



# Addressing Common Myths about Sustainable Freight

## Executive Summary

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A key focus of the Carbon-Neutral and Sustainable Freight program area of the Dock to Door (D2D) Coalition is decarbonizing medium- and heavy-duty vehicles (MHDVs), which contribute significantly to U.S. transportation greenhouse gas emissions. A D2D working group was assembled to tackle the challenge of widespread public misperceptions around climate change and EV technology. The working group included representatives from Better Days Logistics, CAC Tech Services, Dominion Energy, EVNoire, Virginia Clean Cities, Virginia Department of Energy, Virginia Department of Transportation, and Virginia Pilot Association. The working group explored 15 prevalent misperceptions that are impeding sustainable freight progress. These included beliefs such as electric vehicles being less safe than diesel vehicles, electric trucks being too expensive or ineffective in cold climates, and the idea that electrification merely shifts emissions elsewhere.

Through expert input and research, the project explored the following misperceptions, including:

- The lower total cost of ownership and reduced maintenance of electric MHDVs.
- Improved safety profiles of EVs over internal combustion vehicles.
- The evolving availability of charging infrastructure and grid capacity.
- Environmental benefits of electrification, even with fossil fuel-based grids.
- The viability of alternative fuels alongside electrification as part of a broader decarbonization strategy.

This project has deepened the D2D team's understanding of the complex operational challenges and evolving priorities faced by D2D Coalition partners in the transition to sustainable freight. It also clarified the misperceptions that partners encounter internally and across the regional supply chain. While the findings captured in this report reflect a point-in-time assessment, ongoing updates to the misperceptions database are planned as the program grows and more insights emerge. Two major areas for future collaborative work have been identified:

1. Use case development and persona playbook: There is a strong need for clearly defined use cases demonstrating where and how electric MHDVs can be successfully deployed.
2. A database of regional success stories to combat uncertainty and skepticism about electrification. The project team will document and promote real-world success stories from Coalition partners.

These research directions will strengthen the Coalition's collective knowledge base, support future funding opportunities, and accelerate adoption of sustainable freight solutions across the region.