

Massport's Renewable Diesel Transition for MD/HD Fleet

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Renewable Diesel (RD) is a “Drop-in” Fuel

Derived from non-fossil fuel sources (e.g. agricultural products, forestry products, fats, oils, and greases, etc.) and is identical to conventional diesel

IS NOT BIODIESEL

Biodiesel = FAME (fatty acid methyl esters)

Renewable Diesel = Hydrotreated Vegetable Oil (HVO)



MADE FROM 100% SUSTAINABLY SOURCED RENEWABLE RAW MATERIALS



***Up to 95% LESS LIFE CYCLE GHG EMISSIONS COMPARED TO FOSSIL DIESEL**



100% COMPATIBLE WITH ALL DIESEL ENGINES, NO MODIFICATIONS REQUIRED

Renewable Diesel Due Diligence

Suppliers/Distributors:



Refiners/Manufacturers:



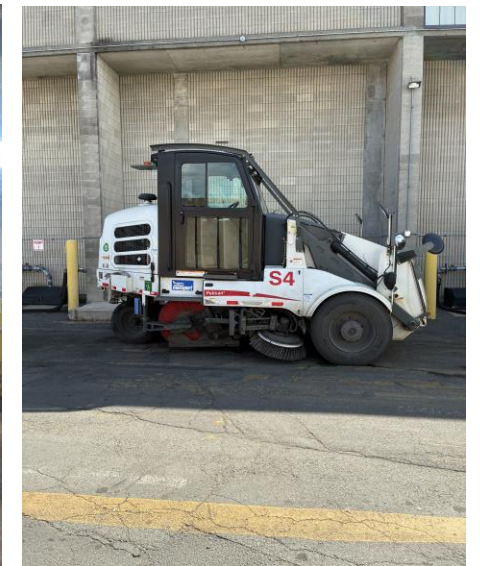
OEMs:












Heavy Duty Equipment Pilot at Maritime and Aviation Facilities

1. Logan: COBUS and Street Sweepers
2. Hanscom: Front loader
3. Maritime: Yard tractors
4. Trecan: Snowmelter



Our 3rd Party AFLEET & GREET Analyses - Feedstock(s) Matter

Equipment Type	On/Non-Road Vehicles & Ground Support Equipment (GSE)	Stationary Equipment (e.g. Emergency Generators)	Stationary Equipment (e.g. Emergency Generators)	Stationary Equipment (e.g. Emergency Generators)
Analysis Tool	AFLEET	GREET	GREET	GREET
Feedstock	Soy feedstock	Forest Residue Pyrolysis	Corn Stover Pyrolysis	Soybeans
Emissions Benefit(s) TAILPIPE/STACK EMISSIONS REPORTED AS BIOGENIC CO ₂ INSTEAD OF SCOPE 1	 65% LESS LIFE CYCLE GHG EMISSIONS	 24% REDUCTION	 42% LESS LIFE CYCLE GHG EMISSIONS	 8% REDUCTION
	 SO _x EMISSIONS ELIMINATED	 41% REDUCTION		 5% REDUCTION



*Reductions calculated using fuel emission factors from the 2023 Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) and 2023 Greenhouse Gases, Regulated Emissions, and Energy use in Technologies (GREET) tools.

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Renewable Diesel Landscape Today

California is a significant consumer:

- SFO: transit, airfield buses, 23 coaches, & 122 staff vehicles
- Oakland: in all diesel equipment reducing 250k diesel gal/yr
- SAN: all diesel airside fleet & equipment

NYC went all in:

- Use renewable diesel in all 12,600 city vehicles by end of '24
- Replace 16 million gallons of fossil diesel
- Cut 128 billion grams of carbon dioxide pollution each year



45Z Clean Fuel Production Credit incentivizing producers:

- \$0.20 - \$1/gal for biofuels, including renewable diesel
- Includes feedstocks from the U.S.A, Mexico, or Canada
- Credit extended to 2029

Policy, Transportation

H.R. 1 Expands 45Z Clean Fuel Production Credit for Conventional Biofuels While Cutting Sustainable Aviation Fuel Tax Credit

October 16, 2025

Advancing a More Sustainable Commonwealth

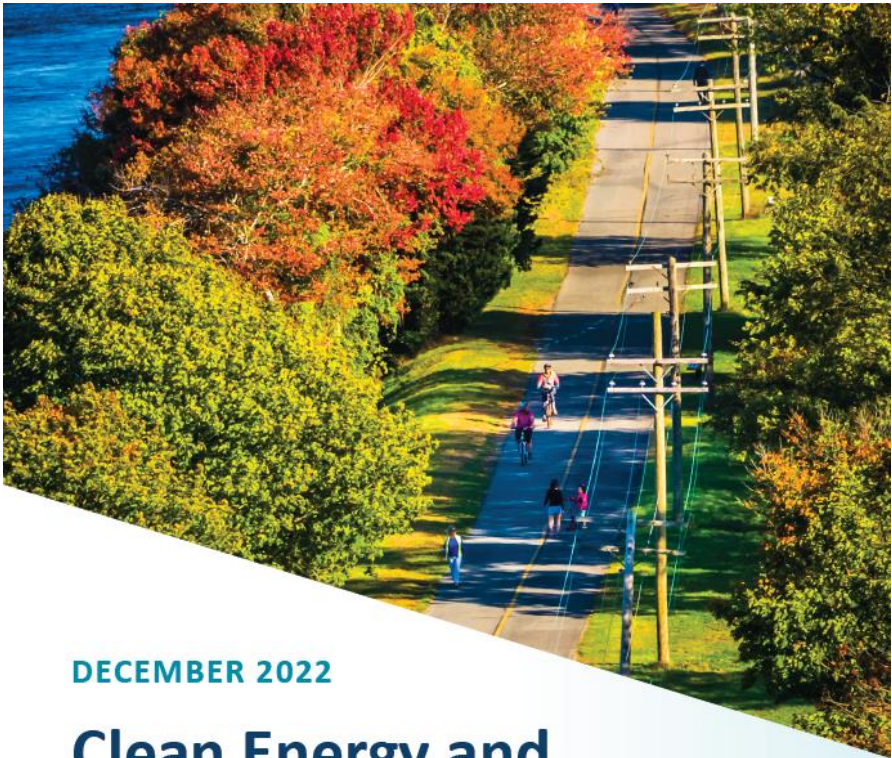
*Office of Climate Innovation & Resilience
and Department of Transportation*

MASSACHUSETTS PRIORITY CLIMATE ACTION PLAN

Submitted to the Environmental Protection Agency



MARCH 2024



DECEMBER 2022

Clean Energy and Climate Plan for 2050



Advancing a More Sustainable Massport in Alignment with the PCAP

Reducing Scope 1 Emissions, VOCs, and SO_x

- Per 2024 Massachusetts Priority Climate Action Plan (PCAP) Biogenic Emissions excluded from MA's GHG limits (until the 2050 net zero limit): renewable diesel = good bridge fuel.

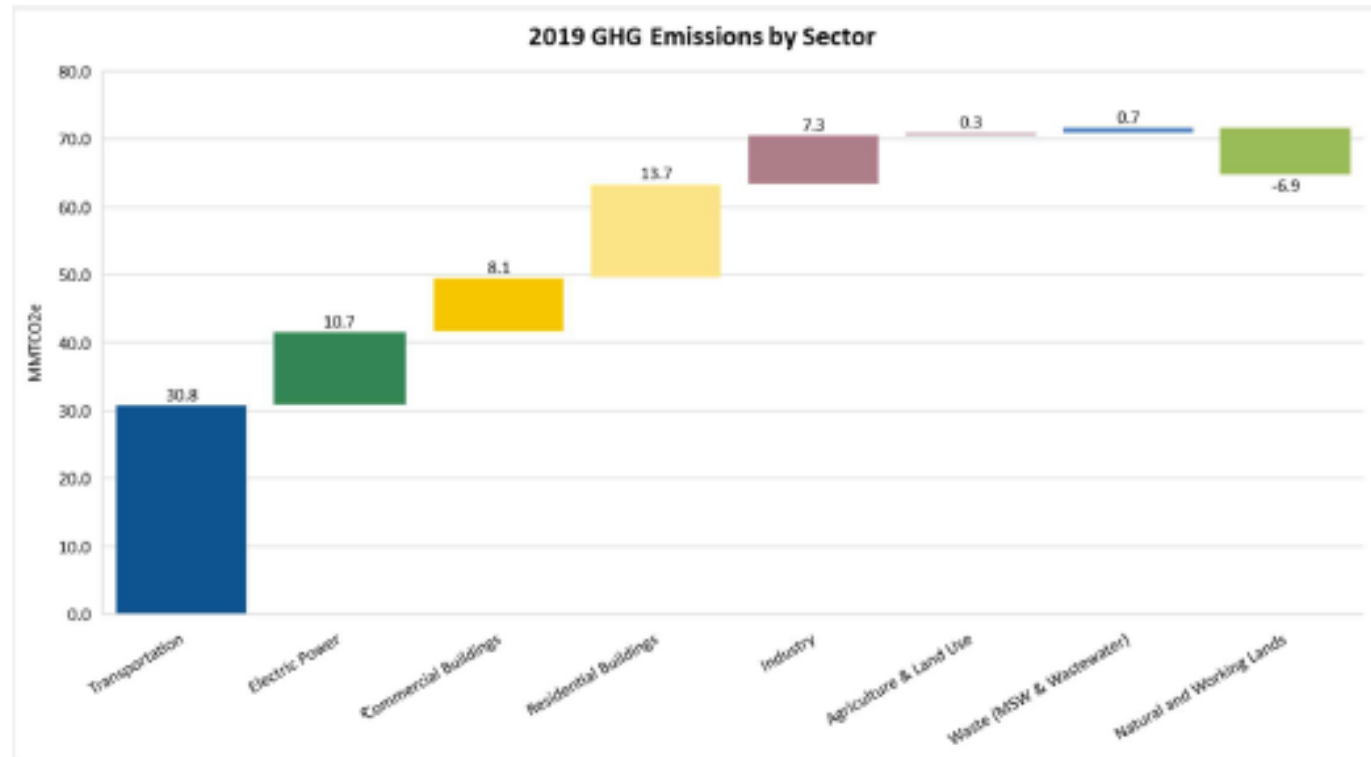


Figure 11: 2019 GHG Emissions by Sector

*2024 MA Priority Climate Action Plan, page 44

Advancing a More Sustainable Massport in Alignment with the CEC

Reducing Gross Emissions per MA PCAP and GHG Protocol

- Per 2022 Massachusetts Clean Energy and Climate Plan (CECP) Gross Emissions must be reduced to “85% below the 1990 level by 2050.”
- Gross GHG Emissions = Scope 1, 2, and 3 Emissions

STANDARD	DESIGN OBJECTIVES	REQUIREMENT TO USE GHG PROTOCOL	ORGANIZATIONAL BOUNDARIES	OPERATIONAL BOUNDARIES	SCOPE 2	SCOPE 3	LAND SECTOR AND REMOVALS
GHG Protocol Corporate Standard (2004)	Designed to be program or policy neutral to support multiple reporting objectives and audiences	-	Choice among operational control, financial control, or equity share	Scope 1 and 2	Dual reporting of location-based and market-based required	Scope 3 reporting optional in Corporate Standard (2004); 15 categories required in Scope 3 Standard (2011)	Biogenic emissions and GHG removals reported separately from scopes

Renewable Diesel Rollout: Where We Are and Where We're Going

Current State

- Fixed RD Price for Massport until the end of November 2025
- RD now the default at Logan Airport, Worcester Airport, Hanscom Field, & Conley Terminal

What's Next?

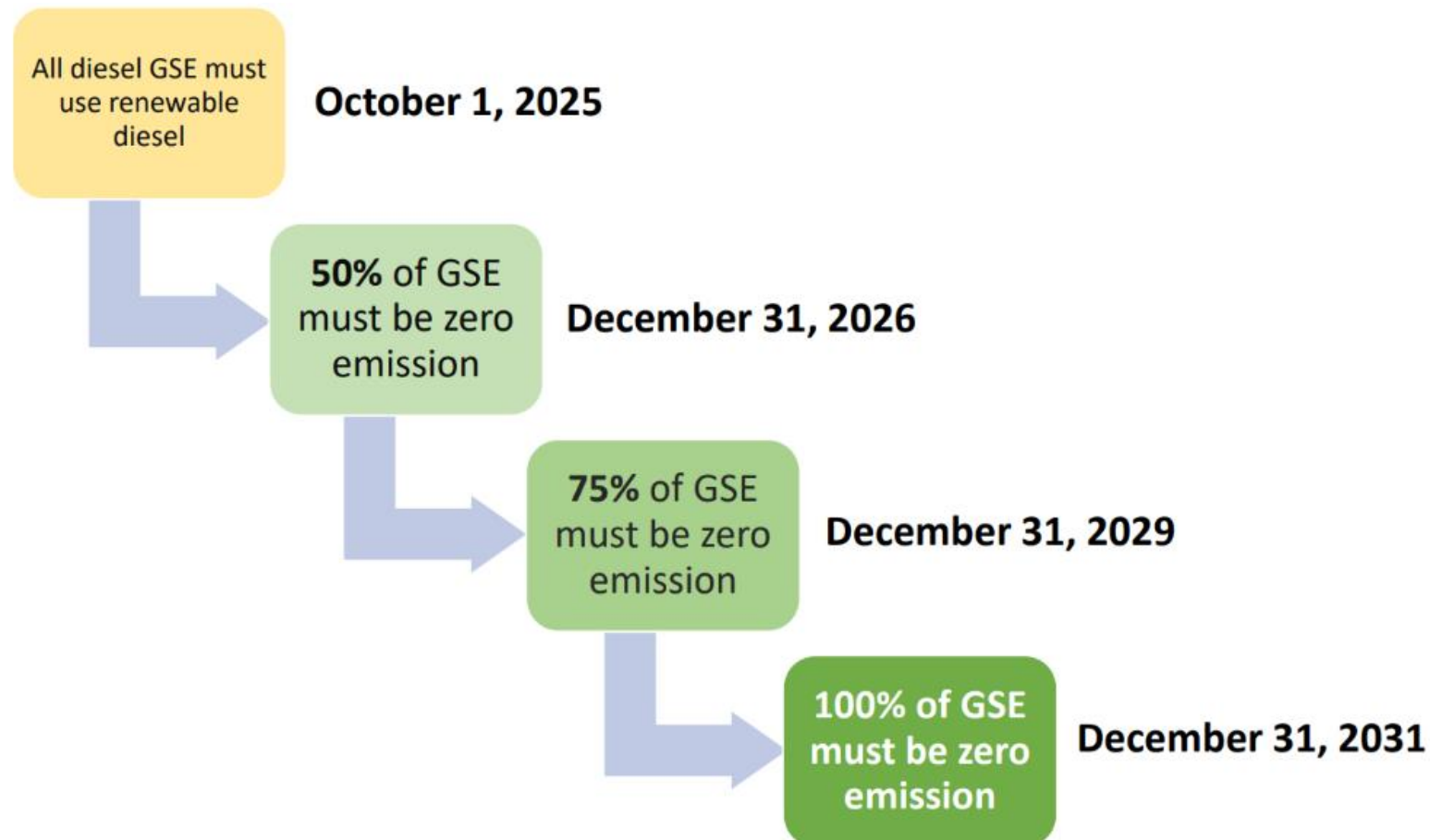
- Currently working on transitioning Logan Express bus fleet & Ground Support Equipment (GSE) operators
- Awarding RD contract (post-RFP) that starts December 1st



RD a Bridge Strategy in Zero Emission GSE Policy to Support Cleaner Operations

Zero Emissions Ground Service Equipment (GSE) Policy launched on October 1st, 2025 at Logan Airport

- Phased timeline for airlines and ground service operators to transition their GSE fleets to all-electric equipment:
- To support this transition, Massport has installed **374 airside charging ports** for electric GSE



Thank you!