UPS just announced the largest renewable natural gas (RNG) order in U.S. history. By switching from diesel to Redeem™ RNG, UPS vehicles fueling at 18 company-owned and operated natural gas stations across 12 states will realize a significant reduction in greenhouse gas emissions.

The UPS fleet has driven sustainable innovation, and RNG is no exception. Could this be the commercial push that drives natural gas vehicles into mass market adoption?

Natural gas vehicles are certainly trending upward. The U.S. Energy Information Administration (EIA) reports that in 2018 about 710 million gasoline gallon equivalents (GGE) of natural gas were consumed and that the natural gas fueling market will grow to 1.2 billion GGE by 2025.

Here are three big reasons why we think RNG is going to be on every fleet manager’s mind in the coming months and why that matters for the entire fuel industry.

1. Significant GHG reductions for companies and governments

The environment and sustainability activities are top of mind for companies and government entities, and a GHG emissions reduction goal is a central part of sustainability.

RNG fuel is derived from organic waste sources, including landfills, wastewater treatment plants and agricultural sources. "RNG is the only fuel available for heavy-duty vehicles that can have carbon-negative emissions."

While organizations and cities will continue to reduce and refine waste streams, these sources of domestic organic waste are not going away. RNG is the only fuel available for heavy- and medium-duty vehicles that can have carbon-negative emissions and a clean air profile.

Creating a useful byproduct from their operations is a low-carbon solution that benefits facility owners, cities and the fleets powered by RNG.

Depending on the waste stream and per the California Air Resources Board (CARB), the RNG emissions profile can range from a 70 percent to a 300 percent reduction when compared to gasoline and diesel.

Those exponential figures allow companies and governments to make a big statement and significantly impact their GHG emissions profile.

"Reducing GHG emissions and overall environmental impact, like any lasting change, starts at the local level."
In addition, when you combine RNG with an ultra-low-emissions engine platform, you have the cleanest engine commercially available today that not only reduces GHG emissions and has a positive impact on the environment, but also provides the same level of performance that fleet operators expect. Reducing GHG emissions and overall environmental impact, like any lasting change, starts at the local level, and RNG is a tool that fleets can use to achieve environmental goals now.

Vehicle applications that work for today’s fleet

Compressed natural gas (CNG) and liquefied natural gas (LNG) vehicles have been widely adopted across municipal, transit, refuse and national delivery applications.

Their proven application and continued improvement mean that drivers, maintenance technicians and other operators are comfortable and familiar with this alternative fuel vehicle.

RNG is a drop-in fuel for CNG and LNG, which means that no added infrastructure or change in operations is required to switch to RNG if a fleet is already using fossil CNG or LNG.

RNG production also benefits from the existing natural gas infrastructure and can be injected into any pipeline if it meets the gas quality specifications (or tariff) of the pipeline.

Once RNG is injected in the natural gas pipeline system, it can be delivered to nearly any natural gas meter in the U.S. served by this existing infrastructure.

If your fleet has already made the investment in CNG and LNG adoption, then it can benefit from the use of RNG without any additional costs.

Support for RNG in federal and state regulations

The RNG industry has experienced significant growth in the last five years through regulatory support under the federal Renewable Fuel Standard and certain low-carbon state mandates.

In 2018, the RNG industry produced more than 200 million GGE and it is anticipated to grow by more than 30 percent year over year for the foreseeable future.

RNG vehicle fuel is supported by federal and state programs that incentivize renewable and low-carbon fuel production.

Although these programs were designed to incentivize the fuel producer, fleets are the ultimate end users of these products, so they often participate in the value chain of environmental credit revenues.

With continued long-term goals in place for these programs, fleets can benefit economically from the use of RNG and receive a discount to conventional natural gas fuel.

RNG has been a success story to date for the alternative fuel industry. It’s a low-carbon fuel that’s poised for greater adoption as natural gas vehicles are tested and proven in new applications.

As fleets like UPS continue to use drop-in renewable fuel like RNG, they can expect cleaner, quieter and more cost-effective vehicles, and the fuel industry at large will continue to push for more innovation.