



# RAIL

*MOVING AMERICA FORWARD*

## FRA Climate & Sustainability Update

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U.S. Department of Transportation  
Federal Railroad Administration

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# Climate & Sustainability News

## Key Updates

- **Amtrak** announcement (???)
- **Inflation Reduction Act** passed
- **Hydrogen and battery-electric trains debuting** in the United States
- **BIL grant program Notices of Funding Opportunities (NOFOs)** start rolling out





# Alternative-Power Locomotive News

## Key Updates

- **San Bernardino Transportation Authority (SBCTA)** is introducing a **multi-unit passenger train** powered by **hydrogen fuel cell/battery system**
- **Sierra Northern Railroad** is proposing to design and test a **switcher locomotive** that will be powered by **hydrogen fuel cell/battery combination**
- Major locomotive manufacturers introducing **fully battery-based locomotives** for short- to medium-distance freight haul service
- **BNSF** is testing a **battery-electric locomotive** to be **paired with diesel locomotives** to power a freight train from Stockton to Barstow, CA
- **Chicago's commuter rail system Metra** is **converting** six of its **oldest diesel locomotives to battery electric**



# EPA SmartWay Program

## SmartWay's Focus

- **Reducing emissions in the freight industry through partnerships**
  - FRA is an affiliate member
  - Rail, trucks, air, barges, and ocean-going vehicles
  - Education, information sharing, influencing decision-makers
  - Sharing of Federal and State grants and funding opportunities
  - Recognition for environmental excellence, its top performers

***Encourage rail, truck, air, barge and OGVs to submit operational data to SmartWay, a trusted US EPA voluntary partnership to develop a more accurate picture of our nation's emission footprint***



# Consideration of Climate and Equity in Grant Reviews

## Executive Order 14008 and Justice40

- **EO 14008 Section 209:** Grants not to be used to subsidize fossil fuel industry
- **EO 14008 Section 213:** Consider climate in grant reviews
- **Justice40:** 40% of DOT grant benefits to Justice40 Communities

## Benefits

*Applicants should note benefits of GHG reductions to environmental justice populations:*

### CLIMATE

- System efficiency improvements
- Locomotive rehab & replacement
- Fuel-use reductions
- Alternative and clean energy
- CO2 estimates
- Modal shift from road & air

### EQUITY

- Safety
- Access
- Fiscal benefits
- Reduction of air & noise emissions
- Neighborhood impacts
- Involvement

# Grant Programs—Sustainability and Equity Focus

## ***FRA Grants***

- Consolidated Rail Infrastructure and Safety Improvements (CRISI)
  - Locomotive replacement, rehabilitation
- Federal-State Partnership for Intercity Passenger Rail (National & NEC)
  - Providing more access to passenger rail
- Railroad Crossing Elimination Program
  - Safety & access

## ***Non-FRA Grants***

- FHWA PROTECT Grants
  - Discretionary grants available for passenger rail resiliency-focused projects
- EPA Diesel Emissions Reduction Act (DERA)
  - To reduce NOx emissions from diesel
  - Potential for locomotives/rail yards
- USDA Biodiesel Grants (HBIIP)
  - For biodiesel infrastructure (closes **November 21, 2022**)



# 2022 CRISI Locomotive Rehab and Replacement Provision

## Provision Details

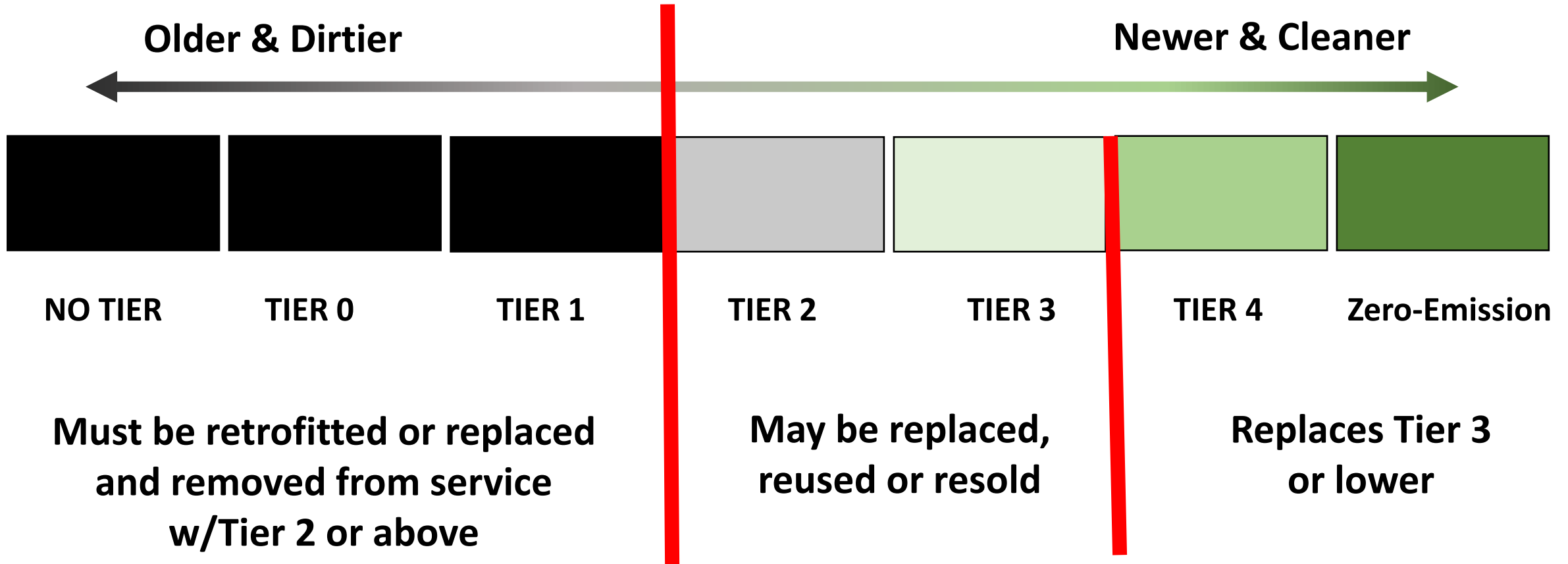
The FY 2022 CRISI program contains the following provisions for grants affecting locomotives (49 U.S.C. 22907(c)16):

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



# "Significant Reduction In Emissions"

## EPA Locomotive Tiers





# Rail's Sustainability and Equity Benefits

- Fewer greenhouse gas emissions than air and car
- Less air/noise and vibration pollution
- Smaller right-of-way footprint than highways and roads
- Safety
- More focused development and infrastructure and resources
- Fewer resources for train sets vs. cars
- Accessibility and access

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