

Inbound Logistics' annual G75 is an editors' choice list of 75 companies that go above and beyond to ensure their global supply chains are sustainable, and that their operations are socially and environmentally friendly. These companies are dedicated to developing and implementing best practices to ensure they leave a positive footprint on the world.



48FORTY SOLUTIONS

48forty.com

48forty repairs, recycles, and reissues 110 million wooden pallets annually. The company minimizes waste and repurposes materials through its pallet repair and remanufacture programs. When a pallet reaches its end of life, it is disassembled. The wood waste is converted into landscape mulch, pellets for stoves and fireplaces, or biofuel. 48forty works with metal recyclers to repurpose the nails.

CURRENT GREEN INITIATIVES

- Reuse/recycling program
- Sustainable packaging
- Environmental impact calculator
- Online portal allowing customers to go paperless

NOTABLE ACHIEVEMENT

Using recycled instead of new pallets is equivalent to 10,866,240 trees saved and 2,279,970 tons of lumber diverted from landfills.



AAA COOPER TRANSPORTATION

aaacooper.com

AAA Cooper Transportation has installed enhanced/full aerodynamic fairing packages, converts oil to lighter-weight synthetic for better fuel economy, installs tire pressure systems designed for drive tire position to enhance MPG, and installs next-generation skirting on van trailers for better airflow direction.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

AAA Cooper designs its data centers to reduce HVAC demands and overall utility consumption.

ALASKA AIR CARGO

alaskaair.com

Alaska Air Cargo's environmental strategy encompasses four main areas designed to reduce emissions from planes and equipment, waste from flights and other facilities, consumption of nonsustainable resources, and energy use in its buildings. Alaska Airlines, the Port of Seattle, and Boeing partnered to power all flights by all airlines at Seattle-Tacoma International Airport with sustainable aviation biofuel.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

For the fifth year in a row, Alaska Airlines ranked No. 1 in fuel efficiency for U.S. airlines, in a report released by the International Council on Clean Transportation. Alaska Airlines outperformed the least fuel-efficient carrier by 25%.

ALASKA RAILROAD

alaskarailroad.com/freight The Alaska Railroad's real estate and facilities department used thermal imaging to identify and repair sources of heat loss in more than 70 railroad facilities. Additional facility improvements vielded conservation results in the areas of natural gas (annual use reduction of 500,000 cubic feet) and water and hazmat reductions (boiler uses about one-sixth the water and one-third the chemicals). Upgrades to locomotives and innovative idle-reduction procedures continue to lower emissions and conserve fuel. Vehicle conservation/ emission reduction efforts have improved fuel efficiency through purchase decisions and GPS-based idle tracking.



CURRENT GREEN INITIATIVES

- Reduce greenhouse
 gas emissions
- Reuse/recycling program
- Use wastewater
- Reduce energy usage

NOTABLE ACHIEVEMENT

The Alaska Railroad is one of Alaska's earliest Green Star Award recipients, earning a Green Star Award in 1993 and repeatedly recertifying.

ALLIANCE SHIPPERS

alliance.com

Alliance Shippers has been a SmartWay participant provider since 2006, and in 2017 and 2019 earned a SmartWay Excellence Award. Building a fleet of refrigerated equipment with the most current technology enables the company to move refrigerated goods via the nation's railroad system, reducing carbon output by 67% or 1 billion pounds, as compared to moving the same goods via trucks. Alliance Shippers also invested in solar panels to charge the batteries on its fleet.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Solar panels
- Energy-efficient lighting





NOTABLE ACHIEVEMENT

Alliance Shippers recently added 100 energy-efficient, 53-foot refrigerated containers to increase its fleet to nearly 1,700 ARBcompliant trailers that will run via rail/intermodal service. The purchase included refrigeration units with electric standby, which allows units to plug in to an electric source while sitting in a yard or at a dock, reducing the need to power the refrigeration unit with diesel power.

AMERICAN AIRLINES CARGO

aacargo.com

American Airlines seeks a reduction in net aviation carbon emissions of 50% by 2050. During the past four years, the air carrier emitted almost 6.4 million metric tons of carbon dioxide equivalent less than it would have if its fuel efficiency had remained at the 2014 level. American established a company goal to source 2.5 million gigajoules—the energy equivalent to almost 20 million gallons of jet fuel -of cost-competitive renewables by 2025. It deploys more than 5,000 reusable, lightweight composite cargo containers to reduce weight and save more than 1 million gallons of fuel every year.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage

NOTABLE ACHIEVEMENT

American Airlines is ranked No. 46 on the Green Power Partners Fortune 500 list, higher than any other domestic airline.

BNSF RAILWAY

bnsf.com



BNSF is committed to improving the energy efficiency of its locomotives and facilities and continues to reduce its total energy use, with major reductions in locomotive diesel consumption. The rail operates the newest and cleanest-burning locomotive fleet in North America. Increased fuel efficiency helps BNSF reduce greenhouse gas emissions into the environment. It continues to implement operational changes, such as anti-idling practices and energy management software.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage

NOTABLE ACHIEVEMENT

One BNSF intermodal train removes up to several hundred long-haul trucks from the nation's highways.

C.H. ROBINSON

chrobinson.com

C.H. Robinson participates in several offset projects, including Gold LEED certification in its largest operating facility in Chicago; singlesort recycling in its offices, resulting in 120 tons of waste being saved from landfills at its headquarters during the course of one year; and paperless invoicing for customers, with a goal of going 100% paperless. C.H. Robinson has been a long-time partner of the U.S. EPA's SmartWay Transport Partnership.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

C.H. Robinson plans to reduce its carbon intensity 40% by 2025 over its 2018 baseline numbers by finding energy efficiencies within its facilities, leveraging renewable energy, and investing in renewable energy certificates.

CABKA NORTH AMERICA

cabka.com

CABKA closes the loop by creating product solutions from recycled plastic. It obtains the basic materials for its products from industrial production scraps, packaging waste from private households, and worn-out plastic products. Its mechanical processes enable CABKA to process and reuse complex composite materials and mixed plastics without chemical or thermal disintegration. CABKA's EcoProducts also feature high loadbearing capacity and stability.

CURRENT GREEN INITIATIVES

- Create products from recycled plastic
- Reduce energy usage
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

CABKA was among the first companies in the industry to produce lightweight plastic pallets for worldwide product transportation, and one of the first to turn to recycled plastic to manufacture new products.





CANADIAN NATIONAL (CN)

cn.ca

CN's environmental strategy focuses on emissions and energy efficiency, waste management, and biodiversity and land management. The railroad consumes almost 15% less fuel per gross ton mile than the industry average. Preventing and minimizing waste also plays a critical role in CN's sustainable resource management and conservation. It focuses on reducing waste at the source by pursuing greener procurement options and improving waste management at its facilities and across its network through comprehensive reuse and recycling programs.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

The goals of CN's EcoConnexions programs include conserving energy, reducing waste, and improving housekeeping at yards and offices across North America. Investments for these initiatives are supported by the \$5 million CN EcoFund, which reinvests the significant cost savings generated by its EcoChampion initiatives into new capital projects that conserve energy and reduce waste.

CHEP

chep.com

CHEP's sustainability program operates on three levels: 1) Share and reuse replaces disposable packaging with high-guality, reusable pallets and containers to eliminate waste and make businesses more efficient. 2) Collaboration projects allow CHEP to analyze supply chains and identify and address specific logistical challenges. 3) Best practices and credentials provide access to CHEP's supply chain sustainability expertise. CHEP's sustainable solutions include carbon-neutral platforms, collaborative transport, platform mix optimization, reverse logistics, unsaleables reduction, and platform management.

CURRENT GREEN INITIATIVES

- Reuse/recycling program
- Reduce energy usage
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

CHEP developed Zero Waste World, an innovation program enabling retailers and consumer goods companies to create smarter, more sustainable supply chains by eliminating packaging and food waste, eradicating empty transport miles, and cutting out inefficiency.

CROWLEY crowley.com



Crowley designed and implemented the EPA's Tier IV engines and exhaust after-treatment systems in new and existing ship-assist tugs and tank vessel tugs to lower emissions, as well as ballast water closed-loop systems that restrict discharges. In 2019, the company began the first year of full operation of liquefied natural gas-fueled containerships, which eliminated or reduced emissions. Additionally, Crowley invested in new reefer containers that have higher efficiency refrigeration units to optimize technology.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

The Chamber of Shipping of America awarded 117 Crowley owned or operated vessels with Environmental Achievement Awards for safe operations.

CROWN EQUIPMENT

crown.com

By designing energy-efficient features into its products, Crown helps customers meet their own sustainability goals. And by manufacturing up to 85% of the parts used in its lift trucks, Crown controls its production processes and only manufactures what is needed to manage inventory with precision. Crown also makes continuous efforts to recycle and reuse materials, preserve natural resources, and reduce waste and energy consumption in its facilities.

CURRENT GREEN INITIATIVES

- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

Crown's environmental management systems achieved ISO 14001 certification. The company operates five zero-wasteto-landfill status facilities and redeveloped more than 500,000 square meters of brownfield space.





CSX

csx.com



CSX has committed to reducing greenhouse gas emissions intensity by more than 37% between 2015 and 2030. The rail delivers efficiency gains by investing in employee training, technological advancements, programmatic efforts, and locomotive upgrades. Fuel-saving technologies and processes include implementing the CSX operating model of scheduled railroading and deploying distributed power on certain trains.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

CSX is the only U.S. Class I railroad with a greenhouse gas emissions goal approved by the Science Based Targets Initiative.

CT LOGISTICS

ctlogistics.com

Among CT Logistics' environmental commitments: At least 40% of its six-acre corporate campus will remain undeveloped and wooded. It recycles all cardboard, paper, copier and printer toner and ink cartridges. The 3PL also recycles all old, broken, or technologically outdated electronic equipment, and repurposes it or disposes it safely. The company first explores telecommunication options for client and vendor interactions instead of travel. All facility lighting utilizes LED lamps and bulbs for electrical efficiency. All buildings use intelligent thermostats, incorporating off-hour energy conservation.

CURRENT GREEN INITIATIVES

- Reuse/recycling program
- Reduce energy usage
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

CT Logistics has developed a Sustainability Program with specific actions and goals to reduce its environmental footprint.



DHL SUPPLY CHAIN

dhl.com

DHL Supply Chain's corporate social responsibility extends to its goal of zero-emission logistics by 2050. DHL delivers sustainable supply chains through its environmental protection program, GoGreen, which improves carbon efficiency and reduces air, waste, and noise pollution. The company implements measures to improve fuel efficiency across its fleet while optimizing networks and routes, and drives energy efficiency with building standards.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Sustainable packaging
- Sustainably source materialsEnergy-efficient lighting

NOTABLE ACHIEVEMENT

DHL encourages individual associate action via its goal to train 80% of associates as Certified GoGreen Specialists by 2025 and offering a getGREEN associate incentive program.



DEPENDABLE HAWAIIAN EXPRESS (DHX)

dhx.com

During the past nine years, DHX reduced its facilities' carbon emissions by 813.5 metric tons, a 76% reduction from their 2011 baseline. Additionally, in 2019, the company began carbon-neutral operations in its warehouses, investing in VCS Standard carbon offsets to compensate for the negative impact of those emissions. All larger facilities are solar powered, and the company continues to invest in truck technology to reduce emissions.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Reduce energy usage
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

In 2019, DHX purchased carbon offsets in sufficient quantity to operate its warehouses in Maui, Guam, Kona, and Los Angeles on a carbon-neutral basis.





DSC LOGISTICS

dsclogistics.com

DSC has tracked sustainability on five metrics—electricity, natural gas, water, propane, and recycling—across 40-plus locations for nine years, and has tracked waste tonnage for three years. Its emissions reduction initiative goals include lowering electricity and water use across all locations in the DSC network. The company is also committed to reducing utility usage by an average of 8% year over year. DSC is a partner in the EPA's SmartWay Transport Partnership.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

DSC Logistics' goal is to improve transportation consolidation by 2% (regarding carbon emissions) per year. A monthly transportation consolidation status report helps track and evaluate this activity. Through its consolidation services, DSC averages an 11% reduction in carbon emissions.

ECHO GLOBAL LOGISTICS

echo.com



Echo works with its shipper and carrier partners to adopt procedures that reduce waste through recycling practices, minimize impact by reducing pollutants, increase the use of environmentally acceptable materials, and actively promote environmental awareness. Echo is certified in the ISO standard 14001: 2015. Since 2010, Echo has partnered with the EPA's SmartWay Transport program.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Reduce energy usage
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

Echo shares freight activity with the EPA, which tracks emissions of carbon dioxide, nitrogen oxide, and particulate matter. Echo's emissions scores rank above average and have continued to improve over time.

enVISTA

envistacorp.com

In addition to network design, enVista offers consulting services to promote sustainability. Its core service offerings include optimizing less-than-truckload and truckload freight and modeling private fleets. enVista's analysis and implementation is designed to reduce total miles and required assets to move freight.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reduce energy usage
- Reduce carbon footprint from optimization, for example from less-than-truckload to truckload
- Reduce mileage via fleet
 optimization in dynamic routing

NOTABLE ACHIEVEMENT

enVista completed a sustainability project designing and optimizing a large retailer's supply chain network and inventory strategy. enVista implemented tools to maintain inventory and ship from stores, eliminating costly distribution center operations. The optimized network saves the retailer an average of \$4.1 million annually.

FEDEX

fedex.com



FedEx focuses on the following initiatives: Commitment to a continual improvement process in environmental management: evaluation of environmental impacts of FedEx packaging products, operations, and facilities with a commitment to minimize impacts and restore properties affected by its operations; efficient use of natural resources to minimize waste generation through recycling, innovation, and prevention of pollution; measurement of environmental performance using a framework to set and review objectives and targets, audit progress, sanction employee accountability, and report to senior management and external stakeholders; and integration of environmental responsibilities and considerations into daily operations and business decision-making.

CURRENT INITIATIVES

- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

FedEx's Reduce, Replace, Revolutionize strategy has contributed to a 40% reduction in carbon emissions intensity on a revenue basis across the enterprise since FY 2009. The company avoided more than 3 million metric tons of carbon dioxide equivalent emissions as a result of enterprise-wide fuel and energy saving initiatives; that's equivalent to the carbon sequestered by more than 4 million acres of U.S. forests in a single year.



FLORIDA EAST COAST RAILWAY

fecrwy.com

Florida East Coast Railway (FECR) is committed to providing shippers with sustainable intermodal and carload supply chain solutions that reduce highway congestion, air pollution, and greenhouse gas emissions. FECR has chosen to use liquefied natural gas (LNG) as a fuel source for its locomotive fleet, as it is cleaner and more environmentally friendly than traditional fuels. The railroad also has Federal Railroad Administration concurrence to run LNG as a locomotive fuel for revenue service across its network, and provides transparency through online portal FECR Connect.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)

NOTABLE ACHIEVEMENT

FECR's fleet of LNG locomotives produce 75% less carbon emissions than regular diesel fuel.



GEODIS

geodis.com

GEODIS operates a number of environmental programs, from recycling various commodities such as cardboard, plastic wrap, pallets, metal, and paper to reducing power consumption in the warehouses by using LED lighting, running a managed print program, and recycling toner. Several locations have Green Teams, led by GEODIS teammates and a management sponsor. GEODIS also awards a certificate through its Green Site Certification Program. Facilities earn points for sustainable practices and are awarded one of three levels. The company shares weekly

communication about green practices on its intranet site. It also shares a dashboard showing the recyclable tonnage, as well as how it is managing waste tonnage.

CURRENT GREEN INITIATIVES

- Reduce greenhouse
 gas emissions
- Reuse/recycling program
- Reduce energy usage
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

"Be a good citizen" is one of the company's seven Golden Rules and encompasses social, societal, and environmental domains. GEODIS' corporate social responsibility goal is to reduce greenhouse gases by 30% in 2030.

GEORGIA PORTS AUTHORITY

gaports.com

As part of its environmental initiatives, Georgia Ports Authority (GPA) coordinated pickup of unusable surplus electronics and disposed of them in an environmentally friendly manner. The ports also use electric refrigerated container racks, with each avoiding the use of 54,000 gallons of diesel annually. Electric ship-to-shore cranes have integrated generators to capture power while lowering boxes. In this way, the cranes produce enough energy to power themselves for 18 minutes of each operating hour. GPA uses new lighting controls and fixtures to reduce energy consumption by up to 60%. Using all-electric rubber-tired gantry cranes at the Appalachian Regional Port reduces fuel consumption by more than 95% per crane. The eRTG program virtually eliminates emissions of carbon dioxide, nitrogen oxide, and particulate matter compared to diesel-powered RTGs.



CURRENT INITIATIVES

- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

GPA converted its fleet of container handling equipment and trucks to ultra-low sulfur diesel, cutting emissions by 10%. As a result, the ports avoid the release of hundreds of tons of nitrogen oxide, carbon emissions, and particulate matter into the air.

HUB GROUP

hubgroup.com

Hub Group offers several green services such as network optimization to reduce mileage, backhaul conversion to eliminate empty miles, and consolidations that maximize capacity utilization. The company has been recognized with multiple awards, including the SmartWay Excellence award. New network visibility tools use artificial intelligence and machine learning to help customers dynamically manage dock schedules, reducing idling traffic. Hub Group's lightweight day cab trucking fleet includes new devices that monitor acceleration and speed. The company's LEED Gold-certified headquarters includes rainwater harvesting, LED lighting, and dynamic light fixtures to maximize natural lighting.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

As an early intermodal pioneer, Hub Group evaluates every truckload RFP it participates in for intermodal conversion opportunities. Through these practices, the company helped shippers avoid emitting 1.5 short tons of carbon in 2019.



HYSTER COMPANY

hyster.com/north-america/en-us Hyster mitigates the environmental impact of manufacturing processes and meets strict emission standards with lithium-ion battery and hydrogen fuel cell power options. The Hyster J60XNL counterbalanced lift truck is engineered around an integrated, space-saving lithium-ion battery producing zero emissions and requiring zero off-gassing during charging processes.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

The Hyster Power Match lift truck power selection tool evaluates the best-fit power source for an operation. Hyster experts research and calculate several variables to arrive at a power choice based on fleet size and characteristics, number of shifts, utility prices and grid stability, space requirements, and operator discipline.

igps logistics

igps.net

iGPS Logistics supplies plastic pallets that are 100% recyclable for cradle-to-cradle sustainability. Because iGPS pallets are 35% lighter than nonplastic alternatives, much less fuel is used during transport. iGPS pallets can also be sanitized to limit exposure to pathogens. The company's business model ensures pallets are used and reused by customers in the same area, minimizing the need for pallets to be shipped long distances.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Reduce energy usage
- Sustainable packaging

NOTABLE ACHIEVEMENT

An independent life-cycle analysis showed that compared to multiuse and single-use nonplastic pallets, the iGPS pallet has 91% to 92% less impact on ozone layer depletion; 75% to 80% less impact on eutrophication (excessive algae growth in waterways due to runoff); 25% to 35% less impact on abiotic depletion (fossil fuel consumption); 65% to 70% less impact on global warming; 60% to 65% less impact on photochemical oxidation; and 60% to 65% less impact on acidification.

J.B. HUNT TRANSPORT SERVICES

J.B. Hunt has received the SmartWay Excellence Award from the U.S. FPA for 10 consecutive years. The agency also named the company a 2019 SmartWay High Performer. J.B. Hunt added the first all-electric, mediumduty box trucks with zero tailpipe emissions to its private fleet and quadrupled its number of temperature-controlled intermodal containers. Additional sustainability initiatives include reducing engine idle time, governing top speed limits, engineering fleet routes that maximize efficiency, and using biodiesel fuels when possible.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
 - Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

In 2018, J.B. Hunt prevented nearly 1.6 million tons of carbon dioxide from entering the atmosphere through intermodal conversion, which is equivalent to removing more than 334,000 passenger vehicles from the road for one year.

KENCO LOGISTICS

kencogroup.com

Kenco explores opportunities for sustainability and reduced carbon footprint in its operations. By reducing the number of trucks on the road by optimizing modes and routes, Kenco helps mitigate the carbon footprint and impact to the nation's infrastructure of its customers' and its own operations.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

Kenco's supply chain solutions division analyzes customer supply chains and makes recommendations to improve sustainability.

KNIGHT-SWIFT

knight-swift.com

Knight-Swift continues to substantially reduce carbon emissions while reducing pollutant criteria emissions in its truckload operations. The carrier also promotes a sustainable lifestyle among its customers and 28,000 employees.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage

NOTABLE ACHIEVEMENT

The carrier received the 2019 SmartWay Excellence Award for setting efficiency benchmarks in transporting products and supplies.

LUFTHANSA CARGO

lufthansa-cargo.com/green

Lufthansa Cargo is aiming for a 25% reduction in carbon emissions by the end of 2020 compared to 2005. The carrier company continuously invests in fuel-efficiency measures as well as energy-efficient conveyor and building technology, demonstrating sustainability through innovation (e.g., lighter loading equipment, loading support material made from alternative raw resources or upcycling products) and through green initiatives.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Energy-efficient lighting
- Reduce aircraft noise

NOTABLE ACHIEVEMENT

Lufthansa Cargo continues the rollover from the aircraft MD11 (six in operation) to the new twin-engine Boeing 777 (seven in operation, two more to deliver) with the aim of running a fleet composed entirely of these fuel-efficient planes in 2021.

LYNDEN

lynden.com



Lynden is the first Alaska-based transportation company to be recognized by SmartWay (in 2008) and the first trucking company to earn the Green Star Award for Alaskan businesses. Despite operating in steep terrain and extreme conditions, its fleets consistently score among the most efficient in the country in terms of carbon dioxide per ton mile as measured by the SmartWay Transport Partnership. Its bulk tanker company consistently scores in the top 1% of tanker carriers for low carbon monoxide, nitrous oxide, and particulate matter emissions per ton mile.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

Lynden's super-efficient reefer units, shore-side plug-in technology, and electric forklifts save fuel and reduce emissions. LED lighting has improved safety and reduced energy use, and its stormwater pollution prevention exceeds local requirements.

MAERSK

maersk.com

Maersk's sustainability strategy focuses on four shared value programs: climate change/ decarbonizing logistics, inclusive trade, reducing food loss, and responsible ship recycling.

CURRENT GREEN INITIATIVES

- Reducing greenhouse gas emissions on the way to zero-carbon shipping for customers' cargo
- Continued work to establish responsible vessel recycling programs and reporting
- Providing a vessel to support The Ocean Cleanup
- Partnering with a coalition of Danish companies to produce green hydrogen
- Partnering with NOAA to collect high-quality weather and ocean data globally

NOTABLE ACHIEVEMENT

Maersk has achieved a total 43% relative reduction in carbon emissions from its ocean shipping compared to its 2008 baseline. Maersk has set an industry-leading goal of net zero carbon emissions from its own activities by 2050. Net-zero carbon shipping based on biofuel is already available for ocean shipments on a limited basis.

MATSON

matson.com

Matson's fleet modernization program will reduce sulfur oxide emissions. Its four newest vessels are equipped with dual-fuel engines, which can run at full power on lowsulfur fuel or liquefied natural gas. Its newest Kanaloa Class vessels have Tier III engines, which are designed to meet the strictest International Maritime Organization nitrogen oxide emissions standards. All vessels meet or exceed the reduced fuel tolerances of the IMO 2020 regulations.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Protect water quality
- Reduce waste

NOTABLE ACHIEVEMENT

By the end of 2020, nine of Matson's 13 active vessels are expected to have exhaust gas cleaning systems, or scrubbers, that virtually eliminate particulate matter and sulfur from engine exhaust.



NORFOLK SOUTHERN

nscorp.com

Norfolk Southern's fuel-efficiency initiatives combine energy management technologies and smart rules-based operating practices. For example, the company leveraged its investment in positive train control (PTC) by integrating onboard locomotive energy-management train-handling systems into the safety-based PTC technology, improving locomotive fuel economy. Its onboard energy management systems identify the proper throttle position and dynamic braking setting to achieve optimal fuel efficiency based on track topography and train tonnage. By mid-2019, it had outfitted approximately 1,300 road locomotives-about twothirds of its road fleet—with energy management technology integrated into PTC.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Reduce energy usage
- Sustainably source materials
- Energy-efficient lighting
- Capturing, treating, and reusing stormwater in work processes



NOTABLE ACHIEVEMENT

Since 2018, Norfolk Southern has conserved a cumulative 47 million gallons of diesel fuel and avoided more than 481,000 metric tons of greenhouse gas emissions.

NORTH CAROLINA PORTS

ncports.com

North Carolina Ports is recognized for environmental stewardship, self-sustaining operations, a highly efficient workforce, and modern, well-maintained facilities and equipment.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program

NOTABLE ACHIEVEMENT

The port's \$200 million capital improvement plan includes steps to avoid or minimize any adverse environmental impacts while deepening its navigational channel depth to 47 feet. The avoidance and minimization efforts influenced channel design, including plans to avoid impacts to groundwater resources, waterfront infrastructure, and natural and historic resources.

NORTHWEST SEAPORT ALLIANCE

nwseaportalliance.com

As the fourth-largest containerized gateway in North America, Northwest Seaport Alliance takes a proactive and collaborative approach, working with supply chain partners, stakeholders, and communities throughout the Puget Sound to improve its facilities, processes, and best practices to minimize environmental impacts from its operations and create a cleaner and healthier environment.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Energy-efficient lighting
- Habitat development
- Mitigation banking
- Contaminant source control
- Clean up legacy contamination
- Clean Truck program
- Green Marine membership
- Shore power use

NOTABLE ACHIEVEMENT

Northwest Seaport Alliance has achieved progress toward the Northwest Ports Clean Air Strategy, greenhouse gas and diesel particulate matter reduction goals, and implementing its Clean Truck Program.



ODYSSEY LOGISTICS & TECHNOLOGY

odysseylogistics.com

Odyssey recently invested in two compressed natural gas (CNG) tractors for its subsidiary Linden Bulk Transportation, and acquired RPM Consolidated Logistics, which has 21 liquefied natural gas and eight CNG tractors in its fleet. Its use of food-grade, bulk-liquid, one-way, refrigerated Flexitank containers reduces customers' carbon footprint by 50% or more-their singleuse design eliminates the need to clean, reduces water waste, and prevents cross-contamination. Its food transportation solutions use intermodal tanks, which are stackable, reusable, and streamline carbon emissions. The company is certified as an ACC Responsible Care partner and SmartWay Transport Program member.



CURRENT GREEN INITIATIVES

- Reduce greenhouse
 gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Sustainable packaging



NOTABLE ACHIEVEMENT

Odyssey's investment in two CNG tractors for subsidiary Linden Bulk Transportation will help reduce greenhouse gas emissions by 70%.

OLD DOMINION FREIGHT LINE

odfl.com

With an average vehicle age of 3.5 years old, Old Dominion Freight Line's fleet is one of the youngest in the industry, with 100% low rolling resistance. The company works with original equipment manufacturers to custom-build efficient tractors, including tire inflation systems, to reduce emissions and increase fuel mileage. Other green initiatives include leveraging trailer skirts, air dams and deflectors on tractors, and line-haul trailers to minimize air resistance at highway speed to achieve enhanced fuel economy and reduced emissions. In addition to recycling everyday materials like oil, filters, scrap steel, and wood, the company adopted a no-idle policy that helps reduce unnecessary fuel use and emissions. Old Dominion is EPA SmartWay certified.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

In 2019, the company invested \$475 million in capital expenditures to improve efficiency in operations, including \$150 million for a tractor replacement program and \$225 million in real estate.

ORBIS CORPORATION

orbiscorporation.com ORBIS' packaging replaces one-time-use materials. It can be recovered, recycled, and reprocessed into new packaging at the end of its service life. ORBIS also provides alternatives to the disposal of excess, damaged, or obsolete packaging to reduce waste. ORBIS has begun repurposing material found near major waterways into its products. ORBIS also offers reusable packaging management services, ensuring packaging is cleaned, handled, transported, tracked, and returned properly, extending packaging life and preventing loss.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

ORBIS offers a variety of services that can help shippers reduce and measure their overall environmental impact, including life-cycle assessments, which are used to understand a reusable packaging program's supply chain impact.

PACKAGING BY QUADIENT

us.packagingbyquadient.com The company's auto-boxing systems create fit-to-size boxes for each single- or multi-item order of either soft or hard goods while eliminating or reducing void fill. Its CVP Everest solution uses a patented gluing system to affix a custom-fit lid to each box for a more sustainable fulfillment process. The corrugate can be 100% recycled, and the boxes can be reused for returns or other items.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Sustainable packaging



NOTABLE ACHIEVEMENT

By right-sizing boxes with Packaging by Quadient solutions, shippers use an average of 29% less corrugate and reduce material costs by an average of 38%. These solutions also decrease shipping volume by an average of 50%, which allows more orders to fit onto delivery trucks, reducing greenhouse gas emissions with fewer trucks needed.

PECO PALLET

pecopallet.com

PECO cycles pallets an average of four times per year and maintains them to prolong their useful life. PECO block pallets allow four-way entry for more efficient stacking and transportation, which can significantly reduce fuel costs and reduce shippers' carbon footprint. Once pallets are retired, parts are recycled to keep materials out of landfills.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Sustainable packaging

NOTABLE ACHIEVEMENT

PECO works with retailers to find ways to cut costs, reduce product losses, streamline materials handling, and improve safety and efficiency throughout the supply chain.





PENSKE LOGISTICS

penskelogistics.com



Penske Logistics received the EPA SmartWay Excellence Award in the truck carrier category for running a cleaner fleet. Penske Truck Leasing is doing exciting work in the area of electric vehicles. partnering with Daimler Trucks on the Freightliner Electric Innovation Fleet. In addition, Penske conducts an annual greenhouse gas emission inventory, discloses emissions to the Carbon Disclosure Project, implements solid waste reduction initiatives, and supports renewable energy generation and energy reduction efforts.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

Penske opened several high-speed commercial electric truck charging stations in Southern California to support electric vehicle units.

PERFORMANCE TEAM

performanceteam.net

A SmartWay Partner since 2008, Performance Team continues to undertake green initiatives. Its entire fleet has SmartWay-approved tires and uses trailer skirts and under trays to improve fuel efficiency. Performance Team utilizes ondemand packaging and works with corridor recycling to help recycle and reduce obsolete hardware in its facilities.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

In the past six years, Performance Team has transloaded more than 300,000 containers. Using a 3:2 compression standard, this translates into approximately 200,000 outbound trailers and a carbon footprint reduction of 30%.



PILOT FREIGHT SERVICES

pilotdelivers.com

SmartWay certified. Pilot partners with carriers in the program and is committed to growing these partnerships by 10% annually. Pilot has a strict no-idle policy for company vehicles, vendors, and carrier partners. In 80 stations. Pilot reduces, reuses, and recycles as much material as possible using cardboard balers. Pilot has replaced most fossil fuel-run warehouse equipment with electric forklifts. Its headquarters and many stations feature occupancy and LED lighting, computer-controlled HVAC, and water bottle refill stations. reducing use of plastic bottles by 10,000 annually.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

Pilot Freight Services' application Compass Dispatcher creates timeand fuel-efficient routes, while the tracking system alerts customers of delivery status, so fuel isn't wasted rerouting the truck.

PITT OHIO

pittohio.com

In 2019, PITT OHIO's average truck miles per gallon improved by 1.1%, saving an estimated 175,000 gallons of diesel fuel. With renewable energy a key part of its strategy, the company is using solar and wind energy to power three of its facilities. Renewable energy makes up 7% of PITT OHIO's electricity. When its new Cleveland facility opens in 2020, 10% of energy will be renewable. In 2019, the company tested an electric vehicle and researched fast charging for trucks off its microgrid.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

In 2020, the PITT OHIO team is set to improve miles per gallon another 4% through its equipment mix, driver metrics, and maintenance processes, which is the equivalent of lowering diesel usage by almost 600,000 gallons.





PORT EVERGLADES

porteverglades.net

Port Everglades is dedicated to careful, ecologically sound growth, as a custodian of one of the most diverse ecosystems in the country. For example, it has conserved more than 70,000 baby mangroves and native plants. To ensure the long-term interest of the fragile environment within and around the port, it employs best management practices, careful study, and remedial and protective measures.

CURRENT GREEN INITIATIVES

- Reduce greenhouse
 gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Manatee protection
- Mangrove conservation

NOTABLE ACHIEVEMENT

In 2018, Port Everglades was the first U.S. port to collaborate with the EPA on a report outlining baseline and future-year emission inventories for nitrogen oxides, particulate matter, and other harmful pollutants that result from typical port operations. The report examines cleaner technologies and more efficient operational strategies.



PORT JERSEY LOGISTICS

portjersey.com

Operating 1 million square feet of warehousing space, Port Jersey Logistics designed each of its facilities to reduce greenhouse gas emissions. The company employs electric forklifts and energy-efficient lighting in all its warehouses. From cardboard recycling programs to solar panels, Port Jersey employs initiatives to ensure energy efficiency across the board.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENT

Port Jersey Logistics partners with shippers to develop customized warehouse, logistics, and distribution solutions to increase supply chain efficiency.

PORT OF NEW YORK AND NEW JERSEY

panynj.gov

As the largest port on the East Coast and the third largest in the United States, the Port of New York and New Jersey is committed to safeguarding natural resources, continuing to drive down diesel emissions, and minimizing noise, congestion, and environmental impacts. Through collaborative initiatives, including the Clean Air Strategy and the Port Master Plan, the port prioritizes environmental stewardship to protect the environment while providing economic benefits to the region. Between 2006 and 2017, the port decreased emissions despite a 32% increase in cargo volume during the same time frame.

CURRENT GREEN INITIATIVES

- Reduce greenhouse
 gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Truck replacement program
- Drayage truck registry
- Cargo-handling equipment
 modernization program
- Clean vessel incentive program
- Environmental management system
- Low-sulfur fuel incentive program

NOTABLE ACHIEVEMENT

Key environmental initiatives span five categories, including truck, cargo-handling equipment, oceangoing vessels, harbor craft, and rail. These initiatives put the port on track to meet its greenhouse gas reduction goal of 35% by 2025 and 80% by 2050.

PORT OF LONG BEACH

polb.com

Port of Long Beach implements sustainable practices, reduces harmful air emissions from portrelated operations, improves water quality in the harbor, and protects marine wildlife. The port aims to preserve natural resources by considering ecofriendly alternatives in design and construction, operations, and administrative practices, with a goal of transitioning terminal equipment to zero emissions by 2030 and onroad trucks by 2035.

CURRENT GREEN INITIATIVES

- Reduce energy usage
- Reduce greenhouse gas emissions
- Reuse/recycling program
- Evaluate land for solar and wind power opportunities

NOTABLE ACHIEVEMENTS

Port of Long Beach implemented the Green Port Policy, which aims to reduce the negative impacts of port operations in addition to its 20-year history of environmental protection programs. The port funded technologies and policies that allow massive cargo ships to switch off diesel engines at berth, launched hybrid diesel-electric tugboats in the harbor, and replaced a 15,000-vehicle drayage truck fleet.





PORT OF LOS ANGELES

portoflosangeles.org The California Air Resources Board awarded \$41 million to the Port of Los Angeles for the Zero-Emission and Near Zero-Emission Freight Facilities project, which is part of a statewide initiative to put billions of cap-and-trade dollars to work reducing greenhouse gas emissions and improving the environment. For the past 10 years, the Port of Los Angeles has invested more than \$350 million in environmental programs and initiatives to continue greening Los Angeles Harbor.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reduce energy usage
- Solar panels

NOTABLE ACHIEVEMENTS

The port's Zero and Near Zero-Emission Freight Facilities project aims to reduce emissions by 465 metric tons of greenhouse gas and 0.72 weighted tons of nitrogen oxide, reactive organic gases, and particulate matter. The port collaborates with Japan's Nagoya port on sustainability, including the development of zero-emission vehicles and equipment.

PORT OF OAKLAND

portofoakland.com

The Port of Oakland works to mitigate unintended negative impacts, including pollution (air, water, noise) and infrastructure wear and tear. The port is involved in dozens of innovative programs, including creative partnerships and collaborations that help identify, quantify, and meet environmental challenges.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling programs
- Use wastewater
- Reduce energy usage
- Sustainably source materials

NOTABLE ACHIEVEMENTS

The Port of Oakland's energy efficiency rebate program provides tenants the opportunity to replace energy-inefficient electric equipment and fixtures. The port's energy rebate program encourages energy-saving initiatives in the facility, and its clean water program helps reduce pollutants in runoff.

PORT TAMPA

porttb.com

Port Tampa partners with the Tampa Bay Estuary Program, regional partners, and its tenants to minimize the impact of day-to-day operations, reduce waste, conserve energy, and raise awareness. The port finds beneficial uses for dredge spoil materials and commits to keeping waters clean as part of the Hillsborough Trash-Free Waters Partnership.

CURRENT GREEN INITIATIVES

- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Port Tampa reduces air emissions by using electric gantry cranes, scheduling truck arrivals to reduce idling, and creating a dedicated truck lane that reduces wear on local roads. The port also created two islands in Hillsborough Bay to store material removed from shipping channels, which are now home to rare populations of nesting birds.

RAYMOND CORPORATION

raymondcorp.com

Raymond upgraded to an automated logic and lighting controls program to zone and control lighting, heating, and air conditioning based on utilization; incorporated occupancy sensors to eliminate wasted lighting in its offices; and installed supplemental active solar lighting.

CURRENT GREEN INITIATIVES

- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainably source materials
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

100% of Raymond's wood pallets are recycled/reused, and it recycles 97.6% of byproducts. The company established a program with its Sales & Service Centers to recycle metal skids and cradles, and uses the recycled metal on new shipping cradles, which keeps reusable materials from cluttering scrap yards.

RINCHEM COMPANY

rinchem.com

Rinchem uses a just-in-time model that brings in only as much material as needed to avoid excessive inventory and transportation. Its automatic trucks reduce its carbon footprint and miles per gallon. Rinchem uses reverse logistics to support returnable totes/ drums, which reduces waste and plastics disposal.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Sustainably source materials
- Solar panels
- Energy-efficient lighting



NOTABLE ACHIEVEMENTS

Rinchem has implemented LED and motion sensor lights in all its U.S. facilities, solar panels, and paperless transactions through a custom online system. Rinchem recycles all cardboard and pallets and 85% of its forklift fleet is electric.



RR DONNELLEY / DLS WORLDWIDE

rrdonnelley.com

RR Donnelley's sustainability policy focuses on four objectives: resource efficiency, procurement, waste minimization, and stewardship. The company implements energy efficiency programs and technologies in its plants worldwide, invested in enhanced energy consumption and recovery systems, and works with customers and suppliers to ensure that packaging and other materials meet environmentally responsible specifications. RR Donnelley is a SmartWay Partner.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Use wastewater
- Sustainable packaging
- Reduce energy usage
- Paperless initiatives

NOTABLE ACHIEVEMENTS

RR Donnelley invests in emerging technologies that prioritize using less natural gas while achieving better overall performance. The company maintains Forest Stewardship Council Chain of Custody-certified locations in the United States, Canada, Latin America, Europe, and Asia.

RUAN

ruan.com

Ruan focuses on utilizing cleaner fuel options, including renewable fuel alternatives such as compressed natural gas, renewable natural gas, biodiesel, and renewable diesel to reduce carbon emissions. Its fleet is made up of lightweight trucks and trailers with green specifications to keep fuel consumption low. The company received the National Biodiesel Board Initiative Award and the SmartWay Excellence Award.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Ruan has traveled more than 100 million miles on natural gas power, used 160 million gallons of biodiesel blends between 2013 and 2019, purchased 2 million gallons of renewable diesel in 2018-2020, and collaborated with electric vehicle manufacturers.

RYDER SYSTEM

ryder.com

To improve fuel economy and reduce emissions, Ryder utilizes cleaner-burning fuels and invests in alternative fuel technology. It is the exclusive distribution and service provider for several electric vehicle manufacturers, and has partnered with InCharge to provide charging infrastructure. Ryder's warehouses operate under lean principles to minimize waste, and the 3PL has been recognized by the EPA with a SmartWay Excellence Award for reducing greenhouse gas emissions.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Each year, Ryder recycles nearly 3 million gallons of used oil, more than 880,000 gallons of oily water, more than 12,000 drums of used oil filters, nearly 48,000 gallons of solvent, and more than 2 million oil filters.

SADDLE CREEK LOGISTICS SERVICES

sclogistics.com

Saddle Creek Logistics Services works to minimize fuel use and emissions by adopting the use of compressed natural gas, and continues innovative initiatives such as converting older diesel tractors into dual compressed natural gas/diesel fuel vehicles to reduce emissions. The dual fuel conversion extends the life of the vehicles by six years. Saddle Creek is also installing event recorders in all tractors to train drivers how to achieve maximum fuel efficiency.

CURRENT GREEN INITIATIVES

- Reduce greenhouse
 gas emissions
- Use alternative fuels or energy sources
- Reuse/recycling program
- Reduce energy usage
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Saddle Creek launched a fleet of eco-friendly compressed natural gas trucks, each of which saves about 120,000 pounds of carbon per year. The company purchased 20 new diesel tractors with Freightliner's RunSmart Predictive Cruise Control, 13 of which have technology that reduces fuel use.



SAIA

saia.com

Environmental sustainability drives Saia's business decisions, from decreasing overall carbon dioxide emissions to saving energy and cutting fuel costs. A SmartWay Excellence Award recipient, all of Saia's trailering equipment runs on SmartWay-approved tires. Since 2017, air inflation systems have been placed on all trailers and gears to ensure proper pressure for optimal fuel efficiency. To mitigate idling and minimize fuel consumption, Saia has a five-minute enginecontrolled shutoff restriction on all tractors.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Sustainably source materials
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Since 2015, Saia has replaced 59% of its 5,300 tractors and 56% of its 22,000 trailers, improving fleet miles per gallon by 16%. Approximately 16% of the fuel purchased in 2019 was renewable diesel. The company piloted a solar panel system at one terminal that puts energy back into the grid, and plans to pilot compressed natural gas and electric tractors by 2021.

SCHNEIDER

schneider.com

Schneider's on-site engineers have tested and evaluated new products and technologies continuously via SAE methodology since 1989. This data provides Schneider with the ability to spec the most advanced, energy-efficient components on its equipment. Schneider is a charter member of the EPA's SmartWay program and is a 10-time Award of Excellence winner.

CURRENT GREEN INITIATIVES

- Reduce greenhouse
 gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Most new tractors added to Schneider's fleet are equipped with a battery-powered auxiliary power unit, which reduces idling of the main engine. The transition to the latest clean diesel emissioncompliant engines is well underway, with more than 99% of the fleet meeting 2014 emissions standards and 68% of the fleet meeting 2017 emissions standards.



THE SHIPPERS GROUP

theshippersgroup.com

The Shippers Group participates in the Texas Emissions Reduction Plan program to help reduce emissions from vehicles and equipment, uses LED lighting and high-efficiency electric chillers, implemented a zero landfill initiative, and removed highemissions forklifts from its fleet.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions,
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Use wastewater
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

The Shippers Group has recycled 65 tons of cardboard, paper, and plastic and reused 5,000 airbags and dunnage.

SOUTH CAROLINA Ports Authority

scspa.com



South Carolina Ports Authority's environmental stewardship includes low gate turn times for truckers, fully electrified cranes and terminal transloading equipment, a reduction of idling on or near port property, and 100% compliance with airquality standards and voluntary air monitoring. The port also partners with state and federal agencies to help bring sustainable practices to the region.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources
- Reuse/recycling program
- Reduce energy usage
- Sustainably source materials
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

South Carolina Ports Authority reduced port-related air emissions and funded two air-monitoring stations. The ports also developed an inland port network consisting of two facilities in South Carolina— Inland Port Greer and Inland Port Dillon—that increase freight tonnage moved by rail per gallon of fuel.

TOYOTA MATERIAL HANDLING

toyotaforklift.com

Toyota Material Handling offers eco-friendly forklifts, featuring recyclable parts and emission systems that meet California's stringent standards. Its manufacturing facility implemented 1,700 energy-saving measures during the past five years, which reduced 120,000 tons of carbon emissions.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources
- Reduce energy usage

NOTABLE ACHIEVEMENTS

Toyota is the first manufacturer to have UL-listed, EPA, and CARBcertified compressed natural gaspowered forklifts. Its 8-Series substantially reduces the use of environmentally harmful substances in manufacturing and increases the number of recyclable parts used.

TRANSGROUP GLOBAL LOGISTICS

transgroup.com

Through its TransNeutral Green Program, TransGroup takes steps to mitigate the impacts of transportation and logistics activities by offering greenhouse gas-limiting warehousing and distribution. TransGroup has been a member of the EPA's SmartWay Transport Partnership since 2007.



CURRENT GREEN INITIATIVES

- Reuse/recycling program
- Reduce energy usage
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Internal company sustainability initiatives include energy conservation, recycling, waste reduction, and paperless initiatives. TransGroup has reduced its fossil fuel consumption, atmospheric pollution, and greenhouse gas emissions. It closes product life-cycle loops, maximizes the value of unused or end-of-lease/ life assets, and tracks shipment emission metrics.

TRANSPORTATION INSIGHT

transportationinsight.com

Transportation Insight's integrated enterprise logistics solutions leverage multimodal insight, expertise, and technology-driven data analysis to help clients improve supply chain performance and sustainability. It is an ongoing participant in the SmartWay Partnership program.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Reduce energy usage
- Sustainable packaging
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Transportation Insight's proprietary and commercial technology applications capture, manage, and act on supply chain data that improves customer service while reducing fuel usage, air emissions, vehicle miles, and energy consumption.

UNION PACIFIC RAILROAD

up.com

Union Pacific Railroad reduces waste by reusing and recycling materials, and diverts approximately 70% of its waste from landfills. In addition to helping customers take advantage of rail's fuel efficiency and the resulting emissions savings, the rail collaborates on service parameters to optimize shipments and avoid wasting resources.

CURRENT GREEN INITIATIVES

- Reduce greenhouse
 gas emissions
- Reuse/recycling program
- Reduce energy usage
- Sustainably source materials
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Since 2000, Union Pacific has improved fuel efficiency by 19%. Since 2009, it has spent about \$3.4 billion to purchase fuelefficient locomotives, and retired 2,300 older locomotives to reduce greenhouse gas emissions. In a typical year, Union Pacific recycles 400,000 pounds of electronic equipment, 1 million pounds of signal batteries, and more than 4 million gallons of oil and diesel fuel.

UPS

ups.com

UPS invests in alternative fuel and advanced technology vehicles, and uses renewable energy to reduce the environmental impact of its operations. UPS was named to the *Forbes* and Just Capital annual Just 100 list for corporate citizenship, has been recognized on the Dow Jones Sustainability World & North America Indices, is on *Barron's* list of 100 Most Sustainable Companies, and was chosen by 3BL as one of the 100 Best Corporate Citizens.

CURRENT GREEN INITIATIVES

- Reduce greenhouse
 gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reduce energy usage
- Sustainable packaging
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

UPS plans for 25% of its total electricity to come from renewable sources by 2025. By that time, the company also aims to source 40% of all ground fuel from sources other than conventional gasoline/ diesel. UPS plans to purchase more than 6,000 natural gas trucks through 2022, and invested in the U.K.-based technology startup firm Arrival, committing to buy 10,000 of their electric vehicles.





VERITIV LOGISTICS SOLUTIONS

veritivcorp.com

Veritiv supports efforts to preserve, replenish, and enhance the environment for future generations. The company creates lightweight, sustainable packaging that minimizes dimensional weight, improving freight and warehouse efficiency in the form of space savings, shipping cost savings, and waste reduction. Since 2014, the company has been a SmartWay partner committed to reducing carbon emissions.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Reuse/recycling program
- Reduce energy usage
- Sustainable packaging

NOTABLE ACHIEVEMENTS

Veritiv implemented paperless billing, reducing the consumption of paper by almost 1 million sheets per year. The company also created a paperboard-based packaging option made with 100% sugarcane bagasse fibers, an annually renewable, tree-free fiber source that is recyclable and compostable.

WERNER LOGISTICS

werner.com

Since becoming the first motor carrier to implement electronic logging devices in 1998, Werner has driven more than 18 billion miles with this technology, allowing the company to reduce its outof-route miles, save fuel, and reduce emissions for more than 20 years. Werner received a 2019 SmartWay Excellence Award and was selected as the SmartWay High Performer winner for its sustainability achievements.

CURRENT GREEN INITIATIVES

- Reduce greenhouse
 gas emissions
- Reuse/recycling program
- Reduce energy usage
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Since 2007, Werner has saved more than 282 million gallons of fuel and reduced carbon emissions by 3.2 million tons.

WSI

wsinc.com

WSI promotes environmental, social, and organizational sustainability through its interactions with customers, employees, and suppliers and is committed to green initiatives. WSI employs natural landscaping and green space to minimize stormwater runoff and surface pollutants and uses electricpowered equipment where possible.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

WSI actively runs recycling programs at all facilities, totaling thousands of tons of material recycled annually.

XPO LOGISTICS

xpo.com

XPO has expanded the use of efficient mega-trucks, which can reduce road miles and cut carbon emissions by as much as 20%. The company prioritizes energy-saving policies and a phased upgrade to LED lighting. XPO is the first global logistics company to join Massachusetts Institute of Technology's Industrial Liaison Program.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Sustainable packaging
- Sustainably source materials
- Solar panels
- Energy-efficient lighting
- Network optimization
- Sustainability reports

NOTABLE ACHIEVEMENTS

XPO added to its fleet of liquefied natural gas vehicles with 500 new vehicles in the United States and 200 in Europe, where approximately 98% of its fleet is compliant with key European emissions standards.

YALE

yale.com/north-america/en-us



The Yale Power Suite provides a range of lift trucks that offer unrestricted choice of hydrogen fuel cells, lithium-ion batteries, internal combustion engines, and lead-acid batteries. This enables a power solution built around requirements for cost, labor, maintenance, emissions, and space, giving end users a sustainable power option that helps eliminate harmful emissions, off-gassing, and other hazardous chemicals.



CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources (e.g., electric vehicles)
- Reuse/recycling program
- Reduce energy usage
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Yale's lithium-ion battery-powered lift trucks can last up to five times longer than those using a lead-acid battery, reducing recycling waste. Based on projected electricity generation from the U.S. power grid versus on-site hydrogen generation from natural gas, hydrogen fuel cellpowered lift trucks save greenhouse gas emissions by 33% compared to lead-acid batteries charged from the electrical grid.

YRC WORLDWIDE

yrcw.com

YRC's fleet strategy centers on equipment use, cleaner-burning fuels, and fuel-efficient engines. Its less-than-truckload companies prioritize greenhouse gas reduction, pollution prevention, waste reduction, and conservation. The carrier restricts power-unit idling to reduce emissions and save fuel, and uses biodiesel fuel. YRC companies have received the SmartWay Environmental Excellence Award, and the EPA named its team a SmartWay Champion.

CURRENT GREEN INITIATIVES

- Reduce greenhouse gas emissions
- Use alternative fuels or energy sources
- Reuse/recycling programs
- Reduce energy usage
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

Since 2015, YRC has replaced 20% of its tractors and 15% of its trailers. YRC also caps speed below 65 mph on all units, which reduces fuel consumption and emissions.



YUSEN LOGISTICS

yusen-logistics.com



Yusen Logistics upgraded its Carson, California, facility with energy-efficient lighting, as well as a white roof, which keeps the warehouse cool by deflecting up to 80% of sunlight, resulting in significant energy savings. Yusen Logistics is rolling out lithiumbattery-powered forklifts in Carson, as well as at its Sumner. Washington, facility. The company has ISO 14001 certification for its warehouses and offices, and reduces environmental loads by using resources efficiently, saving energy, and reducing waste. Yusen has a large-scale solar power generator in New Jersey that generates electricity in the warehouse, with excess wattage sold to local power companies.

CURRENT GREEN INITIATIVES

- Reduce greenhouse
 gas emissions
- Use alternative fuels or energy sources
- Reduce energy usage
- Solar panels
- Energy-efficient lighting

NOTABLE ACHIEVEMENTS

The company's investment in more than 30 lithium-ion battery powered forklifts will result in an average energy savings of 16% per truck. It also achieved a lifetime carbon reduction of 24.7% and helped protect more than 270 acres of rainforest in Southern Papua, New Guinea, to mitigate 100% of the unavoidable embodied carbon associated with the development of its new warehousing facility.

HONORABLE MENTIONS GREEN COMPANIES OF NOTE

A. DUIE PYLE

aduiepyle.com

A. Duie Pyle's fleet is equipped with adaptive cruise control and selfinflating tires, boosting efficiency and reducing fossil fuel waste. Pyle piloted two of the first 20 electric and emission-free eCanter FUSO trucks introduced in North America. Its electric forklifts reduce carbon emissions by 24,000 pounds per unit.

DELTA CARGO

deltacargo.com

Starting March 1, 2020, Delta Air Lines committed \$1 billion during the next 10 years to mitigate all emissions from its global business going forward. The airline will invest in advancing clean air travel technologies, accelerating the reduction of carbon emissions and waste, and establishing new projects to mitigate the balance of emissions.

DSV / PANALAPINA

dsv.com

DSV's group customer service rep department plans and manages sustainability initiatives throughout the organization and performs on-site reviews to ensure local compliance with global policies. DSV reports to the UN Global Compact and CDP annually on its sustainability activities. Initiatives include energy-efficient buildings and recycling and sorting to reduce emissions.

FINSA

finsa.com

FINSA is committed to ensuring its manufacturing processes have the least environmental impact possible. FINSA optimizes all manufacturing processes to achieve maximum energy savings by co-generation (exploitation of the heat and energy produced by its own factory) and minimum waste production.