



From the Fryer to the Fuel Tank Clean Green Biodiesel Works!

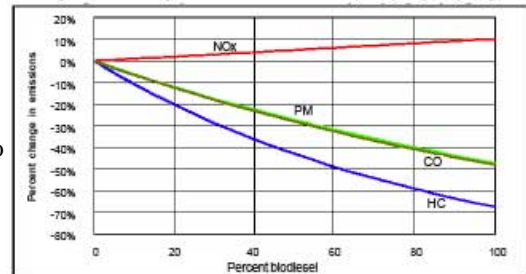
Why is Biodiesel better than petroleum diesel?

1. Lower Emissions

Biodiesel burns much cleaner: Burning biodiesel emits no sulfur dioxide and as much as 50% fewer smog-producing compounds than fossil diesel. Biodiesel meets the strict California Air Resources Board standards. Biodiesel (B100) offers the following benefits compared to diesel:

- Reduces net carbon dioxide (CO₂) emissions by 78%
- Reduces carbon monoxide (CO) emissions by 48%
- Reduces hydrocarbon (HC) emissions by 67%
- Reduces particulate matter (PM) emissions by 47%
- Reduces sulfur dioxide (SO₂) emissions by nearly 100%
- Nitrogen Oxide (NO_x) emissions may increase or decrease slightly depending on the engine and technologies used

Average emission impacts of biodiesel for heavy-duty highway engines



Reduces global warming pollution: When a fossil fuel such as petroleum diesel is burned in a vehicle, carbon dioxide (CO₂) emissions flow into the atmosphere, resulting in a net increase in the balance of global CO₂ – a gas that holds in the sun’s heat, warming the Earth. Consider that each gallon of gasoline burned releases 26 pounds of CO₂ into the atmosphere. Burning fossil fuels (like oil and coal) is the main contributor to global warming, which is creating serious threats to life on our planet, like sea level rise and stronger hurricanes. Because biodiesel is derived from plants, it has a complete carbon cycle - burning biodiesel emits about as much carbon as was absorbed by the plant when it was alive. Thus, using biodiesel does not significantly increase the global balance of carbon dioxide and does not significantly disturb the natural carbon cycle. In the U.S., biodiesel produced from soybean oil reduces life cycle carbon dioxide emissions by as much as 78% (“pure” biodiesel, B100) when compared with petroleum diesel. B20 (20% biodiesel blend) results in a 16% overall CO₂ reduction.

2. Better Health

According to the US Department of Energy, using biodiesel can reduce cancer risks from diesel exhaust by 94%. In May 2000, biodiesel became the only alternative fuel in the country to have successfully met the EPA's Tier I and Tier II Health Effects standards under Section 211(b) of the Clean Air Act. Biodiesel mixes cleanly at any ratio with petrodiesel-- in fact, adding only a small amount of biodiesel to petrodiesel results in greatly lowered emissions. Burning biodiesel lowers levels of smog-inducing, health-threatening substances, resulting in a 10%-50% overall reduction in diesel-generated environmental pollutants.



Pollution from diesel vehicles has health implications for everyone, especially children. Biodiesel can reduce that threat.

3. A Cleaner Engine

Biodiesel's superior lubricating properties can reduce wear in diesel engines. Bench scale tests have shown that 1% biodiesel can improve the lubricity of diesel fuel by as much as 65%. Note, because of the lubricity of biodiesel one must change engine filters after the first use.

4. Economic Benefits

- 🌱 **Reduces our dependence on foreign oil:** According to researchers at Oakridge National Lab, America's dependence on foreign oil cost the US economy between \$150 billion and \$250 billion in 2005. Since 1970, the economic cost of America's oil dependence is estimated at \$3.2 trillion. During the 1973 Arab oil embargo, the US imported 28 percent of our oil. Today, we import 58 percent. The US Department of Energy's Energy Information Administration estimates that - under the current policies -- by 2025, we will import 68 percent of our oil -- more than two-thirds of our oil consumption.
- 🌱 **Creates jobs at home and keeps money in the local economy:** From the farmers who grow the crops to produce the vegetable oil to the workers at the biodiesel production facility, biodiesel keeps our energy dollars local and makes jobs for our neighbors.
- 🌱 **It's recycling:** Biodiesel can be made from *used* vegetable oil, saving restaurant owners' money otherwise spent paying for waste oil disposal.

What are we doing to encourage biodiesel?

The Alliance is working with the New Orleans Biodiesel Initiative, the Greater New Orleans Clean Cities Coalition, Josh Tickell – author of *Biodiesel America*, and others to launch an education campaign about biodiesel. We will be conducting workshops for adults and students about the benefits of biodiesel and how to make your own. We will also be showcasing a Fuelmeister, which turns used kitchen oil into biodiesel, at community events. We also plan to work with city and school officials and local restaurants to launch two pilot projects, whereby we will donate biodiesel to be used in a city bus and a school bus to reduce fuel costs and demonstrate this technology. Our goal is ultimately to have all of our city and school bus fleets running on biodiesel!

How can you support biodiesel locally?

- 🌱 **Volunteer with us!** We need help to make biodiesel, educate the public, pick up used kitchen oil, maintain our biodiesel truck, update a website, create a MySpace webpage, research, provide marketing expertise, and more. Please contact Micah at mwalker@all4energy.org.
- 🌱 **Make a donation** through our website, www.all4energy.org, or mail your contribution payable to the Alliance for Affordable Energy to 4718 Dryades St., New Orleans, LA 70115.
- 🌱 **Could you donate the following items?** Diesel truck with towing hitch or a diesel engine and mechanic to install it on a donated flooded truck, flat bed trailer, supplies (waste vegetable oil, lye, methanol, fire extinguisher, outreach materials (paper and printing), magnetic vehicle signs.

Thanks for supporting clean green biodiesel!

For more information, please contact:

Micah Walker Parkin
Program Director
mwalker@all4energy.org
(504) 258-1247

Alliance for Affordable Energy www.all4energy.org 4718 Dryades St., New Orleans, LA 70115