

Research Paper

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US Election Note: Energy and Climate Policy After 2016

Summary

- At a time of great change in the US and global energy landscape, Hillary Clinton and Donald Trump have campaigned on very different energy and climate platforms. Clinton's vision to make the United States a 'clean energy superpower' includes a climate-focused energy plan that will seek to continue the transition to a lower-carbon energy system. In stark contrast, Trump's 'America First Energy Plan' rejects the importance of climate change and embraces exploiting more domestic energy resources – with an emphasis on coal, oil and natural gas – and focusing on rolling back government regulation.
- The current US and global energy landscape is shifting dramatically. The main causes include the surge in US tight oil and shale gas production; the decline of the coal industry in the US; the current low-oil-price environment and changes to the global oil and gas market; the rapid transformation of the electric power sector driven by new technologies, business models and policy incentives; and the ongoing efforts to reduce greenhouse gas emissions to comply with and shape global goals of managing climate change.
- Regardless of who wins the election, the US will remain divided on energy and climate change, and the next president's agenda is likely to face significant challenges in execution. Much of US climate policy is moving through the regulatory process and faces tough court challenges. Without the willingness of the administration and congress to work together, major new advancements or resolution of energy and climate policy issues will be difficult. Moreover, a great deal of energy decision-making happens at the state and local levels, which can be both helpful and harmful to any future administration's desire to drive a particular agenda.
- The most important global energy issue affected by the US election will be climate change. Whereas a Clinton administration is likely to pursue more robust policies, a Trump one will be less likely to make efforts domestically and internationally in combatting climate change. Four years of lacklustre progress on this front from one of the world's major emitters could significantly hamper, if not derail, global efforts.

Introduction

The 2016 presidential election is a particularly important turning point for US energy and climate policy, not only because of the stark contrast between the party platforms and the candidates' positions, but also because of the major changes taking place in the US energy landscape. These changes include the evolving transformation of the hydrocarbon sector – including the impact of tight oil and shale gas production – as well as the apparent decline of the coal industry; the current low-oil-price environment and changes to the global oil and gas market; the rapid transformation of the electric power sector driven by new technologies, business models and policy incentives; and the ongoing efforts to reduce greenhouse gas emissions to comply with and shape global goals of managing a changing climate.

Hillary Clinton and Donald Trump have put forward energy policies with varying degrees of detail and specificity. Indeed, it has become almost cliché to note that Clinton's energy and climate platform is much more detailed and extensive than Trump's proposed plan. Clinton has put forward a climate-focused energy plan that will seek to continue the transition to a lower-carbon energy system. Trump, on the other hand, rejects the importance of climate change and embraces exploiting more domestic energy resources – with an emphasis on coal, oil and natural gas – and focusing on rolling back government regulation. Clinton's vision to make the United States a 'clean energy superpower' stands in stark contrast to Trump's 'America First Energy Plan'.

Regardless of who is elected, however, the next administration will be somewhat constrained by the checks and balances in the US government system, the control that states have over their own policies and regulations, and the energy market and other external forces that often shape the context in which the president will operate.

Background

The United States is a large producer, consumer and trader of energy resources. Its actions can directly or indirectly affect energy markets around the world. It is also the world's largest economy and one of the largest emitters of greenhouse gases, all of which gives it a particular standing and responsibility within the realm of global climate change objectives.

The changes taking place in the US energy landscape are remarkable. One of the most notable over the last several years is the surge in production of oil and natural gas from tight rock and shale formations through a combination of hydraulic fracturing and horizontal drilling. Between 2008 and 2015, US oil production rose by 88 per cent and natural gas production climbed by 36 per cent. Even since the sharp decline in oil prices that began in late 2014, US oil and gas production has proven remarkably resilient, with production declining far more slowly than many predicted. This surge has arguably provided the US with a new type of oil and gas resource that raises questions about the future of market price levels and volatility, public and private investment decisions throughout the value chain, OPEC cohesion and overall supply security.

As a result of the production surge, the United States no longer bans the export of crude oil for the first time in 40 years, has approved and built liquefied natural gas export facilities, and has started

to pursue new exporting opportunities in oil and gas. Despite the clear near-term economic, and some strategic, benefits provided by increased oil and gas production, states and local communities continue to work to address the pressing environmental concerns associated with development of these resources and the associated infrastructure (such as pipelines or refineries). Many of the battles taking place at the state and local levels are over a mix of environmental concern about potential water contamination, air quality issues and seismicity, but others are tied into the broader effort to stop all production of oil and gas known as the ‘Keep it in the Ground’ movement. While these environmental concerns receive a good deal of national and international attention, and have featured prominently in the presidential election, the low-oil-price environment has done far more to dampen US oil and gas production thus far.

The electric power sector is also experiencing tremendous change. As a result of improved efficiency, low electricity demand, environmental policies, renewable-energy cost improvements and incentives, and the rapid influx of cheap natural gas, many regional and local electric power markets in the United States are struggling to manage the truly dynamic changes occurring in their region. Since 2012 nearly 44 GW¹ of coal-fired power has been retired, and according to some estimates nearly 90 GW more will be retired by 2040.² Eight nuclear reactors have closed prematurely due to the inability to cover operating costs, and by some estimates 15 to 20 more could close over the next five to 10 years.³ Wind and solar capacity have grown by more than 100 per cent and 900 per cent,⁴ respectively, between 2009 and 2015. The penetration of distributed energy resources is expected to grow by 77.3 GW between 2016 and 2025,⁵ which has the potential to transform the physical, economic and regulatory underpinnings of the US electric power sector.

The US has reduced carbon dioxide emissions by 12 per cent⁶ below 2005 levels and has committed itself to an international agreement to further reduce greenhouse-gas emissions by 26–28 per cent below 2005 levels by 2025. The Obama administration has put together policies and measures under its Climate Action Plan that include light- and heavy-duty vehicle emissions standards as well as regulation of carbon dioxide emissions in the electric power sector under the Clean Power Plan (which is currently subject to legal challenges likely to go to the Supreme Court). In addition, large states like California and New York have proposed much deeper emissions reductions than the federal government, including a bill recently passed by the California legislature supporting a

¹ US Energy Information Administration (EIA) (2016), *Preliminary Monthly Electric Generator Inventory*, September 2016, <http://www.eia.gov/electricity/data.cfm> (accessed 7 Oct. 2016).

² EIA (2015), ‘Proposed Clean Power Plan Would Accelerate Renewable Additions and Coal Plant Retirement’, 5 June 2016, <http://www.eia.gov/todayinenergy/detail.cfm?id=21532> (accessed 7 Oct. 2016).

³ Fertel, M. S. (2016), ‘Wake-Up Call, Improving the Economics of America’s Nuclear Reactors’, Speech, Department of Energy Nuclear Summit, 19 May 2016, <http://www.nei.org/News-Media/Speeches/Wake-Up-Call,-Improving-the-Economics-of-America-s> (accessed 7 Oct. 2016).

⁴ Statistical and Analytical Agency, EIA (2016), *Wind and Solar Data and Projections from the U.S. Energy Information Administration: Past Performance and Ongoing Enhancements*, March 2016, <http://www.eia.gov/forecasts/aeo/supplement/renewable/pdf/projections.pdf> (accessed 7 Oct. 2016).

⁵ Navigant Research (2016), ‘U.S. Distributed Renewables Deployment Forecast’, <http://www.navigantresearch.com/research/u-s-distributed-renewables-deployment-forecast> (accessed 7 Oct. 2016).

⁶ EIA (2016), ‘U.S. Energy-related Carbon Dioxide Emissions in 2015 Are 12% below Their 2005 Levels’, 9 May 2016, <http://www.eia.gov/todayinenergy/detail.php?id=26152> (accessed 7 Oct. 2016).

reduction of 40 per cent compared to 1990 levels by 2030.⁷ Twenty states have reduction targets and nearly 30 have renewable or alternative portfolio standards for their electric power sector.⁸

The challenge of implementing energy policy

While attention is focused on who will be the next president, at the same time the US will also be electing hundreds of congressional, state and local representatives. The outcome of these elections will be very important to future energy policy, not only at the state level but also with regard to the willingness of Congress to work with the next administration. The two major parties appear much further apart on many energy issues in this campaign compared to that of 2008. Within the Republican and Democratic parties are also different views on energy and climate issues. The difference of views on the Democratic side relate to hydraulic fracturing and carbon taxes, and on the Republican side on the importance of climate change and the order of preference among fossil fuels. Such divisions will be reflected among members of Congress and the next president will likely have to deal with a divided Congress in trying to implement energy policy.

Important energy policy changes could also arise from two sources, during the course of the next administration. First, out of opportunities to make or attempt changes in regulatory, budget or policy vehicles that are not directly related to energy. For example, neither candidate has suggested they would promote an economy-wide carbon tax but it is possible (though not likely) to see how they might support the idea, under the right conditions, should it be proposed by Congress as a part of a comprehensive tax reform package. The chances of a carbon tax becoming a reality may be low but, as seen at the end of 2015 with the lifting of the export ban on crude oil and the extension of renewable-energy tax credits, the unexpected can happen.

Second, energy policy changes could occur as a result of potential issues arising from an accident or incident, market/price fluctuations, environmental disasters, or technological evolution. Examples of this include oil and gas offshore safety regulation emerging from the Deepwater Horizon oil spill, nuclear safety measures in the wake of the Fukushima Daiichi incident in Japan, or all the policy and regulatory changes that have accompanied the dramatic drop in solar prices or the surge in oil and gas production onshore.

It is impossible to predict with absolute certainty what might confront the next administration in the energy sphere. For example, during the 2008 campaign the Obama team could not have expected to deal with an oil spill in the Gulf of Mexico, a nuclear disaster in Japan and a domestic hydrocarbon renaissance at the same time as a global recession. With global oil markets still just entering a potentially prolonged and tenuous period of rebalance and after nearly two years of underinvestment in global oil and gas production, the outlook for future oil markets remains uncertain. Energy-security issues could also emerge from one of several countries, such as Venezuela, Nigeria, or Libya, which are struggling to withstand sustained low oil prices. There might also be notable technological advancements or climate-negotiation setbacks in the next four

⁷ Megerian, C. and Dillon, L. (2016), 'Gov. Brown Signs Sweeping Legislation to Combat Climate Change', *Los Angeles Times*, 8 September 2016, <http://www.latimes.com/politics/la-pol-ca-jerry-brown-signs-climate-laws-20160908-snap-story.html> (accessed 7 Oct. 2016).

⁸ C2ES (2016), 'Greenhouse Gas Emissions Targets', <http://www.c2es.org/us-states-regions/policy-maps/emissions-targets> (accessed 7 Oct. 2016).

years that could ultimately shape the next administration's policies. With so many apparent unknowns, speculation about the candidates' true beliefs on energy matters becomes particularly useful as an evaluative tool.

Policy positions

The Clinton and Trump positions on energy differ in three fundamental ways: importance to the overall theme of the campaign, attention to climate change and level of specificity on particular policies. Other policy areas – such as foreign, economic, defence and trade – that can also influence energy and climate decisions are not analysed here, but they will provide important context for how US proposals will be received and responded to by other countries. In many of these areas, except perhaps trade, Clinton's positions are generally in line with current policy (though the nuance of where they differ matters). In contrast, Trump's statements suggest his stance would be an abrupt departure from most current and some long-standing policy. It is extremely hard to tell, given his penchant for changing his mind, which declarations are based on real intentions and which are simply meant to garner attention. Regardless, Trump's brash statements and vague policy positions add an element of unpredictability to his potential administration that cannot be understated.

Hillary Clinton

Clinton's campaign highlighted climate change early on as a top three issue along with employment and education. She strongly supports the climate-change policies of the Obama administration but also seeks to build on them. She has put forward numerous proposals on the issue, and frequently mentions energy and climate change in her major addresses on foreign policy and economics. Clinton's energy plan emphasizes policies to aid the deployment of renewable-energy technologies, improving energy efficiency, building new infrastructure, and improving the environmental performance of oil-and-gas-related infrastructure and development for the purposes of creating jobs and meeting the country's climate targets. Key features of the plan include installing half a billion solar panels in the course of the next administration, increasing energy efficiency in buildings by one-third, reducing oil consumption by one-third, implementing the Clean Power Plan, and launching a \$60 billion Clean Energy Challenge to partner with states and local communities to reduce emissions and deploy clean energy.⁹

Both candidates have laid out plans that will be easier to achieve if they have support in one or both chambers of Congress, and that will also likely face increasing public opposition and judicial challenges. This would apply to, for example, Clinton's pledge to support or expand the emissions regulations of the Obama administration as well as to Trump's plan to rescind them. In recent years a good deal of energy policy has taken place through changes to environmental regulation rather than through legislative efforts, in part because of the inability of Congress to pass much legislation and the failure to reach consensus on the measures being proposed (e.g. regulation of greenhouse gas emissions in the power sector, or of methane emissions in oil and gas development). If it is no more able to persuade Congress to pass legislation, a Clinton administration would have to

⁹ Clinton, H. (2016), 'Climate Change', Hillary for President, <https://www.hillaryclinton.com/issues/climate/> (accessed 10 Oct. 2016).

continue Obama's policy of making progress through executive orders or regulation changes. It would also continue to face lawsuits from industry groups and states that oppose these measures, and spend much of its time defending these regulations.

Clinton also addresses fossil-fuel production by suggesting her actions would be similar to the Obama administration's efforts to strengthen environmental performance standards. Although this is a much softer position than the anti-fossil fuel or 'Keep it in the Ground' movement that has become a vocal part of the Democratic party, it still likely would add more environmental constraints than the Republican position of more actively promoting oil and gas production. Clinton's plan includes measures to ensure that current fossil-fuel production is 'safe and responsible', making areas too sensitive for energy production off limits, reforming oil and gas leasing on public lands, ending tax subsidies or incentives for the oil and gas industry, and reducing methane emissions across the economy by 40–45 per cent.

Clinton and Trump speak often about the role of coal workers in the US economy. Coal continues to make up 16 per cent¹⁰ of US energy consumption and 33 per cent¹¹ of electricity generation (though this varies from state to state). The coal sector's direct economic contribution to GDP is small – less than 0.4 per cent¹² is attributed to the entire mining sector of which coal makes up a large proportion – but its regional, indirect economic, symbolic and electoral importance is much stronger. Several prominent coal-producing states, or states with coal-producing regions that have been hit hard by the downturn in the sector, are also important swing states for the presidential election.

Clinton has proposed to revitalize these communities by bringing them new economic opportunities in clean-energy production and other industries, and ensuring that peoples' retirement and healthcare benefits do not disappear if coal companies go bankrupt. This is an area where major effort will be required. Clinton may want to make clean energy an engine of growth for the economy but the size of the sector is nowhere near being that important a driver of growth. She would have to rely on several other pillars of her economic plan to accomplish that goal. Clinton also seeks to protect low-income communities by making environmental and climate justice a larger part of the energy planning process, a major theme championed by portions of the Democratic Party that supported Senator Bernie Sanders during the primaries.

Overall Clinton is likely to have an Obama-like posture when it comes to energy, with climate and environmental priorities having an elevated standing relative to near-term energy-related economic and security priorities. This is because, as the title 'Clean Energy Superpower' suggests, the fundamental belief of the campaign is that promoting clean energy and climate action is in the long-term interest of both the economy and security of the country. The role that energy plays in economic and social mobility in the United States is likely to be extremely important given her focus

¹⁰ EIA (2016), *Monthly Energy Review*, September 2016, http://www.eia.gov/totalenergy/data/monthly/pdf/sec1_7.pdf (accessed 7 Oct. 2016).

¹¹ EIA (2016), *What Is U.S. Electricity Generation by Energy Source?*, Table 1.3 Primary Energy Consumption by Source, http://www.eia.gov/totalenergy/data/monthly/pdf/sec1_7.pdf (accessed 7 Oct. 2016).

¹² Bureau of Economic Analysis, US Department of Commerce (2016), 'GDP by Industry', http://www.bea.gov/industry/xls/io-annual/GDPbyInd_VA_1947-2015.xlsx (accessed 7 Oct. 2016).

on environmental and climate justice as well as because of the immense amount of attention that stagnant economic and social mobility have received during the campaign.

Donald Trump

Donald Trump laid out his thoughts on energy and climate change relatively late in the campaign. He does not speak about them in great detail or offer many specifics, though in recent weeks his campaign has added staff and detail to this and other policy platforms.

Much like other elements of his platform, Trump's policy is cast from the perspective of how energy can help to achieve his central vision to 'make America great again'. He has expressed doubt that climate change is real and the policies that he has set out indicate he does not see much of a need to address it. From his statements, Trump appears to view energy as a means to grow and strengthen the US economy, as well as to gain some degree of economic and foreign policy advantage over other countries including China and members of OPEC. Key elements of his plan include becoming energy independent, using revenue from energy production to rebuild infrastructure and in so doing create jobs for American workers, using inexpensive energy to boost agriculture and removing all regulation that is bad for workers.¹³ It is hard to see how Trump can fully or even partially achieve some of these goals. He may pledge to make the United States energy independent (a goal much more attainable in terms of overall energy self-sufficiency than ever before) or to bring back the coal industry, but it is unclear that he would have the leverage over global market forces to make progress towards these goals, even with regulations removed and incentives provided.

Trump's energy platform also implies a familiar Republican theme of a smaller role for, or less interventionist, government and seems to reject the idea that renewable energy resources should be preferred over fossil fuels like coal, oil and natural gas. His campaign has pledged its most specific actions in the area of rolling back policies dealing with climate change in favour of 'real environmental challenges, not phony ones', such as the need for clean and safe water for local communities.¹⁴ Trump's action plan for his first 100 days in office includes:

- Rescinding all Obama executive actions including the Climate Action Plan and the Waters of the United States rule;¹⁵
- Saving the coal industry and other industries;
- Asking Trans Canada to renew its permit application for the Keystone pipeline;
- Lifting moratoriums on energy production in federal areas;
- Revoking policies that impose unwarranted restrictions on new drilling technologies; and

¹³ Trump, D. J. (2016), 'An America First Energy Plan', Donald J. Trump For President, 26 May 2016, <https://www.donaldjtrump.com/press-releases/an-america-first-energy-plan> (accessed 7 Oct. 2016).

¹⁴ Ibid.

¹⁵ US EPA (2015), *Clean Water Rule: Definition of "Waters of the United States"*, June 29 2015, <https://www.epa.gov/sites/production/files/2015-06/documents/epa-hq-ow-2011-0880-20862.pdf> (accessed 17 Oct. 2016)

- Cancelling the Paris Climate Agreement and stopping all US payments to UN global-warming programmes.

Several of these items could not be accomplished within a 100-day timeframe and some would be difficult to achieve at all – cancelling the Paris climate agreement and saving the coal industry are two good examples. Other aspects of his agenda would be constrained by whether or not Congress is willing and able to enact it. For example, it is within the authority of the executive branch to rescind some of the environmental regulations Trump has pledged to roll back, but he would then also most likely be sued by environmental groups and states for not living up to the statutory responsibility to protect the environment, similar to how the Obama administration is currently being sued by various states and industry associations. And without the ability to persuade or control Congress, Trump could not change the underlying laws from which that responsibility stems and would instead leave the regulations tied up in courts for many years to come.

Based on what he has said to date on energy and climate issues, it is hard to predict how Trump would deal with items that may arise during the course of his administration. It is fair to assume that issues like climate change would not hold a great deal of sway with Trump and that the global oil-market issues would be seen through a much more traditional lens of competitive geopolitics than shared security. However, Trump has said little about his positions to date and he has virtually no track record in this area to analyse. This, along with evidence that he is willing to change his mind on issues very quickly, may mean that his stated policy positions and apparent preferred issues could change when confronted with unexpected circumstances or opportunities.

Overall it is difficult to tell what pro-active energy policy measures a Trump administration would enact but it is clear that advancing policies to reduce emissions and deal with climate change is not high on his agenda. Given the large amount of effort required to advance the types of policies and investments necessary to reduce emissions, it is safe to assume policies and measures designed to advance these aims will be neglected. As Trump's energy plan also states, regulation will be judged on whether it is good for the American worker. Given how important his overarching objective to 'make America great again' is in his campaign, this could bring a significant jobs focus to his energy policy agenda.

International implications

The US plays a large role in regional and global energy markets as well as an important leadership role in setting international climate change goals. Major changes in US energy policy – such as the creation of the US Strategic Petroleum Reserve in the wake of the Arab oil embargoes in the 1970s, the onset of nuclear power and more recently the unconventional energy revolution – all influence energy markets and policies abroad. The most significant areas where the outcome of the US election will impact the international community are in oil and gas market dynamics and in climate change.

US elections matter a great deal for global oil and gas markets, but the influence of any single electoral outcome on them is often muted by a variety of factors. Not the least of these is the long investment and project development cycle typically associated with oil and gas projects.

The US plays an important role in those markets as a producer and consumer, but price, resource availability and cost, as well as state and local policies, matter a great deal more to the country's overall oil and gas production. It is often assumed that Republicans are more accommodative of oil and gas development than Democrats but, absent of the help of Congress, there may not be a great deal more that a Trump administration could do to support oil and gas development. Easing regulation for drilling on public lands may be one possible step but other measures, like overturning moratoria on offshore drilling areas, would require a great deal of work as the newest five-year offshore oil and gas leasing plan will already be finalized by the time the next administration takes office.¹⁶

Trump may not pursue policies designed to reduce consumption or improve environmental performance of oil and gas such as methane regulation, greater levels of energy efficiency in vehicles, more stringent climate policy or the removal of tax incentives for the oil and gas industry. However, these policies would be unlikely to have an influence on US oil and gas production in ways that would substantially affect global markets in the near-term (although regulation and policy changes tend to matter more when commodity prices are low, especially if they raise production costs). To the extent that a Clinton administration would be more amenable to these types of policies, measures not already underway under the current administration would be difficult to pursue without a supportive Congress. More importantly many of the main policy barriers or enablers for oil and gas development, especially onshore, rest with the states rather than the federal government.

Any new administration must also consider how it handles global oil market issues, such as security of supply. Given the significant under-investment in upstream oil and gas development during the price downturn of the last two years, it is possible that prices could increase, thus bringing oil price consideration back into focus within energy and economic policy-making. In the event of an oil-supply disruption, the US will need to work with its international partners to deal with the shortfall and develop strategies for ensuring adequate supply. The Obama administration began to modernize and update the US Strategic Petroleum Reserve, the largest government owned stockpile of crude oil held for the purposes of responding to a supply disruption, but the next administration will have to continue these efforts to ensure the strategic reserve can adequately function in the event of a supply disruption.

How the US deals with major global oil, gas and coal suppliers also matters. While many of the world's major oil-, gas- and coal-producing economies in the Middle East and Eurasia may find it refreshing to engage with a Trump administration that is less climate-focused, it is unclear whether that would outweigh their concerns about Trump's 'America first', anti-trade and anti-OPEC stance. In some ways, Trump's broader foreign and trade policy will matter more than his energy policy for the international community. It is not clear from his platform that he intends to change anything specific about the US stance towards OPEC countries or the organization (though one of his advisers recently called on OPEC and Russia to agree jointly to cut oil production).¹⁷ Statements

¹⁶ US Bureau of Ocean Energy Management, US Department of the Interior (2016) *2017 – 2022 Outer Continental Shelf Oil and Gas Leasing Proposed Program*, March 2016, <http://www.boem.gov/2017-2022-Proposed-Program-Decision/> (accessed 17 Oct. 2016)

¹⁷ Hume, N., Sanderson, H. and Sheppard, D. (2016), 'Donald Trump's Oil Man Urges Russia and Opec to Cut Output', *Financial Times*, 8 September 2016, <https://www.ft.com/content/1fc5cab2-74f5-11e6-b60a-de4532d5ea35> (accessed 7 Oct. 2016).

such as the intent to rip up the Iranian nuclear agreement, wanting to bomb oil fields in Syria and Iraq, and taking over oil fields in Iraq, carry little substance or detail, and therefore are hard to analyse or even respond to in a meaningful way. This leads to an atmosphere of great uncertainty, which some have suggested is an almost instinctive element of Trump's dealmaker persona.¹⁸

Climate change is perhaps the area where the outcome of the US election matters most. The difference between Clinton and Trump on the issue could not be starker. Clinton seeks to extend the US role as a leader in the international climate change movement, meet its obligations under the Paris Agreement, and position it and the international community to deliver even more ambitious contributions to shared goals. Trump has said he would cancel the Paris Agreement. Should Clinton be elected, the international climate change dynamics can reasonably be expected to be about the same as they were under the Obama administration, with the US taking domestic and international action to advance the agenda.¹⁹ The challenges facing a Clinton administration would be greater in some ways than they were for Obama's. While the next administration is likely going to deliver on the 2020 emissions reduction targets pledged at the 2009 Copenhagen climate summit, it will have significant ground to make up in order to meet the targets set for 2025. It will also be in charge of putting forward a plausible yet ambitious 2030 target as well.

Trump could not unilaterally cancel the Paris Agreement, but he could withdraw the US from participation, which would more than likely undermine the globally coordinated efforts and institutions designed to combat climate change. He could also stop the US from contributing to international climate funds, and either actively oppose or take a backseat to climate change-related initiatives in other international forums. In response, it is quite likely that the international community would criticize and put pressure on Trump. During the 2000s Europe played a large and important role in pressuring the US to become more active on climate change. One can imagine that many of the world's developing economies would be upset with the US backtracking on its climate commitments, particularly in regard to financing. China may also prove to be an unexpected champion of the climate agenda in the absence of US action. It is also very difficult to assess how high a priority climate change would be compared to other parts of a Trump administration's agenda, such as renegotiating trade deals and national debt payments, or deporting undocumented immigrants. It remains to be seen whether or not international pressure would be enough to moderate a Trump administration's stance on climate change. Moreover, it is not even clear if Trump's statements constitute, as some have suggested, an opening salvo ahead of negotiations rather than a final position on the issue, though it is hard to see what type of influence could be brought to bear that would change his position.

Regardless of all these caveats and uncertainties, the actions of the next administration to address climate change could have the most impact on the energy landscape. Depending on whether Hillary Clinton or Donald Trump wins, this presidential election will almost certainly yield vastly different outcomes on that front.

¹⁸ Harper, J. (2016), 'Donald Trump Fine Tunes the Presidential Art of the Deal', *Washington Times*, 1 September 2016, <http://www.washingtontimes.com/news/2016/sep/1/donald-trumps-mexico-negotiations/> (accessed 7 Oct. 2016).

¹⁹ McGrath, M. (2016), 'Donald Trump Would 'cancel' Paris Climate Deal', *BBC News*, 27 May 2016, <http://www.bbc.co.uk/news/election-us-2016-36401174> (accessed 7 Oct. 2016).

About the author

Sarah Ladislaw is the director and senior fellow of the Energy and National Security Program at the Center for Strategic and International Studies (CSIS) where she leads the work in energy policy, market and technology analysis. She is an expert in US energy policy, global oil and natural gas markets, and climate change. She has authored numerous publications on the geopolitics of energy, energy security and climate change, low-carbon pathways, and a wide variety of issues on US energy policy, regulation and market dynamics. Her regional energy work includes publications on Chinese, European, African and Western Hemisphere energy issues. She has spearheaded new work at CSIS on climate change, the electricity sector and energy technology development.

Sarah Ladislaw formerly worked in Office of the Americas in the Department of Energy's Office of Policy and International Affairs, where she covered a range of economic, political and energy issues in North America, the Andean region and Brazil. While at the department, she also worked on comparative investment frameworks and trade issues, as well as biofuels development and use in the Western Hemisphere and around the world. She also spent a short period working for Statoil as senior director for international affairs in the company's Washington office. She is frequently invited to speak at public conferences, advise companies and policymakers, and testify before Congress. She is a member of the National Renewable Energy Laboratory's Strategic Analysis Technical Review Panel, the Strategic Advisory Council for Georgia Tech's Strategic Energy Initiative, and a term member of the Council on Foreign Relations. She has taught graduate courses on energy security as an adjunct professor at the George Washington University and is a frequent guest lecturer at other universities.

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About the 2016 US Election Note series

The November 2016 US presidential and congressional elections are occurring at a time of change inside the United States and uncertainty in the world. How the next administration adapts to a host of international challenges will be central not only to the United States' prosperity and security, but also, given its continuing global economic and political power, to the prosperity and security of countries across the world.

In the months before and after the elections there will be an enormous number of analyses and reports by US institutions and media on the future of foreign and domestic policy, targeted principally at US public and policy-making audiences. Drawing on Chatham House's international reputation for informed and independent analysis, the US and the Americas Programme is publishing a series of Election Notes that look at US foreign policy from an external perspective. These research papers are intended to inform and be relevant to governments, businesses, NGOs, foundations and the broader public – both in the United States and in other countries.

Each paper will examine a major foreign policy issue, explaining the background, the relative positions of the main contenders for the White House, and the international implications of each candidate's likely policies. These Election Notes do not just provide independent analysis of what the candidates say, but draw upon an understanding of their record in public life – if relevant – and of their domestic and foreign policy teams to offer a deeper and more rounded assessment of their likely approach to major foreign policy issues.

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