



## **Vegetable Oil As Fuel:** **A Few Facts**

“Unlike petroleum-based products, vegetable oils are biodegradable, nontoxic, and are derived from a renewable resource. When used as a fuel, they produce nearly 100 percent less greenhouse gases than petroleum-based diesel fuels ...”

*National Geographic News*  
April 2003

### **Vegetable Oil Was Used To Run The First Diesel Engine:**

- Rudolf Diesel demonstrated his engine at the Exhibition Fair in Paris, France in 1898. This engine was fueled by peanut oil

### **Vegetable Oil Is Environmentally Friendly:**

- Vegetable oil has no sulfur emissions, a major component of acid rain.
- Vegetable oil has overall better emissions than petroleum diesel.
- One study on a 1981 VW Vanagon equipped with a Greasecar vegetable oil system showed that using vegetable oil as a fuel results in lower nitrous oxides (NO<sub>x</sub>, a component of smog), lower carbon monoxide (CO, a greenhouse gas), and lower particulate matter (PM, a component of smog) than petroleum diesel.<sup>1</sup>
- Another study conducted at an EPA certified lab on a 2002 VW Golf with a Plantdrive Vegetable Oil Control System by Albuquerque Alternative Energies showed that using vegetable oil as a fuel results in lower total hydrocarbons (THC, a greenhouse gas), lower CO, lower NO<sub>x</sub>, and lower PM than petroleum diesel.<sup>2</sup> The vegetable oil fueled car had emissions lower than EPA limits.<sup>3</sup>
- Vegetable oil is carbon neutral. Plants grown in other seasons consume carbon monoxide and carbon dioxide produced from burning vegetable oil.

### **Vegetable Oil Benefits Farmers:**

- Farmer profit from growing plants containing vegetable oil, e.g., soybeans and canola.

### **Vegetable Oil Is A Local Source of Fuel:**

- Plants containing vegetable oil are grown in the Midwest.

### **Vegetable Oil Is A Renewable Source of Fuel:**

- Unlike petroleum diesel, vegetable oil is a renewable source of fuel made from oil-producing plants.

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<sup>1</sup> See <http://www.greasecar.com/tech.cfm>; see also <http://www.abqaltenergies.com/documents/coconut%2520oil%2520for%2520fuel.pdf> for a 2001 study showing that the higher the percent of coconut oil in a petro diesel blend, the lower the NO<sub>x</sub> emissions.

<sup>2</sup> <http://www.abqaltenergies.com/images/CSU%20Test%20Results.JPG>

<sup>3</sup> *Id.* There is no EPA standard for carbon dioxide, but there are for the remaining variables tested.