

Refrigeration Systems

R&B's Class 7 2009 Freightliner M2e® 106 hybrid truck (33,000 GVW) is the first of its kind in North America. Among its many features is a fuel-efficient diesel electric hybrid engine that is about the same size as one in a pickup truck. It also has an electric refrigeration unit powered by the hybrid system eliminating the need for a second diesel engine. The truck converts energy lost during braking into electricity that is then re-routed back to power the refrigeration unit. This Freightliner truck, featuring a 2007 engine, significantly reduces NOx and carbon emissions. In combination with the electric refrigeration system, it is the cleanest refrigerated urban delivery vehicle currently in operation.

"We're proud to take a leadership role in this area," said R&B Trucking owner Paul Cunningham. "With the long-term cost of diesel rising, we're looking forward to seeing a big drop in our fuel bill. We're also excited to be doing our part for the environment."

The hybrid diesel electric refrigeration system substantially reduces fuel use in refrigerated trailer applications. Paradise Island Foods of

Nanimo, BC has operated this technology since mid-2006 on diesel trucks, and has closely monitored the performance of its units.

To date, fuel use reductions of about 36% have been recorded when compared with the fleet average. This results in approximately 3.5 tonnes of GHG emissions reduction per unit - equivalent to taking a passenger car off the road!

Jason Kozubal, Paradise Operations Manager, says, "The hybrid reefer is an amazing machine. It is quiet, more efficient while running on dies

el, humms along when running on electricity and pulls temps down very quickly. It also uses less parts and only half of the refrigerant of conventional reefers. The numbers have proved the benefits of this new reefer technology to us very clearly."