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Cummins QSK95 Engine Proven Fully Compatible With Renewable Diesel

INDIANAPOLIS--(BUSINESS WIRE)-- Cummins Inc. (NYSE: CMI) is pleased to announce that its popular Tier 4 QSK95 engine can be safely used with renewable diesel, without any negative impact to its current EPA emission requirements or reliability.

“Cummins is ready to assist customers on the decarbonization journey. By working together, we can effect change for today’s climate crisis,” states Cummins General Manager – Rail and Defense, Regina Barringer.

Cummins partnered with Siemens Mobility to help customers meet their goal of running renewable diesel in QSK95-powered Charger locomotives to reduce emissions and use a fuel with lower carbon intensity. As such, Cummins undertook extensive testing and investigating of the impact of renewable diesel on their QSK95 Tier 4 fuel and aftertreatment systems through performance, emissions, and durability tests. For these tests, hydrogenated vegetable oil (HVO) was chosen.

HVO reduces well to work carbon intensity by up to 90% compared to conventional diesel fuel. HVO can be produced without fossil resources by processing lipids such as vegetable oil, tallow, or used cooking oil. Its chemical and physical properties are like those of diesel fuel, but its fossil-free composition and low carbon content provides a simple and efficient alternative to diesel. Importantly, HVO can be blended and used in any proportion with diesel which allows for ease of transition.

The tests showed that the QSK95 engine not only meets all of its Tier 4 EPA emissions targets using this renewable fuel, it also recorded additional positive environmental impacts:

- up to 13% additional reduction in NOx (Nitrogen Oxide)
- up to 5% additional reduction in DEF (Diesel Exhaust Fluid) consumption
- up to 50% additional reduction in PM (Particulate Matter) emissions using renewable diesel compared to traditional diesel in rail applications.

“Siemens Chargers continue to transform passenger rail throughout North America,” said Armin Kick, vice president of Locomotives and High-Speed Trainsets, for Siemens Mobility in North America. “Now being able to incorporate renewable fuel into Charger operations will allow our customers to make even more meaningful inroads into their sustainability efforts.”

This initiative is a strong example of Cummins' overall commitment to develop innovative solutions that enable decarbonization, and proactively advance the company's current technology to achieve industry-leading emissions reductions. Through Planet 2050, Cummins pledges to address climate change, support communities and use resources wisely.

About Cummins Inc.

Cummins Inc., a global power technology leader, is a corporation of complementary business segments that design, manufacture, distribute and service a broad portfolio of power solutions. The company's products range from internal combustion, electric and hybrid integrated power solutions and components including filtration, aftertreatment, turbochargers, fuel systems, controls systems, air handling systems, automated transmissions, electric power generation systems, microgrid controls, batteries, electrolyzers and fuel cell products. Headquartered in Columbus, Indiana (U.S.), since its founding in 1919, Cummins employs approximately 59,900 people committed to powering a more prosperous world through three global corporate responsibility priorities critical to healthy communities: education, environment, and equality of opportunity. Cummins serves its customers online, through a network of company-owned and independent distributor locations, and through thousands of dealer locations worldwide and earned about \$2.1 billion on sales of \$24 billion in 2021. Learn more at [cummins.com](https://www.cummins.com).

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