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Capability, Not Politics, Should Drive DOD Energy Research

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With multiple wars ongoing, traditional threats looming, and new ones emerging, the U.S. Armed Forces are already under tremendous stress. So introducing a new assignment that needlessly bleeds scarce resources away from core missions to advance a political agenda is untenable. Yet this is exactly what the Obama Administration is doing by ordering the military to lead a green revolution.

The White House is pushing the idea that the alternative energy industry would get the kick start it needs if the military will just commit to using them. But the assumptions behind this argument are flawed, and the strategy would increase demands on the military budget while harming national security. Congress should put a stop to it right away.

Not a Legitimate Military Mission. Catalyzing a commercially viable alternative energy industry is not within the military's purview. Even if it were, the federal government has a horrible track record of developing products for commercial use. In most cases, governments fund things that have no market value—hence the need for government support.

The allegation that the Department of Defense's (DOD) use of fossil fuel is somehow leading to climate change carries no merit. According to climatologists, a plan such as the Waxman–Markey cap-and-trade bill, which would have cut carbon dioxide emissions by about 80 percent, would have moderated temperatures by only thousandths of a degree in 2050 and a few tenths of a degree in 2100. Since the military consumes less than 2 percent of

American energy, its contribution to global warming is negligible even if one accepts the arguments behind human-induced climate change.

If the problem is that climate change is leading to a new set of conditions and threats to which the Pentagon must respond, then the military should adjust accordingly based on the emerging threats, not whether the technology is carbon-based. Even under this scenario, it is unclear whether the changing climate would actually bring about the changes in conditions—such as extreme weather, food shortages, and civil unrest—that are often attributed to it. These are conditions that have existed in the past, exist today, and will likely exist in the future independent of a changing climate.

The GPS Fallacy. Advocates for public funding for energy initiatives argue that it would lead to commercially successful products. This is then generally followed by a list of examples of government-developed technologies such as GPS, the Internet, and jet engines.

However, none of these things was the result of government programs to develop commercially viable products. They were all government programs to develop capabilities to advance American

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national security. And in each case, the underlying technologies were made available to entrepreneurs, who were then able to spin them off into commercially successful enterprises.

Government energy programs are not based on this effective model but instead are meant to develop commercially viable products. In essence, the theory is that if the taxpayer just subsidizes something enough, the product can become commercially successful. Unfortunately, as the ethanol, wind, and solar industries demonstrate, this does not work.

Price Fluctuations, Supply Chain Vulnerability, Foreign Dependence. Price fluctuations, supply chain vulnerability, and dependence on foreign oil are often used to justify taxpayer support for energy research within the Pentagon. None of these arguments holds water.

Price Fluctuations. Multiple complex variables contribute to fuel prices, and the government is the wrong institution to sort them out. Oil reserves may eventually decline to the point where accessing it is no longer affordable, which would create the opportunity for entrepreneurs to develop alternatives. Or someone may develop a less expensive alternative that pushes oil out of the market. As likely, however, is that technological improvements and oil reserve discoveries could lead to oil price decreases.

Supply Chain Vulnerability. A major justification for the Pentagon investing in oil alternatives is the dangers of transporting liquid fuels over long distances and through war zones. This is a legitimate concern, and the U.S. armed forces should develop capabilities that decrease that threat. However, pursuing biofuels for environmental reasons under the pretext of safer transportation is disingenuous. Like oil, biofuels need to be transported. And in some cases, these fuel alternatives may be more dangerous, as some oil alternatives are less energy dense, which means that more fuel is required to produce the same amount of energy.

Dependence on Foreign Oil. Oil replacement advocates often decry America's dependence on foreign sources of oil. This is then coupled with solutions to subsidize or mandate some alternative. This argument is flawed. American consumers can enjoy

access to inexpensive foreign oil (or other energy sources) without being dependent on any particular supplier by opening access to foreign *and* domestic supplies. This undermines any leverage a foreign supplier might have over the U.S. If a supplier cut off supplies, the U.S. could simply meet its demand from another supplier. So the best way to ensure that the U.S. military has the fuel supplies that it needs is to maximize supply diversity, which means expanding drilling domestically and opening markets abroad.

The mission-based vehicles in the military consume about 340,000 barrels of petroleum products per day. Cutting this even by half would save less petroleum than is produced from Thunderhorse, a single production platform in the Gulf of Mexico. The U.S. Energy Information Administration projects the cost of producing additional oil offshore at \$40–\$50 per barrel. Forcing the military to instead buy biofuels that cost hundreds of dollars per barrel provides no added security.

What the Pentagon Should Do. The federal government should ensure that defense energy programs are geared toward meeting national security requirements, not commercial or political ones. To achieve this, military planners should ensure that DOD energy programs:

- **Increase capabilities and/or reduce costs.** Non-carbon energy costs significantly more than traditional sources and often degrades performance. The Pentagon should pursue alternative energy sources only if they reduce costs or increase capabilities.
- **Do not establish long-term contracts based on price floors.** Many purveyors of expensive energy want the Pentagon to engage in long-term contracts with energy suppliers that set price floors. This has two negative impacts. First, it would cost the military more to fuel its operations. Setting price floors signals to the market that certain fuel producers do not have to compete. Second, prices would never fall below the floor even if production costs allow for lower pricing or superior alternatives exist at lower prices. The Pentagon is a massive fuel consumer that can help fuel suppliers make substantial profits. But fuel sup-

pliers should have to compete for the Pentagon's business. Long-term contracts should be used to guarantee that the Pentagon has the supplies it needs, not to provide a guaranteed market for expensive fuel producers.

- **Establish a capabilities-based determination on the best way to ensure secure domestic base energy supplies.** An over-reliance on the U.S. electricity grid is emerging as a concern for some military planners. An attack on the civilian grid could leave domestic military bases without power. While this fear may be legitimate, by itself it does not justify alternative energy investments.
- **End renewable energy mandates.** According to Section 2911(e) of Title 10 of the United States Code, the DOD is obligated to generate 25 percent of its electricity using renewable sources by 2025. This mandate should be ended immediately. Such mandates will cause the Pentagon to expend an increasing amount of its resources on renewable energy rather than on increasing capability. Plus, mandates undermine the incentive for renewable energy producers to provide com-

petitively priced products, thus actually impeding the ultimate availability of oil alternatives.

- **Do not mandate more expensive alternatives to oil.** Oil products may be expensive, but they are the least expensive option currently available. Forcing the military to purchase more expensive alternatives would leave fewer resources for training, modernization, and recapitalization, resulting in a less capable military.

Strange Bedfellows Cost U.S. Taxpayers. The Pentagon and the environmental movement seem to have found common cause by linking America's national security to the basic tenets of the President's green agenda. The DOD bureaucracy benefits by securing resources to engage in climate change and alternative energy research, and the green movement benefits by keeping its agenda alive. Unfortunately, there are real costs for national security, energy technology, the taxpayer, and the American consumer.

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