



CLEAN CITIES-ATLANTA OVERVIEW

In partnership with the Department of Energy's Clean Cities Program, **Clean Cities-Atlanta is focused on the reducing the nation's consumption of imported oil.** Building on the past successes of Clean Cities coalitions throughout the country in promoting alternative fuels, the program now has an expanded, technology-neutral focus on petroleum displacement through fuel blends, hybrid vehicles, fuel economy, and idle reduction, in addition to the commitment to alternative fuels.

Overall, the Clean Cities mission is to advance the economic, environmental, and energy security of the United States by supporting local decisions to adopt practices that contribute to the reduction of petroleum consumption in the transportation sector.

The purpose of this Clean Cities-Atlanta fact sheet is to provide consumers, producers, blenders/retailers, and other interested individuals and organizations useful information, resources, and contact information to learn more about alternative fuels. This fact sheet primarily focuses on information on ethanol and biodiesel; however, other information on alternative fuels and vehicles will be included where appropriate.

ETHANOL AND BIODIESEL

Ethanol

Ethanol, a type of grain alcohol produced from the fermentation of plant sugars, is a clean-burning, high-octane, renewable fuel source. In the United States, ethanol is currently produced from corn and other grains. However, in the future, the fuel is anticipated to be produced from other biomass resources, such as agricultural and forestry wastes and specially grown energy crops.

In 2004, nearly one-third of all gasoline in the U.S. was an ethanol blend. These blends include:

- E10, or 10% ethanol mixed with 90% unleaded gasoline, is the most common blend of ethanol. This blend is compatible in any make or model of vehicle sold in the United States, with no modifications necessary to the engine.
- E85, or 85% ethanol mixed with 15% unleaded gasoline, is used in flex-fuel vehicles (FFVs). More than six million vehicles on U.S. roadways are FFVs, or E85 compatible, and thus the number of E85 fuel pumps is increasing nationwide. Where no E85 is available, FFVs can operate on pure gasoline or any ethanol blend up to 85%.

A list of available FFVs can be found at: http://www.e85fuel.com/e85101/faqs/ff_vehicles.php
For additional information on ethanol, E85, and flex-fuel vehicles, please visit National Ethanol Vehicle Coalition's website at: <http://www.e85fuel.com/e85101/faq.php>

Biodiesel

Biodiesel is a clean-burning alternative fuel produced from domestic, renewable resources, such as vegetable oil and animal fats. Biodiesel contains no petroleum, but it can be blended at any level with petroleum diesel to create a biodiesel blend. The fuel can be used in compression-ignition (diesel) engines with no major modifications. Biodiesel is biodegradable, nontoxic, and essentially free of sulfur and aromatics.

This alternative fuel can be used as a pure fuel or blended with petroleum in any percentage. B20, a blend of 20% biodiesel with 80% petroleum diesel, has demonstrated significant environmental benefits with a minimum increase in cost for fleet operations and other consumers.

More general information on biodiesel can be found in the fact sheet section of the National Biodiesel Board's website at: <http://www.biodiesel.org/resources/fuelfactsheets/default.shtm>

Alternative Fuel Research in Georgia

The Center for Agribusiness and Economic Development at the University of Georgia conducts state-related research on ethanol and other biofuels. Past studies include the economic impact of cellulosic ethanol production in Truelton County, potential biofuels for Georgia, and the economic feasibility of operating an advanced ethanol production facility in Georgia.

The reports of these studies along with additional research can be viewed at the Center's website: www.caed.uga.edu

Georgia Tech's Strategic Energy Institute (SEI) serves as a national resource for energy information dissemination and engages in energy-related research that will have a long-term, transformative effect on the nation's energy future. Some of SEI's work includes softwood ethanol research and development for a facility in Southern Georgia and a partnership with Chevron Corporation to research the production of cellulosic biofuel and hydrogen viable transportation fuels.

More information on Georgia Tech's SEI and their research can be accessed at: <http://www.energy.gatech.edu/>

SunGrant Bioweb

The SunGrant Bioweb is a new, Internet resource featuring peer-reviewed papers and a collection of materials related to bioenergy and byproducts. Available to the public, the BioWeb is a continually expanding collection of basic and applied scientific knowledge, including basic to technical information on ethanol and biodiesel. Articles found in the website address such topics as:

- What biomass is, where it is, and how much is available
- The ways it can be converted to biofuels, biopower, and bioproducts
- The current state of biomass technology, research, production and use
- Biomass economics and policy

You can access the Bioweb website through the following link: <http://bioweb.sungrant.org/>

State Energy Strategy for Georgia

The *State Energy Strategy* outlines an approach to achieve energy affordability, reliability, and sustainability in Georgia and includes implementation strategies related to alternative fuel production and use. The Governor's Energy Policy Council, members of the public, and several State agencies helped to provide input and draft the *Strategy*. The finalized report was presented to Governor Sonny Perdue in December 2006.

The full report can be viewed at *Strategy's* official website at: <http://www.georgiaenergyplan.org/index.html>

ADDITIONAL INFORMATION

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Clean Cities - Atlanta
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U.S. Department of Energy Clean Cities Program
<http://www.eere.energy.gov/cleancities/>