through seven clear waypoints to ensure not only that the vehicle is ready for duty, but every person, process and asset associated with that new vehicle is positioned for success - from day one.

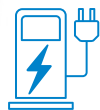
FLEET TRANSFORMATION IN THREE STEPS

To assist in this journey, International Truck has developed a three-step "white glove" process comprising all the questions, considerations, planning, investments and ongoing support involved in transition to Electric Vehicles. These three steps are:



Step 1 | CONSULTING

A discovery workshop dives into a fleet's electrification needs and concerns, building a customized electric vehicle roadmap for success.



Step 2 | CHARGING

Assessment of the placement of hardware and infrastructure, finding the best ways to support vehicle charging and uptime.



Step 3 | DEPLOYMENT

Ensure charging locations, staff, and remote diagnostics are prepared for the electric fleet to hit the road.

WHAT DOES DEPLOYMENT MEAN?

Deployment and commissioning of a new electric truck can mean very different things. Electric vehicles require more than just a vehicle. The dealership has a commissioning process, including a pre-delivery inspection (PDI) as well as consultation and training.



International approaches deployment in a far more hands-on, research-based manner. EVs represent a transformational technology that requires extensive, shared insight into vehicle design, charging, operation and maintenance. The International Deployment method is a fully collaborative process designed to eliminate surprises every step of the way and ensure optimal performance over the full vehicle life cycle. International goes the extra step of requiring certification of dealers to confirm that dealership employees have the knowledge, training and technical expertise to sell, support and maintain/repair these vehicles.

Led by a team whose sole focus is the deployment of International zero emissions vehicles, the International Deployment process is the very definition of “white glove” service, encompassing seven steps which begin with the finalization of the truck sales order:



Deployment Step 1: Project initialization

The sales order marks the transition from the Consulting and Charging phases of the customer journey to the Deployment phase. Once the order is entered, International Deployment team members begin a comprehensive review of the project, including a download of all customer details, including fleet type/vocation, operating requirements, performance/uptime targets, duty cycles, charging infrastructure and more. This step serves as a “triple-check” of roles, responsibilities and any pending activities such as installation of charging hardware and related infrastructure. The goal throughout this and each subsequent deployment step is to eliminate any surprises.

Deployment Step 2: Monitoring Infrastructure Build-Out

By the time a new truck has been ordered, International consultants have already worked closely with the fleet and/or body builder to identify and design the appropriate charging infrastructure and ensure charger operability. The objective is to have all charging hardware fully operational prior to delivery of the vehicle. The Deployment team will monitor the build-out of charging systems until complete, while working closely with the local utilities to ensure power can be delivered to the site.

Deployment Step 3: Finalize Delivery Schedule to Dealer

The International® dealer remains engaged at every step of the deployment process. Deployment team members work with the dealer to prepare both for vehicle delivery and inspection as well as the several-hour deployment event when the vehicle is turned over to the customer.

Deployment Step 4: Collaborative Pre-Delivery Inspection

Most International dealers have performed many pre-delivery vehicle inspections (PDI) of diesel- or gasoline-powered trucks. Given the vast differences between ICE and EVs, however, there is a much broader scope to the EV PDI process.

First, International ensures that every dealer professional or body builder who will interact with the customer and/or vehicle is fully trained for their areas of responsibility. The PDI includes a top-to-bottom inspection and review of all vehicle systems. Next, International, dealership and body builder representatives will perform test drives and charging sessions tailored to the fleet’s unique requirements. The PDI typically occurs two weeks prior to customer delivery to provide adequate time to assess and optimize all vehicle systems.



Deployment Steps 5 and 6: Scheduling, Completion of Vehicle Deployment Event



Deployment day is more than a matter of picking up the new vehicle. In actuality, the deployment event comprises several hours of review, training and hands-on activities for fleet managers, drivers, technicians and, first responders representing the fleet's operating area.

THIS INTENSIVE TRAINING INCLUDES:

- ▶ Overall vehicle operation
- ▶ On-the-road driver training, including the use of regenerative braking technology
- ▶ Charging processes and protocols
- ▶ Maintenance and inspection (including safety requirements)
- ▶ Vehicle storage best practices
- ▶ Towing
- ▶ First responder training - electrical system parameters, safety requirements
- ▶ OnCommand® Connection (telematics/remote diagnostics) setup and operation

Deployment Step 7: Post-Delivery Review

The Deployment phase continues at least 45 days beyond delivery of the vehicle to the customer. Throughout this period, deployment team members monitor and assess vehicle operating data collected through the OnCommand® Connection solution. Among the metrics captured are overall vehicle performance and efficiency, fault codes, charging efficiency, GPS tracking, operating range and safety reports.

The Deployment team reviews this data with managers and other appropriate representatives of the fleet, comparing actual performance of the EV and charging hardware vs. pre-deployment assumptions. This vital step can help fleets identify areas of need in driver training, charging practices and other areas. As an example, a fleet could determine through this review process that its drivers were not using the regenerative brake feature of their EVs, thereby artificially reducing vehicle operating range. Once this issue was rectified, the operating range improved to the pre-deployment target.

YOU HAVE ARRIVED

Fleet electrification can be a complex process. So many unknowns, but so many possibilities. By partnering with the right EV manufacturer for consistency, your fleet can take this bold step into the future with greater confidence, fewer surprises, at lower maintenance cost and with a brighter outlook for increased productivity, uptime and, of course, world-class sustainability. Don't let anyone tell you that deploying a new electric truck is as fast and easy as launching a conventional vehicle. It's not. But by choosing International, you'll have the expertise and support of trusted advisors alongside you every step of the way.

[Contact a trusted advisor today to start your journey to EV](#)

