

# RAIL

MOVING AMERICA FORWARD



# FRA Climate and Sustainability Program

**Michael Johnsen**

*Senior Advisor for Climate and Sustainability*

Environment and Systems Planning Division



# FRA Climate & Sustainability Program

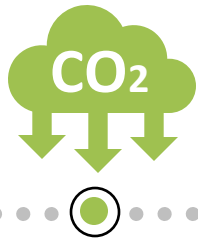
## Purpose

- To organize efforts across FRA on issues related to reducing emissions, improving resilience, and addressing sustainability and environmental issues
- Includes existing efforts and some new initiatives
- Driven by Administration priorities, statutory requirements, Executive Order



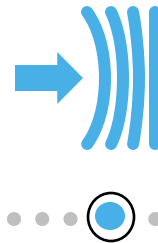
# FRA Climate & Sustainability Program

- Conducting outreach and information sharing
- Providing funding from appropriate grant and loan programs
- Conducting research and supporting innovation
- Compiling relevant data to support decision-making
- Partnering with other Federal agencies and DOT operating administrations
- Improving internal coordination and collaboration
- Reviewing FRA regulations, approvals, policies and procedures



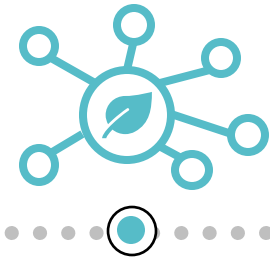
## Reducing Emissions

- Locomotive Replacement Initiative
- Modal Shift
- Zero Emissions Rail Yards



## Resilient Infrastructure

- Informed Investments



## Sustainable Rail Network

- Used Rail Tie Disposal
- Robust NEPA Analysis

# FRA Climate and Sustainability Program

## Reducing Emissions Focus Area: Initiatives

*Reduce greenhouse gas (GHG) and criteria pollutants from the rail sector, primarily from locomotives but also includes reducing emissions from maintenance, construction, and embodied carbon in materials used in the rail network and modal shift*

- Locomotive Replacement Initiative
- Zero-Emissions Rail Yards
- Modal Shift



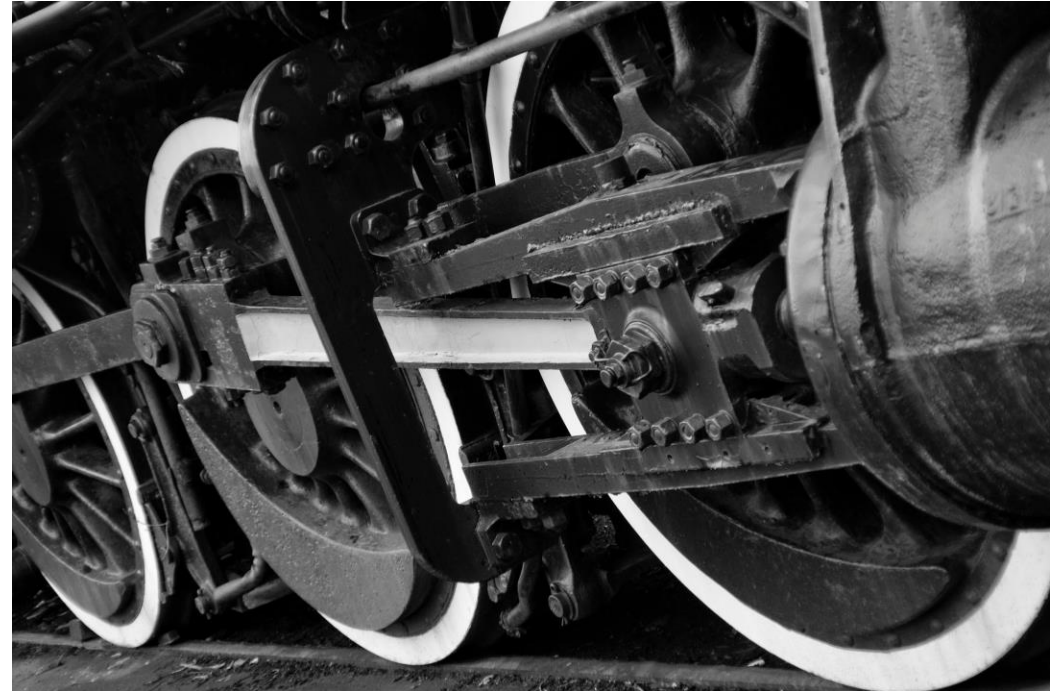


# FRA Climate and Sustainability Program

## Locomotive Replacement Initiative

*Encourage railroads to replace older, high-polluting, and less fuel-efficient locomotives with newer low- and zero-emission locomotives through funding opportunities*

- Utilizes CRISI funding (Provision 16)
- FRA to assure safety of new technologies
- Emissions data and locomotive inventory
- Support zero-emissions pilot projects and research



# Locomotive Replacement Initiative

## CRISI Provision 16

The FY 2022 CRISI program contains the following provisions for grants affecting locomotives (49 U.S.C. 22907(c)16):

*(16) Rehabilitating, remanufacturing, procuring, or overhauling locomotives, provided that such activities result in a **significant** reduction of emissions*



# Locomotive Replacement Initiative

## FY '22 CRISI Grant Awards Summary

- First year of the LRI
- Focus on rail yards and switcher locomotives
- Removes/replaces over 30 “dirty” switcher locomotives (less than Tier 2)
- Funds the purchase of 15 battery switcher locomotives
  - Supports transformative technologies
  - Effort to help make battery switcher locomotives more available
  - Includes workforce training and charging
- Will be used to develop metrics for the LRI
- Notice of Funding Opportunity for FY 23 & FY 24 CRISI due end of the calendar year

# Contact Us

Federal Railroad Administration  
1200 New Jersey Avenue, SE  
Washington, DC 20590



Connect with us [USDOTFRA](#)

## **Michael Johnsen**

*Senior Advisor for Climate and Sustainability*  
Environment and Systems Planning Division

Phone: 202-450-8540

Email: [michael.johnsen@dot.gov](mailto:michael.johnsen@dot.gov)

or

[FRASustainability@dot.gov](mailto:FRASustainability@dot.gov)



U.S. Department of Transportation  
**Federal Railroad Administration**