



Louisville & Indiana's Commitment to Environmental Stewardship Extends to All Parts of the Railroad

As one of the most environmentally efficient modes of land transportation, railroads play a critical role in reducing the environmental impact of freight movement. Louisville & Indiana Railroad Company (LIRC) recognizes that environmental responsibility extends beyond moving goods by rail. Through investments in energy efficiency, sustainable infrastructure, emissions reduction technologies, recycling initiatives and customer-focused innovation, LIRC has incorporated environmental stewardship into many aspects of its operations. These efforts demonstrate the railroad's commitment to continuous improvement and responsible resource management while maintaining safe and efficient service.

LIRC has taken significant steps to improve energy efficiency throughout its facilities and vehicle fleet. The railroad purchases hybrid vehicles when replacements are needed and enforces a strict anti-idling policy to reduce fuel consumption and emissions. Through grant-funded projects, LIRC installed 204 solar panels on three facilities and implemented additional improvements across its shops, offices and rail yards. Building upgrades, including enhanced insulation, energy-efficient heating and cooling systems and smart thermostats, help reduce energy usage. The railroad has transitioned to high-efficiency LED lighting throughout its properties, utilizing occupancy sensors to minimize electricity consumption in unoccupied areas.

A commitment to environmental responsibility is reflected in LIRC's comprehensive waste management and recycling programs. In addition to meeting applicable regulatory requirements, the railroad actively recycles office waste, electronic waste, ferrous and non-ferrous metals and locomotive batteries. Waste fluids, railroad ties, and other materials are recycled whenever practical or disposed of properly when recycling options are unavailable.

To further improve sustainability, LIRC has increasingly utilized copper naphthenate-treated (QNAP) railroad ties in place of traditional creosote-treated ties. More than 32,000 QNAP ties have been installed across various projects, providing both environmental benefits and simplified end-of-life disposal because they are not currently classified as hazardous waste.

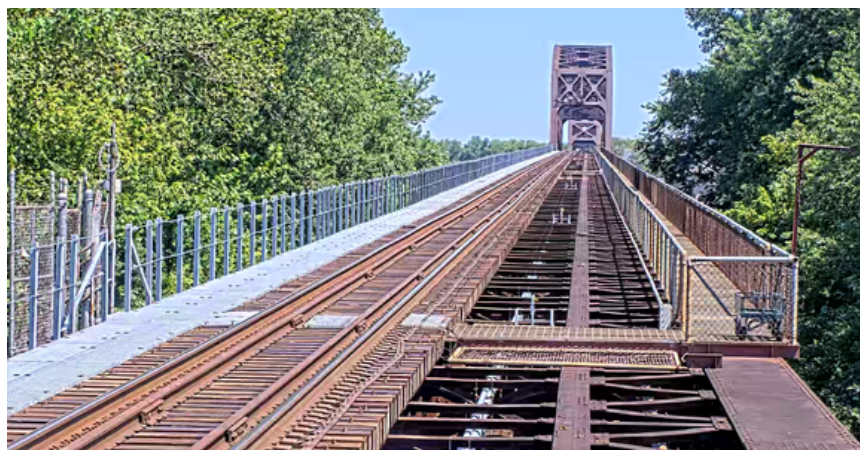
LIRC has focused on reducing fuel consumption and emissions through locomotive modernization. The railroad recently replaced 160 fuel injectors across 11 diesel prime movers with Interstate McBEE ECOTIP Superstack Injectors. These upgrades reduced fuel consumption by approximately 3%, decreased smoke opacity by 75%, and lowered particulate emissions by 44%.

Additionally, grant funding secured in partnership with the American Lung Association enabled the installation of HotStart Auxiliary Power Units (APUs) on all locomotives. These units consume only 0.4 gallons of diesel fuel per hour compared to more than eight gallons during conventional locomotive idling. As a result, LIRC reduced annual fuel consumption by more than 150,000 gallons during the first year of operation.

Additional locomotive technologies further support LIRC's sustainability goals. Five locomotives are equipped with Wi-Tronix ZTR automatic start-stop systems that monitor engine performance and optimize idling, engine utilization and APU operation. The railroad also uses environmentally friendly soy-based wheel lubricants to reduce wheel flange wear and rolling resistance. In locations requiring additional friction management, LIRC has installed top-of-rail lubrication systems that utilize environmentally preferable lubricants, improving both operational efficiency and equipment longevity.

Beyond its own operations, LIRC works collaboratively with customers and industry partners to improve overall supply chain efficiency and environmental impact. Through CedarAI's ARMS platform, customers receive enhanced visibility into inbound and in-transit shipments, allowing them to identify delays, improve planning, and streamline logistics operations. LIRC also participates in Operation Clean Sweep, an industry initiative focused on preventing plastic resin releases into the environment and mitigating environmental impacts associated with transportation incidents.

LIRC's environmental achievements demonstrate that meaningful sustainability improvements can be achieved from a comprehensive and integrated approach rather than a single initiative. Through investments in renewable energy, energy-efficient facilities, advanced locomotive technologies, recycling programs, sustainable track materials and collaborative customer solutions, the railroad continues to reduce its environmental footprint while enhancing operational efficiency. These measurable results illustrate that even a smaller railroad can serve as a leader in environmental stewardship and demonstrate that size is not a barrier to achieving significant sustainability success.



ASLRRA member Louisville & Indiana Railroad Company (LIRC) is increasingly using copper-naphthenate-treated (QNAP) railroad ties in place of traditional creosote-treated ties as part of its efforts to further improve sustainability. LIRC has installed over 32,000 QNAP ties across various projects, including here on the Ohio River Bridge.