



Power and Energy: The Impact of the US Elections

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Energy Industry Report



The Abdullah Bin Hamad Al-Attiyah International Foundation for
Energy & Sustainable Development





INTRODUCTION

POWER AND ENERGY: THE IMPACT OF THE US ELECTIONS

What impact will the 2020 United States presidential elections have on the US energy industry?

What energy and environmental policies will the incoming president likely pursue in the first few months of his four-year term, and realistically how able is he to ensure policies proceed through to being ratified, given the congressional results?

And finally, how will this affect the global energy business outside the US?



Energy Industry Report

This research paper is part of a 12-month series published by the Al-Attiyah Foundation every year. Each in-depth research paper focuses on a prevalent energy topic that is of interest to the Foundation's members and partners. The 12 technical papers are distributed in hard copy to members, partners, and universities, as well as made available online to all Foundation members.



EXECUTIVE SUMMARY

- Mr. Biden's impact on energy will revolve around four key axes: the economy (and Covid-19 recovery); sanctions and geopolitics (particularly concerning Iran); climate and environmental policy, at home and internationally; and China, trade, and tariffs.
- He will have a relatively free hand in international affairs, and in dealing with China given a bipartisan consensus on being 'tough' on Beijing. Some two million barrels per day (Mb/d) of Iranian oil production could return to the market, but a deal is only likely in late 2021 at best.
- His ability to push through ambitious economic stimulus and pro-employment, environmental, and climate policies at home, depends crucially on control of the Senate, to be decided on 5 January.
- Mr. Biden can take a fair range of climate actions through executive orders without control of the Senate. Still, these would be vulnerable to reversal if a Republican wins election in 2024.
- He has a broad-based climate plan, which covers most major emitting sectors and viable low-carbon technologies, as well as reinvigorating global climate action. The plan is likely to lead to more ambitious action from other major economies, and to possible alignment on 'carbon border tariffs' or similar measures against countries with high carbon footprints.

IMPLICATIONS FOR LEADING OIL AND GAS PRODUCERS

- Restrictions on US oil and gas production will likely lead to production being lower than otherwise would have been the case, creating more market space for competing producers.
- Mr. Biden will not intervene to encourage OPEC+ to support prices, leaving it up to the alliance to determine its own policy.
- His administration's impact on oil prices is likely positive in the short term (economic recovery), negative in the medium term (return of Iranian production), positive in the longer term (tighter regulation and taxation of the US upstream oil business), and negative in the very long term (greater development and deployment of low-carbon technologies such as electric vehicles (EVs)).
- Developers of low-carbon technologies (renewables, nuclear, carbon capture, EVs, batteries, hydrogen, biofuels) will see a boost, as will low-carbon producers of oil and gas/LNG.
- High-carbon producers, including coal miners, oil sands, and countries with high flaring and methane leakage, will see more regulatory barriers.
- There will be intensified pressure on companies to disclose climate risks and greenhouse gas (GHG) emissions, and unwillingness by investors to fund high-emitting sectors. This pressure could make some areas of climate policy irreversible, even by a future Republican president.

JOE BIDEN HAS WON THE PRESIDENCY, BUT WHAT ABOUT THE SENATE?

Joseph R. Biden will be inaugurated as US president on 20 January, with Kamala Harris as his vice-president. He will face a deeply divided country, where opinions on the economy, trade, energy, the environment, and relations with Russia and the Middle East have become even more ideologically divided than previously. The health and economic fallout from Covid-19, political gridlock, and social media disinformation will constrain many of Mr. Biden's plans or ability to deliver them.

The scope of Mr. Biden's environmental policies will be heavily dependent on control of the Senate, which in turn pivots on the two run-off elections to be held in the state of Georgia on 5 January. Early polls suggested the two Republican candidates had slight advantages¹. Even if the Democrats win both races, leaving the Senate tied at 50 seats each and the vice-president holding the casting vote, conservative Democrat Joe Manchin, representing the coal-mining state of West Virginia, would also be likely to block anti-fossil fuel action. Mr. Biden has indicated his desire to find bipartisan consensus and work with the Republicans. Still, it's almost certain they will continue to be obstructionist under current majority leader Mitch McConnell.

The Supreme Court, now with a six-three conservative majority, could also have a vital role in striking down policies it deems 'unconstitutional'.

In the absence of legislation, Mr. Biden will have to proceed via executive orders and regulatory action. This approach still gives some options but is vulnerable to reversal by a new president after the next election in 2024. It will be vital for him to embed as

much environmental policy as possible into the American economy and companies' business plans so that they will resist any reversal should the Republicans regain the presidency.



ECONOMIC RECOVERY WILL BE THE KEY FACTOR FOR ENERGY IN THE SHORT TERM

Rather than any specific actions taken in the field of energy, Mr. Biden's most important impact on the industry will be via the pace of economic recovery. His prospective administration will likely bring a much more organised and science-based response to the Covid-19 pandemic. However, this again partly depends on the control of the Senate, for passing additional economic stimulus measures. The likely availability of one or more effective vaccines during 2021 should gradually reduce the effect of the outbreak and support a return to more regular travel and activity in the US, EU, and the UK. Japan, Canada, Switzerland, and Qatar have also secured doses of the Moderna vaccine.

But the economic aftershocks will persist, and it may take longer to complete vaccination in other countries. The Biden administration will probably work more constructively on ensuring vaccine supplies to other countries. It will also follow a multilateral rather than unilateral approach to fighting the virus, which could result in swifter progress on issues such as creating safe travel corridors.



OIL MARKETS WILL FEEL THE IMPACT OF APPROACHES TO IRAN

One of the most consequential early impacts Mr. Biden could have on energy is with regards to sanctions on Iran. He has indicated his intention of bringing the US back into the 'Joint Comprehensive Plan of Action', initially signed under President Barack Obama in 2015, and trading sanctions relief for restrictions on Iran's nuclear programme. President Donald Trump announced he would withdraw from the agreement in May 2018, and his administration then proceeded on a campaign of 'maximum pressure', aiming to reduce Iran's oil exports to zero. By May 2019, China was Iran's only paying customer, and that still depended on a complex web of actions to avoid US sanctions to transfer cargoes and make payment. Iran's crude and condensate exports were reduced from 2.5-3 Mb/d during 2016, 2017 and early 2018, to around 0.3 Mb/d during late 2019. Sanctions enforcement may well ease up in the first few months of 2021, allowing some recovery of Iranian oil exports.

The Biden administration will have many other issues to deal with as it comes into office. There are also ideas of a "more for more" deal on the JCPOA, possibly trading increased sanctions relief for restrictions on Iran's regional activities or missile development.

Iran's presidential elections are scheduled for June 2021; the current president, Hassan Rouhani, cannot run again this time, having served two terms. The reformist/moderate coalition has lost significant public support because of the failure of the JCPOA and Iran's subsequent economic struggles, as well as violent repression of protests. This gives little time for the US to negotiate any changes

or replacement for the JCPOA. More likely, serious talks will have to be carried out with President Rouhani's successor, who could well be a conservative or hardliner and linked to the Revolutionary Guards.

The possible return of Iran poses some tricky questions for the OPEC+ alliance, particularly given the recovery of much of Libya's production late in 2020—if this can be sustained. Though the vaccines promise a recovery in demand later in 2021, forecasts suggest the market in the first quarter will only be slightly in deficit, given OPEC+'s plans to reduce current cuts from 7.7 Mb/d to 5.8 Mb/d. OPEC+ may choose to extend the current cuts through the first quarter, which would also give some more room for Iran's output to increase. However, this would be politically unwelcome to Saudi Arabia and the UAE, leading forces within OPEC.

These prospects assume there is no serious military conflict involving Iran and the US before Mr. Biden's inauguration. Attacks on Saudi oil facilities and tankers, and the assassination of leading Iranian nuclear scientist Mohsen Fakhri-zadeh near Tehran on 27 November 2020, alongside a secret meeting between Israeli Prime Minister Benjamin Netanyahu and Saudi Crown Prince Mohammed bin Salman, in November 2020 were a continuation of previous covert actions and Iranian retaliation. Some have seen in these attempts by the Trump administration to provoke Iran to make it more difficult for Mr. Biden to re-enter the JCPOA, or to leave a diplomatic and military mess for him to clean up.



OIL MARKETS WILL FEEL THE IMPACT OF APPROACHES TO IRAN

"[Kerry] is very well aware that the remit for the next few years is not to sit in big UN negotiation halls putting the final touches on the Paris rule book but rallying the world around key action areas."

Paul Bodnar, a senior director for energy and climate in the administration of President Obama.

Mr. Biden is unlikely to intervene in OPEC's deliberations, as President Trump did verbally in April, to encourage the organisation to support oil prices. He has also been rhetorically unfriendly towards Saudi Arabia. However, President Trump did not retaliate following the likely Iranian-inspired attack on the Kingdom's key Abqaiq oil processing facility in September 2019, so Riyadh is not necessarily more seriously exposed under the new administration.



OTHER AREAS OF CONFLICT AND SANCTIONS WILL FACE MIXED APPROACHES

Two other areas of sanctions are important. The US Congress has succeeded in halting construction of the Nord Stream II pipeline from Russia to Germany, by threatening measures against companies assisting in its construction and financing. These sanctions were intended to reduce European dependence on Russian gas, and to support Ukraine, which Nord Stream II is intended to bypass, but also had the advantage of leaving a gap in the market for US LNG exports.

Mr. Biden's administration is likely to be less friendly towards Moscow than President Trump's. He has also said he is against the pipeline and is likely to work more constructively with the Europeans to diversify their energy supplies, and to bring non-EU European states (such as Ukraine) into the continent's common electricity and gas marketsⁱⁱ. This is likely a negative prospect for Russia and Gazprom, both politically and economically, but a positive one for competing energy suppliers to and within Europe.

Venezuela is a trickier, if smaller, problem. Diplomatic pressure and sanctions on the Maduro regime will continue, but the Biden team may have a more nuanced and constructive approach. Nevertheless, they are unlikely to be able to affect the situation much. If President Maduro and his associates were forced from power, the position of China and Russia in the country would be weakened, and Venezuelan oil production would likely rise significantly over a period of time and with the help of Western investment.

GOALS OF CARBON NEUTRALITY WILL BE GLOBALLY CONSEQUENTIAL

Immediately on taking office, Mr. Biden will bring the US back into the Paris Agreement on climate change. Mr. Biden's climate targets are for the power sector to be zero-carbon by 2035, and the US as a whole to be carbon neutral by 2050, in line with the ambitions of the EU, UK, Canada, Japan, and South Korea. With China aiming for 2060, this means a critical mass of the world economy will be heading for sharp reductions in GHG emissions.

Mr. Biden has named former secretary of state, and presidential candidate, John Kerry as his climate change envoy, now a Cabinet-level position. Mr. Kerry was present at the 1992 Rio Summit and 1997 negotiations on the Kyoto Protocol, at COP15 in Copenhagen in 2009, and had an important role in negotiating the 2015 Paris Agreement ⁱⁱⁱ.

Mr. Biden aims to make climate change a national security issue, rather than just an environmental one, and to ensure that climate action will be incorporated throughout all of the federal government. John Kerry can be expected to encourage coordinated global action in key focus areas, such as renewables, advanced batteries, and ecosystem restoration for carbon sequestration.

The participation of the US in the Paris Agreement is important not just because of the emissions cuts the US will commit to, but because it will encourage other major economies to do more. It will also mean more clean energy innovation and deployment within the United States, which will help bring down costs at a global level.



DOMESTIC CLIMATE POLICY WILL ALSO BE ESSENTIAL

Mr. Biden's 'Build Back Better' slogan heavily stresses the themes of environmentally-friendly reconstruction and employment. It draws on many of the ideas of the 'Green New Deal' advanced by the left-wing of the Democratic Party, even though Mr. Biden himself did not formally adopt this plan.

The US is the world's second-largest GHG emitter. In 2018, its emissions of 5,416 Mt of carbon dioxide were second only to China (10,065 Mt), and 15% of the global total^{iv}. US emissions have fallen since 2007, largely because of the replacement of coal with natural gas and renewables but they rose from 2017 to 2018. The US is probably approaching the end of reductions that can be realised from coal-to-gas switching and will have to introduce more zero-carbon technologies.

Mr. Biden's plan includes \$1.7 trillion of federal investment over ten years, leveraged with state and private money to \$5 trillion, on climate and environmental justice. Part of this would be funded by eliminating tax breaks

for corporations and 'subsidies' for fossil fuels, which could mean a higher tax burden on the domestic oil, gas, and coal industry. Immediate executive actions would include:

- Tightening methane leakage regulations on the oil and gas industry;
- Guiding the federal procurement system's \$500 billion of annual spending to clean energy and low-emission vehicles;
- Improving the energy efficiency of government buildings;
- Tightening vehicle fuel efficiency standards;
- Promoting advanced biofuels;
- Requiring companies to disclose climate risks and their emissions levels;
- Conserving 30% of the nation's land and waters;
- Modifying fossil fuel royalties to allow for climate change; and
- Enhancing reforestation and renewables on federal lands and waters.



Legislative action would be required to establish a new Advanced Research Projects Agency focused on climate, with key targets including:

- Grid-scale storage at a tenth the cost of current lithium-ion batteries;
- Small modular nuclear reactors at half the cost of current reactors;
- Net-zero energy buildings with no increase in cost;
- Refrigerants with no global warming potential;
- 'Green' hydrogen from renewables at the cost of natural gas;
- Decarbonised industrial heat, construction materials, food and agriculture;
- Carbon capture, use and storage (CCUS) on power plants; and
- Development of low-carbon aviation ^v.

The main impact of Mr. Biden on 'green' energy, at least over his initial term, may be in removing obstacles President Trump had placed. New incentives may take time to put in place. Renewables such as solar and wind are increasingly competitive on their own terms, even without subsidies.

Offshore wind is particularly set to benefit, as President Trump slowed approvals and threatened to close off the coast from Virginia to Florida. EVs will benefit from tighter fuel economy standards, with the fleet potentially 60% higher than under Trump-era standards. However, Wood Mackenzie forecasts there will still only be four million EVs on US roads by 2030 out of a total fleet of 275 million ^{vi}. Electric passenger rail and freight will be expanded.



DOMESTIC CLIMATE POLICY WILL ALSO BE ESSENTIAL

Overall, the Biden climate agenda is very broad and comprehensive, tackling all the main emitting sectors of the US economy, including areas of land-use and agriculture, which are often overlooked. This is considering all the leading low-carbon technologies and embracing international action and cooperation. Of course, not all this will be achievable, certainly not within one term and particularly if the Republicans hold the Senate. However, some elements, such as CCUS and nuclear power, enjoy Republican support too. For instance, the 45Q tax credit for CCUS, worth \$35 per tonne of CO₂ used in enhanced oil recovery and \$50 per tonne of CO₂ geologically stored, expires at the end of 2023 but could be extended ^{vii}.

Mr. Biden's pick as treasury secretary, Janet Yellen, has expressed support for a carbon tax. But this looks politically difficult to pass. In its absence, promoting low-carbon energy will depend on a patchwork of executive orders, regulatory mandates, state-level action, and some federal legislation, which will be more expensive and less comprehensive.



DOMESTIC OIL AND GAS PRODUCTION WILL BE HAMPERED, BUT NOT IMMEDIATELY

Mr. Biden eventually made it clear in his campaign that he would not seek to ban hydraulic fracturing ('fracking'), the critical technology for extracting tight/shale oil and gas. A total ban on fracking would probably be legally impossible and economically very damaging, as the production of oil and gas would collapse, affecting some 1.5 million workers employed across the whole value chain, as well as businesses and consumers that rely on natural gas in particular.

But Mr. Biden did say that he would ban new leasing and permitting of wells within federal areas. Such a decision would be open to legal challenge. It would not affect most oil and gas activities, which take place on private lands. Still, it would halt development in some areas where the federal government owns significant lands, such as New Mexico (65% of its production from federal acreage), Wyoming (37%), North Dakota (16%), and Colorado (11%) ^{viii}. It would prevent new leasing in the federal offshore Gulf of Mexico, a crucial producing area. This prevention could lead offshore production to be 30% lower by 2035 than if leasing had continued, and overall national output could be two Mb/d lower by 2025 at around 11 Mb/d; slightly above the current level ^{ix}. S&P Global Platts puts potential production at risk by 2025 as 1.1 Mb/d of oil and 3.7 Bcf/d of gas.

Finally, it would remove any ideas of opening the Alaskan National Wildlife Refuge (ANWR), as the Trump administration has attempted to do in its last days. Still, companies were probably unlikely to explore there for economic and legal reasons. Mr. Biden's team will also have to weigh environmental against economic factors, especially in a Democratic state such as New Mexico, where petroleum is a significant employer.

New oil and gas infrastructure, such as pipelines, will face increasing legal and regulatory hurdles. Permitting has already been challenging. The Obama administration, with Mr. Biden as vice-president, was supportive of LNG exports, but President Biden may offer less encouragement. Domestic gas prices may also be higher because of drilling and permitting restrictions. On the other hand, curbs on flaring will mean more gas needing market outlets. The share prices of US LNG developers such as Cheniere, Sempra, NextDecade, and Tellurian responded positively to Mr. Biden's win, possibly on hopes of easing of Chinese tariffs ^x.

US oil production is already struggling because of low prices, the impact of the pandemic and a reduction in capital availability as investors demand better returns. A rise in prices is much more important for encouraging more significant drilling than any impact of regulation, certainly in the short- and medium-term. If US oil production is limited while global demand recovers, oil prices would be likely to rise—good news for the domestic industry, but unfavourable for US consumers and a potential political problem for Mr. Biden.



CLIMATE, ENERGY, AND TRADE POLICY ARE CLOSELY ENTWINED

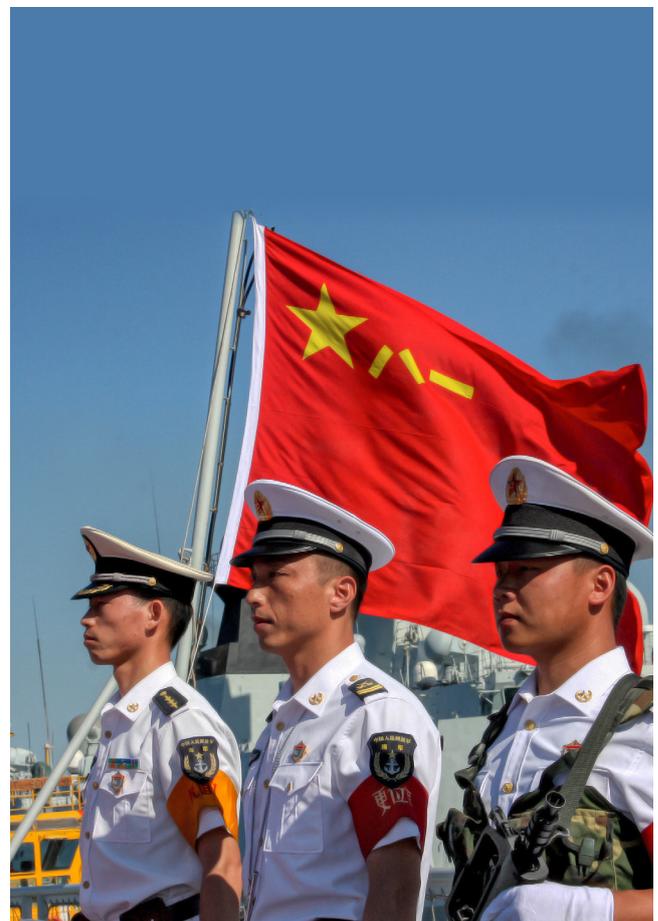
Mr. Biden's trade policy will be very consequential for energy, particularly as it relates to China and Europe. Climate will be a growing and inescapable part of trade policy but aims to support US employment, and economic growth will probably be even more significant.

It has now become common wisdom, one of the rare, shared understandings between Democrats and Republicans, that the US needs to be 'tough' on China. There will be more attempts at 'decoupling' the two economies and blocking investments or trade deals that pose national security threats or appear unbalanced in Beijing's favour. These may have some marginal impact on slowing Chinese growth and so energy demand. President Trump's initial trade deal with China, setting numerical targets for Chinese purchases, has not succeeded, partly due to the plunge in world oil and gas prices. Chinese companies have also been unwilling to risk signing long-term LNG purchase agreements with American firms, thus delaying the next wave of US export projects.

Overall, less integrated world trade probably means slower global growth, with a negative impact on energy demand but also less diffusion of new technologies in fields such as renewables, batteries, and EVs. There is also the chance of a conflict in an area such as the South China Sea, affecting oil and gas transit, though the Biden administration is less likely to blunder into this than the Trump team would have been.

Mr. Biden will probably pursue a much more multilateral approach to containing China than President Donald Trump did, using tariffs more selectively, and working with partners such as Europe, Canada, Australia, Japan, South Korea, and perhaps India.

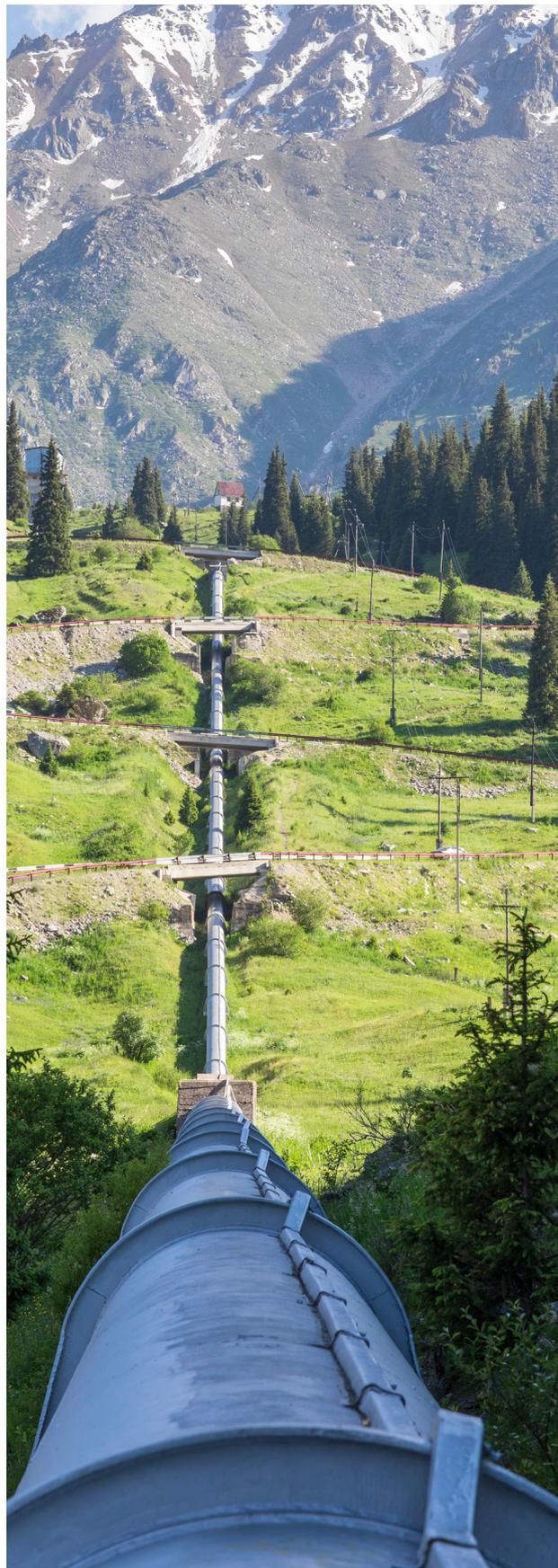
This multilateralism will mean more suspicion of China's Belt-and-Road Initiative, and likely US attempts to compete with it using more direct funding from the Development Finance Corporation (DFC). This competition could unlock some energy projects that have struggled for commercial viability. Conversely, countries such as Pakistan may come under American pressure to drop Chinese-backed projects such as hydroelectric and coal power stations. US backing of nuclear power is harder to assess because of environmentalist



suspicion. Still, there may also be a temptation to block exports of Russian or Chinese nuclear plants to countries, including the UK, Egypt, Turkey, and Saudi Arabia.

As noted above, with Europe, the particular issues relate to the environment and to Russian gas. US LNG exports have recently come under scrutiny because of the industry's high carbon footprint, linked particularly to flaring from oilfields. French utility Engie cancelled a deal to buy LNG from NextDecade, a developer in Texas, because of reputational concerns, and the possible risk of European curbs on high-carbon imports. Mr. Biden is likely to use emissions standards to cut flaring and to reinstate rules to reduce methane leakage ^{xi}. While that might involve some extra costs for the industry, it would also help assure its export markets, and drive it to a more environmentally sustainable posture.

Just four days after entering office, President Trump signed an executive order to progress the Keystone XL pipeline from Canada. Such pieces of cross-border hydrocarbon infrastructure are likely to face more legal and regulatory challenges and have already been hard to progress. This difficulty is likely to continue to constrain the development of Canada's oil sands in particular, which suffer further opposition because of their high carbon footprint and costs.

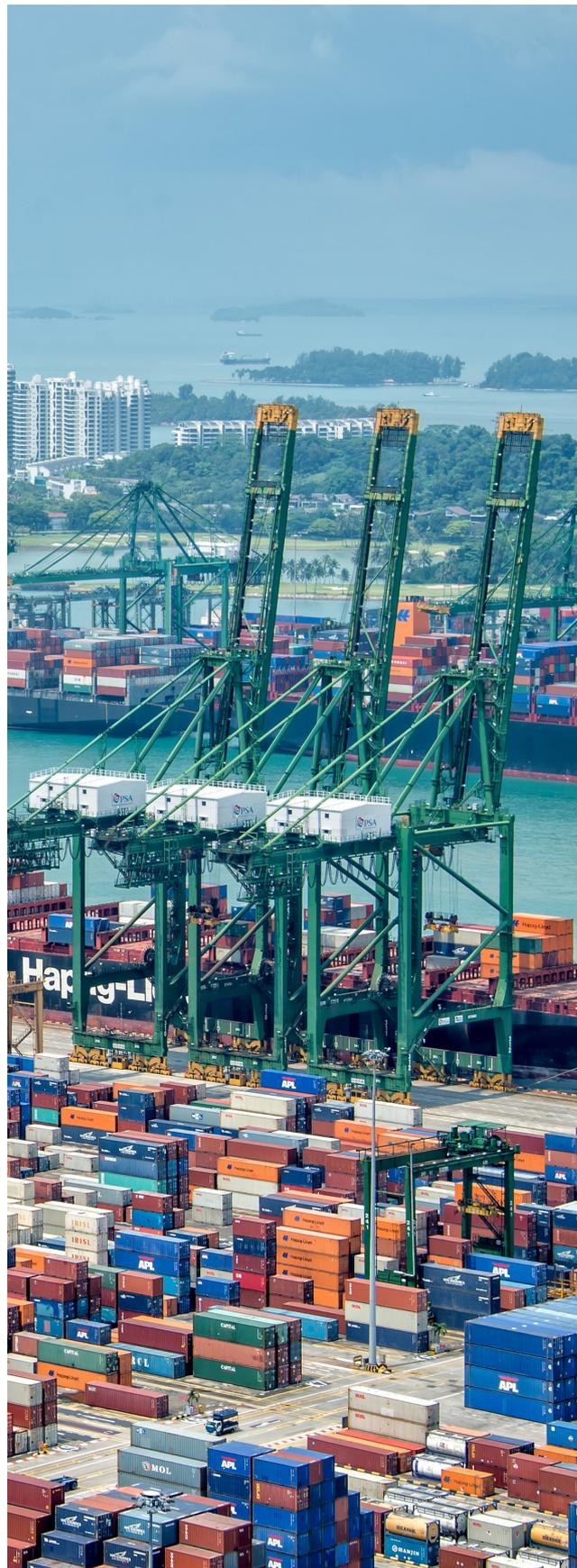


CONCLUSIONS

Political constraints will mean the Biden administration's energy impact will be less than its ambitions. The danger of political and budgetary gridlock is valid. Many of its most consequential actions for energy will come in the broader areas of international diplomacy and sanctions, trade, economic recovery, and industrial and infrastructure policy. Its direct effect on the domestic oil and gas industry has perhaps been overstated, particularly in the short term.

However, in the longer term, the Biden administration could be very consequential for low-carbon energy, particularly if Mr. Biden or a fellow Democrat also wins election in 2024 and if the party controls the Senate. This scenario will rely on creating momentum on a clean-energy economy and its core technologies.

Energy companies will need to monitor the new administration closely, understand domestic and state-level politics as well as that at the federal level, and engage where appropriate on supportive policies. The new administration is much more open than the government under President Donald Trump to multilateral institutions and cooperation with traditional partners.



APPENDIX

- i. <https://www.ajc.com/politics/politics-blog/an-early-poll-of-georgias-twin-senate-runoffs-shows-tight-races/DUDDDLIH-CJH4LORTT57HAOUG64/>
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- xi. <https://www.politico.com/news/2020/11/27/biden-gas-exports-europe-440678>

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Barzan Tower, 4th Floor, West Bay, PO Box 1916 - Doha, Qatar

Tel: +(974) 4042 8000, Fax: +(974) 4042 8099

 www.abhafoundation.org

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 The Al-Attiyah Foundation