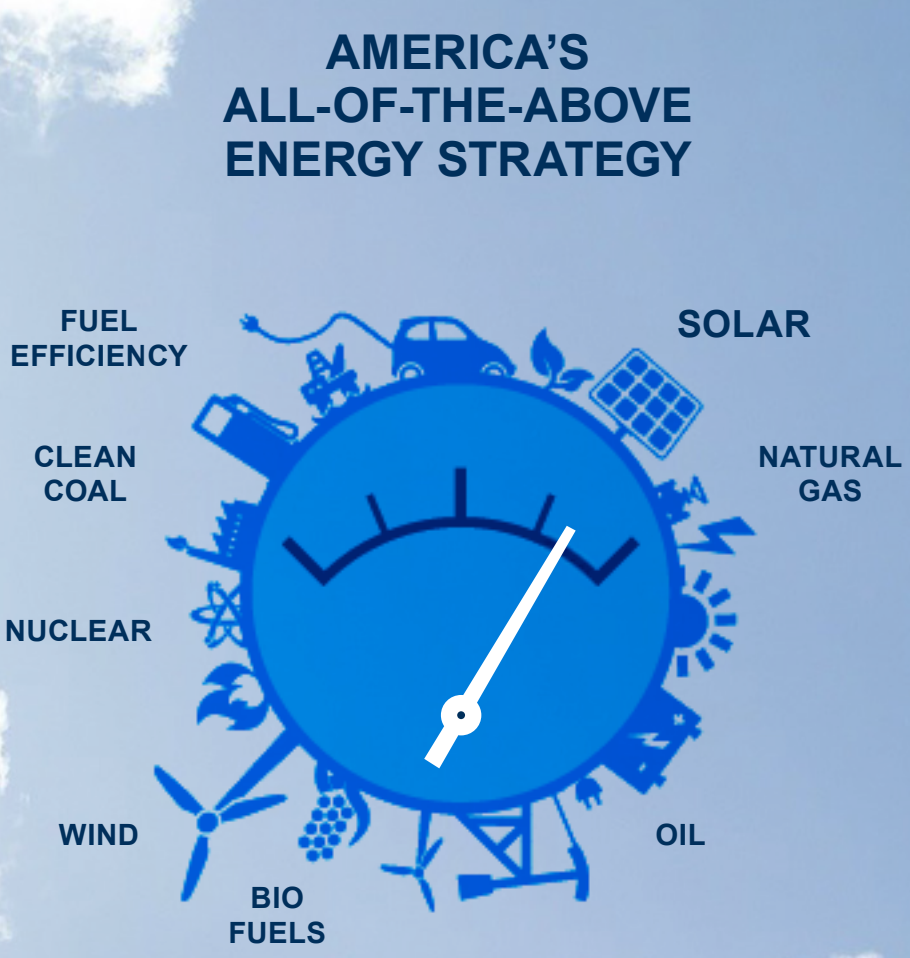

President Obama's Energy Legacy:

Will It Last?

A Primer in Lessons Learned for the Incoming Trump Administration

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A Primer in Lessons Learned for the Incoming Trump Administration

Executive Summary

By Tim Doyle*

The abundance of fossil fuel energy in the United States has never been greater than it is today. Through advances in drilling techniques that have unlocked huge quantities of oil and natural gas, the nation has reemerged as one of the world's leading energy producers. The United States now produces energy more efficiently and with less environmental impact than at any other time in its history.

The economic and environmental impact of the development of the nation's natural resources has been instrumental in keeping the sluggish U.S. economy going. Increased production of oil and natural gas has also transformed the global energy market. The ability to rely less on foreign oil from hostile areas of the world has made the United States stronger and safer. Increasing the use of natural gas has diversified our energy mix and been paramount in cutting greenhouse gas emissions and improving air quality.

The Obama administration's dilemma with natural resources and climate mitigation ultimately led to a fundamental change in its approach to energy policy. The administration initially touted increased use of natural gas as a way to reduce greenhouse gas emissions without wrecking the economy. But natural gas was, at least in the minds of the administration and its supporters in the environmental community, supposed to be a "bridge fuel" to the ultimate goal of powering the nation from 100 percent renewable energy sources. When natural gas' abundance was fully recognized, the shift to renewables was accelerated. Unfortunately, reliance on 100 percent renewable energy is not currently economical or technologically feasible. Nonetheless, the administration continued to support a policy of ending the use of fossil fuels as a way to meet its climate goals.

The legal authority to implement this shift in energy policy was problematic because more than 90 percent of the nation's energy currently comes from fossil fuels. The U.S. Supreme Court handed the administration the necessary legal authority, though, when it ruled that greenhouse gases could be regulated under the Clean Air Act if the Environmental Protection Agency (EPA) determined they posed a threat to public health and safety. In 2009, the EPA determined that a threat did in fact exist. Subsequently, the administration submitted their goals of reducing greenhouse gas emissions by 26 percent by 2025, and 80 percent by 2050 to the United Nations Framework Convention on Climate Change (UNFCCC). These goals were then used as quantifiable targets to support their new energy policy.

Implementing a new policy through the federal regulatory system was necessary because of a lack of support in Congress for legislation that was perceived to cause more economic harm than societal good. The administration's non-legislative strategy centered on increasing the regulatory burden on fossil fuel developers at *all levels* of the process, including exploration and production, access to federal lands, pipelines and rail transport, and capital markets. The resulting regulatory accumulation would create an endless mountain of red tape that significantly increased the cost of producing the nation's energy resources.

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President-elect Trump has indicated that he plans to reverse many of President Obama's policy decisions. The Trump administration is expected to help ensure that fossil fuel production remains a central part of our country's long-term energy strategy. President-elect Trump should follow through on his campaign promises to reject the current administration's policy of pursuing energy and climate policy through regulation. He should instead work with Congress to address the nation's energy and conservation needs in a balanced way that does not jeopardize its economic competitiveness or security.

In conclusion, improving the production and use of all sources of domestic energy is a better alternative to the fundamental shift in energy and economic policy pursued by the Obama administration. The new administration should instead focus on encouraging innovation and technological advancements so that we may continue to benefit as a nation from our vast wealth of traditional energy resources, while continuing to steadily reduce the impact on the environment from their production and use.

Introduction

President Barack Obama's energy policy over the past four years has shifted from an "all-of-the-above" approach to one of "keep it in the ground." This report looks at the milestones that have occurred during the administration's shift in policy in light of the potential economic benefits to America's struggling economy of increased domestic energy production. It also analyzes the Obama administration's increasing focus on climate mitigation as a policy priority, and offers suggestions as to what policies the next administration should pursue to more effectively achieve our national energy, economic, environmental, and security goals.

Specifically, this paper examines the Obama administration's argument for shifting U.S. energy policy away from development of the nation's abundant oil and natural gas when those resources have proven vital to the recovering economy. It explores the administration's efforts to convince a nation that it needs to make sacrifices in its energy consumption, while simultaneously rejecting the availability of abundant sources of domestic energy and wealth. Finally, it explores the claim of legal authority under which the administration has implemented this fundamental shift in energy policy, despite, or perhaps because of, the absence of support within Congress.

It is critical that President-elect Donald Trump consider the economic consequences of continuing down the path laid out by President Obama. Based on Trump's statements during the campaign, the new administration is likely to support a return to a true "all-of-the-above" energy strategy and advocate for policies that allow the marketplace to develop many of the solutions to the nation's most pressing environmental concerns.

An Abundance of Fossil Fuels

The United States has an incredible abundance of fossil fuels. The nation has the largest recoverable coal reserves in the world,[1] which is primarily used in the electric power sector.[2] In addition, not long ago many experts believed the United States was running out of oil and natural gas (gas)[3] — as it turns out, there is a lot more of both than anyone estimated. Crude oil (oil) is most often associated with transportation fuel, but petroleum-based products are widely used in everyday households goods. Natural gas is used predominately for power generation, manufacturing, and residential heating.[4] However, in the past five years, U.S. resource estimates have been turned on their head due to advances in drilling techniques by the petroleum industry. Latest estimates indicate that the United States has a 100-year supply of natural gas, and oil reserves greater than either Saudi Arabia or Russia.[5] President Obama acknowledged the reality of this new resource wealth in his 2012 State of the Union address.[6] The reversal of declining domestic oil and gas production has been nothing short of "game changing" in the energy world.[7] The increase in recoverable resources is the result of advancements in both drilling technology and technique that has allowed for the extraction of large amounts of oil and gas from shale rock and other tight formations that had previously been uneconomical. In fact, geologists had known since at least the 1800s[8] that a tremendous amount of oil and gas was locked in shale and other "tight" rock formations, but until recently lacked the means to unlock those resources. In assessing the nation's proven oil and gas reserves,[9] most experts had until recently subscribed to the theory of "peak

The reversal of declining domestic oil and gas production has been nothing short of "game changing" to the energy world.

[1] U.S. Energy Information Agency ("EIA"), ***How Much Coal if Left***, (last visited Sept. 14, 2016, 8:58 AM), http://www.eia.gov/energyexplained/index.cfm?page=coal_reserves

[2] EIA, ***Coal Explained: Use of Coal***, (last visited Sept. 27, 2016, 2:12 PM), http://www.eia.gov/energyexplained/index.cfm?page=coal_use

[3] EIA, ***Drilling often results in both oil and natural gas production*** (Oct. 29, 2013) (Oil and natural gas are quite often both extracted and produced simultaneously), http://www.eia.gov/todayinenergy/detail.cfm?id=13571

[4] EIA, ***Oil: Crude and Petroleum Products***, (last visited Sept. 15, 2016, 10:09 AM), http://www.eia.gov/energyexplained/index.cfm?page=oil_home; EIA, ***Natural Gas***, (last visited Sept. 15, 2016, 10:13 AM), http://www.eia.gov/energyexplained/index.cfm?page=natural_gas_use

[5] Anjli Raval, ***US oil reserves surpass those of Saudi Arabia and Russia***, Financial Times, (July 4, 2016), https://next.ft.com/content/7525f1dc-41d6-11e6-9b66-0712b3873ae1

[6] Pres. Obama, State of the Union (Jan. 24, 2012), https://www.whitehouse.gov/the-press-office/2012/01/24/remarks-president-state-union-address

[7] Daniel J. Graeber, API: ***U.S. gas a strategic asset***, United Press International (UPI), (Aug. 26, 2016, 7:57 AM), http://www.upi.com/Business_News/Energy-Industry/2016/08/26/API-US-gas-a-strategic-asset/6101472208551/; See Also, Matt Egan, CNN Money, Oil milestone: Fracking fuels half of U.S. output, (Mar. 24, 2016, 12:40 PM), http://money.cnn.com/2016/03/24/investing/fracking-shale-oil-boom/

[8] U.S. Dept. of Energy, Office of Fossil Energy, ***Natural Gas from Shale***, (April, 2013), http://energy.gov/sites/prod/files/2013/04/f0/complete_brochure.pdf

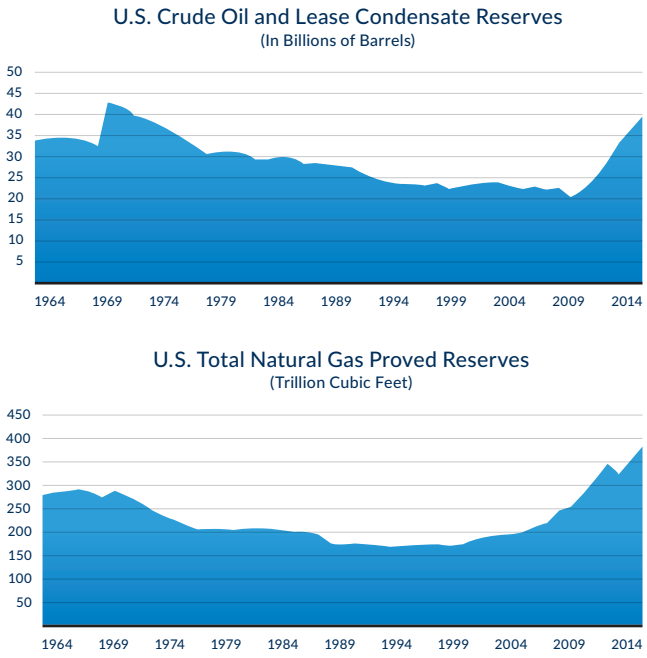
[9] EIA, proved energy reserves: "Estimated quantities of energy sources that analysis of geologic and engineering data demonstrates with reasonable certainty are recoverable under existing economic and operating conditions…", http://www.eia.gov/tools/glossary/index.cfm?id=P#prov_en_reserves.

oil," arguing that the world was running out of oil and gas.[10] *(See Figure 1)*. Where many energy experts miscalculated was how an innovative breakthrough of combining hydraulic fracturing and horizontal drilling could impact the drilling industry and ultimately result in fundamental changes to the nation's energy policies.[11]

The ability to develop domestic oil and gas that was previously thought unrecoverable has reestablished the United States as a major energy producer, thus diminishing the influence and diversifying the supply of energy from the Middle East and Russia.

Advancements in drilling techniques have both increased domestic energy production and have realigned the geopolitical world.[12] The ability to develop domestic oil and gas that was previously thought unrecoverable has reestablished the United States as a major energy producer, diminishing the influence and diversifying the supply of energy from the Middle East and Russia. American innovation and entrepreneurial spirit have not only realigned the energy world, but have also forced those at the highest levels of government to reassess the nation's energy policies and consider the benefits of oil, gas, and a diverse-fuel economy.

Figure 1.
U.S. Oil and Natural Gas Proved Reserves, 1964–2014



Sources: U.S. Energy Information Administration, Form EIA-23L, Annual Survey of Domestic Oil and Gas Reserves, 1977-2014, American Petroleum Institute, 1964-76

[10] Review & Outlook, ***'Peak Oil' Debunked, Again***, The Wall Street Journal, (Dec. 4, 2014, 7:36 PM) ("...the notion that the world is running out of resources always fails because the ingenuity of entrepreneurs, spurred by necessity and incentive, always exceeds the imagination of doomsayers."); See Also, R. Tyler Priest, ***Ignoring the Shale Revolution***, The Wall Street Journal, (April 25, 2016) http://www.wsj.com/articles/ignoring-the-shale-revolution-1461623772

[11] Tim Doyle, ***Federal Regulation: Preventing The U.S. From Regaining Energy Independence***, (Nov. 2012), http://accf.org/wp-content/uploads/2016/09/Oversight-Report-A-Critique-of-BLM's-2012-Proposed-Rule-on-Hydraulic-Fracturing-FINAL.pdf

[12] Marisa Endicott, ***The geopolitics of fracking***, Energy Policy Institute at the University of Chicago, (June 7, 2016), https://epic.uchicago.edu/news-events/news/geopolitics-fracking

Economic and Environmental Impact

The energy boom could not have come at a better time for the U.S. economy.[13] Once North Dakota, Texas, and Pennsylvania started producing large amounts of oil and natural gas, the rest of the country quickly took notice of the positive economic impact on the national economy. Both Republicans and Democrats have championed hydraulic fracturing as an economic catalyst and strategic advantage in the global economy. Arguably, moving forward the nation could have a truly "all-of-the-above" energy strategy, involving domestic development, increased manufacturing opportunities, and a drastically reduced reliance on oil and gas imported from the Middle East. The strategy calls for using natural resources such as oil, gas, and coal, as well as renewables, nuclear, and hydropower to power America's economy and create jobs. The Obama administration embraced the strategy in 2014, indicating that "[w]e need an energy strategy for the future — an all-of-the-above strategy for the 21st century that develops every source of American-made energy."[14]

However, the significance of increased production and proven reserves has not been lost on the environmental community, which initially supported natural gas as a "bridge fuel" in the long hoped for transition to renewables.[15] Whereas the development and use of oil has consistently been opposed by the environmental community, natural gas was considered a cleaner-burning fuel source and better for the environment,[16] as it produces 50% less carbon dioxide when burned than coal, the dominant fuel source for power generation at the time. Furthermore, with its relatively high price and dwindling domestic supply, natural gas was supposed to help facilitate the development of more cost effective ways to expand renewables in the nation's energy portfolio. The closer to parity the price of developing natural gas and renewables became, the easier it would be to convince the nation — and ultimately the world — that switching to 100% renewable energy was the logical, planet-saving choice. However, instead of coming to rely on natural gas in the short-term, advances in drilling technologies unlocked a century worth of affordable gas and an abundance of oil that undercut the cost of using renewable sources of energy.

As climate mitigation increasingly took center stage as the defining policy debate of the Obama administration, leaders in the environmental community began to openly express opposition to natural gas.

> *"Fighting climate pollution by only regulating smokestacks and tailpipes is a fool's errand; fossil fuels that are extracted will be burned — so tackling the climate crisis requires policies that sever the fossil fuel supply."*[17]
>
> Center for Biological Diversity

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[13] Jon Carter, ***How Fracking is Saving the Economy, Energy & Capital***, (Sept. 5, 2013, 2:28 PM), http://www.energyandcapital.com/articles/how-fracking-is-saving-the-economy/3810

[14] The White House, ***New Report: The All-of-the-Above Energy Strategy as a Path to Sustainable Economic Growth*** (May 29, 2014), https://www.whitehouse.gov/blog/2014/05/29/new-report-all-above-energy-strategy-path-sustainable-economic-growth; See also, The White House, ***The All-of-the-Above Energy Strategy***, (last visit Aug. 31, 2016, 9:35 AM), https://www.whitehouse.gov/energy/securing-american-energy, ("Safe and Responsible Domestic Oil and Gas Production" and "Reducing Our Dependence on Foreign Oil").

[15] Matt Ridley, ***The Shale Gas Shock***, The Global Warming Policy Foundation, p.21, (May 11, 2011) ("Shale gas was welcomed at first by environmentalists as a lower-carbon alternative to coal…[h]owever, as it became apparent that shale gas was a competitive threat to renewable energy as well as to coal, the green movement has turned against shale."), (last visited Oct. 3, 2016), http://www.thegwpf.org/images/stories/gwpf-reports/Shale-Gas_4_May_11.pdf

[16] According to the U.S. Energy Info. Admin., compared to Coal, Natural Gas emits roughly half the carbon in relations to energy produced, https://www.eia.gov/tools/faqs/faq.cfm?id=73&t=11

[17] Center for Biological Diversity, ***Keep it in the Ground***, (last visited Aug. 4, 2016, 4:26 PM), http://www.biologicaldiversity.org/campaigns/keep_it_in_the_ground/

This change of position by the environmental community manifested itself in the creation of a coalition to *end* all fossil fuel development and use, representing an expansion of its previous stance against coal and oil. The coalition behind the current "keep it in the ground" campaign, a broad group of environmental organizations,[18] has argued that:

> *"...in order to stave off catastrophic climate change, the overwhelming majority of the large coal reserves in China, Russia and the United States as well as more than 260 billion barrels of oil reserves and 60% of gas reserves in the Middle East must all remain unused... [and] [a]rctic resources should be off-limits to development and that the exploration and usage of unconventional oil, like the high-carbon Canadian tar sands, undermines any efforts to limit climate change."*[19]
>
> Sierra Club, 350.org, and Greenpeace: "Keep It in the Ground"

Noticeably absent from this argument is any viable path forward for the economy that does not result in massive job loss and instability. The economic turmoil that would likely follow such a policy shift would be felt by *all* Americans and result in the type of job losses already witnessed in West Virginia's coal industry.[20] Advocates of "keep it in the ground" counter that any jobs lost in the move to more expensive renewable energy would be replaced by opportunities in the new "clean energy" economy. While possible in theory, it has so far not proven to be the case, and, perhaps more importantly, it fails to take into consideration the higher price tag for the energy needed to run manufacturing plants associated with a "clean energy" economy. Solar panels and wind turbines, like all manufactured products, require energy to build. There is little evidence that solar and wind can produce enough energy at affordable prices to keep the U.S. manufacturing sector competitive in the world marketplace. While some expect the forcible shift to renewables to fundamentally change the U.S. economy,[21] currently renewables, including biomass, hydroelectric, wind, solar, and geothermal, make up only 10% of *all* U.S. energy consumption. *(See Figure 2)*. Additionally, federal regulations that mandate the use of renewable energy do not automatically translate into American jobs. In fact, existing market forces have already pushed most manufacturing of renewable technologies, like solar panels and wind turbines, to China.[22] Despite the focus on power generation and

> Even with the focus on power generation and despite subsidies from the federal government, wind and solar account for less than 6% of U.S. electricity generation.

[18] Sierra Club, 350.org, Greenpeace, and others.

[19] Sierra Club, 350.org, and Greenpeace, Keep It in the Ground, (Jan. 2016), (paraphrasing a Jan. 2015 study: ***The geographical distribution of fossil fuels unused when limiting global warming to 2 °C***, Nature International Weekly Journal of Science.), https://www.sierraclub.org/sites/www.sierraclub.org/files/blog/Keep%20It%20in%20the%20Ground%20-%20January%202016.pdf

[20] Of the five major mining regions in the U.S., coal production in the Central Appalachian Basin saw the greatest decline with a 40 percent drop below its annual average 2010-2014 level in 2015. Northern Appalachian Basin also saw a decrease in production in 2015 by 10 to 20 percent. The Appalachian regions saw steam-coal prices dropped 22 percent in 2015, following a 13 percent decline in 2014. These production and price declines in coal have resulted in significant unemployment and economic hardship in the Appalachian region. EIA, ***Coal Production and Prices Decline in 2015*** (Jan. 8, 2016), http://www.eia.gov/todayinenergy/detail.php?id=24472

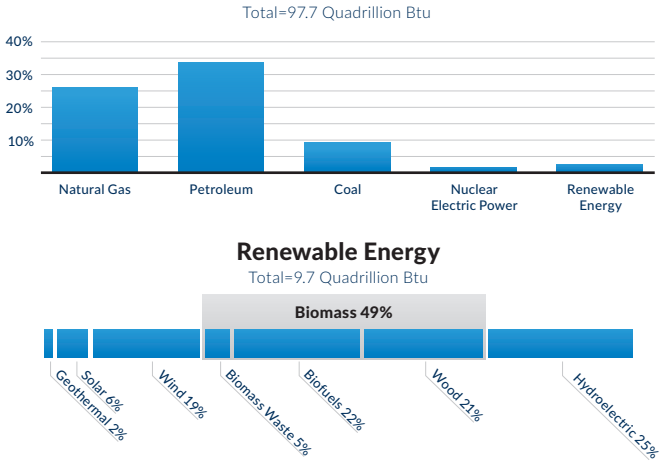
[21] Richard Heinberg, ***Renewable Energy Will Not Support Economic Growth***, (June 5, 2015), http://www.postcarbon.org/renewable-energy-will-not-support-economic-growth/

[22] EIA, ***Global solar photovoltaic manufacturing production slows in recent years***, (Sept. 14, 2015), http://www.eia.gov/todayinenergy/detail.cfm?id=22912

decades of subsidies from the federal government, wind and solar account for less than 7%[23] of U.S. electricity generation.[24] For the stability and strength of the American economy, it is therefore critical to maintain fossil fuels place in the nation's energy mix, as well as pursue greater diversity in energy resources going forward for an "all-of-the-above" policy to be truly effective.

Figure 2.

2015 U.S. Energy Consumption by Energy Source



Note: Sum of components may not equal 100% because of independent rounding

Source: U.S. Energy Information Administration. Monthly Energy Review. Table 1.3 and 10.1 (April 2016). preliminary data

The Administration's Dilemma with Natural Resources and Climate Mitigation

Increases in the amount of recoverable oil and gas presented a dilemma for the Obama administration, which had been working to implement a Climate Action Plan in response to global climate change.[25] On the one hand, the administration wanted to address climate mitigation and the negative environmental impacts of natural resource development. On the other hand, a number of senior administration officials were already on record supporting increased domestic production of oil and gas as part of an "all-of-the-above" strategy. Support for increased production was in no small part due to the fact that oil and gas development was one of the few sectors of the economy that was growing and creating jobs after the 2008 economic collapse *(See Figure 3)*.[26]

Increases in natural gas production provided a unique opportunity for the administration to reduce the use of coal as the nation's preferred fuel supply for power generation. After the 2010 midterm elections, Congress indicated that it would not support unduly increasing restrictions on the use of coal, given its abundance and ability to produce affordable energy.[27]

[23] EIA, ***Electricity in the United States***, (last visited, Sept. 30, 2016, 4:07 PM), http://www.eia.gov/energyexplained/index.cfm?page=electricity_in_the_united_states

[24] EIA, ***U.S. energy consumption by energy source, 2015*** (last visited, Sept. 16, 2016, 4:00 PM), http://www.eia.gov/energyexplained/index.cfm?page=renewable_home

[25] The White House, ***The President's Climate Action Plan***, (Jun. 2013), https://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf; Also, The White House, President Obama's Climate Action Plan — 2nd Anniversary Progress Report, (June 2015), https://www.whitehouse.gov/sites/default/files/docs/cap_progress_report_final_w_cover.pdf

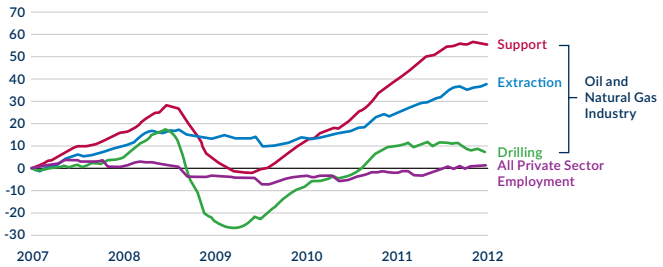
[26] EIA, ***Oil and gas industry employment growing much faster than total private sector employment***, (Aug. 8, 2013), http://www.eia.gov/todayinenergy/detail.php?id=12451

[27] Edison Electric Institute (EEI), ***Comments of The EEI on the Quadrennial Energy Review Second Installment: An Integrated Study of the Electricity System***, p. 61, (June 10, 2016) ("Renewable generation units can provide electrons, but are limited in their ability to provide energy grid or peak period capacity services."), http://www.eei.org/issuesandpolicy/testimony-filingsbriefs/Documents/160610QER1.2_EEIComments_FINAL.pdf; (This was particularly true regarding its use in generating "base load" power for the nation's electric grids. A paramount problem with the efficacy of most renewable energy sources is their variable nature — solar panels don't generate electricity at night and wind turbines don't turn when the wind doesn't blow — coupled with the challenges of storing electricity.).

From the outset, however, the Obama administration made clear that achieving drastic reductions in the use of coal was a central plank of its environmental platform. The lack of congressional support simply prompted the administration to use the federal regulatory system to "encourage" utilities and others to switch from coal to natural gas. Falling natural gas prices made the switch from coal more feasible for utilities than it otherwise would have been, and spared the Obama administration from being blamed for spikes in electricity prices. It also gave the administration cover to use the Environmental Protection Agency (EPA) to implement its broader regulatory agenda. Ironically, going around Congress fulfilled a 2008 campaign promise of then-presidential candidate Obama, who said that if Congress wouldn't act to regulate greenhouse gases (GHGs), his administration would implement policies that would regulate the coal industry out of business.[28]

> The oil and gas industry had already reduced GHG emissions by "374 million metric tons of carbon dioxide equivalent" and invested $90B in new technologies.

Figure 3.
Increased Employment in Oil & Gas Industry



Note: Total private sector employment is non-government employment, as derived from the Quarterly Census of Employment and Wages

Source: U.S. Bureau of Labor Statistics.

Despite the economic and environmental benefits of America's new found natural gas reserves, it soon became apparent that the "war on coal" was really to be an attack on all fossil fuels. This came as a surprise to some because through 2014, the oil and gas industry had actually reduced GHG emissions by "374 million metric tons of carbon dioxide equivalent" and invested $90 billion in new technologies to improve environmental performance.[29] This reduction in emissions occurred while energy production increased. In a case of allowing the perfect to be the enemy of the good, environmental activists — quickly followed by the administration — turned on natural gas as the next threat to the planet to be eliminated.

The first glimpse of this broader "war" was President Obama's stated rationale for rejecting the Keystone XL pipeline. In issuing his decision against granting the Canadian pipeline permission to cross the U.S. border, he specifically stated that "…we must transition — to a clean energy economy…. But it's also *going more quickly than many anticipated* … [and] if we're going to prevent large parts of this Earth from becoming not only inhospitable but uninhabitable in *our lifetimes*, we're going to have to *keep some fossil fuels in the ground* rather than burn them …." (Emphasis added).[30]

[28] Then candidate Obama said "…if somebody wants to build a coal-powered plant, they can; it's just that it will bankrupt them, because they're going to be charged a huge sum for all that greenhouse gas that's being emitted," (2008 interview with the San Francisco Chronicle's editorial board), http://dailycaller.com/2015/08/03/flashback-2008-obama-promised-to-bankrupt-coal-companies/#ixzz4GUBi3493.

[29] American Petroleum Institute (API), ***Greenhouse Gas Emission Reductions, Energy Tomorrow***, http://www.energytomorrow.org/environment-and-safety/greenhouse-gas-emission-reductions

[30] President Obama, ***Statement by the President on the Keystone XL Pipeline***, (Nov. 6, 2015), https://www.whitehouse.gov/the-press-office/2015/11/06/statement-president-Keystone-XL-pipeline

In issuing his decision not to grant the Canadian pipeline permission to cross the U.S. border, President Obama specifically stated that "...we must transition — to a clean energy economy... But it's also going more quickly than many anticipated... [and] if we're going to prevent large parts of this Earth from becoming not only inhospitable but uninhabitable in our lifetimes, we're going to have to keep some fossil fuels in the ground rather than burn them..."

The idea that natural gas was the next target of the environmental community was also apparent in statements by the National Resource Defense Council (NRDC) and the Sierra Club:

> *"Burning oil, gas, and coal endangers people's health and causes climate change[31]... Oil, gas, and other fossil fuels come with grave consequences for our health and our future ... NRDC is pushing America to move beyond these dirty fuels."*[32]
>
> Natural Resource Defense Council

> *"It's time to stop thinking of natural gas as a 'kinder, gentler' energy source. What's more, we do not have an effective regulatory system in this country to address the risks that gas drilling poses on our health and communities. The scope of the problems from under-regulated drilling, as well as a clearer understanding of the total carbon pollution that results from both drilling and burning gas, have made it plain that, as we phase out coal, we need to leapfrog over gas whenever possible in favor of truly clean energy."*[33]
>
> Michael Brune, Executive Director, Sierra Club

It is ironic that between 2007 and 2010, the Sierra Club accepted more than $25 million from the natural gas industry[34] to support their "Beyond Coal" campaign. Then in 2012, the Sierra Club started a new campaign called "Beyond Natural Gas."[35] The move may be the best indicator that the environmental community ultimately opposes all forms of fossil fuel energy.

[31] Natural Resource Defense Council (NRDC), ***Dirty Energy***, (last visited Sept. 9, 2016, 9:45 AM), https://www.nrdc.org/issues/dirty-energy#priority-why-matters

[32] NRDC, ***Reduce Fossil Fuels***, (last visited Sept. 9, 2016, 9:45 AM), https://www.nrdc.org/issues/reduce-fossil-fuels

[33] Michael Brune, ***The Sierra Club and Natural Gas***, Sierra Club, (Feb. 02, 2012) (Mr. Brune is the Executive Director of Sierra Club), http://sierraclub.typepad.com/michaelbrune/2012/02/the-sierra-club-and-natural-gas.html

[34] Bryan Walsh, ***How the Sierra Club Took Millions From the Natural Gas Industry — and Why They Stopped***, Time, (Feb. 2, 2016), http://science.time.com/2012/02/02/exclusive-how-the-sierra-club-took-millions-from-the-natural-gas-industry-and-why-they-stopped/

[35] Review & Outlook, ***Sierra Clubs Natural Gas***, The Wall Street Journal, (May 31, 2012, 12:01 AM), http://www.wsj.com/articles/SB10001424052702304363104577390432521371296

Legal Authority to Implement Shifting Energy Policy

To shift its energy policy, the Obama administration created the necessary legal authority to regulate carbon and other GHGs through arguably one of the most controversial "findings" ever produced by the EPA. Based on the U.S. Supreme Court's 5-4 decision in *Massachusetts vs EPA*,[36] the EPA issued an "endangerment finding"[37] that gave it the legal authority to regulate and fundamentally influence almost every aspect of the nation's economy, including energy policy and individual property rights.[38] The Supreme Court concluded that the EPA could regulate under its existing Clean Air Act authorities if it determined that the release of carbon dioxide and other GHGs could eventually lead to cataclysmic events related to climate change that could directly affect the safety and wellbeing of humanity. Practically speaking, the EPA's finding gave the administration an extremely broad legal justification to fundamentally change domestic energy policy based on the amount of GHGs emitted in a given activity. For the energy industry, this includes the development, transport, storage, and use of natural resources. Taken together, these different stages of the energy supply chain represent the "lifecycle"[39] of a carbon-producing source. The endangerment finding and subsequent federal court decisions providing judicial deference to agencies, afforded the administration the most efficacious vehicle for advocating for its climate mitigation strategy and, more importantly, gave it a foundation for implementation. This framework would be the incentive for reaching President Obama's goals of reducing GHGs 26% by 2025 and 80% by 2050.[40] This was the goal that the United States submitted to the United Nations Framework Convention on Climate Change (UNFCCC).

The broader intent of the international framework was to build a global coalition to address climate change. There have been numerous global conferences on the effects of climate change, but none received quite the attention in the United States as the 2015 UNFCCC, COP 21/CMP 11,[41] which culminated in the Paris Agreement.[42] Though politically controversial, President Obama signed an "executive agreement" supporting the conference's conclusions

[36] Massachusetts v. EPA, 549 U.S. 497 (2007) (In the case, the State of Massachusetts argued that increased GHGs would contribute to global warming resulting in the polar ice caps melting. This would correspondingly raise the sea level to a point that Massachusetts would lose costal land. Though four of the nine Supreme Court Justices disagreed with this attenuated argument for causation, the implications if true, would potentially be devastating for coastal communities nationwide. Therefore, the Supreme Court remanded the case for the EPA to give a rational basis why it should not regulate GHGs if it found inaction would pose a risk to human health and welfare.).

[37] The U.S. Environmental Protection Agency (EPA) signed an endangerment finding on December 7, 2009, (The EPA concluded "… that the current and projected concentrations of the six key well-mixed greenhouse gases carbon dioxide (CO2), methane* (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6) in the atmosphere threaten the public health and welfare of current and future generations.") (*Note: there is some question as to whether methane (CH4) should have a separate endangerment finding under regulations (Subpart OOOOa) dealing with oil and gas emissions), https://www3.epa.gov/climatechange/endangerment/

[38] EPA, ***Household Emissions Calculator Assumptions and References***, (last visited Aug. 31, 2016, 9:33 AM), https://www.epa.gov/ghgemissions/household-emissions-calculator-assumptions-and-references

[39] EPA, ***Climate Change and the Life Cycle of Stuff***, (last visited Aug. 31, 2016, 9:51 AM), https://www3.epa.gov/climatechange/climate-change-waste/life-cycle-diagram.html

[40] The White House. ***U.S. Reports its 2025 Emissions Target to the UNFCCC***, (Mar. 31, 2016), https://www.whitehouse.gov/the-press-office/2015/03/31/fact-sheet-us-reports-its-2025-emissions-target-unfccc

[41] Cop 21 is the 21st Conference of the Parties to the UN Framework Convention on Climate Change arising out of the 1992 ***"Earth Summit"*** in Rio de Janeiro; CMP 11 is the eleventh session of the Conference of the Parties serving as the meeting of the Parties to the 2005 Kyoto Protocol in Montreal.

[42] ***Adoption of the Paris Agreement***, (Dec. 12, 2015), https://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf

the reductions set out in the Paris Agreement.[43] Most importantly to the administration's changing energy policy, the conference determined that unless the world was able to hold global warming to under a 2-degrees Celsius increase above pre-industrial levels, there would be catastrophic global effects threatening human existence.[44] While the U.S. Supreme Court and subsequent EPA endangerment finding gave the administration the legal basis and moral justification for reducing GHGs, it was not until the Paris Agreement that a specific goal was set for its change in policy from "all-of-the-above" to "keep it in the ground." By agreeing to the conclusions in the conference, there was really no other choice than to shift the country toward obtaining their energy for *only* 100% renewable sources.

> *"The world as a whole needs ultimately to completely decarbonize. The studies of where we need to get show that as a world we need carbon emissions to be in the vicinity of 50% below those of 2000 by 2050. They need to get close to zero … by 2100, and ultimately all the way to zero. Is it feasible? Yes, it is certainly technically feasible. The real question is can we make the needed changes rapidly enough to get there as quickly as we need to. That is not a challenge of scientific or technological feasibility, it is a challenge of economic and social practicality."*[45]
>
> John Holdren, Chief Science and Technology Advisor to President Obama

In order to meet the emission reduction goals of the Paris Agreement it would be necessary for all of the major GHG-emitting nations to work together. The United States alone is *not* capable of reducing GHG levels to the extent necessary to affect climate change. The Obama administration has, however, argued that the United States must lead by example to convince developing countries to make the necessary reductions. The challenge is to convince rapidly industrializing and developing countries, such as China, to fully commit to these goals in a way that doesn't give any economic advantage to other countries at the expense of the U.S. economy.

Whether the Obama administration had the authority to unilaterally commit the country to the Paris Agreement without Senate ratification will undoubtedly be decided by the courts and the incoming Republican administration. The economic implications of the policy changes begun by the Obama administration have already spawned multiple legal challenges — a possibly indicator of the negative effects of overregulation on the American energy sector.

[43] Valerie Richardson, ***Whitehouse defend Obama evading Senate on Paris climate deal***, The Washington Times, ("White House senior adviser Brian Deese said the president has the legal authority to ratify the accord without the two-thirds Senate vote required for treaties. He said the pact…is merely an 'executive agreement.'"), (Aug. 29, 2016), http://www.washingtontimes.com/news/2016/aug/29/obama-will-bypass-senate-ratify-paris-climate-acco/

[44] United Nations, ***Paris Agreement, Framework Convention on Climate Change***, (Dec. 12, 2015), https://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf

[45] Craig Welch, ***Top U.S. Scientist: World Must Act Now to Reverse Climate Change***, National Geographic, (Dec. 7, 2015) (Interview with John Holdren), http://news.nationalgeographic.com/2015/12/151207-climate-change-holdren-white-house-science-paris/#/01holdrenqa.ngsversion.1449529200710.jpg

Implementing Energy Policy through the Federal Regulatory System

As with most major changes in policy, the key to success is in its implementation. If done too quickly, policy changes can have unintended consequences. If done too slowly the change can lose its effectiveness and cause supporters to question the seriousness of the effort. It appears the Obama administration's strategy has been to move incrementally and deliberately toward its goals. A component of this strategy has been the focus on highlighting the "social cost of carbon" in its analysis done for prospective rules. The social cost of carbon was used by the administration to measure the potential economic damage from carbon dioxide emissions.[46] The challenge for the Obama administration in using regulation instead of legislation was convincing the nation that the potential benefits of reducing GHG emissions outweighed the costs.

The federal regulatory system allowed the Obama administration to ratchet up restrictions on natural gas and oil development in pursuit of its goal to address climate change. The strategy has been broad in scope, but fundamentally centered on increasing the regulatory burden, and thereby the costs, associated with development. The breadth of the plan appeared to principally include promulgating regulations that purport to reduce carbon emissions. However, in reality the regulations took aim at all levels of industry activity, including exploration and production, access to federal lands, pipelines and rail transport, and even capital markets.[47] The resulting regulatory accumulation has contributed to an endless mountain of duplicative government red tape that has significantly increased the cost of doing business. If fully implemented, it would have accomplished the administration's goal of reducing the development, production, and distribution of traditional domestic energy resources — oil, gas and coal.

The central component of President Obama's Climate Action Plan was the EPA's Clean Power Plan (CPP),[48] a major regulation established to restrict carbon dioxide emissions at the nation's power producing facilities. By design, the acceptable amount of carbon emissions for power generation under the CPP was set at a level that effectively made it uneconomical for coal-fired power plants to continue to operate with existing technology that had been "adequately demonstrated."[49] However, the minimum level of operation was low enough that cleaner burning natural gas-fired power plants were able to meet the requirements, under most conditions. While the CPP focused on regulating power generating facilities, its purported rationale for both reducing carbon emissions and as a model for global climate mitigation, means it inevitably would have been expanded to all sectors of the economy that directly or indirectly produce carbon dioxide emissions.

[46] EPA, ***The Social Cost of Carbon***, (last visited Sept. 13, 2016), https://www3.epa.gov/climatechange/EPAactivities/economics/scc.html

[47] Brian Deese and Jeff Zients, ***Enlist the Market in the Climate-Change Fight***, The Wall Street Journal Opinion, (Aug. 18, 2016, 6:57 PM) (Mr. Deese is a senior adviser to President Obama. Mr. Zients is director of the White House's National Economic Council.), http://www.wsj.com/articles/enlist-the-market-in-the-climate-change-fight-1471561052

[48] EPA, ***Clean Power Plan for Existing Power Plants***, (last visited Sept. 9, 2016), https://www.epa.gov/cleanpowerplan/clean-power-plan-existing-power-plants

[49] Clean Air Act § 111(a)(1) ("The term 'standard of performance' means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.") (Emphasis added).

In an attempt to reach its GHGs reduction goals under the Climate Action Plan, the Obama administration also finalized regulations to cut methane[50] emissions up to 45% from 2012 levels by 2025.[51] Methane, as a GHG, is considered 25 times more damaging to the atmosphere than carbon dioxide, yet has a much shorter atmospheric lifespan.[52] While these rules apply to only new, reconstructed, or modified oil and natural gas sources, the EPA has already expressed interest in regulating methane from existing sources.[53] If fully implemented, the regulations on existing sources could substantially increase the cost of energy development and production. This despite the fact that the oil and gas industry has already successfully reduced methane leakage, for both environmental and economic reasons, without new federal regulations. The new rules proposed by the Obama administration are expected to add unnecessary costs and reduce innovation in addressing the issue, industry experts argue.[54] In addition, there are also serious questions about how the EPA came up with its estimate of the social cost of methane, especially given methane's shorter lifespan, in calculating the associated benefits of the proposed rules.[55]

When climate mitigation fundamentally changed the economic feasibility of the coal industry, the Obama administration went to great lengths to undermine the industry's existence. This approach highlighted the ongoing debate regarding the management of federal lands[56] through the individual states. The most recent example of this was the administration's decision to halt most new leasing of federal land for the purpose of coal mining. Given that almost 40% of the coal produced in the United States comes from federal lands, the decision, if allowed to stand, could have long-term implications for an industry already struggling under a mounting regulatory burden.[57] In addition, in 2015 the Interior Department, through the Bureau of Land Management (BLM), finalized a proposed rule regulating hydraulic fracturing on federal lands.[58] Although the states have been regulating this process for years, the administration asserted that a standardized national rule was necessary. Whether the Interior Department has the authority to promulgate the rule is currently being decided in the federal courts.[59] If allowed to take effect, the final rule — which opponents argue was much broader in scope than what BLM initially proposed — would add additional costs for companies seeking to develop oil and gas on federal land.

[50] Methane is the key component of natural gas.

[51] EPA, ***Regulatory Actions***, (Sept. 20, 2016, 1:32 PM), https://www3.epa.gov/airquality/oilandgas/actions.html

[52] NERA, Technical Comments on the Social Cost of Methane As Used in the Regulatory Impact Analysis for the Proposed Emissions Standards for New and Modified Sources in the Oil and Natural Gas Sector, prepared from ACCF, (Dec. 2015), http://accf.org/technical-comments-on-the-social-cost-of-methane-as-used-in-the-regulatory-impact-analysis-for-the-proposed-emissions-standards-for-new-and-modified-sources-in-the-oil-and-natural-gas-sector/

[53] EPA, ***Actions and Notices about Oil and Natural Gas Air Pollution Standards***, (Oct. 17, 2016, 1:31 PM), https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/actions-and-notices-about-oil-and-natural-gas#info

[54] Amy Harder and Erin Ailworth, ***EPA Issues Final Rules Cutting Oil, Natural Gas Methane Emissions***, The Wall Street Journal, (May 12, 2016, 3:22 PM), http://www.wsj.com/articles/epa-issues-final-rules-cutting-oil-natural-gas-methane-emissions-1463067378

[55] Id at Note 49.

[56] Amy Harder and John Miller, ***Obama Halts Most New Coal-Mining Leases on Public Lands***, The Wall Street Journal, (Jan. 15, 2016), http://www.wsj.com/articles/obama-halts-coal-leasing-on-public-lands-1452870231

[57] Interior Dept., BLM, ***Federal Coal Leasing Program***, (last visited Oct. 3, 2016), http://www.blm.gov/live/pdfs/CoalListeningSessions%20PPT%208.07.15.pdf

[58] Interior Dept., ***BLM, Release of Final Rule Regarding Hydraulic Fracturing on Public and Tribal Lands***, http://www.blm.gov/wo/st/en/info/newsroom/2015/march/nr_03_20_2015.html

[59] Wyoming et al vs. Interior Dept. et al, No. 2:15CV-043-SWS, U.S. District Court of Wyoming (D. Wyo. Jun. 21, 2016), http://www.wyd.uscourts.gov/pdfforms/orders/15-cv-043-S%20Order.pdf (last visited Sept. 20, 2016) (Judge Skavdahl set aside BLM's hydraulic fracturing rule holding that under the Chevron analysis the BLM lacked the Congressional authority to regulate it. The court reasoned that if hydraulic fracturing was excluded from the EPA's jurisdiction under the Safe Water Drinking Act, through the passage of the Energy Policy Act of 2005, it can logically be assumed that Congress did not intend the BLM to regulate it under their "broad authority.").

As for pipelines, past decisions should be instructive for what the Trump administration will likely hear from the environmental community.[60] The Obama administration slow walked review of the now infamous Keystone XL pipeline after a concerted effort by the environmental community to thwart its construction.[61] It took nearly seven years for the administration to issue a final decision on the cross-border permit in November of 2015, nearly *five* times the average permitting time, according to the Associated Press.[62] More recently, the administration ordered a halt[63] to the Dakota Access pipeline, which is designed to provide a safer and more economical way to transport oil produced in North Dakota's Bakken and Three Forks areas to existing pipeline infrastructure in Illinois.[64] This after the project had substantively been approved by the U.S. Army Corps of Engineers (Army Corps) and upheld by a federal judge who denied a request to thwart the project.[65] The final permit — out of 202 issued — was waiting for a signature when the Army Corps, on November 14, 2016, indicated it would not grant the final easement and instead called for further consultation. Stakeholders in the project petitioned the court to compel the Army Corps. to issue the easement permit.[66]

Although transporting oil by rail[67] accounts for less than 2% of the total freight in the country, the volume has drastically increased since 2008 because of the oil boom in areas without adequate pipeline infrastructure.[68] According to the Association of American Railroads, oil was transported in 9,500 tank cars[69] in 2008. By 2014 that number had increased to more than 490,000 carloads.[70] The increased use of rail has brought renewed interest in safety issues concerning tank cars, although critics say that the administration's proposed regulations would do little to improve actual railroad safety and would significantly increase transportation costs on the oil industry.[71]

[60] Supra note 28. (Pres. Obama's Stmt.)

[61] CBS News, ***Analysis: Keystone XL oil pipeline review taking unusually long time***, (Aug. 12, 2015, 9:20 AM), http://www.cbsnews.com/news/analysis-keystone-xl-oil-pipeline-review-taking-unusually-long-time/

[62] Id.

[63] U.S. Dept. of Justice, ***Joint Statement from DOJ, DOI, and Army Corps. Regarding Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers***, (Sept. 9, 2016), https://www.justice.gov/opa/pr/joint-statement-department-justice-department-army-and-department-interior-regarding-standing

[64] Energy Transfer Partners, L.P., ***The Route***, (last visited, Sept. 13, 2016), http://www.daplpipelinefacts.com/about/route.html

[65] The Guardian, ***Judge denies tribe's request to stop North Dakota oil pipeline construction***, (September 9, 2016, 3:44 PM), https://www.theguardian.com/us-news/2016/sep/09/north-dakota-oil-pipeline-judge-denies-construction

[66] ***Clear View Energy Partners, Dakota Access Fights Back With Cross-Claim v. Corps.***, (Nov. 15, 2016), Also see, (U.S. Army Corps. of Engineers letter regarding the easement), http://www.usace.army.mil/LinkClick.aspx?fileticket=EJo70s-OTIc%3d&portalid=2

[67] Gail Wurtzler, John Jacus, and Mave Gasaway, ***Law 360, DOT Oil Rail Safety Transport Rules Will Be Costly***, (Sept. 29, 2014), http://www.law360.com/articles/582103/dot-oil-rail-safety-transport-rules-will-be-costly; Also, 79 FR 45015; 79 FR 45079; and 79 FR 53356

[68] Aman Batheja, ***Rail Transport of Crude Oil Increases as Pipeline Falls Short***, New York Times, (April,12, 2014), http://www.nytimes.com/2014/04/13/us/rail-transport-of-crude-oil-increases-as-pipeline-falls-short.html?_r=0

[69] Merriam-Webster Definition of Tank Car: a railroad car for transporting liquids or gases in bulk.

[70] Association of American Railroads ("AAR"), ***Moving Crude Oil Safely by Rail***, (July 2015), https://www.aar.org/BackgroundPapers/Moving%20Crude%20Oil%20Safely%20by%20Rail.pdf

[71] Id.

In a move to expand its campaign against traditional fossil fuels, President Obama briefly — although persuasively to his backers — publicly supported the divestment[72] movement during his climate change speech at Georgetown University.[73] The President told the crowd that they should "[c]onvince those in power to reduce our carbon pollution. Push your own communities to adopt smarter practices. *Invest. Divest.* Remind folks there's no contradiction between a sound environment and strong economic growth." (Emphasis added).[74] Supporting an initiative that advocates divesting a university or other public entity's holdings in fossil fuel or energy intensive companies may be popular with the general public, but it raises legitimate questions about their fiduciary duty and sound investment strategies.

Proposed rules such as the expansion of the Clean Water Rule (WOTUS) and the updated National Ambient Air Quality Standard for ozone, applied cumulatively, have the potential to drastically increase the regulatory burden and corresponding costs across the entire economy.

The latest attack on fossil fuel producers is the Obama administration's push to require companies to calculate and disclose to investors their "climate-risk exposure."[75] It appears the administration believed the current requirements regarding disclosure of "material risks" were insufficient because they lacked "standardized and comparable climate-risk information."[76] The administration is also suggested that the Securities and Exchange Commission *could* create industry specific disclosure standards on climate risk exposure.[77] In addition, the administration proposed that all companies doing business with the federal government would be required to disclose this information to qualify for federal contracts.[78]

While the aforementioned list of regulations affecting the oil and gas industry included the most significant, it cannot be overstated that the accumulation of all applicable federal regulations must be considered when trying to determine the total impact on the economy. Other proposed rules, such as the expansion of the Clean Water Rule (WOTUS)[79] and the updated National Ambient Air Quality Standard for ozone,[80] applied cumulatively, have the potential to drastically increase the regulatory burden and corresponding costs across the entire economy.

[72] Divest Invest, http://divestinvest.org/

[73] Justin Gillis, ***Old Tactic in New Climate Campaign***, New York Times, (July 8, 2016), http://www.nytimes.com/2013/07/09/science/old-tactic-in-new-climate-campaign.html?_r=0

[74] President Obama, Georgetown University, ***Remarks on Climate Change***, (June 25, 2013), https://www.whitehouse.gov/the-press-office/2013/06/25/remarks-president-climate-change

[75] Brian Deese and Jeff Zients, ***Enlist the Market in the Climate-Change Fight***, The Wall Street Journal Opinion, (Aug. 18, 2016, 6:57 PM) (Mr. Deese is a senior adviser to President Obama. Mr. Zients is director of the White House's National Economic Council.), http://www.wsj.com/articles/enlist-the-market-in-the-climate-change-fight-1471561052; See Note 45

[76] Id.

[77] Id.

[78] Id.

[79] EPA, ***Clean Water Rule***, https://www.epa.gov/cleanwaterrule

[80] EPA, 2015 ***National Ambient Air Quality Standards (NAAQS) for Ozone***, https://www.epa.gov/ozone-pollution/2015-national-ambient-air-quality-standards-naaqs-ozone

Outlook for President Obama's Energy Legacy Under a Trump Administration

President-elect Trump has already indicated his support for a broader energy policy, one that does not exclude the continued use of traditional fossil fuels. His administration should be expected to support reversing many of the regulatory restrictions that President Obama has placed on the energy sector over the past eight years.

Clean Power Plan

The incoming administration will likely review all options to repeal, modify, or at least slow down implementation of the CPP. The Trump administration should not be expected to wait until legal challenges to the CPP have worked through the court system. At the very least, one should expect the new administration to decrease the reduction targets for power plants under the CPP. Expect the focus to shift from excluding coal to looking for ways it can continue to be used with less environmental impact. The President-elect has voiced support for employing clean coal technologies and could remove barriers to its development and use.[81] The new administration should also be expected to reinstate leasing of federal lands for coal production.

Paris Agreement

President-elect Trump has indicated his plans to "cancel" U.S. participation in the Paris Agreement. The new administration could argue that the agreement is an unratified treaty or simply ignore it and refuse to provide any of the $3 billion in funding pledged by Obama. The Obama administration's claim that the agreement represents a binding "executive agreement" is unlikely to survive constitutional scrutiny. Senate Republicans have also indicated their desire to bring it to the floor for a vote, which would most certainly doom its chances.[82]

Pipelines

President-elect Trump indicated on the campaign trail his support for the Keystone XL pipeline project. Look for a Trump administration to overturn President Obama's rejection of the pipeline. The State Department's original environmental impact statement indicated the pipeline would have little environmental impact on carbon emissions because the resources would be developed regardless, which means there's little environmental reason not to approve the pipeline.[83] Senate Republicans have already asked President-elect Trump to approve the project.[84] And then there is the Dakota Access pipeline, which has been stalled by environmental activists and an ongoing legal challenge. A federal judge is currently weighing a challenge to the U.S. Army Corp of Engineers' decision to withhold the final permit needed for construction of the pipeline. The Trump administration could let the court challenge play out before weighing in or it could move ahead immediately upon taking office with a review of the Army Corps' decision with the ultimate goal of reversing the permit decision.

[81] An America First Energy Plan, ***Donald J. Trump's Vision***, (last visited, Nov. 14, 2016, 9:45 AM), https://www.donaldjtrump.com/policies/energy

[82] Fox News Politics, ***Republicans, fearing congressional end-run, warn Obama ahead of climate talks***, (Nov. 27, 2015), http://www.foxnews.com/politics/2015/11/27/republicans-fearing-congressional-end-run-warn-obama-ahead-climate-talks.html

[83] CNN, Tom Cohen, ***U.S. report on Keystone indicates little climate impact***, (Jan. 31, 2014, 10:18 PM), http://www.cnn.com/2014/01/31/politics/keystone-pipeline/

[84] Fortune, ***The Associated Press, GOP Leader Asks Donald Trump to Approve Keystone Pipeline Deal***, (Nov. 11, 2016, 5:30 PM), http://fortune.com/2016/11/11/donald-trump-keystone-pipeline/

Hydraulic Fracturing

Trump's position on the Bureau Land Management's (BLM) controversial rule on hydraulic fracturing is more difficult to gauge. While the President-elect's son, Donald Trump Jr., who is serving as an advisor to his father on energy policy, has called BLM's role in regulating hydraulic fracturing on federal lands "reasonable," the final rule did go well beyond what the agency initially proposed and may well be deemed excessive by the new administration.[85] Trump's support or lack of support for the rule may not make a difference since a federal judge has ruled that BLM lacks congressional authority to regulate hydraulic fracturing under the Energy Policy Act of 2005.[86] If the BLM rule is upheld, a Trump administration could find it conflicts with the new President's goal of increasing domestic oil and gas production.

Endangerment Finding

The Trump administration may well look at the legal basis for EPA's GHG rulemaking under the Clean Air Act. The dissenting opinion in the U.S. Supreme Court's 5-4 decision could lend support to the idea that the endangerment finding should be revisited and possibly amended or revoked.[87] Congress could also draft legislation removing GHGs from being considered under the Clean Air Act.[88]

Regulatory State

President-elect Trump has advocated for repealing two regulations for every new one that gets promulgated. While likely rhetoric attributable to the campaign trail, the new President should create an independent commission to review existing regulations and make recommendations to Congress on which regulations should be kept, updated, or done away with. The new administration should also make it a priority to overhaul the current regulatory system to make the rulemaking process more efficient. Such an overhaul should include a robust cost-benefit analysis requirement, improvements to public participation and access to data used in promulgating rules. As for the so called "midnight rules" finalized between Election Day and the inauguration, Congress will likely carry out its oversight role under the Congressional Review Act.

[85] Environment and Energy Daily, Phil Taylor, ***Campaign 2016: Trump Jr. calls BLM drilling regs 'reasonable'***, (June 24, 2016), http://www.eenews.net/stories/1060039360

[86] The Wall Street Journal, Amy Harder, ***Judge Strikes Down Obama Rule on Fracking on Public Lands***, (June 22, 2016, 6:35 PM), http://www.wsj.com/articles/judge-strikes-down-obama-rule-on-fracking-on-public-lands-1466600116

[87] ***Massachusetts v. EPA 549 U.S. 497*** (2007), https://supreme.justia.com/cases/federal/us/549/497/dissent2.html

[88] ***Utility Air Regulatory Group v. EPA, 573 U.S.*** (2014), No. 12-1146 (June 23), https://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf

Conclusion

President Obama's decision to increase the regulatory burden on American businesses in an effort to fundamentally change the way the nation produces and uses energy proved controversial and, ultimately, may have caused voters to reject Democrats in the 2016 election. The Obama administration prioritized climate change over the economy and Democrats paid the price from the presidential ticket down.

If the administration's strategy of "keep it in the ground" and transitioning away from using fossil fuels through increased regulation comes down to merely leading the world by example with no quantifiable results, the viability of such a strategy may severely test the patience of Americans.

The direction the Obama administration was heading would have been scrutinized further once it became clear that the costly climate mitigation measures imposed through regulation would not, in fact, prevent climate change.[89] While environmental activists, including advocates of "keep it in the ground," suffered a temporary setback with the results of the November election and the election of Donald Trump, they should by no means be counted out of the public debate on energy and environmental policy.

As Democrats attempt to determine what went wrong in the 2016 election, their willingness to cooperate with the incoming administration of President-elect Trump and Republican majorities in Congress will be shaped by their commitment to President Obama's climate legacy.

The Trump administration would be well advised to take a broad approach toward energy policy and put forward measured proposals to provide the nation with energy that is affordable and abundant, but also diverse, secure, and with the least environmental impact as possible. However, the new administration should expect continued opposition in the courts and in the streets against any attempt to walk back Obama's strategy of phasing out the use of traditional fossil fuels.

To counter this opposition, the Trump administration should work with Congress to develop viable solutions to environmental concerns through strategies that do not threaten the nation's economic prosperity and competitiveness. It should also work to improve the regulatory process to ensure flexibility and predictability to allow private industry to innovate and test emerging technologies in the real world.

Major regulations with the power to fundamentally change the nation's economy should only be imposed when they provide clear and demonstrable public benefits. Traditionally, federal agencies have sought to balance economic cost and the public good when promulgating regulations. In the case of climate change, however, the regulations in question — particularly the Clean Power Plan — were never designed to address such a global and economy wide challenge. Instead the Obama administration attempted to force a square peg into a round hole in order to advance its policy goals in spite of congressional opposition. Congressional review of recent regulatory proposals will help protect Americans from bearing unnecessarily high energy costs.

[89] Marc Morano, ***EPA Chief Admits Obama Regs Have No Measurable Climate Impact, Climate Depot***, (July 15, 2015, 6:34 PM), http://www.climatedepot.com/2015/07/15/epa-chief-admits-obama-regs-have-no-measurable-climate-impact-one-one-hundredth-of-a-degree-epa-chief-mccarthy-defends-regs-as-enormously-beneficial-symbolic-impact/

Going forward, the federal government should pursue responsible development of all of its available resources, while continuing to encourage the kind of competitive, entrepreneurial spirit that led to the most recent energy boom. Domestic energy development and clean air and water are not mutually exclusive. Allowing the same market forces to develop the technologies necessary to address environmental concerns, without jeopardizing the nation's strategic competitive advantage, is a bipartisan goal worth pursuing. There is much that can be done to produce the energy the nation needs without jeopardizing its economy, standard of living, environmental record, or strategic position in the world.

How willing Americans are to accept the repercussions of the Paris Agreement's goal of keeping below a 2-degree °C increase in global temperatures is a difficult question to answer at this time. One would assume that costly regulations, and the inevitable costs passed on to them, would need to be justified in a manner that can be readily accepted. Traditionally that has required the federal government to strike a balance between the economic cost and the public good of a proposed regulation. However, the federal regulatory system, and the Clean Air Act in particular, were not created to handle global climate change mitigation. The former is meant to better manage the laws that Congress passes. The latter was written and amended well before global climate change was considered a pressing public policy concern. Instead of using the regulatory system to change policy, the administration should work with Congress to develop viable solutions to climate mitigation — strategies that do not threaten the nation's economic survival.

Since the President's 2012 State of the Union, the administration has implemented its agenda through the federal regulatory system rather than working with Congress on a national energy plan. Yet working with Congress led to the success of all-of-the-above and should not be dismissed by the next administration. Instead of a future where we leave the nation's most valuable and strategic assets in the ground, we should pursue responsible development and continue to encourage the kind of competitive, entrepreneurial spirit that led to energy boom in the first place. The innovative technology responsible for moving our nation closer to achieving North American energy "independence," it also fostered a resurgence in the nation's manufacturing sector, due to the availability of affordable natural gas. Allowing the same market forces to develop the technologies necessary to address climate mitigation, without jeopardizing the nation's strategic advantage, is a policy worth pursuing.

An all-of-the-above energy policy is the right strategy provided it includes an effective way to address climate mitigation and pathway to achieve a strong, diverse-fuel economy. Domestic energy development and climate mitigation are not mutually exclusive options with the proper policies and technological advancements in place. There is much that can be done to produce the energy this nation needs without jeopardizing its economy, standard of living, and strategic place in the world.

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