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CONGRESSIONAL TESTIMONY

**Green Energy Oversight:
Examining the Department of
Energy's Bad Bet on Fisker
Automotive**

**Committee on Oversight and Government
Reform Subcommittee on Economic Growth,
Job Creation, and Regulatory Affairs**

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My name is Nicolas Loris. I am an energy policy analyst and the Herbert & Joyce Morgan Fellow at The Heritage Foundation. The views I express in this testimony are my own, and should not be construed as representing any official position of The Heritage Foundation.

I want to thank the members of the Oversight and Government Reform Subcommittee on Economic Growth, Job Creation, and Regulatory Affairs for this opportunity address you concerning the Department of Energy's Bad Bet on Fisker Automotive.

For decades the federal government has taken choice away from the individual and overridden preferences by mandating more stringent fuel efficiency in place of power, weight, and safety. Over the years the federal government has intervened even more in the automobile market by subsidizing the production and consumption of alternative vehicles and fuels with tax credits, mandates, grants, loan guarantees and loans. More specifically, the Department of Energy's Advanced Technology Vehicles Manufacturing (ATVM) loan program awarded \$8.4 billion in loans to five companies from September 2009 to March 2011.¹

Fisker Automotive, the recipient of a \$529 million loan from the Department of Energy (DOE) has come under dire financial straits. Investigating any potential cronyism between Fisker's investors and its relationship with the federal government and any negligence on the part of the DOE in underwriting and approving the loan are worthwhile and necessary actions to protect American taxpayers and promote transparency in the federal government – a goal championed by President Obama since he first ran for president in 2008.

What is equally if not more important, however, is to emphasize what led to these problems in the first place and that is the federal government's involvement with investment decisions that are better left for the private sector. The government's intervention in the market decreases the incentive to innovate and increases the incentive to use the political process and lobby for handouts. Federal loans and loan guarantees promote cronyism that rewards political connectedness over market viability. Market viable technologies should not need financial support from the taxpayer. Whether a company that receives a Department of Energy loan is profitable or not, the program is misguided. Rather than seek to improve and reform DOE loan and loan guarantee programs, policymakers should eliminate them.

Economic and Environmental Realities of the Electric Vehicle

When President Obama took office, he touted an ambitious goal of putting one million electric vehicles on American roads by 2015. The Department of Energy recently lowered that projection to 250,000 electric vehicles, about .1 percent of all vehicles in the

¹ U.S. Department of Energy Loan Programs Office, The Financing Force Behind America's Clean Energy Economy, accessible at https://lpo.energy.gov/?page_id=45 (accessed April 22, 2013).

United States.² The economic and technological challenges of electric vehicles are large and the environmental benefits are dubious, at best.

While consumers have concerns about electric vehicles' battery range, battery life expectancy and replacement costs, the primary reason for low electric vehicle demand is cost. Consumers must pay a premium for electric vehicles with the expectation that the savings in fuel costs will negate the higher sticker price and the electric vehicle purchase will eventually be a money-saver. But consumers are reluctant to pay that premium and are rightly skeptical that the fuel savings will make up the difference. One way of doing the comparison is to calculate how much more a new car buyer could afford in car payments with the monthly fuel savings. Using a 5 percent interest rate over 10 years (similar to new-car finance rates), The Heritage Foundation calculated that the additional financing available from monthly fuel savings would come nowhere close to the premium paid for an electric vehicle.³

A September 2012 Congressional Budget Office report affirmed this. The CBO analysis found that plug-in hybrid electric vehicles will cost \$12,000 more over the lifetime of the vehicle than a similar-sized gas-powered vehicle, even after factoring in fuel savings using a 10 percent discount rate.⁴ Even a generous tax-payer funded \$7,500 credit does not make up the difference. CBO also concluded that "All-electric vehicles are closer to being cost competitive with conventional vehicles than are plug-in hybrids with the same size battery, but the tax credits would still need to be about 50 percent higher than they are now to fully offset the higher lifetime costs of an all-electric vehicle."⁵

Fisker is in a category of its own when it comes to economic challenges. Fisker's luxury Karma was priced at \$103,000. PrivCo, a research analysis firm focusing on privately-held companies, calculated that Fisker spent an astounding \$660,000 on each vehicle produced.⁶ Three important questions must be answered. 1.) Why are taxpayers helping to foot the bill with a \$7,500 tax credit for a vehicle that costs over \$100,000? 2.) Is this the type of risk we want to take with taxpayer-loaned money? 3.) Did the ATVM loan significantly hedge the risk of investors and would have they obtained that much private financing without the federal government's loan?

Furthermore, the environmental benefits from going electric are questionable. If reducing greenhouse gas emissions is a goal, subsidizing the production and consumption of electric vehicles is one of the least effective tools to combat climate change. A 2012

² Bjørn Lomborg, "The Electric Car's Short Circuit," Project Syndicate, April 11, 2011, accessible at <http://www.project-syndicate.org/commentary/the-false-promise-of-electric-cars-by-bj-rn-lomborg>

³ By Nicolas Loris and David W. Kreutzer, Ph.D., "Economic Realities of the Electric Car, Heritage Foundation WebMemo No 3116, January 24, 2011, accessible at <http://www.heritage.org/research/reports/2011/01/economic-realities-of-the-electric-car>

⁴ Congressional Budget Office, "The Effects of the Federal Tax Credit for the Purchase of Electric Vehicles," September 2012, accessible at http://www.cbo.gov/sites/default/files/cbofiles/attachments/09-20-12-ElectricVehicles_0.pdf

⁵ Ibid.

⁶ PrivCo, "FISKER AUTOMOTIVE'S ROAD TO RUIN: How a "Billion-Dollar Startup Became a Billion-Dollar Disaster" <http://www.privco.com/fisker-automotives-road-to-ruin> (accessed April 22, 2013).

report from the Journal of Industrial Ecology found that the manufacturing of electric vehicles produces over double the carbon dioxide emissions than that of a conventional car.⁷ Further, if the car charges with electricity powered by coal and the battery needs replacement, the greenhouse gas reductions are marginal, at best.

Profitable or Not, DOE's ATVM is a Failure

In October of 2011, DOE's Director of Public Affairs Dan Leistikow wrote on the Department of Energy's webpage, "Two years ago, critics said we shouldn't be investing in American auto manufacturing because the industry wouldn't survive. They were wrong then and they're wrong today. From well established names like Ford to innovative startups like Tesla and Fisker, America's auto industry is being reinvented, and the Department's loan program is helping play an important role."⁸

Three years after the DOE closed its ATVM loan for Fisker Automotive, the company is on the verge of bankruptcy. The DOE loan artificially made this dubious investment appear more attractive and lowered the risk of private investment. For instance, private investors sunk \$1.1 billion into Fisker but much of the private financing came after the Department of Energy approved and closed the loan for Fisker. Fisker, formed in August 2007, raised \$94 million before the DOE approved the loan in September 2009.⁹ Fisker raised another \$57 million between the time DOE approved and closed the loan in April 2010. After DOE closed the loan, Fisker raised over \$1 billion in various rounds of venture capital funding.¹⁰

Private investors look at government loans a way to substantially reduce their risk. Even if a project may be an economic loser but has a huge upside, private companies can invest a smaller amount if the government provides a loan. Those investments are especially attractive if the federal government complements loans with other policies like targeted tax credits, DOE research dollars, and fuel efficiency standards that allow electric vehicles to accumulate credits and then trade them with non-compliant manufacturers. If the project fails, private investors still lose money, but the risk was artificially distorted. Now taxpayers are potentially on the hook for the nearly \$200 million of loans Fisker drew down. When economically uncompetitive technologies and companies cannot survive without the taxpayer's crutch, there is a good reason these companies cannot fully attract private financing. These investors are using political calculus to hedge their bets.

Success Stories are not a Result of the Program

⁷ Troy R. Hawkins, Bhawna Singh, Guillaume Majeau-Bettez and Anders Hammer Strømman, "Comparative Environmental Life Cycle Assessment of Conventional and Electric Vehicles," Journal of Industrial Ecology Volume 17, Issue 1, pages 53–64, February 2013

⁸ Dan Leistikow, "Fisker, Tesla, and American Auto Innovation," U.S. Department of Energy, October 20, 2011, accessible at <http://energy.gov/articles/fisker-tesla-and-american-auto-innovation> (accessed April 22, 2013).

⁹ Fisker raised \$68 million of the \$94 million after submitting the loan application.

¹⁰ PrivCo, "FISKER AUTOMOTIVE'S ROAD TO RUIN: How a "Billion-Dollar Startup Became a Billion-Dollar Disaster" <http://www.privco.com/fisker-automotives-road-to-ruin> (accessed April 22, 2013).

Whether it is the Department of Energy's ATVM loan program or its 1703 and 1705 loan guarantee programs, supporters argue a few failures are worth the risk and the number of success stories far outweigh bankrupt companies or ones facing difficult financial times. But even if a project receives a DOE loan or loan guarantee, it is a mistake to attribute that company's success to the federal government's investment.

There are companies that would, and often do, receive investment from the private sector because their technology is profitable or because investors find their technology promising and want to pursue the risk. In these cases, the DOE's loan partially offsets private-sector investments that would have been made without the federal backing. Tesla, the recipient of a \$465 million loan through the ATVM program, had its initial public offering in June 2010. Although the car manufacturer reported \$75 million in losses over the final three quarters in 2012, Tesla expects to report its first ever quarterly profit.¹¹

Whether Tesla remains profitable remains to be seen. And because many of the projects for both DOE ATVM and loan guarantees are in relatively early stages of development, labeling them successes is premature—and if they do go bankrupt, the taxpayer funds are merely providing a lifeline. However, if Tesla's electric vehicles are the wave of the future, they should have secured investment and loans through the private sector. Similarly, Ford and Nissan North America ATVM loans to retool their factories to produce more fuel efficient and electric vehicles should have been completely privately financed outside of DOE. Having the federal government provide the loan privatizes the benefits and distributes any potential losses among the taxpayers.

Furthermore, a successful federally-backed company does not mean it is a good deal for energy consumers. Representative Paul Ryan (R-WI) recently received criticism for including two solar-generation projects that received loan guarantees in his budget plan as "failed" projects despite the fact that Mesquite Solar 1's project in Phoenix is generating electricity and SolarReserve's project is under construction and recently entered a contract to sell power to California's largest utility.

Both companies are selling to California's Pacific Gas and Electric Company (PG&E). In fact, in Mesquite Solar 1's case, they entered into a contract with PG&E before receiving the loan guarantee.

California law mandates that the utility must purchase 25 percent of its electricity from renewable sources by 2016 and 33 percent by 2020. With respect to SolarReserve entering into a contract with utility PG&E, the state utility commissioner acknowledged, "This is expensive, there's no getting around it, but I think this technology is something that's worth investing in." Those investments should be determined in the free market not artificially skewed by using the political process to pick one technology over another.

¹¹ Jose Pagliery, "Tesla expects its first-ever profit," CNNMoney, April 1, 2013, accessible at <http://money.cnn.com/2013/04/01/news/companies/tesla-profit/index.html> (April 22, 2013).

If electricity generated by these projects were competitive with other sources of energy, there wouldn't be a law mandating its use. Instead, families are forced into buying pricier electricity and taxpayers are on the hook if the project fails.

One of the conditions of the ATVM program is that the applicant must be “financially viable without the receipt of additional federal funding for the proposed project other than the ATVM loan.”¹² If that is the case, then these companies should seek private capital, not government capital. The demand for the vehicle will determine whether that company or technology is financially viable. A truly financially viable company should not have a problem securing private investments.

The Incentive for Alternative Fuel Technology Already Exists

Oil's dominance as a transportation fuel is not because a government program is lacking or because more taxpayer investments are needed to jumpstart a transformation in the fuel industry. At present, even with consistently higher prices, oil is the most efficient and economic source of transportation fuel.

Americans spent \$481 billion on gasoline in 2011.¹³ Globally, the transportation fuels market is a multi-trillion-dollar one. If any alternative fuel technology captured a mere slice of that market, it would capture billions of dollars in profit annually. The market demand for transportation fuel is incentive enough to spur competition in the industry. Breaking into this market is not a problem of the so-called valley of death where good ideas are not able to attract substantial investment. It is a valley of wealth waiting to be had.

Markets adapt to changes in resource demand and supply through the price mechanism. If vehicles powered by natural gas, electricity, or biofuel became economically competitive consumers would respond, and alternative-fuel vehicle and necessary supporting infrastructure would be built. A common argument for federal support of alternative-fuel vehicles is that consumers will not buy the cars if they have no place to re-charge or re-fuel them thus creating a chicken-and-egg problem, but markets overcome the chicken-and-egg problem all the time. Diesel cars and diesel pumps and cellular telephones and cellular towers are just two examples of investments that expanded rapidly. Good economic ideas will do that but it will not be as the result of a government program or a politician in Washington thinking he knows which is the most promising alternative to a gas-powered car.

The Fundamental Problems with DOE Loans and Loan Guarantees

¹² United States Department of Energy, ATVM, https://lpo.energy.gov/?page_id=43 (accessed April 22, 2013).

¹³ Janice Podsada, “Americans Spent Record Sum on Gasoline in 2011,” January 3, 2012, http://articles.courant.com/2012-01-03/business/hc-gasoline-record-spending-2011-20111230_1_tom-kloza-oil-price-information-service-crude (accessed April 22, 2013).

Fisker Automotive provides another critical piece of evidence as to why the Department of Energy should not be attempting to serve as a venture capitalist. Both the loan and loan guarantee programs are some of the most pernicious ways that governments distort markets and harm American families and businesses alike. DOE loans and loan guarantees:

- **Reduce Capital Availability for Less Politically Favored Companies:** As anyone looking to start a business or buy a home in recent years can attest, acquiring a loan can be very difficult. DOE loans and loan guarantees make that process even more difficult because the government essentially pulls capital out of those limited reserves and dictates who should receive it. While sure-bet companies can still get a loan, those that are more on the margin may lose that opportunity.
- **Reduce Americans' Access to Technologies and Services:** Capital is in limited supply. A dollar loaned to a government-backed project will not be available for some other project. This means that the higher-risk, higher-reward companies that drive innovation and bring new services and technologies into the marketplace may not get support, while companies with strong political connections or those that produce something that politicians want do.
- **Skew the Rules of Free Enterprise:** The more government participates in the market as an investor, the greater its temptation to shape the rules to advance its own interests. Further, because they are not risking their own money, politicians and bureaucrats will bear almost no responsibility for the outcome of the investment. This allows them to take credit when an investment succeeds and deny blame when it fails.
- **Beget Corruption and Cronyism:** Programs such as loan guarantees create a symbiotic relationship between government officials and specific businesses. In essence, both have very strong incentives for the other to be successful. In this relationship, the politician helps the business gain market advantage, and the successful business helps the politician advance his political agenda. The result is, at best, a brand of cronyism where businesses develop strong relationships with public officials to ensure that public policies support their economic interests.

By attempting to force government-developed technologies into the market, the government diminishes the role of the entrepreneur and crowds out private-sector investment. This practice of the government picking winners and losers denies energy technologies the opportunity to compete in the marketplace, which is the only proven way to develop market-viable products. When the government attempts to drive technological commercialization, it circumvents this critical process.

Fisker is not the first Department of Energy investment failure and it very likely that it will not be the last. More stringent oversight and risk assessment may marginally

improve the protection of the taxpayers' money, but the best option is to get rid of the loan program altogether and allow free-market competition to drive energy investment. This protects taxpayer money and will ensure that only the most promising new energy technologies move forward.

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Nick Loris, an economist, focuses on energy, environmental, and regulatory issues as the Herbert and Joyce Morgan Fellow at The Heritage Foundation. In Heritage's Roe Institute for Economic Policy Studies, Loris researches and writes about energy prices and other economic effects of environmental policies and regulations, including climate change and "cap and trade" legislation. He also articulates the benefits of free-market environmentalism. Loris has been published and quoted in such publications as The Wall Street Journal, The New York Times, The Washington Post, Investor's Business Daily and The Baltimore Sun. His radio and television appearances include Fox News Channel, CNN and National Public Radio.

He is a prolific contributor to "The Foundry," Heritage's rapid-response policy blog. Loris was a policy analyst specializing in energy and environmental issues such as the Keystone XL pipeline in spring 2012 when he was named to succeed Ronald Utt, a retiring Roe Institute colleague, as Morgan Fellow. "Nick's work on energy has been crucial to advancing understanding of the need for reliable supplies of domestic energy, unfettered by reams of government red tape," Heritage President Edwin J. Feulner said. The fellowship was endowed by retired real estate developer Herbert Morgan and his late wife, Joyce, of Arlington, Va., longtime proponents of free enterprise and limited government. Mrs. Morgan passed away in 2009. Before joining Heritage in June 2007, Loris was an associate at the Charles G. Koch Charitable Foundation, immersing himself for a year in a market-based management program. His first media experience was as an editorial intern for Townhall.com. Loris received his master's degree in economics from George Mason University in Fairfax, Va. He holds a bachelor's degree in economics, finance, and political science from Albright College in Reading, Pa.