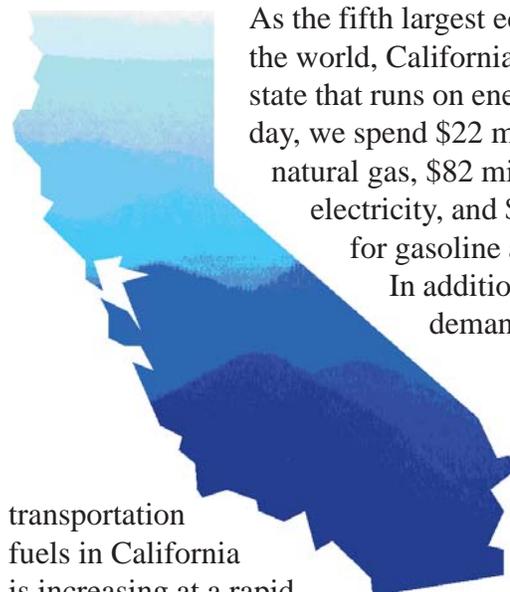


Petroleum Reduction

Encouraging Alternative Fuel Use in California



As the fifth largest economy in the world, California is a nation state that runs on energy. Every day, we spend \$22 million for natural gas, \$82 million on electricity, and \$82 million for gasoline and diesel. In addition, the demand for

transportation fuels in California is increasing at a rapid rate, projected to grow by almost 35 percent over the next 20 years. Petroleum will be the primary source of California's transportation fuels for the foreseeable future, and as demand continues to rise and in-state and Alaskan petroleum supplies diminish, California will rely more and more on foreign imports of crude oil.

The State of California has supported the development of alternative transportation fuels (fuels other than gasoline or diesel) since the creation of the Energy Commission in 1975. Earlier programs included demonstration programs with vehicles using ethanol and methanol; infrastructure development for methanol/gasoline blends; support for flexible fuel, natural gas, and electric vehicles.

Nearly 100 percent of the state's transportation system is fueled currently by fossil fuels. Moving toward a more diversified range of fuels and supporting the advancement of higher efficiency vehicles is one of the goals of the state's programs.

Even though improving vehicle efficiency is the single most effective means to reduce petroleum dependence, the Energy Commission and the California Air Resources Board have concluded that improving vehicle efficiency alone will not be enough. For that reason, California must also focus on increasing our use of alternative fuels, including:

- Biodiesel
- Electricity
- Ethanol
- Gas-to-Liquid Fuels
(*natural gas to diesel fuel*)
- Hydrogen
- Liquefied Petroleum Gas
(*LPG, also known as propane*)
- Natural Gas

The Energy Commission's *2003 Integrated Energy Policy Report* recommended several actions to promote affordable energy supplies; improve energy reliability; and enhance public health, economic well-being, and environmental quality. One of the transportation energy recommendations established a goal for the use of alternative fuels:

"Increase the use of non-petroleum fuels to 20 percent of on-road fuel consumption by 2020 and 30 percent by 2030 based on identified strategies that are achievable and cost-beneficial."

California is already home to a growing number of alternative fuel vehicles, through the efforts of the Energy Commission, California Air Resources Board, local air districts, federal government, transit agencies, utilities, and other public and private entities. More than 61,000 cars, transit buses, and trucks currently operate on natural gas

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and LPG, along with over 10,000 electric vehicles. California also has more than 900 fueling stations dispensing a variety of non-petroleum fuels.

Increasing the use of these fuels, however, faces significant uncertainties such as the availability of new vehicle technologies, the cost and availability of new fueling infrastructures, and acceptance of these fuels by consumers.

Currently, the Energy Commission is working with stakeholders of various alternative fuels. These stakeholder working groups have participated in informal surveys to identify the principal barriers that exist to developing a more robust alternative fuels market in California, and to develop recommendations for overcoming or mitigating those barriers.

The Energy Commission is developing its *2005 Integrated Energy Policy Report*. This major energy policy document for the state is expected to include the results of the stakeholder working groups and recommend actions that the state can take to help meet the 2020 goal of 20 percent alternative fuel use in California.

Over 100 participants have provided ideas, comments, and concerns during this process. By working together in this way, private industry, public agencies, and public interest groups can help to ensure that the future of California's transportation energy use is protected from supply disruptions and high prices.

GOAL

“Increase the use of nonpetroleum fuels to 20 percent of on-road fuel consumption by 2020 and 30 percent by 2030 based on identified strategies that are achievable and cost-beneficial.”

For additional information on alternative fuels, please visit the Commission's website at [<http://www.energy.ca.gov/afvs/index.html>].

In addition, you may find these other sites helpful:

- CalStart's Clean Car Maps [<http://cleancarmaps.com/home/>].
- U.S. Department of Energy Vehicle Buyer's Guide [<http://www.eere.energy.gov/cleancities/>].

Using the Vehicle Buyer's Guide, you can learn about different technologies, view vehicle lists with pricing and technical specifications, locate nearby alternative fuel stations, contact a dealer or industry expert, learn about financial incentives, and more.



California Energy Commission
 Jackalyne Pfannenstiel, Chairman
 James D. Boyd, Vice Chair
 Commissioners
 Arthur H. Rosenfeld
 John L. Geesman
 Jeffrey D. Byron

STATE of CALIFORNIA
 Arnold Schwarzenegger, Governor

B. B. Blevins
 Executive Director
www.energy.ca.gov