

Setting sights on zero emissions

DHL Supply Chain employing a range of equipment measures

As part of a global initiative to use more fuel-efficient vehicles, DHL Supply Chain in the U.S. has a local target in its sights—to contribute to improving air quality in urban areas, it aims to deliver 70% of its first and last mile services with clean pickup and delivery solutions. GoGreen, the corporate program of this contract logistics services provider, includes numerous initiatives that focus on making its operations more sustainable. Its goal is to achieve zero emissions by 2050.

DHL Supply Chain is employing a wide range of measures to improve the carbon and fuel efficiency of its fleet operations. Solutions focus on aerodynamics as well as lightweight vehicle designs and telematics. In addition to making technical modifications to conventional fuel vehicles, the company is also relying on alternative drive technologies and fuels to reduce greenhouse gas emissions.

That includes electric- and natural gas-powered vehicles for short distances as well as sustainably produced biofuels for long haul transport operations. Out of approximately 92,000 road vehicles around the world, DHL has modified roughly 20,500 vehicles.

“If we’re not talking about sustainability with our suppliers, we are affecting our bottom line and not meeting our corporate responsibility to reduce our carbon footprint and set a good example every day for our associates,” said Jennifer Miller, DHL Supply Chain’s senior director of automotive operations, North America. “We approach our sustainability goals from the beginning of our procurement process and on a daily basis throughout our operation.

“We work with our OEMs to fundamentally understand how best to set our sustainability targets based on their product

designs,” Miller continued. “We focus on speed, mpg, fuel, and idling, to name a few. We also ensure our drivers understand that these goals are in place to help meet corporate sustainability targets, and we reward them for their performance.”

One of the equipment-related sustainability initiatives at DHL Supply Chain that is reducing fuel use involves deploying all-electric terminal trucks. “We are currently operating four electric yard tractors built by Orange EV at two sites,” related Emily Davis, sustainability program manager and GoGreen Lead, North America. “They make the most sense where we use incentives to help cover the incremental cost of the trucks.

“As costs come down and fuel prices go up, the electric trucks will demonstrate price parity to standard diesels,” Davis added, “but we also save on fuel and maintenance costs. And there are benefits to our drivers having less exposure to air pollution, vibration and noise.”

The Orange EV 100% electric Class 8 T-Series terminal trucks can be rated for on- or off-highway use and built as new vehicles, or remanufactured using existing diesel chassis with new powertrain, auxiliary, and environmental systems. The manufacturer says the trucks eliminate all of the NOx, CO, PM, and carbon dioxide produced by a typical diesel operating 6,000 hours annually at 2.5 gallons per hour.



An Orange EV tractor powers up at an electric terminal.

Operationally, Davis said all-electric models are a good fit for warehouse shuttling operations at DHL Supply Chain, which involves two or three shifts daily and high levels of low speed utilization at the facilities. For the yard tractors, the company has installed an equipment-specific charging infrastructure at warehouses. The trucks are capable of operating up to 20 hours per day on a single charge.

“It makes the most sense to have our own charging infrastructure in locations where we control and operate the warehouse as well,” Davis said. “While the infrastructure needed depends on the type, range, and application of electric vehicles, installing charging systems at the point of domicile enables us to get a longer overnight charge when necessary.”

Every aspect of the sustainability programs for equipment at DHL Supply Chain is evaluated regularly and monitored closely.

“We measure driver and vehicle performance every day to ensure we leave the smallest possible carbon footprint,” Miller stated. ■