



Are Subsidies to Oil Companies Ever Justified?

Posted by [Robert Rapier](#) on April 23, 2007 - 10:58am

Topic: [Alternative energy](#)

Tags: [biodiesel](#), [biofuel](#), [conocophillips](#), [green diesel](#), [oil companies](#), [subsidies](#) [[list all tags](#)]

Should We Ever Subsidize an Oil Company?

"Of course not!" might be the immediate reaction of most people. But doesn't it depend on the objectives you are trying to achieve or the behaviors you wish to influence? Are there no cases in which it would be warranted? What if the end result was a reduction in our fossil fuel consumption?

I think most people would like to see us move away from fossil fuels. But fossil fuels are money-makers for the oil companies, and the cheapest option (strictly in terms of dollars at the pump) for consumers. So how do we wean off of fossil fuels?

Reducing Fossil Fuel Usage

There are really two options. By far the most efficient would be to raise taxes on fossil fuels. I am an American, but have lived in Europe before, and I am back here now. In my opinion Europeans have been far wiser about their policies on fossil fuels than we have been in the U.S. They made them expensive. Does that mean everyone then lives in poverty because they can't afford gasoline? Far from it. People have adapted. They are attracted to fuel efficient vehicles. They live in smaller houses, closer to their jobs. They embrace mass transit. These are all behaviors that the U.S. has discouraged by keeping fossil fuel taxes low. So, we are energy gluttons, and we maintain this gluttonous habit by ensuring that both major political parties think twice before raising our gas taxes.

Higher fossil fuel taxes would help level the playing field for alternative fuels. Not only does this avoid the potential mistake of trying to forecast and subsidize particular technology winners, but it also discourages alternatives that have high fossil fuel inputs. This is important, because we are now subsidizing some "alternative" options that are essentially 90% recycled fossil fuel. Taxing fossil fuels would strongly penalize those alternatives with high fossil fuel inputs.

However, I think it is unlikely that our political leaders have the will to tackle the tax option. So then we are left with the alternative of subsidizing alternative energy and hoping that one or more sustainable options are developed as a result. We have tried this experiment with corn ethanol for 30 years now. It has been heavily subsidized since the late 1970's, and today it is still not a viable option without mandates or subsidies. (I know that there are those who truly believe that grain ethanol could survive without the subsidies. I think what we would see is that the industry would collapse like a row of dominoes, which is why the subsidy remains in place).

Renewable Diesel

One option that I have always felt had serious potential as a sustainable option is renewable diesel. Not only is the [EROEI](#) of the biodiesel production process superior to that of grain ethanol, but a diesel engine is also much more efficient than a spark-ignition engine (which is where our ethanol supply ends up). And like ethanol, we also subsidize renewable diesel. And there aren't all that many objections to subsidizing biodiesel; that is until an oil company wants to make it.

Biodiesel, which is strictly defined as [alkyl esters made from the transesterification of vegetable oils or animal fats](#), receives a \$1/gallon production subsidy. Biodiesel is produced by reacting the vegetable oil or animal fat with (typically) [methanol](#) (which is usually produced from fossil fuels) and a strong caustic. The products are biodiesel and a [glycerol](#) by-product that can be difficult to dispose of ([it is often simply incinerated](#)). There is also a wastewater discharge, containing "[free fatty acids that have a high biochemical oxygen demand, or BOD, that can remove oxygen from water bodies and harm aquatic life.](#)" None of the by-products, however, are classified as hazardous waste.

There are two other forms of renewable, or "green diesel" that aren't strictly defined as biodiesel. One is obtained via a gasification and subsequent [Fischer-Tropsch](#) reaction of biomass. [Choren](#), for instance, uses this process to make their [SunDiesel](#) product. The other form involves thermal processes in which animal fats or vegetable oils are heated and sometimes reacted with hydrogen to transform the oils into a diesel product. Such processes for making diesel have been referred to as [second-generation biofuel technology](#). And these second-generation technologies have one big advantage over the first-generation technologies: They can be blended up to 100% with conventional diesel in any weather. [The cold weather limitations of alkyl ester biodiesel are well-known](#).

There was some uncertainty about whether new green diesel technologies met the definition of biodiesel and therefore qualified for the subsidy. So Missouri Representative Roy Blunt, to help a company in his district - [Changing World Technologies](#) (CWT) - inserted a provision to make sure that so-called thermal depolymerization processes also received the subsidy. In addition, [he helped CWT secure a \\$5 million grant](#). While this is money that in hindsight was probably [thrown down a black hole](#) because of grossly exaggerated claims on the part of CWT (See my essay [TDP: The Next Big Thing](#)), it did set a precedent for expanding the biodiesel subsidy to include processes other than strict alkyl ester biodiesel. In general, I would think that funding second-generation technologies is as important as funding first-generation technologies.

The First-Generation Recipients Scream Foul

On April 16th, 2007 [ConocoPhillips and Tyson Foods announced a collaborative effort to produce green diesel](#) via one of the second-generation technologies. But the [National Biodiesel Board](#), a lobby for the first-generation biodiesel producers, cried foul and issued an incredibly hypocritical news release, which I have dissected:

[The Biodiesel Lobby Cries Foul](#)

Their argument was that it was not fair to give an oil company - already making billions in profits - incentives for producing biofuels. They also complained that the White House was directly lobbied on this matter. This issue is discussed at:

[ConocoPhillips, Tyson Lobbied White House on Tax Rule](#)

The persistent theme of the article is that the credit was expanded on behalf of ConocoPhillips

and Tyson Foods. But it appears to me that a clarification was requested before millions of dollars had been invested in this process. From the EPA's [Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Requirements for 2006](#), issued December 30, 2005 we find the following definition of biodiesel:

Biodiesel means a diesel fuel substitute produced from nonpetroleum renewable resources that meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 211 of the Clean Air Act. It includes biodiesel derived from animal wastes (including poultry fats and poultry wastes) and other waste materials, or biodiesel derived from municipal solid waste and sludges and oils derived from wastewater and the treatment of wastewater.

That definition is certainly not process-specific, but I can understand the desire to get clarification on the rules before the project was announced. The sticking point could be that someone could argue that "biodiesel" has traditionally been the term for the ester product. But the key phrase to me looks like "diesel fuel substitute produced from nonpetroleum renewable resources." After all, what are we actually trying to achieve with these subsidies? Isn't the point to encourage movement away from fossil fuels and toward biofuels? Shall we start picking technology winners by funding one renewable "diesel fuel substitute" while denying funding to another?

But some didn't see it that way at all. What they saw was that an oil company was going to get the same subsidy that biodiesel producers received, and they are quite happy to cut off their nose to spite their face:

[Democrats Target Tax Break for ConocoPhillips, Tyson](#)

April 20 (Bloomberg) -- Democrats in Congress plan to reverse an Internal Revenue Service ruling that allowed ConocoPhillips and Tyson Foods Inc. to benefit from a tax break for producing alternative energy.

If adopted, the legislation would threaten a joint venture announced this week by ConocoPhillips and Tyson to produce diesel fuel from animal fat. Lawmakers said that the tax credit was intended to benefit new technologies using animal carcasses and other food waste and that the companies pressured Bush administration officials to redefine it.

I almost hate to point out that **this is new technology**. This particular process came along much later than both traditional biodiesel manufacture and the CWT process that didn't actually work as advertised yet still got \$5 million.

As Jim Mulva pointed out, the project is not profitable without the tax credit and would not go forward otherwise:

ConocoPhillips spokesman Bill Graham said today that remarks by company Chief Executive Officer Jim Mulva earlier in the week sum up the company's position on the tax cuts. Mulva said that ConocoPhillips and Tyson wouldn't proceed with the venture if they didn't qualify for the tax credit, worth \$1 per gallon of renewable diesel produced.

"It's not profitable without the \$1 tax credit," Mulva said April 16 at a news conference in Houston. "It's very important and significant in going forward at this point in time."

A Tyson spokesman also weighed in:

Gary Mickelson, a Tyson spokesman, said today that the company hadn't seen any legislation.

"Denying the tax credit will only serve to limit the expansion and availability of alternative fuels and also damage the ability of livestock farmers and ranchers to participate in the renewable energy business," Mickelson said in an e-mail, citing support for the IRS ruling by the National Cattlemen's Beef Association, National Pork Producers Council, National Chicken Council and Texas Cattle Feeders Association.

The article also pointed out the it wasn't only the biodiesel lobby that was unhappy:

It also angered the American Soybean Association, which fears refiners may begin shipping in less-expensive foreign palm oil to replace U.S. soy oil at the government's expense.

This is a ridiculous argument, because nothing is stopping conventional biodiesel producers from doing that right now. Of course this sort of protectionism is nothing new in the renewable energy field, as we do the same thing with corn ethanol. We subsidize it, and then penalize [much more sustainable Brazilian ethanol](#) with a [\\$0.54/gallon tariff](#). Except in this case, we are going to discourage the development of an alternative within the U.S. because it will benefit a U.S. oil company.

An [article in the Houston Chronicle](#) discussed the economics in a bit more detail:

Jeff Webster, general manager of Tyson's Renewable Energy Division, noted that **the cost of using animal fat as a feedstock is about \$2 a gallon, or about \$84 a barrel.**

That compares with crude oil futures running above \$63 a barrel on the New York Mercantile Exchange.

The \$1-per-gallon tax credit, however, would bring the feedstock cost for animal fat down to about \$1 a gallon, or \$42 a barrel.

"In general, the feedstock cost is the big driver of your overall costs, as much as 75 percent of your cost structure," Webster said.

Asked about the effort to change the interpretation, ConocoPhillips spokesman Bill Graham noted: "With any repeal, you're changing the economics for the manufacturing

of the renewable diesel.

"If it is repealed and maintained for other forms of alternative energy, then what you're doing is picking and choosing between alternative energies. And we don't think that's sound public policy."

Objections

Most objections that I have seen are generally along the lines of "*Why on earth would I want my tax dollars going to a company making billions of dollars a year? They don't need any subsidies.*"

Of course that is correct. They don't need subsidies to continue business as usual. In fact, all that would happen if you removed the so-called indirect subsidies is that we would pay more for gasoline. There would be some demand destruction as a result, so perhaps there would be some impact to the oil companies, but for the most part it would be business as usual.

And there's the rub. If you want to take that position: "*They don't need my tax money*", then don't expect them to do things that you think they should do. As someone else wrote to me "*It is in their best interest to move into biofuels.*" But you see, as far as they are concerned it is not. What is being asked here is for them to enter into a guaranteed money-losing commercial venture. That is a lot different than just funding R&D research, which is being done regardless.

You saw the API conference call transcript. The oil industry, rightly or wrongly, believes that their business will be oil for quite some time. So that leaves two possibilities.

First, what if they are wrong? Well, if they are wrong and they are discouraged from moving into next-generation fuels, then you and I will suffer. It will be peak with no parachute. We will have wasted quite an opportunity to nudge them in the direction of diversifying the fuel supply.

So, what if they are right and there is plenty of oil and gas? Well, they will continue to make oil and gas, consumers will continue to buy it, oil companies will continue to profit, and greenhouse gas emissions will continue to rise. And they will not change their behavior because the status quo is making money, and the shareholders are happy.

So the way I see it, we need to encourage a move away from fossil fuels even if we have to give oil companies the same incentives that we give everyone else. Who will be hurt if we don't is you and me.

Conclusions

This case is very frustrating to me. It highlights the problems that we are going to have in encouraging oil companies to move toward alternative energy. What is the purpose of these subsidies? Isn't it to make the alternatives competitive with fossil fuels? So then why should we expect oil companies to expand R&D on alternative fuels if they are going to sell these fuels at a loss? Remember, the current biodiesel producers aren't losing their \$1/gallon tax credit. Farmer Marty Ross, mentioned in [The Biodiesel Lobby Cries Foul](#), is still going to receive his \$5.5 million a year in subsidies. Furthermore, he qualifies for various grants and low-interest loans to give him an additional benefit. But biodiesel producers want both a subsidy and a monopoly, and their position endangers us all by discouraging the development of next-generation alternatives.

Oil companies are still answerable to their shareholders. They can't be expected to invest big dollars into product development if they believe they are going to sell the product at a loss. These credits should be open to anyone willing to make the necessary investments. Would you rather see the money flow to the Middle East? Do you want the next generation of fuels to be coal-based, or derived from shale oil? Because this is what will happen if we make it more difficult for oil companies to become involved in alternative fuels. Ask yourself the following questions:

1. Will technologies like this reduce our dependence on foreign oil? Yes.
2. Will this encourage a renewable diesel technology that does not commercially exist? Yes
3. Will this help diversify our fuel supply? Yes.
4. Does this produce a fuel with superior performance characteristics? Yes

That would seem like a slam-dunk. Yet there is one more question to answer, and because of that answer some are willing to forego quite an opportunity to nudge oil companies in a sustainable direction:

5. Will an oil company benefit, just as any other company could benefit? Yes.

I have personally lobbied my company to become more involved in alternative energy, and this attempt to rescind the credit is very upsetting to me. I have skin in the game here, and I want to encourage my company to move into alternative fuels. But rescinding the credit will be a disincentive because I know what the economics look like for these biofuels.

Disclaimer

Of course I do work for "an" oil company. I can't say which one, although it is relatively easy to figure out with Google. I tell you this because I don't want there to be any misunderstandings. However, I can't come right out and name my company, because I am not sanctioned to speak for them. Their position and my position don't always mesh, so it is important to keep my personal opinions separate from official company statements.

I was conflicted about whether to write this essay, because I don't want it to look like I am putting my self-interests ahead of good energy policy. And I wouldn't even touch this one, but I think this is a very important, precedent-setting issue that has major implications on the direction of our energy policy. I asked and received feedback from TOD editors and contributors, and the feedback that I did receive suggested that I should go ahead and post it.



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