

The Takeaway

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A Smart, Price-Based Energy Policy

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Energy policy in the United States is fatally flawed both in the process by which problems are identified and in the solutions that are chosen. It relies too heavily on subsidies, tax credits, grants, and mandates, when what is needed are price-based policies that encourage technological innovation and will achieve the goals of keeping energy reasonably cheap, but also reasonably clean and secure.

In his recent confirmation hearing, former Texas Governor and newly minted US Energy Secretary Rick Perry, stated that he would, “advocate and promote energy in all forms, and that certainly includes our renewables.” He also went on

to state, “I am committed to helping provide stable, reliable, affordable, and secure sources of American energy.”¹ Unfortunately, cheap, clean, and secure energy are fundamentally in conflict. Cheap energy is essential to the continued health and



WHAT'S THE TAKEAWAY?

Congress should not be picking winners and losers, supporting some alternative technologies over others.

An environmental investment fee should be used to make the price of fossil fuels higher and reflect their true social cost.

Such a fee will level the playing field stimulating new technologies and innovations.

prosperity of all nations. Clean energy is not typically cheap but must be part of the goal. Secure energy also is not cheap, but it is essential to economic stability.

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Competitive markets and new technology hold the best promise of limiting these inherent conflicts. For example, fracking technology, pioneered by another Texan, George Mitchell, has revitalized the US oil and natural gas industry. Fracking has both increased US oil security and brought world oil prices down from their \$100 per barrel range in 2014. Additionally, fracking has unlocked vast reserves of domestic natural gas, prompting cheaper natural gas prices. An environmental bonus has been that natural gas-fired combined cycle power plants emit about 60% less CO₂ than their coal fired counterparts. Thanks to fracking unlocking vast oil reserves outside of the troubled Middle East, oil security is now much less of a concern.

Nevertheless, the scientific community tells us that there exist serious climate consequences from cheap fossil fuel energy.² Both in the United States and worldwide, fossil fuels account for a dominant portion of CO₂ emissions and of total energy consumed. Unfortunately, carbon-free energy sources are much more expensive than their fossil alternatives. Yet, cheap energy is important for maintaining high standards of living. Nevertheless, concern for future generations ar-

gues for a gradual transition to a low-carbon fuel mix. The question then becomes, “How do we balance over time the two conflicting goals of cheap and clean?”

INEFFECTIVE SOLUTIONS

In the past, the answer has been to give certain favored technologies like wind power subsidies big enough to allow them to compete. Another answer was to change consumer behavior by command and control mandates from Washington. Corporate Average Fuel Economy (CAFE) standards on cars and light trucks and mandates on ethanol content of gasoline come to mind. Ethanol mandates resulted in all kinds of unintended consequences—most alarmingly causing increases in world food prices that disproportionately affect the poorest—while achieving little of the hoped for price, energy security, and environmental benefits.³ Another fiasco was Solyndra, a government financed company ostensibly designed to produce low cost solar panels. Ultimately, the company failed after costing US taxpayers over \$500 million.

Note that both these solutions, whether subsidies for favored technologies or command and control mandates, are not free. Subsidies diminish tax revenues (contributing to our deficit) and mandates distort consumer choices.

Congress should stop picking winners, choosing to boost selected alternative technologies. Its members aren't any good at recognizing the most promising ones. They don't have the expertise, and the process looks too much like a flawed beauty-contest determined by lobbyist and home-state in-

terests. If all new technologies enjoyed a more level playing field, not just the pageant winners, the market would decide which technologies become the winners.

SETTING A NEW PLAYING FIELD USING A PRICE-BASED POLICY

Using an analogy from sports, let government set the dimensions of the football field on which all energy forms must compete. Then government should get out of the way. If a particular energy form can compete on that playing field, well and good. If it cannot, it should not be subsidized, nor its use mandated by government fiat. Basically, this is the free market mantra that applies to virtually all the products we buy. The best energy policy for balancing the often-competing goals of cheap, clean, and secure energy would use the price system to alter consumer behavior, business behavior, and the incentives to develop alternative-energy technologies.

Unfortunately, the current price system fails to incorporate the true social cost of fossil fuels—the costs primarily associated with climate change. Absent subsidies and mandates, fossil fuels would dominate the playing field. There would be no role for wind power, electric cars, etc. New low-carbon technologies simply cannot compete. A smart energy policy raises the playing field on which new energy technologies compete by incorporating into the price of fossil fuels their externally borne costs associated with CO₂.

By creating a new playing field where fossil fuel prices reflect their true cost, technology and innovation can flourish. Furthermore, the role of government would be relegated to being a tax collector—something that it is

pretty good at. We have no idea what technologies will dominate in thirty or fifty years. Instead of policymakers attempting to socially engineer the outcome, it is far better to create market conditions under which unknown and unknowable technologies will flourish.

The Department of Energy does have a legitimate role in funding research and development, but not in manufacturing solar panels like Solyndra. A smart energy policy does use government research and development funds to stimulate advances in basic energy research and high cost initial development projects. R&D funding decisions should be made by knowledgeable professionals in the energy department, not Congress.

AN INVESTMENT IN THE FUTURE

In today's tax shy political landscape many will say introducing even a modest carbon fee that would raise gasoline prices by \$.10 per gallon is unacceptable. But, an environmental investment fee differs fundamentally from the usual tax designed to redistribute income from one group to another. A fee on carbon is an investment in the future that will create a new, more level playing field for alternative energy sources and encourage conservation. It is an investment in the world our children and grandchildren will inherit. When viewed as an investment in the future, suddenly, it looks much more attractive. Too, the revenues could be used to help alleviate the current fiscal imbalance that will also affect those grandchildren.

Global warming and oil security are not just US problems, they are world-wide problems. Reductions in US carbon emissions will be of

little consequence if emissions in China and India continue to grow at prodigious rates. Opponents of any policy to reduce US emissions would argue that without international cooperation, such policies are futile and would only hurt the United States. These same opponents would point out that such international cooperation seems unlikely in today's fractured world. This is an argument against a high fee, not for a zero fee. Obviously, one would not want to impose a carbon tax of \$100 per ton as advocated in the Stern Review,⁴ but a modest carbon fee of say \$10 per ton (implying \$.10 per gallon) would not have significant effects on the US economy or individual well-being. But if on this new playing field major technological advances emerged, these technologies could be exported to the rest of the world. World emissions could be significantly reduced and American innovators rewarded.

With Energy Secretary Rick Perry's understanding of how technology revitalized oil and natural gas production in Texas, he has

an opportunity to use sound scientific and market-based economic principles to guide decision making. Prices should reflect real costs and an environmental investment fee should be used to make the cost of fossil fuels higher. With energy prices continuing to be fairly low, this is the perfect time to level the playing field for new technology and innovation.

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Notes:

¹ Nomination hearing of the Honorable Rick Perry for Secretary of Energy (January 19, 2017).

² *Climate Change 2014 Synthesis Report, Summary for Policymakers*, IPCC

³ Griffin, J.M. and Cifuentes-Soto, M. (2012, Feb.). US ethanol policy: The unintended consequences. *The Takeaway*, 3(1). Available at <http://bush.tamu.edu/mosbacher/takeaway/TakeAwayVol3Iss1.pdf>

⁴ Stern, N. (2007). *The economics of climate change: The Stern review*. Cambridge University Press.

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