RedPrairie®

Greenlighting Efficiency:

7 Easy Steps to Reduce the Environmental Impact of Today's Supply Chains

E²e

With increased international attention focused on the environmental impact of manufacturing and transportation, today's leading companies are using cutting-edge technology to "go green" in another area that can make a dramatic difference: the supply chain.

In addition to boosting a company's reputation in the minds of consumers, applying a "green" mindset to supply chain processes can also deliver financial benefits, including reduced costs in key areas such as materials, labor and transportation. Balancing environmental objectives with strategic and financial goals is a tricky business, but at RedPrairie we believe there are simple, cost-effective ways for companies to help their supply chains better support their environmental goals.

Creating a "green" supply chain can be easier than you think

Going "green" means committing to change, but that doesn't mean it needs to be a painful, expensive, or lengthy process. Every step to increase efficiency throughout the system adds up, and the overall impact can make a dramatic difference—for both the environment and the bottom line.

At RedPrairie, we're committed to developing the technology, solutions, and strategies needed to create more cost-efficient—and environmentally sustainable—supply chains. Here are 7 "greenlight" supply chain initiatives that can help you meet your company's environmental goals.

1. Optimize Your Routing and Consolidation

The opportunity

Inefficient planning and routing of transportation units and fleet operations can lead to enormous amounts of wasted fuel—and time. Optimized routing and consolidation provides the 'best possible path' through a series of stops and ensures your drivers spend as little time as possible at each stop. It also maximizes the usage of each trailer load shipped, resulting in fewer loads overall.

The environmental impact

RedPrairie has found that our fleet clients save an average of 10-15% in miles driven from improved routing and consolidation. This translates into a direct reduction of carbon dioxide emissions. According to EPA estimates, every gallon of diesel consumed creates 22.2 pounds of carbon dioxide (CO_2) emissions. If every driver in a fleet of 50 trucks drove 5 fewer miles a day through optimized routing and planning, after one year it would save 1.5 million pounds of CO_2 from entering the atmosphere—not to mention substantially reducing fuel consumption and fuel costs. In addition, optimized routing reduces idling time, and better consolidation of shipments reduces loading and unloading times.

2. Improve Your Fleet Management

The opportunity

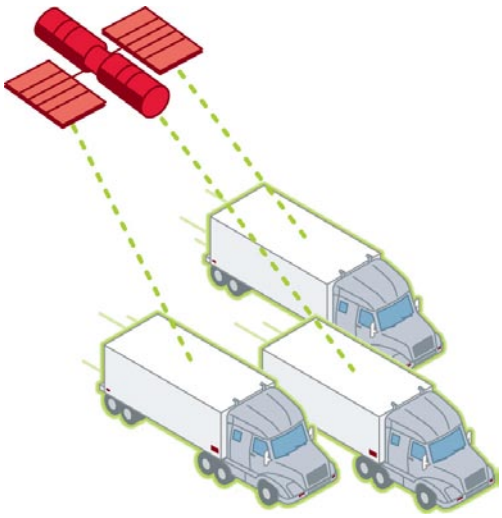
Do you often wonder:

- How fast are my drivers really going?
- How long are my trucks idling?
- Where are my drivers?
- How many trucks or drivers do I really need today?

Fleet tracking, or Fleet Visibility, helps you track vehicle movements and monitor performance with real-time feedback on route productivity. At RedPrairie, we've found the lack of fleet visibility results in enormous workforce inefficiencies and fuel waste. Incorporating GPS tracking and monitoring into your fleet operations is a relatively easy fix for companies looking to reduce their overall carbon emissions footprint.

The environmental impact

Better fleet tracking allows for more efficient management of resources and reduces the overall amount of diesel fuel consumed. According to the EPA, truck and rail transportation consumes 35 billion gallons of fuel a year, producing 350 million metric tons of carbon dioxide emissions. Improved fleet management can make a significant dent in the overall environmental impact of transportation.



Some of the greatest environmental benefits from fleet tracking come from the reduction in idling time and improved equipment use. Our RedPrairie Fleet Visibility customers are typically able to reduce idling by 30%. Moreover, approximately 15 states and dozens of county governments have proposed laws to restrict the amount of time a vehicle can idle its main engine. Thus, reducing the amount of idling in your fleet can have significant legal, financial, and environmental benefits.

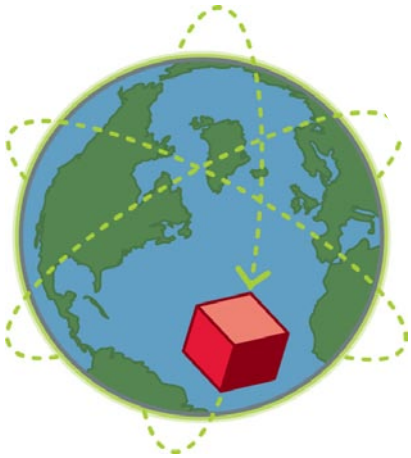
In addition, fleet tracking solutions can help you determine an improved fleet strategy—helping you better plan your equipment purchases and usage. One grocer cut 83,000 gallons of diesel fuel and half-million miles by switching from single trailers to tandem trailers at its distribution center. The tractors also have computer controls that limit cruising speeds to 65 mph, and automatically turn off engines after five minutes of idling (*Timesunion.com*, "EPA program cuts grocer's emissions," June 24, 2007).

3. Increase Your Global Transport Efficiency

The opportunity

Delays due to port clearance documentation, poor duty payment coordination, or general lack of visibility into your global supply chain can create significant inefficiencies across your operations.

Our global transport solutions can help you increase efficiency by improving the coordination, strategy, and logistics surrounding the movement of goods through multiple countries. With an increasing number of materials being shipped from Asia and Latin America, the overall environmental impact of those shipments can be reduced through better, more efficient coordination and tracking.



The environmental impact

When goods are stuck in ports or in customs, most companies worry about the sales impact. However, there is also an environmental impact that results from the storage and inefficient movement of those goods.

Gaining clear visibility into the movement of goods allows you to optimize routes and modes of transport around each final destination—for example using large capacity containers for unloading in ports near areas of high demand, and smaller containers for cities with lower demand. This type of optimized international multi-modal transport can exert a smaller impact on the environment by increasing transportation efficiency.

4. Create System-generated Tasks and Communications

The opportunity

Most warehouses still rely on paper-based methods of communication. However, electronic interfaces, RFID, voice-based technologies, and electronic Advanced Ship Notices (ASNs) can significantly reduce the need for paper in the warehouse. In addition to reducing paper consumption, system-generated tasks, and specifically ASNs, make receiving more efficient—which in turn impacts the overall efficiency of trucks and warehouse personnel.

Our complete suite of system task and communication tools can help you integrate critical systems to increase the efficiency of your operations.

The environmental impact

Roughly 170 trees are destroyed for every 500,000 pieces of paper at postcard weight ("Recycled Papers: The Essential Guide," Claudia Thompson). This doesn't include the carbon dioxide emissions and greenhouse gases generated in the production of the paper. Cutting unnecessary paper use from your warehouses can generate a quick "green" return on investment.

5. Take Full Advantage of Improved Packaging Strategies

The opportunity

There is an increased global focus on reducing the impact of packaging on waste systems and landfills. However, there are also additional steps that can be taken within the supply chain to ensure that reduced packaging, storage containers and transportation supplies are used as efficiently as possible.

While many companies are transitioning to reduced packaging materials, some do not reconfigure their shelving to take full advantage of those gains. Our warehouse management solutions can help you streamline storage and accurately track crates and pallets so transportation materials can be more easily recycled and reused.

The environmental impact

In Europe, under the European Union's Packaging Waste Directive, manufacturers already pay for collection and recycling of packaging waste based on the material and weight of their packages.

In the United States, many retailers and some states have established packaging material mandates. One of the most famous companies mandating packaging changes is Wal-Mart. The company's "Packaging Scorecard" is a measurement tool that allows suppliers to evaluate their packaging against all the other packaging in a product segment. Scores are calculated based on the following weights: 15% for greenhouse gas/carbon dioxide generation per ton of production; 15% for material value; 15% for product/package ratio; 15% for container cube utilization; 10% for transportation; 10% for recycled content; 10% for recovery value; 5% for renewable energy; and 5% for innovation (Source: www.walmartfacts.com). Packages that score well on one criterion may not rate as high in another, indicating an area of potential improvement. Since each package is compared with its peers, a ranking can change if another supplier improves its packaging.

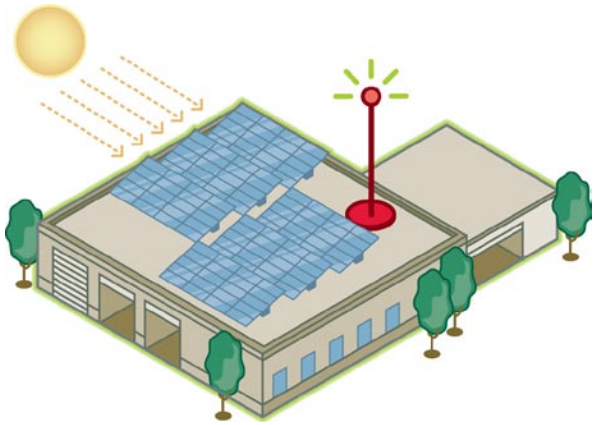
Last year, Wal-Mart's Canadian operation switched several shipping crates from cardboard to plastic, allowing them to be reused about 60 times on average, as opposed to the single-use cardboard design. The company estimates it saved $4.5 million from the switch, reduced waste by 1,400 tons, and reduced carbon emissions by 10,000 tons due to the elimination of cardboard production. The Canadian initiative is now being replicated in other Wal-Mart operations around the world (Source: Wal-Mart Canada).

6. Deliver on Energy Conservation Strategies in Your Warehouses

The opportunity

There are a variety of ways to increase energy-efficiency and reduce the environmental impact of warehouses—from energy-saving motion sensors for lights, to solar power and reusable pallets. In the U.S. alone, more than 2 billion wooden pallets are used every year, the equivalent of approximately 1 million acres of hardwood forest. Even small changes such as switching to reusable pallets and creating more efficient shelving or forklift routing can have a significant impact on the overall environmental footprint of a warehouse.

For over 30 years, RedPrairie has worked with clients across every facet of distribution operations to increase efficiency. Our Warehouse Management solutions can help you improve shelving strategies and create more efficient loading processes so materials can be off-loaded in order of delivery, reducing the idling time and fuel consumption for each truckload. RedPrairie's load optimization software virtually determines optimal loading and weight distribution to meet Department of Transportation standards which are designed to help minimize the environmental impact of transporting goods.



When combined with our Workforce Management solutions, RedPrairie can even allow you to establish and track key performance indicators for environmental initiatives such as recycling, energy-efficiency or load efficiency down to the individual employee level.

The environmental impact

Based on EPA estimates, the average energy cost per square foot for a non-refrigerated warehouse is approximately $1.00, and the average energy cost per square foot for a refrigerated warehouse is $1.45. Running a more energy-efficient warehouse provides the opportunity to cut those costs down significantly and allows you to rely less on non-sustainable energy resources.

Examples of RedPrairie clients who have achieved significant gains in energy efficiency include PepsiCo and Subaru.

PepsiCo has made a companywide commitment to environmental action, including using more solar energy at its facilities, recycling water, and purchasing renewable energy credits that subsidize the development of clean sources such as wind power (*USA Today*, "Eco-marketing a hot topic for advertisers at Cannes," June 22, 2007).

Subaru was the first automotive plant in America to achieve zero landfill status, with a 99% recycle rate. That same plant was also the first U.S. auto plant designated as a wildlife habitat (Source: Subaru).

7. Improve Labor Management

The opportunity

By combining the schedule, time clock, task list, online courseware, and performance metrics into a single touch screen user interface that's role-specific, your employees can do more, use less paper, and see instant results. These tools also allow store and warehouse management to improve how they manage and schedule people.

Preferred Methods℠ and Standards are another way to create a more efficient workforce. Preferred Methods℠ focus on how a job should be performed by your employees. Preferred Methods℠ also act as instructive tools for managers to coach individual employees on how to perform their role most efficiently by eliminating wasted effort—enabling employees to work smarter rather than harder.

The environmental impact

In 2005, the U.S. Census Bureau reported that Americans spend more than 100 hours a year commuting to work. Making sure your facilities are staffed correctly can eliminate unnecessary trips by employees, reducing the overall fuel consumption needed to get your employees to and from work.

More importantly, improved labor automation and training tools can make your people more efficient, requiring less overtime. Also, with improved labor efficiency you have the opportunity to give your employees paid time off for training or volunteering. RedPrairie offers its employees two days of paid time off every year to volunteer.

Every step matters

Every initiative to improve efficiency that you greenlight is another opportunity to reduce the environmental impact of your supply chain. From more efficient store operations that consolidate and reduce the number of inter-store transfers and replenishment shipments, to tools that allow you to improve the accuracy of shipments, and better inventory controls to reduce waste from over-production, technology will continue to lead the way for greener, more efficient supply chains. And RedPrairie will be there every step of the way.

About RedPrairie

RedPrairie is a world leading consumer driven optimization company. Built on an advanced Service Oriented Architecture (SOA) developed over the past 10 years, the RedPrairie integrated suite of solutions offers on-demand capabilities to over 25,000 sites worldwide for many of the world's largest companies.

RedPrairie's E²e™ solutions synchronize people and products throughout the customer buying cycle to ensure goods reach the right place at the right time. At the point of sale, this means consumers have access to desired products and that the store is staffed with the right people to help them make their purchases. In the production cycle, it means suppliers and manufacturers time and synchronize shipments and production based on demand signals from the retailer. And in the back room of the store, it means having the least amount of inventory, solving the "last yard" problem of the retail supply chain.

With 20 global service sites and standard service methods that have been validated over the last 30 years, RedPrairie provides unparalleled service and support. For additional information, call 1.877.733.7724, or access www.RedPrairie.com.