



## Wishful thinking

Posted by [Heading Out](#) on April 30, 2006 - 8:47pm

Topic: [Supply/Production](#)

Tags: [ethanol](#), [hydrogen](#), [peak oil](#) [[list all tags](#)]

I was struck by a clause in the [Will Hutton column](#) that was brought up in comments. The particular comment is

We should urgently slow down the depletion rate of North Sea oil and gas

and I think it highlights some of the problems that the general public have with the developing issues relating to oil and gas. For obviously the columnist believes that, had we the will, we could just leap in our rowing boat, paddle out there and, by George, increase that production. This is either ignorance of the reality or denial of its existence. When an oilfield starts to deplete then, beyond a certain point, you cannot bring back production, or even change the depletion rate much. In fact it is the result of trying to get as much out as soon as possible that led to the current depletion rates (For those who are not aware of the problem North Sea production is falling at rates of up to 15% per year against a historic general value of around 5%).

The oil and gas that has been removed is gone, and the cupboard is starting to get empty. So it is with the production in the United States and in an increasing number of countries elsewhere. Thus, when you read stories about the steps that politicians are suggesting we make, the first question that should be asked is, will this increase the amount of oil or gas that we can use, or is it providing an alternative source of energy that can replace the amount the we need, but can no longer expect to get from the historic supply. And if the answer is no, then I think it becomes fair to ask, why not?

Updated to include comment on Brazilian ethanol production.

---

That thought was enhanced by something that Dr Hamilton said at the end of our discussion yesterday. "\$70 crude oil encourages all sorts of ideas, and some of them will work out and some of them won't, and I think that the best way to find out what the winners are is to have the incentive there, which I think that \$70 oil definitely provides, for everybody to have their dream of becoming the millionaire new turkey fat mogul, or whatever it might be.." This followed an earlier comment that he did not think that Congress was the best group to decide. And given my comment in the last paragraph you might think we are in total agreement. Well here is my perception of the problem that we have.

Right now the Congress and the Administration have picked a certain limited number of ideas that they think will provide the answer. These include hybrids, hydrogen, clean coal, and ethanol. If you wander around the funding at DoE you will find, as I have commented earlier, that other programs are being cut. Thus if the programs that are being invested in do not provide a solution in time then we are going to be in the cart.

As came up in the discussion of ethanol, the current administration plan only looks favorably on domestic generation of ethanol, which may be [getting close to 5%](#) of our gasoline use (to correct myself - thanks jdeely). It looks less favorably on importing to increase the percentage much further. So that will only get us so far (plus it neglects the fact that Brazil has a domestic demand for what they are making). And, as other countries have found, beyond a certain point food use will conflict with fuel use and we will reach a limit to what can be made available.

UPDATE [The Tribune](#) has a story on problems with demand that are showing up in Brazil.

Rising consumption of ethanol had already stretched supplies thin. Prices recently have fallen, but only after the government lowered the required percentage of ethanol mixed with gasoline from 25 to 20 percent, reducing demand. This month's beginning of the sugar cane harvest also boosted ethanol supplies and lowered prices. "This showed ethanol can help but it cannot replace fossil fuels, at least right now," said Jed Bailey, Latin American director of Cambridge Energy Research Associates, a U.S. consulting firm. "There's a lot more development that's needed." Ethanol has become a staple in Brazil's energy stew. Brazil's refineries pumped out 4.5 billion gallons of the biofuel this past year. All but 14 percent was consumed domestically. . . . . But with more than 13 million acres already growing sugar cane, such words worry environmentalists, who fear expansion will come at the cost of rainforests and savannah in Brazil's northern states, where there is little sugar production. Sugar cane production expanded by only 2 percent last year in the country's southern and central states, where most sugar is grown. . . . . Ethanol churns out about 20 percent fewer miles per gallon than regular gasoline and must be at least that much cheaper at the pump to be cost-effective. Currently, that's about the difference in price here between the two fuels, with ethanol selling for \$4.03 a gallon, while regular gasoline costs \$4.86 a gallon.

(Thanks [Leanan](#)).

We currently have a small program going in biodiesel, but the plants that generate on any scale are still measuring in thousands of gallons a year, when we need millions of barrels a day.

Why do I bring this up? Because there aren't that many sources that one can go to that can fund the size of plants that will be needed even at the pilot stage, or to scale operations up to the levels that will be needed. Industrial sources will not be willing to do so without significant proof of concept, and there will need to be a very strong case that if they do invest, that there will be a satisfactory return on their investment. Does that sound like the climate we have at present?

I think that it is worth returning to the editorial that I began with, however, since outside of that one comment, I think it makes considerable sense.

Britain in all this is the doe-eyed Bambi, bleating its faith in market forces in a world of predators. We should urgently slow down the depletion rate of North Sea oil and gas and establish a British strategic reserve and, with that protection, begin determinedly to build an economy that is not dependent on oil and gas. We should get serious about energy efficiency for solid environmental and strategic reasons. We should tax aviation fuel. We must accelerate our investment in renewable energy. We must research how to burn coal cleanly. And we must commission new nuclear reactors.

We have to move on all fronts fast. The case is usually made in terms of climate change,

but it is more than that. Unless we confront and change the emerging balance of world power, the consequent oil conflagrations could make the conflicts of the 20th century look tame.

Without a sense of emergency in terms of finding new methods for providing energy (regardless of type) and without a willingness to consider ideas outside the box of existing conventional ideas, we are going to have problems. Of such a nature I fear, that waiting for the law of natural selection to prevail, as Dr Hamilton suggests, is a luxury we can no longer afford the time to allow.



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](http://creativecommons.org/licenses/by-sa/3.0/).