

DRIVING TO NET ZERO

The Case for Shipper Leadership in the Transportation Transition

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Introduction

Cleaner transportation solutions deliver more than sustainability benefits; they provide a clear business advantage. Companies that continue investing in cleaner freight strategies are better positioned to control costs, meet growing customer expectations and stay ahead of market shifts.

The benefits extend beyond emissions reductions. Freight leaders are securing access to new markets, expanding carrier capacity, reducing exposure to fuel-price volatility, strengthening customer relationships and helping shape the future freight marketplace. As regulatory standards increase in market share, net zero leadership is increasingly a proxy for performance.

EDF's latest analysis identifies five steps to help shippers capture greater operational benefits and demonstrate net zero leadership amid the latest regulations in California and Europe, as well as 2026 updates to voluntary standards. In a rapidly changing regulatory environment, shipper demand signals are becoming a key differentiator.

Five Steps to Accelerate Impact: New Regulations and Case Studies

In 2023, EDF published [guidance for shippers](#) navigating Scope 3 transportation emissions. Since then, significant macroeconomic and political shifts have created a need for updated guidance. The regulatory landscape, particularly at the federal level, has grown more uncertain, with evolving federal incentives and uneven state-level implementation creating a less predictable investment environment. These regulations were designed to establish a clear, coordinated pathway that aligns infrastructure, vehicle availability and fleet adoption toward a zero-emission transportation future. While shippers or beneficial cargo owners (BCOs) are not directly regulated under these standards, these rules can enable their sustainability goals and amplify their influence across the freight market. With these rules under threat, the context has changed in ways that make shipper leadership not just strategically smart, but arguably more important and impactful than at any prior moment.

The procurement decisions of large shippers can define the market, determining which routes attract zero-emission vehicles and whether carriers invest and have the confidence to make long-term bets on new technology. Collectively, large shippers play a major role in shaping the direction of the commercial trucking market.

The five steps that follow provide a leadership blueprint: a clear set of actions that shippers must take right now to reduce their transportation emissions, insulate their freight budgets from fuel price risk, meet their disclosure obligations, and use their market power to accelerate the clean transportation transition they need to compete.

1. Shippers must commit to and set clear freight emission reduction goals and use them as the north star for internal & external alignment.

Every effective strategy to address Scope 3 transportation emissions begins with a commitment that is specific enough to drive action. An overarching “net-zero by 2050” goal is helpful but lacks the urgency for near-term action. Shippers must set specific transportation targets that are tied to the emissions category, the reduction pathway and the timeframe, and that are linked to budget authority, procurement criteria and carrier performance measurement.

Internally, a specific transportation emissions target gives procurement and supply chain teams the mandate they need to prioritize zero-emission carrier capacity, embed emissions benchmarks in Request for Proposals (RFPs), and decline renewals with carriers that are not moving forward on their electrification roadmaps. Externally, it provides the consistent demand signal that carriers need to make the capital commitments required to transition their fleets. Carriers make multimillion-dollar, decade-long investment decisions — and a shipper's public, durable commitment is part of the commercial case that justifies those investments.

Recommendations

- Set a transportation-specific, time-bound net-zero target disaggregated from the broader corporate sustainability pledge. Make them operational and tie them to procurement criteria, carrier scorecards and executive key performance indicators.
- Communicate the commitment directly and specifically to the Tier 1 carriers. Be specific about the scope of the reduction, the associated timeline and the consequences for contract renewal if carriers are not tracking toward.
- Use commitment targets as a sourcing criterion. Prefer carriers with public electrification roadmaps, deployed zero-emission equipment or validated science-based targets in your RFP scoring.

Example

[Target's near-term goal](#) is to reduce Scope 3 greenhouse gas (GHG) emissions by 32.5% below 2017 levels by 2030, which includes emissions from retail purchased goods & services, upstream and downstream transport and use of sold product. Having a disaggregated target allows accountability from procurement teams on hotspot-specific performance such as transportation. Similarly, [IKEA](#) at the RFP stage in their procurement process, inquires about the sustainability agenda for each prospective supplier while explicitly communicating its environmental requirements and targets; these include reducing 70% of the greenhouse gas emissions from transport by 2030 and using only zero-emission transportation by 2040.

2. Shippers must disclose their Scope 3 transportation emissions because measurement is the foundation of management.

Disclosures are how a company converts a commitment into accountability. They help unearth the data needed to identify the highest-impact lanes and carriers, track progress over time, engage with peers on industry benchmarks and respond to customer questions that are already coming, regardless of the federal policy outlook.

Currently, there is no federal mandate requiring shippers, specifically, to disclose their Scope 3 transportation emissions; however, there are upcoming obligations at the state and international levels that will impact most large shippers. These include:

California Senate Bill 253

California's [SB 253](#) requires public and private companies with over \$1 billion in annual revenue doing business in the state to disclose Scope 1, 2 and 3 GHG emissions annually. Scope 1 and 2 reporting begins in 2026, and with Scope 3 reporting begins in 2027 on a phased approach. With penalties of up to \$500,000 per year, the rule introduces tangible financial and reputational risks for shippers.

Given the scale of operations of many large shippers in California, this regulation is likely to impact a significant portion of the industry and shippers should not read the phase-in as a reason to wait.

European Regulatory Updates

Under the European Union's Corporate Sustainability Reporting Directive ([CSRD](#)), U.S. companies generating more than €450 million in EU net turnover with an EU subsidiary or branch above €200 million in net turnover will be required to report starting with financial year 2028. The CSRD mandates Scope 3 disclosure under the European Sustainability Reporting Standards, pushing companies toward more granular, decision-useful emissions data.

For shippers, this means moving beyond high-level estimates and working closely with carriers to obtain category-level transportation emissions data aligned with recognized standards.

GHG Protocol Updates

The GHG Protocol, while a voluntary standard, is the foundation for how companies measure and report emissions, especially given California's SB 253 and EU CSRD's alignment with their Corporate Standard. Its [Scope 3 Standard](#), which is being revised for publication in 2028, is expected to tighten expectations on data quality and transparency, particularly for transportation emissions. The proposed path forward emphasizes reducing reliance on broad, spend-based estimates where more granular activity or supplier-specific data is available, increasing pressure on companies to obtain higher-quality emissions data from their carriers. For shippers, this means starting now by building the systems and partnerships needed to collect primary data, rather than waiting for the final standard to be published.

Recommendations

Determine whether your company is in scope for California SB 253 and/or the EU CSRD and begin building your Scope 3 transportation data infrastructure now.

Require primary emissions data from your top-tier carriers as a standard procurement practice. Specify the methodology and level of disaggregation (lane, equipment type, etc.) required to meet regulatory and reporting requirements.

Use the emissions inventory as a management tool to empirically gauge which carriers and routes are most carbon-intensive; this develops a prioritization framework for reduction efforts.

Example

A German discount grocery chain that operates 12,000 stores worldwide provides a compelling example of investing in comprehensive data captured by suppliers. The [research](#) discovered that capturing carrier-specific, granular data versus using aggregated benchmarks can lead to substantially different emissions estimates. These estimates can influence the conclusions companies draw and the effectiveness of their emissions reduction efforts.

3. Shippers should build a transportation emissions reduction plan that prioritizes battery electric vehicles' (BEVs) readiness, facilitates carrier collaboration and is operationally grounded.

The principles for Greener Freight [from EDF's Green Freight Handbook](#) will remain the guidelines:

- Maximize the efficiency of every freight move,
- Choose the most carbon-efficient mode,
- Collaborate with your value chain partners,
- Redesign your network, and
- Demand cleaner equipment from the carriers.
- Efficiency and optimization

Before considering zero-emission vehicle (ZEV) equipment, shippers should be extracting every available efficiency improvement from their existing freight network. Improving backhaul, consolidating shipments and optimizing routing are actions that reduce emissions, but also reduce cost and mitigate fuel exposure. In an environment where diesel prices are elevated, these actions carry immediate financial return as well as long-term benefits.

Electric vehicles as the path forward

BEVs are becoming the commercially proven zero-emission option for freight, while second-generation electric trucks will enter the market as early as late 2026. These trucks have greater range, better efficiency and faster charging from numerous original equipment manufacturers, both incumbent and new. Additionally, [battery costs](#) have dropped significantly since 2023. Recent analysis by the International Council on Clean Transportation (ICCT) projects electric heavy-duty trucks will be the [least-cost option](#) across all major vehicle segments by 2030.

The total cost of ownership is improving

The economic case for zero-emission trucking has improved materially since 2023 and the fuel price environment of 2026 accelerates it further. Electric trucks are often 50–70% cheaper per mile to fuel than diesel and have substantially lower maintenance. Even today, the total cost of

ownership (TCO) favors BEVs in both California in Texas for Class 3 regional delivery, according to an [analysis by the ICCT](#). With national average diesel near [\\$6 per gallon](#) in September 2026, the crossover point for heavier classes moves meaningfully earlier.

Recommendations

- Conduct an audit of your freight network for efficiency improvements before focusing on equipment transitions. Mode shifts, consolidation and load factor improvements are the fastest and cheapest emissions reduction solutions and generate immediate cost savings at current fuel prices.
- Build a lane-by-lane plan with Tier 1 carriers. Identify which routes are ready for BEV deployment now, which require longer timelines, and what infrastructure investment would be needed.
- Plan charging infrastructure as part of carrier contracts. For dedicated carrier relationships, co-investing in depot charging is often the decisive factor in enabling fleet investment.

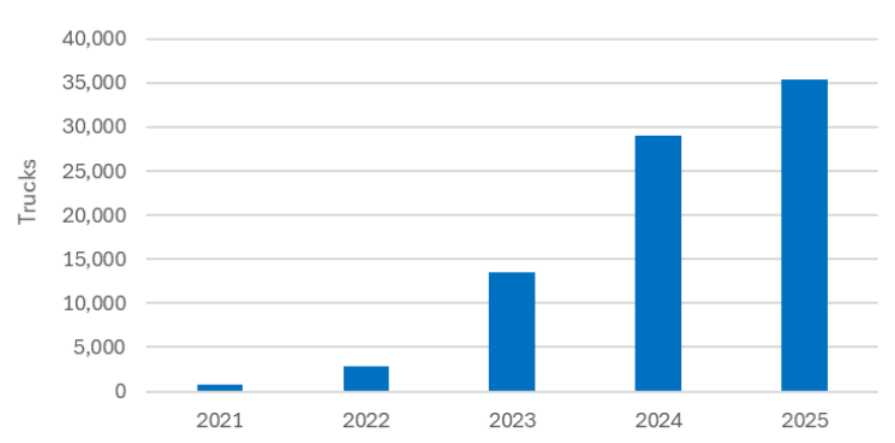
Example

PepsiCo's [partnership](#) with Schneider National to run EV-only lanes for Frito-Lay loads out of Schneider's facility in South El Monte, CA is a prime example of a shipper-carrier relationship to facilitate adoption of BEVs. PepsiCo has also made its existing nationwide network of behind-the-fence fast chargers available to its carrier partners for opportunity charges and top-ups, giving them much-needed flexibility to run more EV lanes.

4. Shippers must act as market makers and use their purchasing power, partnerships and innovative contracting to accelerate the transition.

The market for zero-emission trucking has moved past pilots and into early commercial scale. Over [38,000](#) medium- and heavy-duty electric trucks are now deployed across U.S. fleets, with record deployment in both 2023 and 2024.

Growth in Electric Medium-to Heavy Duty Truck Deployments



Source: [EDF-Electric Fleet Deployment & Commitment List](#)

The primary bottlenecks are shifting from technology to infrastructure, financing and commercial structures. Among these, commercial structures are critical enablers because they give carriers the confidence and capital to invest. This is where shippers have the most influence and where their actions matter most.

Strengthen carrier relationships as long-term strategic partnerships

The I-10 Corridor coalition, launched in 2024 by Smart Freight Centre, is the prime example of effective shipper-carrier relationships on zero-emission freight. The coalition pooled demand from participating shippers and co-designed a long-haul heavy-duty EV deployment project along one of the nation's busiest freight corridors. Such multi-party collaborations move the

market away from speculative builds for carriers and infrastructure investors because they provide scale, certainty and shared risk.

Shippers should engage with Tier 1 carriers about their electrification roadmaps and ask about:

- What ZEV equipment they are planning or deploying,
- What barriers they are facing, and
- Where the shipper's business relationship can provide the certainty that unlocks carrier investment.

Book-and-claim procurement

An important innovation in zero-emission freight procurement since 2023 is the scaling of book-and-claim systems. Under traditional procurement, a shipper can claim Scope 3 reductions only from zero-emission trucks that physically carry their freight. For shippers operating through spot markets and brokers, establishing that physical link was impractical.

Book-and-claim separates the zero-emission attributes of a truck's operation from the physical freight movement: A shipper purchases zero-emission service attributes from a carrier operating electric trucks anywhere in the network and uses them to claim Scope 3 reductions, even when their own goods are moved onto a diesel truck during that trip.

Creative contracting structures

Beyond book-and-claim, leading shippers are deploying a range of contractual innovations to accelerate zero-emission deployment and insulate their freight budgets from fuel price volatility simultaneously. These include:

- **Multi-year volume commitments:** These guarantee the carriers a defined freight volume over three to five years that is contingent on zero-emission service deployment. This provides the revenue certainty carriers need to finance EV procurement without relying on public incentives that may not be available.
- **Joint depot infrastructure investment:** Co-invest in depot charging as part of the service agreement, structured as a shared asset or service fee. This directly addresses the capital barrier most frequently cited by carriers considering fleet transitions.

Recommendations

- Elevate your top-tier carrier relationships to strategic partnership status, schedule annual sustainability reviews, understand their electrification plans and be explicit about how your business relationship supports or constrains their ability to invest.
- Consider joining a buyers' alliance. Collective demand aggregation amplifies your market signal and gives you access to book-and-claim infrastructure and carrier networks you would otherwise need to build from scratch.
- Use multi-year volume guarantees and joint infrastructure investments as tools for deepening carrier relationships while creating measurable decarbonization outcomes.

Example

The leading example is Green Market Activation's [Trucking buyers' alliance](#), consisting of leading shippers such as Amazon, eBay, Etsy, Google, Green Worldwide Shipping and Meta, which finalized contracts with Nevoja, providing the market signal to deploy 40 BEV trucks in Texas. In September 2026, [Google](#) also joined the program to add another 25 trucks bringing the total trucks to be deployed to 63. The vehicles will travel approximately 11 million miles and will reduce ~92,000 metric tons of carbon dioxide over the length of the contracts. Shippers purchasing trucking attributes help scale and grow the BEV market for zero-emission trucking services.

5. Shippers should use their industry voice and policy influence to build the market conditions, infrastructure and standards that support the freight transition.

In an environment where federal policy has reversed, the shipper community's collective voice is one of the most leveraged inputs available to accelerate the clean freight transition. No shipper can move the market alone: Acting alongside peers to shape the conditions for success is how industry norms get established and how the market moves faster than any individual company could push it.

State-level engagement

California, with numerous other states, including New York, New Jersey, Colorado, Illinois and Washington, is advancing their own clean truck programs. Shippers operating in these states should be providing data and testimony in state agency processes, making business cases for utility programs, incentive structures and port electrification investments that reduce the cost of zero-emission trucking services.

Recommendations

- Engage state transportation and environmental agencies in California and other advanced clean truck states, provide data on your own commitments and emissions reduction plans and support incentive programs that reduce the cost of zero-emission trucking services for your carrier partners.

Conclusion

In this environment, procurement decisions are not merely operational choices. They are a core mechanism that shippers can use to shape the freight ecosystem. When shippers embed emissions benchmarks into their carrier RFPs, award volume to fleets investing in electrification, join buyers' coalitions, or co-invest in charging infrastructure alongside carrier partners, they send a commercial signal that is increasingly critical alongside evolving regulatory drivers. In doing so, they are not only reducing their own Scope 3 emissions but actively building the market for zero-emission trucking services.

The transition to clean freight will be defined by the buying power of shippers that step forward to use it. They have the scale, the influence and the commercial relationships to accelerate this transportation transition by taking a proactive role in driving it forward.