

There can be challenges to starting a green fleet, or converting an existing fleet to the use of alternative fuels. According to some industry experts, a successful plan to reduce fuel consumption and carbon emissions requires a long-term vision, incremental change, support from top management, and flexibility to make changes along the way.

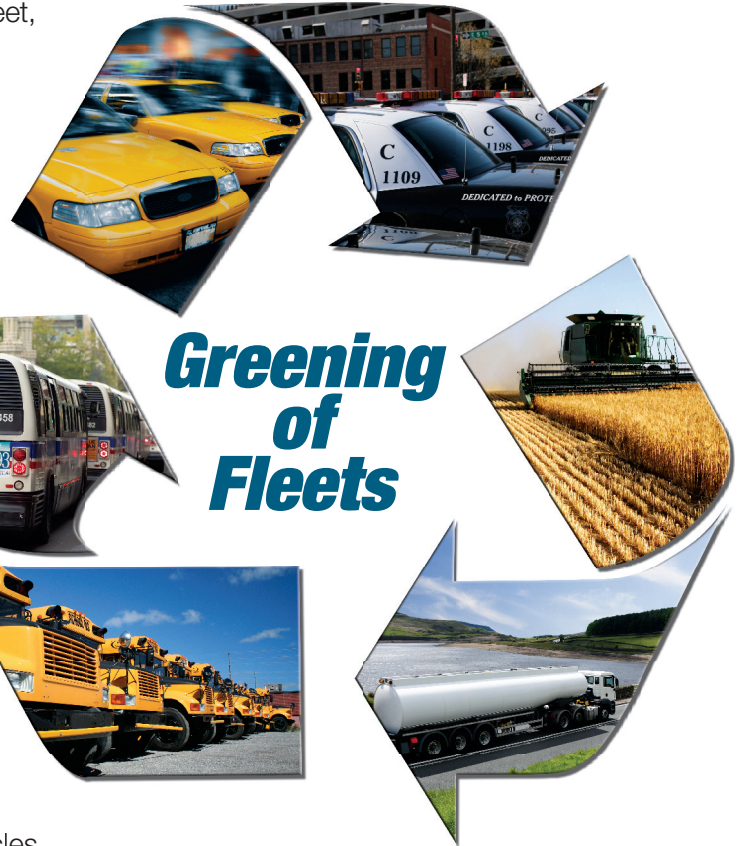
There are compelling reasons *why* fleets should be green and deliberate steps on *how* to implement alternative fuels.

Why Use Green Fleets?

- **Reduce operating costs** by improving efficiency, reducing life cycle costs, and reducing vulnerability to volatile fuel prices.
- **Reduce greenhouse gas emissions** by implementing the use of biodiesel in vehicles, which are the primary source of greenhouse gases and urban air pollution.
- **Improve corporate image** by branding business strategies and appealing to public concerns about energy conservation and ecological sensibilities.

How to Implement Green Fleets

- **Get buy-in** from all management and staff levels, and be sure to communicate information about the benefits, goals, and targets frequently.
- **Create long-term objectives** and tangible goals based on best practices in the industry (such as baselines, benchmarks, and progress reports).
- **Avoid setting reduction goals in absolute numbers** for growing fleets or fleets just starting because absolute goals can impede growth.
- **Anticipate obstacles**, such as driver resistance, lag time between original equipment manufacturers' technology and market availability, and slower return on investment.
- **Move slowly** and implement change over time.
- **Improve vehicle use** with selection analysis and education of drivers.
- **Track and report progress** and share successes with employees, shareholders, and the public.



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Biodiesel Basics

Conventional diesel fuel is a refined petroleum product. It is subject to the same concerns as gasoline: its exhaust emissions pollute the environment and dependence on foreign supplies of petroleum threatens economic security. The alternative to diesel is a fuel made from natural products called biodiesel. Biodiesel is a domestically produced renewable fuel that can be manufactured from organic materials. Its physical properties are very similar to those of diesel, yet biodiesel burns much cleaner with fewer emissions.



Did You Know?

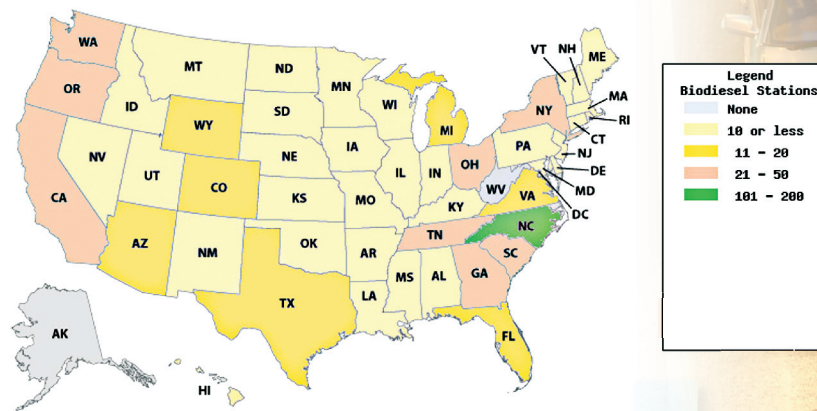
Check out the following link to see what incentives are available for biodiesel:

<http://www.afdc.energy.gov/afdc/laws/matrix/tech/>

- **Renewable, domestically produced fuel made from a variety of feedstocks (for use in compression ignition, diesel engines)**
 - Soybeans
 - Vegetable oil
 - Recycled vegetable oil
 - Tallow
- **Comes in a variety of blends**
 - B100 – 100% biodiesel
 - B20 – 20% biodiesel, 80% conventional
 - B5 – 5% biodiesel, 95% conventional
 - B2 – 2% biodiesel, 98% conventional
- **Can be used in most diesel vehicles with little to no modification**
 - Fuel filters will require changing after conversion

Incentives

Despite the fluctuating economy and budget woes, there are a record number of grants and incentives for funding alternative fuel vehicles that have been made available. For example, in 2009 the U.S. Department of Energy (DOE) made nearly \$300 million of American Reinvestment and Recovery Act (ARRA) funding available through the Clean Cities program. This single grant funding opportunity is responsible for putting more than 9,000 alternative fuel and energy efficient vehicles on the road and establishing an additional 542 fueling stations across the country.



Biodiesel fueling stations. Source: AFDC.

Fuel	Area	2012 Cost	2009 Cost
Diesel (\$ per gallon)	National Average	\$3.86	\$2.19
Biodiesel (B20) (\$ per gallon)	National Average	\$3.95	\$2.43
Biodiesel (B99-B100) (\$ per gallon)	National Average	\$4.20	\$3.42

Diesel and biodiesel cost comparison, 2009-2012. Source: AFDC.

Biodiesel Cost

Costs of biodiesel, just as conventional diesel, depend on a variety of factors. The price depends on the biodiesel blend. A high biodiesel ratio, B20 or B100 for example, will cost more. The per-gallon cost of biodiesel is slightly more than conventional diesel because demand is low.

Biodiesel Availability

Biodiesel has widespread availability around the globe. The above map shows the number of biodiesel stations by state.