GREEN TRUCKING

5 Ways Sustainable Freight Transportation Could Reduce Your Company's Environmental Impact

As today's shippers become more invested in the concept of supply chain eco-sustainability, many are looking for trucking companies who are also committed to "going green."

The good news is that many freight carriers are already investing in eco-friendly initiatives to help reduce their carbon footprint. If you're not sure what to look for, here are a few green trucking practices that can benefit both the environment and your business.

Carbon Capture Technology

As today's trucking companies look for ways to reduce their carbon footprint, many may soon be interested in exploring a groundbreaking new carbon capture technology pioneered by Remora. This technology will help trucking companies meet their climate commitments by vastly reducing the amount of CO2 their semi-trucks release into the earth's atmosphere.

Remora is being developed out of research funded by the EPA to:

- Build carbon capture devices that can be retrofitted to the tailpipe of virtually any kind of semi-truck
- Capture up to 80% of the truck's CO2 emissions
- Permanently sequester the captured carbon by selling it to end-users like concrete producers, who use CO2 in the concrete curing process

Remora's new carbon capture device for semi-trucks is currently in development.

EPA Partnership

SmartWay℠ Transport Partner
Getting There With Cleaner Air

As customers become more aware of the benefits of going green, many of today's trucking industry leaders are demonstrating their commitment to eco-sustainability by becoming a SmartWay transport partner. The SmartWay program was pioneered by the Environmental Protection Agency (EPA) as a way to encourage greater efficiency and lower greenhouse gas emissions in transportation supply chains. Since its inception in 2004, SmartWay has:

- Provided a framework for helping carriers track, document, and share information about fuel use and freight emissions across supply chains
- Given carriers the tools to be able to verify the benefits of fuel-saving vehicles and equipment
- Helped its partners avoid emitting 150 million tons of air pollution into the environment

Carriers that participate in the EPA's SmartWay program are committed to making freight transportation more sustainable by reducing its negative impact on the environment.

Alternative Fuel Vehicles

Many trucking companies today are investing in alternative fuel vehicles, such as those that run on Renewable Natural Gas (RNG). RNG is a pipeline-quality gas derived from the decomposition of organic matter, such as food, plant, and animal waste (methane). RNG is derived from recycled carbon that is already circulating in the environment, and releases greenhouse gases more than 20% less potent than methane, itself.

Because Renewable Natural Gas is one of the cleanest burning fuels available today, RNG vehicles:

- Produce less climate-harming greenhouse gases than diesel-powered vehicles
- Reduce emissions of carbon dioxide, carbon monoxide, and carcinogenic particulates
- Don't introduce brand new carbon emissions into the atmosphere

RNG qualifies as an advanced biofuel under the Renewable Fuel Standard, a federal program that requires all U.S. transportation fuel to contain a minimum volume of renewable fuels. When made from food waste or animal manure, RNG also has the added benefit of being net-carbon-negative.

Electric Forklifts

Electric forklifts are another great zero-emission option for carriers committed to reducing their carbon footprint. These forklifts have electric motors that produce no exhaust (unlike those that run on diesel, gasoline, or liquid propane). As a result, they emit no harmful fumes for terminal workers to breathe, and release no greenhouse gas into the earth's atmosphere. Electric forklifts have many benefits, including:



- **Environmental friendliness:** No tailpipe emissions and fewer waste fluids
- **Enhanced safety:** No risk of oil leaks, or need to worry about fuel storage
- **Reduced operating costs:** Minimal maintenance, and zero fuel consumption

Electric forklifts only consume the energy that's needed for operation, and most electric forklift batteries can be recycled, which further helps the planet.

Route Optimization

While we all know route optimization is a critical component of delivering freight on time, freight efficiency can also improve a carrier's carbon footprint. That's because the length of any given trip has an impact on not only the amount of fuel a vehicle consumes, but also the emissions it releases into the environment.

Many carriers today invest in route optimization software to organize all their scheduled delivery stops into the shortest, most efficient trip possible. Through the use of advanced algorithms and GPS technology, these applications evaluate various factors such as weather, traffic reports, road closures, and detours to optimize a driver's delivery route.

- Complete freight visibility from pickup to delivery, real-time shipment tracking, and a single PRO all the way
- Dedicated shipping professionals stationed on both sides of the border to help with your shipment documentation and prevent unexpected hassles and delays
- Time Critical Guaranteed delivery by 10:00a.m., 12:00p.m., and 5:00p.m. to most destinations throughout the country



Sustainable Logistics Strategies

In addition to equipment investments and enhancements, freight carriers can also implement strategies to reduce, reuse, and recycle in their day-to-day logistics. This commitment to conserving natural resources could look like:

- Recycling metal and water
- Using biodegradable, paper-based clean-up sheets instead of traditional shop cloths
- Repairing units with refurbished parts and components when possible
- Using long-life LED lighting
- Repurposing materials such as cardboard and pallets
- Recapping tires
- Conserving paper by providing customers with paperless e-commerce solutions

Many trucking companies are also working hard to keep harmful pollutants out of the air and groundwater by using:

- Nonhazardous cleaning solutions
- Wash systems with oil-water separators that minimize discharge to sewer systems

- Refrigerant capture systems to ensure that Freon and other harmful refrigerants are disposed of in an environmentally-friendly manner
- Self-contained sinks for washing vehicle parts
- Battery storage racks designed to collect acids and other harmful chemicals
- Mounted wheels that eliminate standing water, which can be a dangerous breeding site for mosquitoes who carry disease-causing viruses

Finding the Right Eco-Friendly Carrier For You

At Estes, we want to provide reliable transportation solutions while remaining good stewards of the earth. That's why we continue to invest in green trucking initiatives that are shaping the future of freight transportation:



- Becoming the first LTL carrier to participate in the inaugural year of Remora's carbon capture pilot program
- Expanding our fleet of Renewable Natural Gas (RNG) trucks
- Using route optimization technology to minimize fuel consumption and reduce carbon dioxide emissions
- Recycling, repurposing and conserving resources in our day-to-day logistics operations
- Growing our supply of electric forklifts

As one of the first trucking companies to join the EPA's SmartWay Transport Partnership in 2004, Estes is proud to be pioneering another industry-leading green initiative that makes freight transportation more sustainable: carbon capture. Estes is one of only six companies to participate in the inaugural year of Remora pilots and will be retrofitting ten vehicles with this groundbreaking new carbon capture technology.

To learn more, visit our website's Environmental Policies page to discover the many ways we're investing in tomorrow through our commitment to eco-sustainability.

Going the extra mile isn't just what we do—it's who we are