



The system will also be equipped with a thermal management system for year-round operation | Photo source XL Fleet

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## PARTNERSHIP DEVELOPS DESIGN OF SOLAR-POWERED REFRIGERATED TRAILERS

 AGRICULTURE & ENERGY

### XL Fleet and eNow will be collaborating to develop a system to power eTRUs, which offer an alternative to conventional diesel-powered systems

**Spotted:** Boston-based XL Fleet is a leader in fleet electrification solutions for commercial and municipal fleets. The company recently announced an exciting partnership with eNow, producer of solar battery systems for electric Transport Refrigeration Units (eTRUs).

Refrigerated trailers usually use diesel and electricity from either the tractor’s generator or an Auxiliary Power Unit to keep cool. Given that a diesel tractor burns a gallon of fuel per hour, the company saw an opportunity to make a sustainable impact.

According to the company, the collaboration aims to develop a system to power eTRUs, which still offer an alternative to conventional diesel-powered systems. The system uses high-capacity lithium-ion batteries and power electronics technology. The development will support around 12 hours of run time between charges. The design will also include solar panels mounted on the roof of the trailer, XL Fleet say.

“Based on customer data, trailers can consume approximately one gallon of diesel fuel per hour, and run for 24 hours (including sitting in a yard/parking lot), which totals 24 gallons of diesel fuel per day,” Tod Hynes, Founder & President of XL Fleet, says.

According to the press release, the system will also be equipped with a thermal management system for year-round operation. The partnership also builds on XL Fleet’s goal to provide a Electrification-as-a-Service for leasing the refrigerated trailers.

XL Fleet and eNow aim to release the initial eTRUs by the start of 2022 across the food, retail, manufacturing and distribution industries.

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### **Takeaway:**

The carbon footprint of food transportation is high and still underestimated. Whilst local produce is the most sustainable option, it is almost impossible to fully eliminate all food importation, whilst meeting present consumer demands. With over half a million refrigerated trailers in operation in the U.S, electrification would enable a significant downfall in emissions and make transporting refrigerated food more eco-friendly.