Freight Rail & Energy

KEY TAKEAWAY

Railroads are critical in powering the nation and fueling its energy needs. They facilitate the reliable and safe movement of essential energy resources, such as coal, oil, and natural gas, enabling power generation, fuel production, and economic growth. With their extensive network and capacity, they continue to effectively meet customer needs as energy sources and consumption patterns have changed.

DATA POINTS

Railroads account for 60 to 70% of ethanol movement. In 2022, the average carload of crude oil originated in the United States was around 650 barrels of oil and freight railroads moved 3.4 million carloads of coal.

Railroads have helped power America since its earliest days. In fact, the first big haul for America’s first major railroad was transporting coal from western Maryland and Virginia to Baltimore. In the years since, the role of railroads in the energy industry has continued to grow. And as energy sources and consumption patterns have changed, the freight rail industry has adjusted to customer needs to continue safely and efficiently moving energy products.

Some energy products are considered hazardous materials, and railroads take their commitment to safely moving them seriously. More than 99.9% of hazardous materials reach their destination without release from an incident.

Coal

Although rail coal shipments have declined in recent years, coal is still an essential part of the nation’s industrial economy and a key rail market. Well over 90% of U.S. coal consumption is for electricity generation, while some coal is used to produce coke and for other industrial purposes. U.S. coal is also exported to countries all over the world for steelmaking and power generation. Railroads account for around 70% of U.S. coal deliveries to power plants. One rail car can carry enough coal to power 20 homes for a year.

Ethanol

Ethanol — a renewable fuel made from corn and other plant materials — is an important chemical commodity for U.S. railroads. Ethanol production is concentrated in the Midwest, where most of the corn used in ethanol production is grown, but many of the major markets for ethanol are on the East Coast, California and Texas.
Crude Oil

Crude oil goes into many of the products we rely on every day, from plastics and transportation fuels to medicines and even fleece jackets. With one rail car carrying enough crude oil to make about 13,500 gallons of gasoline, railroads play a critical role in moving this important commodity.

Thanks to ongoing investments and operational improvements, more than 99.9% of hazmat moved by rail, including crude oil, reaches its destination without incident, and the hazmat accident rate is down 73% since 2000, and the 2022 hazmat accident rate was among the lowest ever. In 2022, the average carload of crude oil originated in the United States carried around 650 barrels of oil.