

CLEANER FUELS

FOR
CLEANER
AIR

The cry for cleaner air led to the search for alternative fuels that pollute less than today's gasoline.

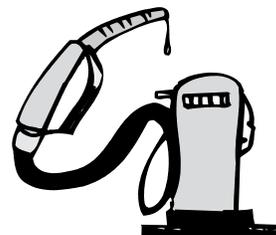
In 1955, Floridians burned 1.3 billion gallons of gasoline. Ten years later that had grown to 2.4 billion gallons, and in another ten years, to 4.6 billion. In 1985, we burned 6.1 billion gallons of gasoline to propel us on our average 28-mile-a-day trips. Only three years later, we burned 6.8 billion gallons for the same short trips. (*Florida Statistical Abstract, University of Florida Press, 1994*)

The petroleum industry has responded to the requirements of the Clean Air Act by developing cleaner-burning and less volatile gasoline, reformulated gasoline, alcohol and compressed gaseous fuels.



Alternative Fuels

- **Oxygenated gasoline** contains additives such as alcohol or alcohol derivatives to increase oxygen content. Sale of oxygenated gasoline, or oxyfuels, is required in the wintertime in parts of this country with unhealthy ambient levels of carbon monoxide. The use of this fuel is not required in Florida.
- **Reformulated gasoline** differs from conventional gasoline in its lower volatility and reduced toxin content. Higher-oxygen-content reformulated gasoline is required in areas where ozone (smog) levels exceed health standards. The use of this gasoline is not required in Florida.
- **Ethanol and Methanol** are liquid fuels that can be used in pure form or blended with gasoline. E85 and M85 contain 15 percent gasoline and 85 percent methanol.
- **Gaseous Fuels: compressed natural gas and propane gas** have been used as automotive fuel for years in many parts of the world, including Florida. While considered to be clean fuels, they have not been proven to be environmentally beneficial in those vehicles converted to their use from gasoline power. The tanks that contain the gases are heavy and bulky, and are used for larger vehicles that can be refueled overnight, versus private vehicles.



How You Can Help

- Use the correct fuel for your car or truck, as recommended in your owners manual.
- Follow the manufacturer's octane level recommendations.
- When refueling don't overfill the tank; stop when pump automatically shuts off.
- After fueling replace the gas tank cap tightly.
- Keep your car properly tuned.
- Keep tires properly inflated. Low inflation wastes fuel.



Alternatives

- **Electric cars:** Electric cars are constantly improving. The new generation designs are more efficient and less expensive than ever before. While newer technology has increased the operating range of electric cars, it is still only about 100 miles, and then you have to find a charging station and wait for the batteries to recharge. These cars are still best for the short commute.
- **Fuel cells:** Vehicles are powered by fuel cells that convert hydrogen and oxygen into electricity. Because there is no combustion, a fuel cell releases only water vapor into the atmosphere making it less polluting than traditional gas vehicles. At the present time fuel cell costs are high and more development needs to be done before this technology is commercially viable.
- **Hybrids:** Presently the most environmentally-friendly cars in production by automakers are the hybrids. Both an internal combustion engine and electric motor supply the power for these vehicles. These motors operate independently and in unison as the driving conditions require. Hybrid cars can get up to 80 miles per gallon and have a range of as much as 700 miles. They also supply their own energy to recharge the electric motor's batteries while operating thus avoiding the hassles of plugging into a slow external recharge unit.

For more information, please contact:

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