

Will the Navy's Green Strike Group Sail Again?, Part 2

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By JIM LANE, Editor & Publisher, *Biofuels Digest*



This is part two of a two-part piece. [Part](#)

[one can be found here](#) [1]. [1]

Myth #1. Military biofuels will cost an extra \$1.8B per year.

True or False? Is there “a little-noticed Defense Department report [that] shows that the Navy could spend as much as an extra \$1.8 billion per year if it buys all the biofuel it’s pledged to burn?”

False and false. Which is to say, congressional Republicans have been attempting to give the report more visibility than the Declaration of Independence.

The report does mention a figure of \$1.8 billion — absent the invocation of the Defense Production Act Title III (DPA), which would ensure that advanced biofuels are, in fact, cost-competitive with fossil fuels. The Obama administration, working with the Navy, simply followed the recommendations of the 2011 report and invoked the DPA to ensure that switching to green fuels would not involve great expense to taxpayers.

[The report is here.](#) [2]

Myth #2. Advanced biofuels are falling 98 percent short of congressional targets.

True or false? “In 2007, Congress set a goal of producing 2 billion gallons of advanced biofuels within five years. But today, firms can only generate around 40 million gallons of the stuff — 98 percent less than the original plan’s total.”

False. Advanced biofuels, as defined in the congressional goal, specifically include sugarcane ethanol and biodiesel, and more than 10 billion gallons “of the stuff” were produced around the world last year — vastly exceeding the congressional

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target.

How did *Wired* get its, er, wires crossed? By mixing up the definition of cellulosic biofuels with advanced biofuels. As it happens, none of the fuels used in the fleet's exercise were cellulosic biofuels.

Myth #3. There is no biofuels production in the U.S. capable of supporting military fuels — it's fantasy fuel.

True or false? "Currently, there's not a single commercial-grade biorefinery operating in this country."

False and false. There are more than 180 biorefineries operating in the United States. More importantly, since what *Wired* is driving at is the manufacture of military fuels (rather than, say, ethanol), all of them are capable of making intermediates that can be upgraded to military-spec aviation fuel.

Keep in mind, all biofuels made for military purposes today are manufactured in a two-step process — first, an intermediate is made, and then it is upgraded through processes, such as UOP's hydro-processing technology. It's the same with crude — you don't pour crude oil into an aircraft or destroyer — after recovery, it is processed and upgraded at a refinery to meet a military specification.

Also keep this in mind: In the 2012 demonstration, highly enriched fuel assembly (HEFA) fuels were used from a new renewable fuel spec developed and approved in the past two years, and which primarily utilizes fats, oils and greases to make renewable fuels.

By the 2016 deployment of the Green Strike Group, the alcohol-to-jet (ATJ) standard is expected to have been approved. What's that? Instead of upgrading oils to military fuels, this is for the upgrade of alcohols into fuels. The military will have a vastly larger pool of suppliers and production capacity to tap into in 2016.

So, why all the fuss about invoking the DPA? The Navy is planning to use the DPA to ensure that it has a reliable, cost-competitive supply of military fuels. DPA-invested production capacity will be, by contract, providing fuels at a cost-competitive price and with a dedicated supply to the military. The U.S. Navy, like everyone else, is determined not to repeat the mistake of recent years and buy renewable fuels in the open market.

In this way, it is returning to the same strategy it used in the conversion from coal to petroleum back in the early 1900s.

The oil industry in Wyoming really got underway with the Teapot Dome complex, which was a Navy fuel production depot. Ultimately, that complex was released to the public (initiating an energy brouhaha — the Teapot Dome scandal — that makes the upheaval over Solyndra look like chicken feed, and was described as the most serious public scandal prior to Watergate). President Harding's Interior Secretary, Albert Fall, in fact, went to jail as a result of the scandal, the first U.S. cabinet

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official ever to do so.

The British Navy did much the same when converting from coal to oil. Concerned over supplies and costs, First Lord of the Admiralty Winston Churchill pushed through a plan to found the Anglo-Persian Oil Co. to guarantee affordable, reliable sources of the new fuel. Today, that company is still around — it's BP.

Myth #4. Biofuels are heavily subsidized and are a showcase for government subsidy programs gone wrong.

True or false? "In 1980, Congress began a major investment in the production of corn-based ethanol with a 45-cents-per-gallon subsidy. Thirty years and \$45 billion later, that program is widely considered to be a disaster; at least 40 percent of the U.S. corn industry is now diverted into producing biofuel."

True and false. True, the Congress introduced a subsidy in 1980. The program has resulted in, according to the most recent study, a [\\$1.09-per-gallon reduction in the cost of gasoline](#) [3] by reducing U.S. petroleum demand, almost single-handedly eliminated a farm support that was costing U.S. taxpayers even more than the ethanol subsidy and the ethanol subsidy itself has been discontinued.

On the 40 percent figure, *Wired* has mistaken corn shipments to ethanol plants for corn usage by ethanol plants. It's true (well, not quite, but close enough for horseshoes) that 40 percent of corn is shipped to U.S. ethanol plants — but only one-third of the corn kernel, by weight, is used for ethanol. Another third, for example, is returned to the feed markets as a low-cost, high-protein animal feed.

Imagine, if you will, a family of eight at the Sunday dinner table. You are the first, say, to dive into the mashed potatoes. You take your share of a 2-pound tub, and then pass it to your right, and everyone takes their share. It is not true to say that you consumed 2 pounds of mashed potatoes.

Myth #5. Biofuels technologies drive up food prices, excepting technologies that never seem to arrive.

True or false? "If you use crop land, you increase the price of food. Using 'new' land would work — if you depend on a bunch of technologies which haven't been commercialized yet, a bunch of things that don't really exist in this world."

False and false. Food and crops are not the same things, just because food is made from crops. Lots of things go into making food — mostly, energy and marketing. In a \$4 box of corn flakes, there is less than 10 cents worth of corn. I know — you're about to tell me that I am referring to processed foods, as are used in developed countries — but what about staple foods, such as are used in Africa? Well, let's consider (sub-Saharan) Africa and the traditional staple crop, cassava. Eat that raw, you die — without energy-intensive cooking, it forms cyanide in your body.

And, it's false that "a bunch of technologies which haven't been commercialized

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yet, a bunch of things that don't really exist in this world" are required to make biofuels from "new land."

Take for instance, Dynamic Fuels' 75 million-gallon commercial-scale facility, which makes military fuel intermediates from animal waste — and which provided much of the fuel for this 2012 demonstration.

Myth #6. Former green-tech supporters are now leading the charge against advanced biofuels.

True or false? "One-time green-tech supporters were now lashing out at the biofuel program. During the 2008 election, Sen. John McCain pushed his plan to 'in five years, become oil independent,' modeled after the U.S. military's project to build the atomic bomb."

A mile from true. Arizona Senator John McCain has been a long-time, well-known leading opponent of biofuels, in virtually all its forms, for more than a decade. The senator is one of just 20 or so senators who voted against the Bush administration's Renewable Fuel Standard legislation (the Energy Independence and Security Act), and has been a leading opponent of clean-tech mandates in power and fuels, clean-tech tax incentives, production tax credits and loan guarantees.

As *Friends of the Earth* pointed out in the last election cycle:

"John McCain says he opposes funding wind and solar: 'You should let the free-enterprise system take over,' McCain says [Grist, 10/1/07]. McCain no-shows for vote to extend renewable energy tax credit, measure fails by one-vote margin, McCain advisor later says he opposed measure [CQ, 12/13/07]. McCain previously voted against tax credits encouraging renewable energy production [Senate Vote 42, 3/14/06; Senate Vote 125, 5/21/01]. McCain votes against establishing national renewable energy standard to promote wind, solar and other alternatives [Senate Vote 141, 6/16/05; Senate Vote 50 3/14/02; Senate Vote 55 3/21/02; Senate Vote 59 3/21/02]."

Not that there's anything wrong with the senator taking a position against federal investment in developing new technologies and industries. It's just plain wrong to style Senator McCain as a green-tech supporter in this context.

Will the Green Strike Group — Much Less the Great Green Fleet — Sail Again?

If the Navy has its way, yes. Will the Navy get its way? Much depends on the 2012 U.S. presidential election and, just as crucially, on the U.S. congressional elections.

One thing you can take to the bank: Should the fleet sail again, and when the fleet sails again, it will not be at a massive cost to the taxpayer. That's the purpose of the DPA Title III program, which should properly be seen in the context of the way that the Navy's transition from coal to oil was structured, not dissimilarly, in the early 20th century.

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General Colin Powell, Retired

"In the military, we are always looking for ways to leverage up our forces. Perpetual optimism, believing in yourself, believing in your purpose, believing you will prevail, and demonstrating passion and confidence is a force multiplier."

To read part one of this two-part series, [please click here](#). [1]What's your take? Please feel free to comment below! Copyright 2012; [Biofuels Digest](#) [4]

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[3] <http://www.marketwatch.com/story/new-university-study-ethanol-reduced-gas-prices-by-more-than-1-per-gallon-in-2011-2012-05-15>

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