

# **Selected Resources in Alternative Fuels**

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## **Web Sites**

### **Portals & General Information**

#### **Alternative Fuels Data Center**

<http://www.eere.energy.gov/afdc/index.html>

A vast collection of information on alternative fuels and the vehicles that use them. Topics covered include biodiesel, electricity, ethanol, hydrogen, natural gas, and propane.

#### **Alternative Fuels from the National Conference of State Legislatures**

<http://www.ncsl.org/programs/energy/ALTFUEL.htm>

Includes a summary of state incentives for ethanol production and links to alternative fuel web sites and publications. Good overview on the topic from a public policy perspective.

#### **U.S. EPA Alternative Fuels**

<http://www.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm>

Includes links to fact sheets, certification procedures & emission standards, workshops & meetings, emission models, and links to other web sites from within and outside U.S. EPA.

#### **Alternative Fuels Statistics**

<http://www.eia.doe.gov/fuelalternate.html>

The Energy Information Administration's web page for statistics on alternative fuel production and use.

#### **How Fuel Cells Work**

<http://www.howstuffworks.com/fuel-cell.htm>

Plain English explanation of how fuel cells work.

#### **How the Hydrogen Economy Works**

<http://people.howstuffworks.com/hydrogen-economy.htm>

Plain English explanation of the hydrogen economy, its advantages, and its technological challenges.

### **Biomass Fuels**

#### **Alternative Fuels Data Center -- Biodiesel**

<http://www.eere.energy.gov/afdc/altfuel/biodiesel.html>

Good overview from the U.S. Department of Energy. Includes sections on what biodiesel is, how it's made, its benefits, and current research and development efforts.

## **Biomass Program (U.S. Department of Energy, Energy Efficiency and Renewable Energy)**

<http://www.eere.energy.gov/biomass/>

The U.S. Department of Energy (DOE) Biomass Program develops technology for conversion of biomass (plant-derived material) to valuable fuels, chemicals, materials and power, in order to reduce dependence on foreign oil and foster growth of biorefineries.

## **Make Your Own Biodiesel**

[http://journeytoforever.org/biodiesel\\_make.html](http://journeytoforever.org/biodiesel_make.html)

Step-by-step instructions for making your own biodiesel out of common household products.

## **The Biodiesel Info Page**

<http://www.biodieselamerica.org/biosite/index.php?id=7,0,0,1,0,0>

Includes links to articles and fact sheets about biodiesel.

## **B100 Fuel, living on BioDiesel**

<http://www.b100fuel.com/>

Web log related to B100 biodiesel use and issues.

## **Biodiesel Blog**

<http://biodieselblog.com/>

News and information about biodiesel and alternative fuels.

## **Clean Cars**

### **Alternative Fuel Vehicles from Fueleconomy.gov**

<http://www.fueleconomy.gov/feg/current.shtml>

Describes various alternative fuel technologies.

### **Clean Cities Vehicle Buyer's Guide**

<http://www.eere.energy.gov/cleancities/vbg/>

Information about alternative fuel technologies, vehicle lists with pricing and technical specifications, locations of alternative fuel stations, contacting dealers or industry experts, financial incentives, and more. Includes buyer's guides for fleets and consumers.

### **EERE- FreedomCAR and Vehicle**

<http://www.eere.energy.gov/vehiclesandfuels/>

The FreedomCAR and Vehicle Technologies (FCVT) Program develops more energy efficient and environmentally friendly highway transportation technologies that will enable America to use less petroleum. The long-term aim is to develop "leap frog" technologies that will provide Americans with greater freedom of mobility and energy security, while lowering costs and reducing impacts on the environment.

### **Future Car**

<http://www.pbs.org/saf/1403/video/watchonline.htm>

Part of the Scientific American Frontiers series on PBS. Includes video clips from the show, links to clips from related shows, a teaching guide, and web links.

### **Green Car Congress**

<http://www.greencarcongress.com/>

Covers technologies, issues, and policies for sustainable mobility.

### **How Electric Cars Work**

<http://auto.howstuffworks.com/electric-car.htm>

Plain English explanation of electric car technology.

### **Fuel Cells**

#### **Fuel Cell Today**

<http://www.fuelcelltoday.com/index/>

Portal aiming to accelerate the commercialization of fuel cells.

#### **Fuel Cell World -- Internet Home to the World Fuel Cell Council**

<http://fuelcellworld.org/home-wfc.fcm?language=1>

Founded as a non-profit association in 1991 by a number of fuel cell manufacturers and material suppliers. Its objective is to promote rapid commercialization of the technology. Members of the Council include companies involved in the development and use fuel cell technologies for both stationary and mobile applications.

#### **Fuel Cells 2000 -- The Online Fuel Cell Information Resource**

<http://www.fuelcells.org/>

Fuel Cells 2000 is an activity of the Breakthrough Technologies Institute (BTI), a non-profit [501(c)(3)] educational organization formed to promote the development and early commercialization of fuel cells and related pollution-free, efficient energy generation, storage and utilization technologies and fuels.

#### **National Fuel Cell Research Center**

<http://www.nfrcr.uci.edu/>

The Center's mission is to facilitate and accelerate the development and deployment of fuel cell technology and fuel cell systems; promote strategic alliances to address the market challenges associated with the installation and integration of fuel cell systems; and educate and develop resources for the various stakeholders in the fuel cell community.

#### **Solid Oxide Fuel Cells**

<http://www.csa.com/hottopics/Fuecel/overview.html>

Hot topic overview by Eileen J. De Guire at Cambridge Scientific Abstracts.

## **Books & Reports**

*Comparative Assessment of Fuel Cell Cars*. Cambridge, MA: MIT, Laboratory for Energy and the Environment, 2003. (Available online at <http://lfee.mit.edu/publications/PDF/LFEE%5F2003-001%5FRP.pdf>)

Greene, Nathanael. *Growing Energy: How Biofuels Can Help End America's Oil Dependence*. New York, NY: Natural Resources Defense Council, 2004. (Available online at <http://www.bio.org/ind/GrowingEnergy.pdf>)

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Toy, Edmond; Graham, John D.; Hammitt, James K. *Fueling Heavy Duty Trucks: Diesel or Natural Gas?* Boston, MA: Harvard Center for Risk Analysis, 2000.

## **Journal Articles**

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Heller, M. C.; Keoleian, G. A.; Mann, M. K.; Volk, T. A. "Life Cycle Energy and Environmental Benefits of Generating Electricity from Willow Biomass." *Renewable Energy*, 29(7), 1023-1042 (2004).

Kolar, James "Biomass Power and Biofuels as Alternative, Sustainable Energy Sources." *Pollution Prevention Review*, 9(4), 45-51 (1999).

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## **Professional & Trade Associations**

### **American Society of Mechanical Engineers, Advanced Energy Systems Division**

<http://divisions.asme.org/aesd/index.html>

Focus on direct and indirect non-conventional or emerging energy conversion processes. Recent activities include consideration of transportation energy requirements, thermal discharge disposition, advanced power cycles, pollution impacts and the demands on technology due to the energy crisis.

### **National Biodiesel Board**

<http://www.biodiesel.org/>

The National Biodiesel Board (NBB) is a trade association representing the biodiesel industry and is the coordinating body for research and development in the United States.

## **Society of Automotive Engineers**

<http://www.sae.org/servlets/index>

Society dedicated to advancing mobility engineering. Good resource for innovations in automotive engine and fuel technology.

## ***Journals & Newsletters***

Many peer-reviewed energy journals include articles on alternative fuels. The periodicals listed below are primarily focused on the subject.

### *Alternative Fuel Vehicle Group*

<http://www.altfuels.com/>

Publisher of several alternative fuels newsletters including *AltFuels Advisor* and *Hybrid and Electric Vehicle Progress*. Also publishes books and industry reports.

### *Fuel Cell Magazine*

<http://www.fuelcell-magazine.com/>

The magazine of fuel cell applications and technology. Subscription is free to qualified U.S. subscribers.

### *Hydrogen and Fuel Cell Investor*

<http://www.h2fc.com/>

Weekly newsletter on hydrogen and fuel cell companies, technologies and stocks. Subscription is \$95/six months.

### *Journal of Fuel Cell Science and Technology*

<http://scitation.aip.org/ASMEJournals/FuelCell/>

Publishes peer-reviewed archival scholarly articles, technical papers, briefs, and feature articles on all aspects of the science, engineering, and manufacturing of fuel cells of all types. Published by the American Society of Mechanical Engineers. \$270/year list price, \$50/year for ASME members.

### *The Hydrogen and Fuel Cell Letter*

<http://www.hfcletter.com/>

Monthly newsletter covering the science, business, economics, and politics of hydrogen and fuel cells. Both national and international coverage. Subscription prices: \$295/year (print); \$275/year (online); \$395/year (print & online combined)