



□ Smarter Trailers, Safer Roads - Range Energy's eTrailer Passes 400 Tests

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picture: Range Energy

A powered trailer that enhances braking, safety, and sustainability — all in one module

Could a trailer do more than just carry cargo? What if it actively supported propulsion, stabilized the vehicle, improved braking — and reduced emissions?

That's the premise behind Range Energy's eTrailer system, a powered trailer module designed to deliver both decarbonization and advanced safety performance — without requiring any modifications to the tractor.

After recently undergoing over 400 dynamic safety tests at the Transportation Research Center Inc. (TRC) — the largest independent vehicle test facility in North America — Range Energy's eTrailer has proven it's not just a promising idea. It's a

deployment-ready solution.

☐ Key Results from Testing

The TRC trials put the eTrailer through a range of rigorous real-world scenarios:

Wet roads. Sudden lane changes. Sharp turns under full load. High and low-speed handling.

Across all test categories, the results were compelling:

- ☐ Up to 25% reduction in rollover risk
- ☐ Improved braking performance, assisted by regenerative braking
- ☐ Greater stability during evasive maneuvers and lane changes
- ☐ Consistent control on wet and dry surfaces
- ☐ No need to modify the towing vehicle, regardless of whether it's diesel or electric

These results validate Range Energy's claim that a powered trailer can be more than a sustainability feature — it can be an active safety and performance upgrade for logistics fleets.

⚙ How the eTrailer Works

At its core, the eTrailer integrates a battery-electric propulsion system into the trailer chassis itself. This system supports:

- Torque-assist during acceleration, reducing the load on the tractor's engine
- Regenerative braking, which both recovers energy and improves stopping control
- Smart control algorithms, which continuously balance weight distribution, traction, and stability

In effect, the eTrailer transforms a passive load into an active participant in driving dynamics — making every mile cleaner, safer, and smoother.

And because it's designed as a plug-and-play system, fleets can deploy it without costly retrofits, downtime, or training overhead. It's compatible with standard tractor-trailer configurations across multiple OEM platforms.

□ A Platform for the Future

Beyond the immediate safety and fuel benefits, Range Energy's eTrailer also represents a step toward more intelligent, connected freight systems.

The platform supports vehicle telemetry, predictive maintenance alerts, and driver-assist features that can integrate into broader fleet management ecosystems. As fleets evolve toward full electrification and autonomous-ready capabilities, systems like the eTrailer may play a central role in bridging the gap.

In short, Range's innovation shows that trailers no longer need to be passive components — they can be smart, electric, and value-generating assets.

Read more: <https://theevreport.com/range-energy-etrailer-system-enhances-safety, Range | Electrified Trailers>