The Freight RAILCAR Act

An Environmental Game Changer for a Modern and Efficient North American Freight Rail Fleet

Overview:

Greenhouse gas (GHG) emissions from transportation account for about 29% of total U.S. greenhouse gas emissions, making it the largest contributor of U.S. GHG emissions.

The bipartisan Freight RAILCAR Act enhances environmental stability and encourages investment in the transportation sector by incentivizing investment in the North American freight rail fleet. The benefits will be an environmental game-changer for this vital industry and the U.S. overall.

Modernizing the Freight Rail Fleet Will Reduce Greenhouse Gases:

- Shifting just 10% more freight to rail would reduce GHG emissions by more than 17 million tons annually. **That is the equivalent of removing 3.35 million cars from our highways or planting 260 million trees.**
- Obsolete and aging freight railcars could be replaced over the next 3 years, making way for a more efficient fleet.
- New high-strength and lightweight materials, innovative designs, and advanced technologies mean lighter, more energy-efficient freight railcars. Modernized freight railcars carry greater loads (up to 110-tons versus 100-tons) and use less fuel. New freight railcars reduce GHG.
- If just one-third of the almost 300,000 outdated hopper cars were replaced by higher capacity railcars, this would save 4.3 million gallons of diesel fuel in the first year or close to 13 million gallons of fuel and 1.5 million tons of CO2 over 30 years, the average life span of a freight railcar.
- The Freight RAILCAR Act will incentivize the market, to replace the bulk of these obsolete cars years before the end of their useful life, delivering significant and tangible environmental benefits decades earlier. The Freight RAILCAR Act moves the replacement timeline forward by creating appropriate tax incentives and market certainty.

The Environmental Benefits of Recycling Obsolete Railcars:

- Steel from scrapped railcars can be recycled into new steel and other needed domestic infrastructure materials.
- Freight railcars today are manufactured with premium, high-grade recycled scrap steel.
- Producing a ton of steel today in the U.S. requires less than half the energy that was needed to create a ton of steel 40 years ago.
- That results in a 50% reduction in GHG emissions.

Case Study: The Modern Hopper Railcar

An Environmentally Efficient and Higher-Capacity Method to Ship Goods

- The covered hopper fleet (approximately 570,000 cars as of 7/1/2021) is 34.7% of the 1.642 million U.S. freight railcar fleet
- Modernizing from 263,000# Gross Rail Load (e.g. weight of the freight car plus lading) to 286,000# GRL, an 8% carrying capacity increase, amounts to an annual savings of 12.9 million gallons of diesel fuel and 0.145 million tons of CO2
- Over 20 years, this will save 240 million gallons of diesel fuel and eliminate 2.9 million tons of CO2
- Covered hopper car selection is determined by the shipper, consignee, or end user and the specific commodity shipped. The fleet ranges from low cubic foot capacity (<3,500 CF) to very high capacity (over 5,000 CF). Even greater fuel savings and reduced GHG emissions can be realized depending upon the commodity density

The Environmental Stewardship of Freight Rail:

- A single freight train can move a ton of freight 487 miles on one gallon of fuel – by far the most fuel-efficient method of transporting goods and services.
- Freight railroads are 3-4 times more fuel-efficient than other methods of transportation, on average.
- Rail moves 40% of freight (per ton-mile) and accounts for less than 1% of total U.S. GHG emissions.
- Current trends indicate that freight and passenger activity will more than double by 2050 as the sector pushes for cleaner, more energy-efficient transportation.
- In 2019 alone, U.S. freight railroads consumed some 656 million fewer gallons of fuel and emitted 7.3 million fewer tons of CO_2 than they would have if their fuel efficiency had remained level compared to 2000.
- From 2000 through 2019, U.S. freight railroads consumed 9.6 billion fewer gallons of diesel fuel and emitted 108 million fewer tons of CO_2 thanks to industry-wide fuel efficiency efforts. In 2019, railroad CO_2 emissions from diesel fuel consumption were 18% lower than their peak in 2006.