

THREE **ENERGY** INITIATIVES



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U.S. energy policy needs a rethink. More specifically, it's time to emphasize nuclear power and de-emphasize government mandates and high-cost, inefficient subsidies to other energy sources. Here are three steps that Congress and the new Trump administration can take:*

1. **Expand and Enhance America's Nuclear-Energy Sector**
2. **Repeal the Renewable Fuel Standard**
3. **Repeal the Tax Credit for Electric Vehicles**

1.

Expand and Enhance America's Nuclear-Energy Sector

During the campaign, President-elect Donald Trump declared that nuclear energy should be "part of an all-the-above program for providing power for America long into the future. We can make nuclear power safer, and its outputs are extraordinary given the investment we should make." There are three sound reasons for this policy: having diverse and reliable energy sources, maintaining U.S. technological

leadership, and reducing the energy footprint on U.S. land.

The importance of diverse energy sources was evident during the polar vortex in early 2014, when extreme cold led to a surge in electricity demand. During that time, numerous coal- and natural gas-fired plants faltered, but America's reactor fleet operated at 95% of its capacity. Without those plants,

large parts of the U.S. could have suffered blackouts.

Unfortunately, the U.S. nuclear sector is in crisis. Over the past three years, utilities from Vermont to California have shuttered six reactors. Another seven reactors are slated to close over the coming decade, and many more are threatened with premature closure.

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Several factors are to blame, including low natural gas prices, aging reactors, post-Fukushima regulations, and heavily subsidized wind and solar energy. The result: many reactors can't make money selling their electricity into wholesale markets, where prices are at, or near, 15-year lows.

The new administration should move to preserve existing reactors and pave the way for the next generation of safer, cheaper reactors. Keeping existing reactors in operation will require financial help, via taxpayers, for some of them. Those subsidies will help the U.S. maintain a diverse set of electricity-generation assets.

Many conservatives may balk at the idea of providing financial assistance to nuclear utilities. But the reality is that cheap, abundant, reliable electricity is a public good.

Electricity is the lifeblood of the U.S. economy. America's economy is doing well, compared with much of the rest of the world, partly because it enjoys some of the cheapest electricity in the

world. Throughout its history, the U.S. electricity sector has tussled between public interest and private profit. America's nuclear fleet is a tremendously valuable asset that we ignore or discard at our peril.

America has been leading the global nuclear sector since World War II, and the U.S. still produces about twice as much electricity by splitting atoms as France. But the U.S. has become an also-ran in the deployment of nuclear technology. In November, Japan and India agreed on a deal to allow Japanese companies to export nuclear-power equipment and technology to India. In addition, companies from Russia, China, and South Korea are acquiring customers around the world.

To maintain America's technological leadership, the Department of Energy and the Nuclear Regulatory Commission (NRC) should expedite the development and deployment of next-generation reactors that are safer and cheaper than those in the existing fleet. There are many promising designs in the works, including molten salt reactors. But the

permitting process for new reactors is onerous and prohibitively expensive. The Trump administration should be certain that its appointees to the NRC are focused on streamlining the permitting process for new reactors.

Among nuclear energy's greatest virtues is its unsurpassed power density. Renewable energy has myriad proponents. Yet those proponents seldom discuss the landscape-destroying energy sprawl that inevitably accompanies large-scale wind and solar projects.

For instance, the Breakthrough Institute estimates that wind energy's land footprint is about 530 times as large as that of a nuclear plant and that solar energy's footprint is about 145 times as large. In a recent report for the Manhattan Institute, I showed that a major push for wind and solar energy will require stringing tens of thousands of miles of new high-voltage transmission lines across rural America.

2.

Repeal the Renewable Fuel Standard

Since 2007, the RFS, which requires fuel retailers to blend corn ethanol into the gasoline that they sell, has saddled motorists with more than \$10 billion per year in extra fuel costs above what they would have paid if they had purchased gasoline alone. That's because ethanol, on an energy-equivalent basis, is significantly more expensive than gasoline. Since 1982, ethanol has cost 2.4 times

more, on average, than an energy-equivalent amount of gasoline.

During 2007–14, about 92.5 billion gallons of ethanol were mixed into U.S. gasoline supplies. During the same period, the energy-equivalent cost of ethanol over gasoline averaged about 90 cents per gallon. Motorists thus incurred about \$83 billion—roughly \$10

billion per year—in additional fuel costs over and above what they would have paid for gasoline alone.

Several recent studies, including one published earlier this year by John DeCicco of the University of Michigan's Energy Institute, have found that corn ethanol not only raises fuel costs considerably; it is also worse for the

climate than conventional gasoline. DeCicco determined that the amount of atmospheric carbon dioxide absorbed by plants offset only a fraction (37%) of the carbon dioxide emitted by the combustion of biofuels. "When it comes to the emissions that cause global

warming, it turns out that biofuels are worse than gasoline," DeCicco said. "So the underpinnings of policies used to promote biofuels for reasons of climate have now been proven to be scientifically incorrect."

Corn ethanol costs motorists a bundle at the pump and does not improve the environment. The Trump administration and the Republican Congress should end the Renewable Fuel Standard.

3.

Repeal the Tax Credit for Electric Vehicles

Despite the endless hype about electric cars, vehicles that plug into the grid remain a niche product that is sold almost exclusively to the affluent. For instance, the average buyer of a Tesla, the most popular electric vehicle in the U.S., has an average household income of \$293,000. A 2015 study by Severin Borenstein and Lucas Davis of the University of California at Berkeley found that 90% of federal EV tax credits are claimed by buyers with incomes in the top 20% of taxpayers. Buyers of a Tesla, or other EVs, are entitled to a \$7,500 federal tax credit.

In 2015, U.S. sales of EVs and plug-in hybrid vehicles totaled 116,099 units, or 0.6% of the 17.5 million cars and light trucks sold. Put another way, in 2015, Ford Motor Company sold as many F-150s and other pickups every eight days as Nissan sold Leaf EVs in the entire year.

The EV subsidy will have virtually no impact on America's need for oil, either. A 2012 analysis of the federal EV tax credits by the Congressional Budget Office concluded that the subsidy will "result in little or no reduction in the

total gasoline use and greenhouse gas emissions of the nation's vehicle fleet."

There is no economic or environmental justification for the EV tax credit. Motorists purchase the vehicles that suit their needs. Lower-income taxpayers should not be subsidizing wealthy motorists who buy EVs.