Alternative Fuels Data Center

Biodiesel | Electricity | Ethanol | Hydrogen | Natural Gas | Propane
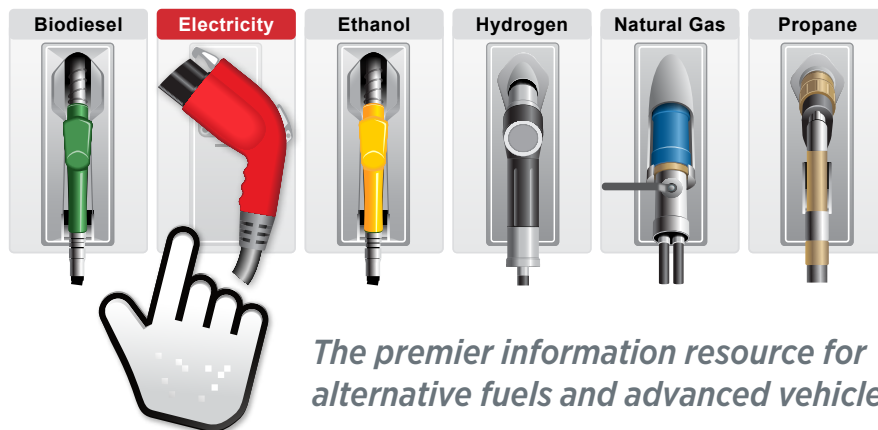
The premier information resource for alternative fuels and advanced vehicles

The Alternative Fuels Data Center (AFDC) is a comprehensive clearinghouse of information on advanced transportation technologies. The site offers unbiased information, accurate data, and interactive tools to aid in the deployment of alternative fuels, advanced vehicles, and fuel economy improvements. The AFDC functions as a dynamic information hub, enabling thousands of players and parts of the transportation system to interact with one another.

The U.S. Department of Energy launched the AFDC in 1991 as a repository for alternative fuel vehicle performance data. Since that time, it has evolved to become an indispensable resource for fleets, fuel providers, policymakers, Clean Cities coalitions, and others working to cut petroleum use in transportation. Armed with the AFDC's data, information, and tools, these transportation stakeholders are saving millions of gallons of petroleum every year, resulting in substantial benefits to the country's economy, energy security, and environment.

The AFDC provides extensive information about alternative fuels, including biodiesel, electricity, ethanol, hydrogen, natural gas, and propane. Users can find out about fuel properties, production, distribution, prices, station locations, emissions benefits, and more. The site features information on the vehicles and engines that use these fuels and the corresponding fueling infrastructure. Fuel-saving strategies like idle reduction, fuel economy improvements, and efficient driving habits are also included on the AFDC.

The AFDC's large suite of online tools and vast collection of vetted data empower fleets and drivers to identify the strategies and technologies that will best help them meet their environmental and energy goals in the most cost-efficient manner. Users can examine long-term trends, conduct cost estimates, project emissions benefits, compare multiple strategies, and identify fuels and technologies that are appropriate for their operational needs and geographic locations.

Clean Cities
U.S. Department of Energy
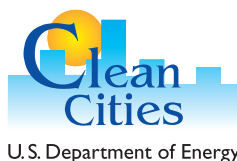
Case Studies in Deployment

Thousands of fleet managers, business owners, state and local officials, and other transportation decision makers have already successfully deployed fuels, technologies, and strategies that cut petroleum use in communities across the United States. The AFDC features more than 100 of their stories in a library of case studies, searchable by geographic location, fuel or technology, application, and fleet type (*afdc.energy.gov/case*).

These case studies, offered in both written and video formats, serve as road maps for fleets and drivers, through which they can learn how others have overcome technical and financial barriers. Users can find real-life examples of delivery fleets that run on biodiesel, cities that have developed electric vehicle charging infrastructure, school districts that power their buses with propane, and police departments that have installed idle-reduction equipment in patrol vehicles.

Photos, top: by Pearson Fuels, NREL 16745; bottom: from Paper Transport Inc., NREL 22257

Interactive Online Tools

The AFDC features more than a dozen easy-to-use online tools (*afdc.energy.gov/tools*). These calculators, interactive maps, and data searches help fleets and drivers evaluate, select, and deploy alternative fuels and advanced vehicles as efficiently and cost-effectively as possible.

- **The Petroleum Reduction Planning Tool** helps fleet managers evaluate options and develop a plan to reduce petroleum use. The tool allows users to set goals then quantify the estimated energy, environmental, and cost benefits associated with a deployment of alternative fuels, advanced vehicles, and efficiency measures.

- **The Vehicle Cost Calculator** allows users to enter information about driving habits to compare total cost of ownership and emissions for most vehicle models, including those that run on alternative fuels or electricity.

Incentives and Laws

Any advanced transportation deployment project should take into account applicable incentives and laws. The AFDC houses a comprehensive database of federal and state incentives and laws related to alternative fuels and vehicles, air quality, fuel efficiency, and other transportation topics (*afdc.energy.gov/laws*). Users can customize their queries with an advanced search function. The site also includes examples of local laws and incentives.

### The Alternative Fueling Station Locator

The Station Locator (*www.afdc.energy.gov/stations*) is among the AFDC's most popular tools. This interactive mapping application allows users to find stations that offer electric vehicle charging, E85, biodiesel, natural gas, propane, and hydrogen. Users can sort by fuel, find all stations near a given location, and map routes with stations identified along the way. The tool also provides station counts for individual states and the nation as a whole. Users can easily download data or embed the Station Locator onto their own websites.
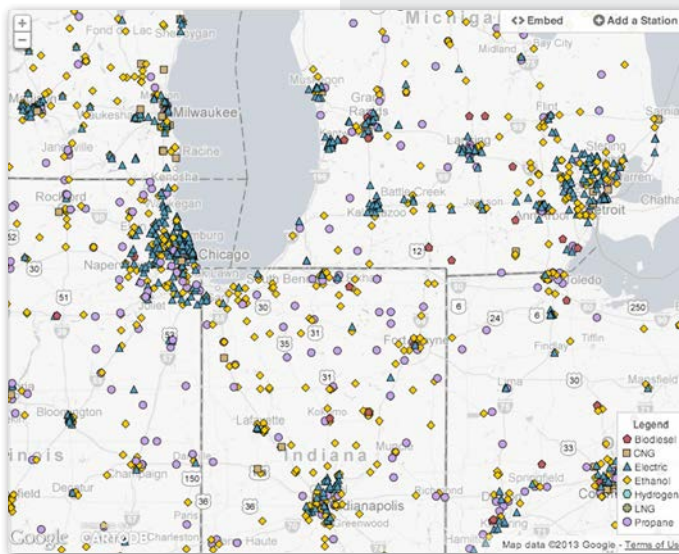
Maps and Data

The AFDC offers a large collection of maps and data (*afdc.energy.gov/data*), which users can view through interactive charts and graphics. Featured data cover a wide range of transportation topics, including alternative fuel use trends, U.S. driver habits, hybrid vehicle availability, biofuels production, transportation regulations and incentives, and vehicle greenhouse gas emissions. With the click of a mouse, users can customize the data to reveal trends, download them into a variety of file formats, conduct their own analyses, and find answers to questions about transportation in the United States and beyond.

Average Retail Fuel Prices in the U.S.
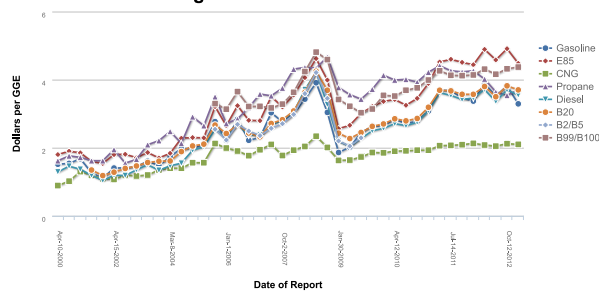
The AFDC is a resource of the U.S. Department of Energy's Clean Cities program and is administered by the National Renewable Energy Laboratory. Visit the AFDC at *afdc.energy.gov*.