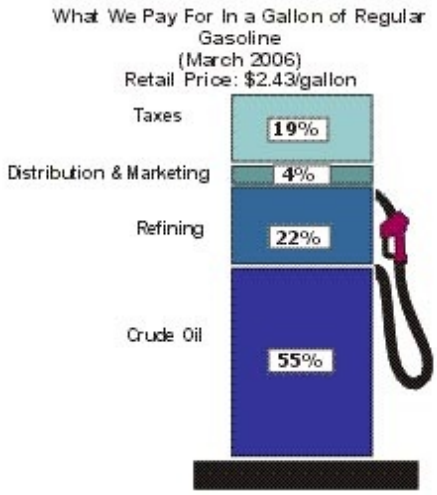
The Oil Drum
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

The more things change, the more they stay the same

Posted by Heading Out on April 28, 2006 - 10:32am
Topic: Miscellaneous
Tags: ethanol, hydrogen, peak oil [list all tags]

A couple of pictures to begin with, the first is a month (and 50 cents) out of date, but it is a good start on telling folk where the price of a gallon goes. (From the EIA)



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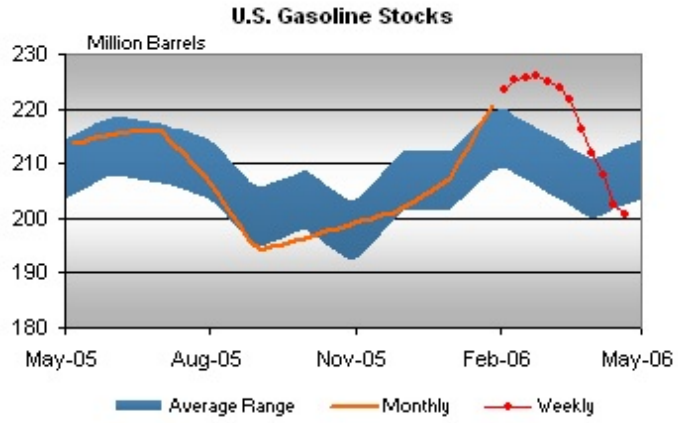
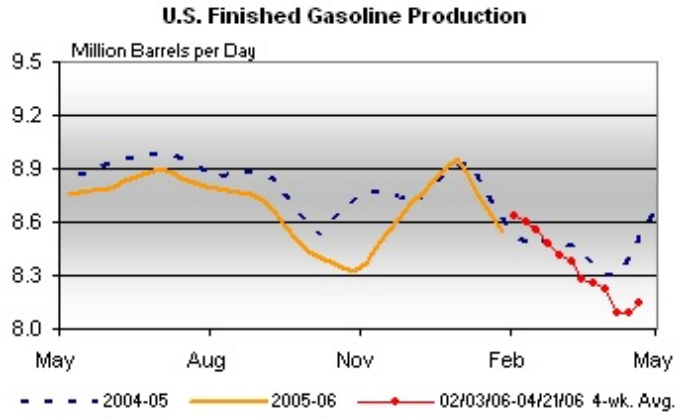
And the second, which others have put in comments, are the ongoing gasoline stock and production curves.





Well, we're back to being a five-day wonder. People are again shocked that prices have gone up. I wonder if this is now going to be an annual ritual, as we progress from winter to summer, and corporate profits are announced. Unfortunately, as the press release from my colleagues notes, the reason for the price increase is not amenable to the solutions that are now being thrown around. In which regard, it was interesting to hear the spokeslady from the API actually mention peak oil, in her remarks on the News Hour tonight.

It is difficult to educate the public at this time. They want something done in a circumstance where there is not that much, in the short term, that will make the situation much better and some things that are coming (such as the Hurricane season) which may likely make it worse. The tried and true formulae (the "give them cake" suggestions from both parties) only work when this is a short-term problem. When it becomes, as it increasingly is, an ongoing situation then the paradigm must change. (As was commented earlier, illustratively, we need to transition from paying the winter fuel bill of the disadvantaged to paying for insulation of their houses).
But to change the attitudes you must first have the public, and their servants, educated. We are blessed that a small fraction already are, but as yet the rest are still in what Prof G called it last year, the river phase, or Denial (took me a minute!). As I noted the words peak oil are starting to get more attention, but the true implications are yet to sink in.

Yes, we have the new encouragement for long-term solutions such as ethanol, but there we need to look at the numbers. Which are, as the President noted:

> Last year, America used a record 4 billion gallons of ethanol. There are now 97 ethanol refineries in our country, and nine of those are expanding and 35 more are under construction. The ethanol industry is on the move, and America is better off for it.
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> Many of these refineries are in the Midwest -- the Midwest because that is where the source -- you know, the feed stock for ethanol comes from.
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> That happens to be corn.
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> But what's really interesting, there are new plants springing up in unexpected areas, like the Central Valley of California, or Arizona, or, of course, in the sugar fields of Hawaii. After all, sugar can be used for ethanol. As a matter of fact, it's a very efficient feedstock for ethanol.

However, if we use 20 million barrels of oil a day, and the 4 billion gallons is less than 100 million

barrels a year, or 260,000 barrels of ethanol a day - about 1.3% of our gas needs, and thus to get to 5% we would need to treble production - which requires a fair amount more corn. In other parts of the world, which use sugar instead, it is already taking prices to 25-year highs with half of Brazil's sugar crop now going to ethanol. Business week has just reviewed the history of ethanol production and concludes:

> The recent price spikes for gasoline have forcibly reminded the people of Chicago and Wisconsin of what happened when ethanol was forced on them during the summer of 2000. Moreover, the promise of energy independence that Brazil has explored through ethanol is widely misunderstood. Recently a Brazilian official, commenting on our third and most recent attempted conversion to ethanol, said that when Brazil tried using agricultural crops for ethanol, it achieved only a 1:1.20 energy conversion rate, too low to be worth the effort.
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> FINAL BOW? On the other hand, ethanol from sugar cane delivered 1:8 energy conversion, which met the national mandate. Unfortunately for us, sugar cane isn't a viable crop in the climate of our nation's heartland. But the part of Brazil's quest for energy independence that the media usually overlooks is that ethanol wasn't the only fuel source the country was working on: Its other, more important, thrust was to find more oil. To that end, last week Brazil's P50 offshore oil platform was turned on. Its anticipated daily output is high enough to make Brazil totally oil independent.
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> More smog, infinitely worse gas mileage, huge problems in distribution, and skyrocketing prices for gasoline. Maybe now that we're witnessing the third act in America's ethanol play, the upcoming epilogue will close this show forever. Even great advertising works only if the product does.

Hydrogen, even if developed as fast as possible, is going to take about 20 years, if it will work at the scale needed even then. (And there are significant doubts, since it has to be created as a secondary use of energy). Other than that we don't have much inspirational creativity as far as new programs go, and those that exist are still getting done away with. I learned in the last Energy Crisis that to expect energy companies to invest in new ideas when they are getting buried in money using the old ones is not really fruitful. I suspect, adverts in the paper not withstanding that we are in the same condition again today.

Well, wonder what is going to take it off the front pages this year. Might as well get out the dust cloths and mothball this until next April, when we can bring it out again. After all it's about time for Michael Lynch to start appearing on the talk shows again, together with Saint Daniel de Yergin.