



Oakland Energy

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- New OU Fuel Cell / Hybrid / Electric Car Certificate Program

Save Gasoline \$\$ Without Switching Cars!

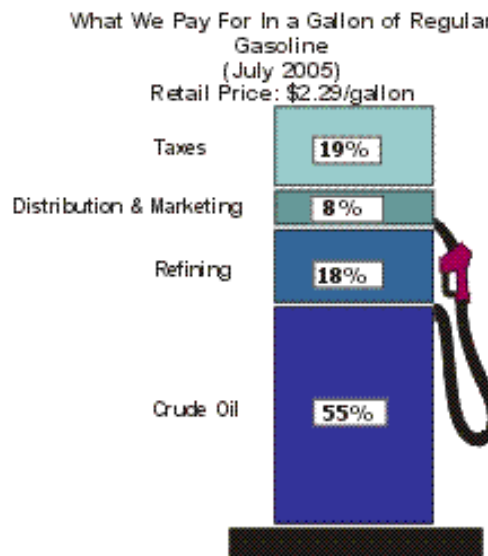
**HARD TIRES,
SOFT FOOT**

With gas prices near \$3 per gallon, there are a few simple things that you can do to improve your car's mileage.

- First, check those tires! For every 2 PSI you add, you should gain about 1 MPG.
- Time those stoplights!

Let off the gas and coast to a stop as much as possible. Avoid stop and go traffic. Using those brakes is equal to burning extra gas.

- Drive slower on the highway. Over 60 MPH burns more fuel.
- Drive sensibly. Avoid hard acceleration. Smooth and steady is the key.
- Of course, drive less! Consolidate and plan your trips wisely. Telecommute if you can.
- Buy regular gas. Unless your turbo speedster needs it, buy regular & save.



source: US Dept of Energy, Energy Information Administration

Winter Natural Gas Prices – Brace Yourself

OK, are you sitting down?

If you recall last winter's gas price increase, you'd know that prices jumped about 25%. DTE/MichCon's gas prices for this winter will be about 30% higher yet. This is a combined increase of 60% over the past two winters.

The time to prepare is now, not in December.

As I mentioned in a previous edition, here are a few tips for lowering your winter heating bills.

- 🔥 Attack air infiltration first. Caulking and weather-stripping are your #1 investment (*next to compact fluorescent light bulbs*)
- 🔥 Install and USE a programmable thermostat to set back the heating set-point

at night and while at work. 🔥 Seal air ducts against leakage. 🔥 Use kitchen and bath fans sparingly. 🔥 Close off vents and doors to unused rooms.

In return for \$\$ saving tips at home, please, turn off lights and computers when not in use AT WORK as well.

Thanks everyone! 😊

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Don't like \$3 Gas? Make Your Own BioDiesel

With gas prices at an all time high, you might want to look into alternatives. If you're in the market for a new car, look at hybrids and diesel engines. Both are 30-40% more efficient MPG than a similar sized gasoline fueled car.

For the more adventurous diesel car & truck owners,

there is a fairly simple process to convert waste restaurant grease (or new veggie oils) into a clean burning, American grown, diesel fuel substitute. Go to www.biomich.com for more information on how to make your own for under \$1 per gallon.

The table below shows

the energy content and recent cost of various auto fuels. It shows that natural gas and electric cars are the lowest dollar per mile cost to drive, but biodiesel is by far the lowest contributor of the global warming gas, CO₂.

See the footnotes for definitions and references.

Fuel	Units	BTU ^A per Unit	Cost per Unit	Fuel cost per million BTU	Motor Efficiency	Useful output cost per BTU	Pounds CO ₂ per million BTU ^C	Fuel source & notes
Gasoline	gallons	125,000	\$ 2.75	\$ 22.00	25%	\$ 88.00	626	Crude oil: over 60% imported
Biodiesel	gallons	127,000	\$ 2.75	\$ 21.65	35%	\$ 61.87	143	US grown vegetable oil ^D
Diesel, #2	gallons	140,000	\$ 2.75	\$ 19.64	35%	\$ 56.12	457	Crude oil (60% imported)
Nat. Gas	CCF ^B	103,000	\$ 1.00	\$ 9.71	25%	\$ 38.83	468	US & Canadian produced
Electricity	kW hrs	3,413	\$ 0.10	\$ 29.30	75%	\$ 39.07	619	US mined coal 71% ^E

^A BTU = British thermal unit is a measure of heat energy content

^B CCF = 100 cubic feet

^C Based on Detroit Edison fuel mix and 464 lb CO₂, natural gas: 117 lb CO₂, and liquid fuels: ~160 lb CO₂ per million BTU divided by the motor efficiency per category. Data taken from the US Dept of Energy at www.eia.doe.gov/oiaf/1605/factors.html

^D Includes estimate of 3.2 to 1 ratio of fossil fuel energy required to produce a gallon of soy biodiesel

^E Based on Detroit Edison fuel supply mix of 22.3% nuclear, 70.8% coal, and 4.7% natural gas

2005 Energy Bill Subsidies and Provisions

Don't expect much help from the 2005 Energy Bill in regards to your home or automotive fuel prices.

Congress elected to bypass tough choices such as increasing auto fuel economy and instead focused on massive subsidies to energy companies.

These subsidies are projected to cost US

taxpayers \$12 to 14 billion through 2015. The vast majority of these subsidies go to highly profitable oil, coal, and gas energy companies. (fossil fuels)

However, a \$3,400 credit for hybrid cars and support for alternative fuels were included.

This bill gives:

- \$4.3B for nuclear
- \$2.8B to fossil fuels

- \$1.6B to "clean coal"
- \$1.7B to Freedom Car
- \$?B to hydrogen
- \$1.3B to conservation
- \$2.7B to renewables
- \$1.3B to alternative fuels and vehicles

Another interesting provision is that daylight savings time will be extended one month in 2007.

About OU Energy Management

If you have any questions, comments, or ideas, please email the Energy Manager at:

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Many conservation projects have been undertaken and more are underway. However, it will always be you, the end user, who has the

most control over our campus energy consumption. Please help us to conserve our natural resources both at home and on campus!

We're on the Web!

See us at:

www.ouenergy.com