





The State of Fleet Electrification

Results of the FEC Demand Aggregation Survey Q2-3 2023



Introduction

Demand Aggregation Survey



The Fleet Electrification Coalition (FEC) aims to accelerate zero-emission truck deployments at scale by surveying leading fleets with operations in the US and Europe. This survey represents an industry first attempt to track down actual deployment and charging plans. The following data is fully anonymized and treated with the utmost respect for privacy and security.

The following report will illustrate the findings from our first survey by profiling respondents, investigating e-MHDT demand, and discussing charging strategies plus supporting measures taken by companies who wish to effect fleet electrification.

Survey duration: June to August 2023

Scope: On-road Class 2b-8/N2-N3 freight

Survey size: 26 respondents

14 Carriers / LSPs12 Shippers

Introduction

Demand Aggregation Survey



Survey responses help us achieve the following objectives:

1

Demonstrate Market
Demand for E-Trucks

2

Guide
Charging Infrastructure
Development

3

Support Development of new Finance Mechanisms

4

Establish high-impact pilot projects

We compiled aggregated data to illustrate the collective etruck demand across our network, providing a clear signal to OEMs, infrastructure providers, investors, and other industry partners

Insights into your e-truck deployment plans enable us to work with charge point operators and infrastructure providers to prioritize the placement of charging stations in areas where they are most needed

Survey results also help us to implement finance mechanisms which accelerate e-truck adoption

Your inputs will help us realize a range of high-impact collaborative pilot projects that create tangible action towards road freight electrification.

Demand Signal for e-Trucks in the EU and US



10.000

by 2026

We see a significantly higher potential for deployment commitments and by involving more companies in the second survey, we will strengthen the voice of industry!

60.000

by 2030



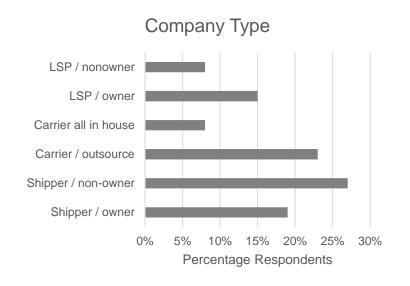
Participate in Our Second Survey

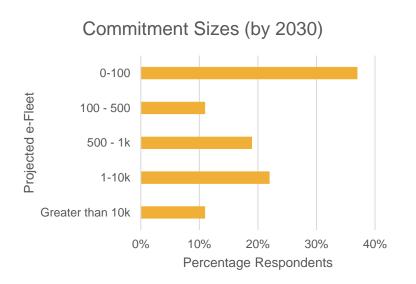
- ➤ The demand signal and our support becomes stronger with every company that joins this effort
- All information we gather is treated confidentially and only shared in aggregated, anonymized form
- Your input is important for paving the way for e-Trucks!

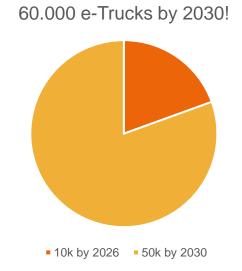
Follow this link to the Second Demand
Aggregation Survey

Respondent Profiles









No Strategy / NA 12%

In Progress 42%

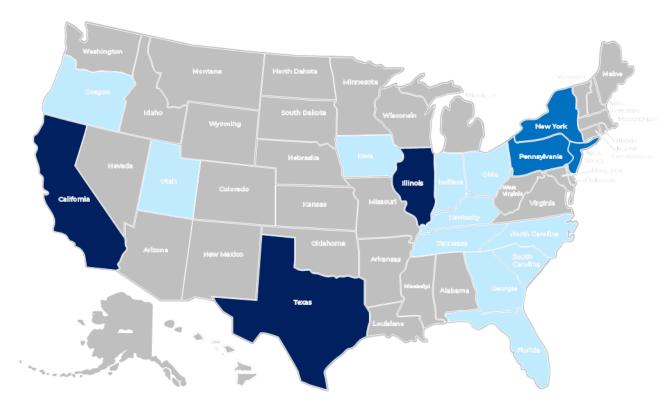
Fleet Electrification Strategy

Fully Developed 46%

Truck Deployment Locations

United States



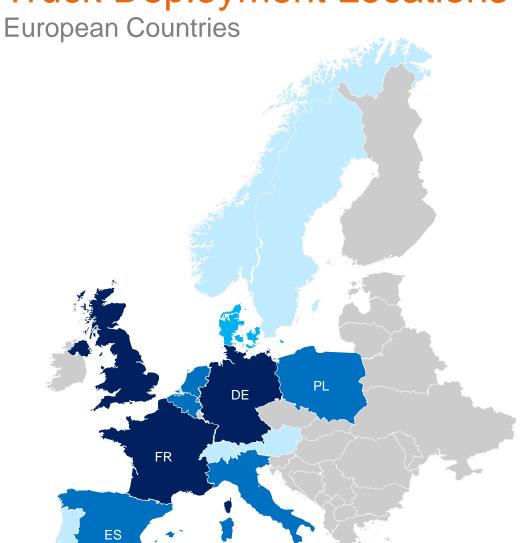


United States

- Respondents highlighted California, Texas, Illinois, and the Northeast (New York, Pennsylvania, and New Jersey)
- When asked which routes they would like to electrify, respondents suggested a geographically diverse range of potential electrification corridors, spanning from coast to coast
- Based on strategic partnerships, the Fleet Electrification Coalition is actively working to implement zero-emission long-haul trucking trials connecting key states and corridors
- This widespread interest and attractive policy incentives contribute to ready-to-electrify attitude across the country
- Further outreach in the second survey will crystalize and expand upon these preliminary findings

Top 3

Truck Deployment Locations





Europe

- Leading electrification countries such as Germany,
 France, and the United Kingdom are well represented
- Corridors our members have mentioned include hightraffic TEN-T network legs such as those through Germany and the BENELUX region
- Poland and Italy offer greenfield development opportunities, coupled with impressive long-haul trucking market share
- Strong European legislation and member states' commitments paint an optimistic picture of electrification progress
- Our second survey is primed to solidify these insights and provide additional actionable information

Frequently mentioned

Top 3

Also mentioned

Using These Results to Help Our Members





FEC Members in the United States and European Union receive support in four key categories, directly influenced by survey responses

1

e-Truck Demand

- Demand aggregation surveys + insights
- Procurement Playbook publication

2

Charging Infrastructure

- Shared charging working group launched early 2024
- 2. Public charging support including corridor identification, mapping and stakeholder involvement and outreach

3

Financing for SMEs

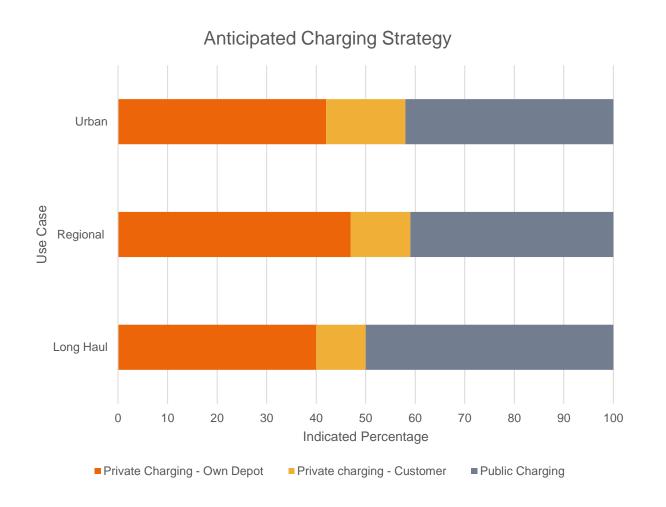
 Direct involvement with financial organizations in FEC as both members and partners ____4

Research and Guidance Publications

- Depot Charging Guidelines
- 2. Forthcoming guidance on shared and public charging

Charging Strategies





- Respondents indicated that they anticipate using all strategies for all duty cycles, which contradicts contemporary research expectations of usage patterns
- Focus must be on aligning deployment with usage to avoid any bottlenecks in the (early) implementation stages
- These responses place an emphasis on the importance of FEC workstreams and pilot projects focused on shared and public charging

Note: anticipated strategy is for 2026 deployments

Respondents Shared How They Support Charging

"For the battery electric trucks that you plan to deploy by 2026, how is your company planning to support charging?"

- 41% of respondents plan to make charging infrastructure on their own premises available to carriers
- 16% plan to deploy shared or public charging infrastructure
- 15% plan to provide financial support for charging at own locations or carrier depots
- 28% "Other"





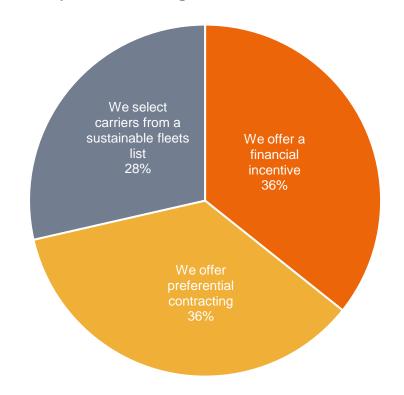
From the 'Other' responses

- "We connect carriers and work with charging infrastructure companies/ electrification-as-a-service companies to support charging for our carriers"
- "We are using (pre-existing) carriers' or public infrastructure"
- "Depends on the specific site and available grid capacity"

Cargo Owners Offer a Range of Supporting measures to Their Carriers



How do you encourage carriers to use ZETs?



- Cargo owners are eager to see supply chain decarbonization, and are offering various measures to pursue this goal
- Preferential contracting and financial incentives are the most common supporting measures given to carriers who use e-Trucks
- Future FEC work will strengthen these commitments and link them to innovative financing mechanisms, empowering carriers to deliver goods in a sustainable manner

Our next steps





 Presenting the results of the second survey at Smart Freight Week 2024

We look forward to...

- A strengthened demand signal
- Specificity on charging strategy and infrastructure
- Insight on carriers', shippers', and LSPs' electrification progress
- Continued work on scaling and proof of business models for electrification
- Harnessing the power of demand aggregation to remain a key factor of success derived from this workstream
- Your survey responses help us target our impact, focus our work, and get more electric trucks on the road!
- Follow this link to the Second Demand Aggregation Survey









A Smart Freight Centre Partnership

Uniting corporate **freight buyers** to shift towards zero-emissions freight across all modes of transport in **collaboration with** their supply chains and partners.

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