

National Zero-Emission Freight Corridor Strategy

DOT Climate Change Center Webinar

Intermodal Freight Decarbonization

April 26, 2024

driveelectric.gov

Goal

The National Zero-Emission Freight Corridor Strategy seeks to align and accelerate cross-sector investments in zero-emission mediumand heavy-duty vehicle (ZE-MHDV) infrastructure and clearly signal the need to bolster electric grid and hydrogen planning to achieve a zero-emission freight network by 2040.



Background

An **interagency** initiative between the Joint Office of Energy and Transportation (JO), U.S. Department of Energy (DOE), U.S. Department of Transportation (DOT), and the Environmental Protection Agency (EPA) to **develop a national strategy for MHD freight corridors for electric and hydrogen vehicles** by:

- 1) Identifying **key characteristics** of a zero-emission freight corridor for electric charging and hydrogen fueling infrastructure
- 2) **Prioritizing and strategically sequencing** federal investments that will help achieve **a national zero-emission freight network by 2040.**



Approach

To catalyze public and private investment in zero-emission freight (ZEF) and fully build out a ZEF corridor network by 2040, we will **prioritize** and **sequence** federal investments:

PRIORITIZE

• Determine deployment factors.

APPROACH

- Apply factors to map.
- Establish focus and cadence of a multi-phase corridor plan to scale growth along freight corridors by 2040 for a fully built out national network.

OUTCOMES

• Allows federal grant program administrators to prioritize applications by assigning criteria/bonus points to projects in priority locations.

• Enables utilities & regulators to plan and approve infrastructure investments.

 Aligns policy across jurisdictions, sequences public & private action, ensures hubs and corridors support environmental justice.



Analysis

Zero-Emission Freight Corridor Strategy

Deployment Factors to Identify Priority ZEF Corridors



1. Segments of the NHFN with highest freight volumes.



2. Highest percentage of ports by annual tonnage, all intermodal freight facilities, and key truck service & parking.



3. Areas that bear disproportionate environmental and air quality burden from MHDV emissions.



4. States with policies that enable zero-emission vehicle deployment.



5. Areas projected to demonstrate better total cost of ownership for ZE-MHDV compared to ICE.



6. "On-the-ground" planning through Department of Energy commercial zero-emission vehicle corridor planning grants.





Zero-Emission Freight Corridor Strategy

A Four-Phased Strategy for a National ZEF Network

The ZEF Corridor Strategy will accelerate infrastructure deployment along key corridors and hubs in four phases to achieve a **national ZEF network by 2040**.







Zero-Emission Freight Corridor Strategy



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ZEF Network

Selected Corridors

- Selected Principal Ports
- Selected Intermodal Freight Facilities
- × Selected Truck Parking

Selected Hubs

National Highway Freight Network





ZEF Network

Selected Corridors

- Selected Principal Ports
- Selected Intermodal Freight Facilities
- Selected Truck Parking

Selected Hubs

National Highway Freight Network





ZEF Network

Selected Corridors

- Selected Principal Ports
- Selected Intermodal Freight Facilities
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Selected Hubs

---- National Highway Freight Network





ZEF Network

- Selected Corridors
- Selected Principal Ports
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National Highway Freight Network



Joint Office of Energy and Transportation

Thank You/Q&A

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