

MAKING THE

SWITCH

*to*

BIODIESEL

ENERGY, ENVIRONMENTAL & ECONOMIC SECURITY

**DM  
ME** Virginia  
Department of  
Mining, Minerals  
and Energy

 **USB**  
UNITED SOYBEAN BOARD  
Progress Powered by U.S. Farmers

 Virginia Clean Cities

# BENEFITS *of* BIODIESEL

## BIODIESEL IS COST EFFECTIVE

**WORKS** with existing engines, no new equipment necessary

**COSTS** about the same as diesel but may very slightly

**IS USED** in existing tanks and dispensers (pre-cleaning recommended)

**IS MADE** primarily from domestically produced soybean and waste oils. It can be made from non-edible feedstocks such as camelina or algae

**SUPPORTS** more than 39,000 jobs to meet the Renewable Fuel Standard (RFS) in 2012  
This number is expected to grow to 74,000 jobs in 2015 \*

**ADDS \$3.8 BILLION** to the nation's Gross Domestic Product and creates \$2.8 billion in household income (based on 2012 production levels)

## BIODIESEL IMPROVES NATIONAL ENERGY SECURITY

**PROVIDES** an immediate solution to our energy security needs

**RELIEVES PRESSURE** on oil imports from the Middle East to maintain fuel diversity. The US spends \$1 billion per day and \$1 million per minute on foreign oil \*\*

## BIODIESEL IS CLEANER BECAUSE IT:

**MEETS CLEAN** diesel standards

**IS DESIGNATED** as an alternative fuel by the US Department of Energy and US Department of Transportation

**REDUCES GREENHOUSE GAS** emissions by 89% \*\*\*

**IS APPROVED** as an advanced biofuel by EPA to meet the RFS and can be blended at any level with diesel fuel \*\*\*\*

**MEETS INDUSTRY** lubricity standards by improving the lubricity value of the fuel, thereby reducing engine wear and improving operating costs



\* (source: Cardno ENTRIX)

\*\* (source: Energy Information Administration)

\*\*\* according to Argonne National Laboratory (Science Mag. Oct. 2011)

\*\*\*\* (see ASTM standards D6751 for B100, D975 for up to B5, D7467 for B6-B20, and D396)

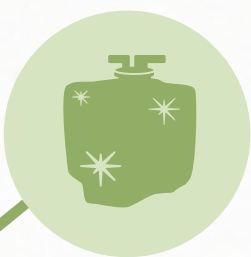


**Biodiesel reduces Greenhouse Gas emissions by 89%**

Step by Step

# BIODIESEL

Biodiesel is a renewable alternative fuel created from vegetable oils, animal fats, and greases through a chemical process. Biodiesel can be blended at any percentage with petroleum for use in diesel engines (check engine warrantee for recommended blend levels). Biodiesel, which contains oxygen, burns cleaner than petroleum and reduces greenhouse gases (GHGs). Produced in the US, it creates jobs, adds to local and national economies, and decreases dependence on foreign oil imports.



## PREPARE

**CLEAN** your bulk fuel tank

**REPLACE** fuel filters after initial use in used vehicles

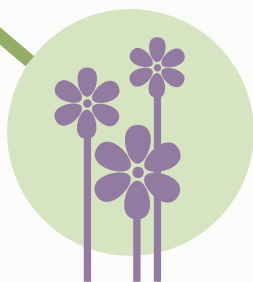


## HANDLE & USE

**REQUIRE THAT THE FUEL SUPPLIER** guarantee their product by ensuring fuel quality; Use only ASTM certified fuel (D6751 for B100, D975 for up to B5, D7467 for B6-B20, and D396)

**BUY BIODIESEL** from a reputable source. If you are concerned about fuel quality, purchase fuel from a BQ-9000 supplier

**BIODIESEL IS A CLEANING AGENT**, which means petroleum deposits may end up in the fuel filter until the system is clean. Stick to your regular maintenance schedule



## ENJOY the BENEFITS

**LESS CLIMATE CHANGE.** Biodiesel from soybeans and waste oils reduce greenhouse gases by as much as 98% according to the Argonne National Laboratory

**LESS ACID RAIN.** Biodiesel emits no sulfurous compounds which produce acid rain

**LESS SMOG.** Biodiesel reduces smog-causing pollutants and carbon monoxide by about 50 percent

**LESS OIL IMPORTS.** Every gallon of biodiesel used in America means one less gallon imported and more money in the US economy



LEARN MORE:

**IMPORTANCE OF BIODIESEL FUEL on [biodiesel.org](http://www.biodiesel.org)**

[http://www.ehow.com/about\\_6515889\\_importance-biodiesel-fuel.html#ixzz25cUWtBCg](http://www.ehow.com/about_6515889_importance-biodiesel-fuel.html#ixzz25cUWtBCg)



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# SWITCH *to* BIODIESEL?

*here...*

## IS HOW TO GET STARTED



Sign up for our emailing lists to stay informed at: [vacleancities.org](http://vacleancities.org)



Read more at: [biodiesel.org](http://biodiesel.org)



Call Virginia Clean Cities at:  
540-568-8896

## BE PART OF THE SOLUTION!

