

# Energy and Environment in the Next Administration

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## **ABSTRACT**

COVID-19 has had significant impacts both on the energy sector and on economic activity in the United States. Moving forward, Americans will have to decide which candidate they will want in the next Presidential Election to lead the US through the crises it's facing. If President Trump is re-elected, there is likely to be little change from the current Administration in the deregulation of the environment and energy. Trump's administration has prioritized politics over science, and the EPA has lost a significant number of scientists. These scientists are being replaced by industry. While industry's voice should be heard regarding regulations, the industry should not be in control of the regulations. It will be important for the next administration to put someone in charge of the Agency who will actually do the job of the Agency, which is to protect the health and environment. However, Vice President Joe Biden offers a starkly contrasting platform that is centered on climate change issues as one of the focuses of his Build Back Better campaign. Biden's platform may be the opportunity that the US needs to re-enter the global discussions on climate change and regain the leadership in the climate change efforts. Achieving net-zero emissions means that the emissions created must be balanced by technologies or land-use considerations. The current energy industry must look at a broad spectrum of technology innovations that will lead the industry to net-zero emissions by 2050. The US will need an aggressive plan to assist the communities most impacted by the energy and climate transition. This will need to be an integrated part of the approach. One important dimension to this challenge is the need to rapidly develop technologies for CCUS. That will be a big opportunity for workers in the oil and gas industry. China's emissions are 40% of the world's total emissions, and if we don't have China's cooperation, we will not reach the global climate change goals. This doesn't mean we have to find ways to be allies, but that we have to find ways that we can play together nicely. China is going to own the EV market if the US does not engage soon. The US should look to build alliances with Europe and other competitors that look to curb China's looming monopoly on EVs.

COVID-19 은 미국의 경제 활동 및 에너지 산업 부문에 큰 영향을 미쳤다. 이와 같은 유례없는 위기의 상황에서 미국은 곧 새로운 대통령 선거를 치르게 된다. 트럼프 현 대통령이 재선에 성공한다면 환경 규제 완화에 있어서 현 행정부의 방침과 거의 차이가 없을 것이다. 트럼프 행정부는 과학기술 보다는 정치적인 움직임을 우선시해왔고 EPA 는 이 기간동안 많은 전문 과학자들을 내보내야만 했으며 많은 인사는 산업계의 인사들로 교체되어왔다. 물론 산업계의 목소리 또한 경청해야 하는 것은 분명하지만, 규제의 영역에 있어서 이해 당사자인 업계가 규제를 통제하게 되는 상황이 오게 되어서는 안된다. 그런 맥락에서 다음 행정부에서는 (누가 정권을 잡건) 실제로 해당 기관의 업무를 수행할 책임자를 배치하는 것이 미국민의 건강과 환경을 보호하는 길이라는 것을 알아야한다. 그러나 Joe Biden 부통령은 Build Back Better 의 초점 중 하나로 기후 변화문제에 중점을 두고 있다. 바이든의 플랫폼은 미국이 글로벌 기후 변화 논의의 장에 다시 진입하고, 기후 변화 토픽에 관해 잃었던 리더십을 되찾을 수 있는 기회가 될 것이다. 탄소배

출량 제로의 목표를 달성한다는 것은, 실 배출량이 기술 혹은 토지 사용의 목적과 조화적으로 고려됨을 의미한다. 현재 에너지 산업은 2050년까지 탄소 배출량 제로의 목표를 달성하기 위한 다양한 스펙트럼의 기술 혁신에 몰두해야 한다. 미국은 에너지와 기후변화에 영향을 가장 많이 받는 지역 사회를 지원하기 위한 적극적인 계획이 필요하다. 이는 통합적인 접근이 필요한데, 이 접근의 차원에서 CCUS 기술의 신속한 개발은 매우 중요하다. 이는 또한 석유 및 가스 산업 종사자에게 큰 기회가 될 수 있을 것이다. 현재 중국의 배출량은 전 세계 총 배출량의 40%에 달한다. 중국과 협력하지 않으면 세계 기후 변화 목표에 도달하지 못할 것은 자명하다. 이 명제가 반드시 미국이 중국과 가까운 동맹이 되어야 한다는 이야기로 귀결되지는 않는다. 다만 이 문제에 대해 함께 해결방안을 찾아야 할 필요성이 있다는 이야기이다. 더하여 미국이 빠르게 개입하지 않는다면, 중국은 결국 전기차 시장을 장악하게 될 것이다. 이에 대해 미국은 중국의 다가오는 전기차 독점 시도를 억제하는 방안으로서 유럽 및 기타 경쟁사와의 긴밀한 협조와 동맹을 맺어야 한다.

## **SUMMARY**

*As a result of COVID-19, energy demand has crashed along with energy supply. Job losses have been widespread as well as bankruptcies from US companies. GDP will drop almost 8% this year, with unemployment at 11%, and these effects will have significant impacts on the energy sector. In moving forward, Americans will have to choose between Trump and Biden in how these issues are handled.*

- President Trump has promised more energy dominance through opening of more federal lands and the rolling back of environmental regulations. There is no reason to believe there will be a significant difference in Trump's second administration from the first.
- Joe Biden has put forth a historically ambitious green recovery plan. Biden has managed to unite the progressive wing with the moderate wing, and his ambitions are focused on net-zero emissions by 2050, zero emissions by 2035, funding green energy infrastructure with trillions of dollars, and job creations.
- Both candidates are likely to face uncertainties and headwinds. The continuation of the pandemic is likely to be a significant impact for the coming recovery effects.

*If Trump is elected for a second term, he will likely continue on the track he has been on in terms of deregulating environmental regulations. It is likely that Trump will attempt to revive the US coal industry through significant deregulation, but this is likely to be futile.*

- Many companies are not finding value in investing into coal. Despite Trump's environmental regulation rollbacks, the coal industry will not be revived because the death of coal is not due to environmental regulations.
  - At the same time, while the deregulation will not lead to a revival of the coal industry, it will result in widespread health concerns as tailings and waste streams are going to be allowed to be dumped into municipal water supplies.
  - Despite Trump's desire to save the fossil fuel industry, even the industry leaders support a carbon tax, so it's difficult to see how Trump would be able to block this activity.

*A second Trump administration is bad news for anyone who is interested in transitioning to a clean energy economy. Despite that, regardless of what happens with the presidential election, there is a trend in Congress surrounding the need to transition to clean energy.*

- Republican leaders have begun to come around to raising awareness for climate change efforts. There is a bipartisan senate caucus for climate change efforts. These congressional efforts are going to be irreversible. Once a carbon tax is implemented, the demand for revenue from this tax will grow, leading to wider spread acceptance of this type of carbon pricing.

*The effects of climate change and the pandemic will affect people across all party lines and economic statuses. Joe Biden has the capacity to bring the country together with a unique ability to find common ground between people who do not share his platform views.*

- Joe Biden's recovery plan looks to create an economic recovery around clean energy and job creation in response to the COVID-19 global pandemic. Under this plan, Biden also creates opportunities for minorities and people of color to gain entry into the energy industry.

*Achieving net-zero emissions means that the emissions created must be balanced by technologies or land-use considerations. The current energy industry must look at a broad spectrum of technology innovations that will lead the industry to net-zero emissions by 2050.*

- Coal is not a promising long-term scenario, as it is not economically competitive even with upfront costs being removed.
- Natural gas is a significant part of the current energy mix, and it looks like natural gas will stay as a significant portion of the mix for a long period of time.

*The US has the ability to re-enter the global discussions on climate change efforts. However, the US has had a history of leading climate discussions resulting in the US withdrawing from the global agreement. Why would others look to the US and say that we are the exemplar? In order for the US to regain leadership despite the previous withdrawals, the US will need to create a strong domestic plan to demonstrate commitment.*

- There will need to be a focus on domestic efforts with a deep plan that will affect all aspects including jobs, emissions, financing, markets, and global leadership. Industry has already demonstrated pushback to President Trump's environmental regulation rollback, and more pushback will be needed to keep the US's leadership in climate change moving forward despite a second Trump administration.
  - The most important international strategy for the US is to lead with technology and humility. First, the US needs to make a much more ambitious statement at COP26 stating its commitment to returning to the Paris Agreement. Beyond that, science must be elevated, and international scientific research must be strengthened. Key areas of technology investigation should include process heat for industrial processes and hydrogen energy.
  - The US can also lead emerging markets and developing countries in helping them

develop a climate change plan to transition into a clean energy economy using the US's technology and experience. If the US cannot help other countries meet their climate goals, the world may not be able to realize the climate change mitigation needed.

### **QUESTION & ANSWER**

**Q:** *How do you deal with China? China was supposed to be a major source of US energy exports, but that isn't going well with the trade wars. China is also dominating global supply chains for battery materials and renewable energy supply chains. How do you have a somewhat nationalistic, American jobs first plan while dealing with Chinese competition?*

**A:** One thing we cannot afford is a process in which China is seen as the enemy. China's emissions are 40% of the world's total emissions, and if we don't have China's cooperation, we will not reach the global climate change goals. This doesn't mean we have to find ways to be allies, but that we have to find ways that we can play together nicely. China is going to own the EV market if the US does not engage soon. The US should look to build alliances with Europe and other competitors that look to curb China's looming monopoly on EVs.

**A:** We haven't yet dealt with the national security aspects of these discussions. The Chinese have successfully sold nuclear power into other countries. Nuclear power is controversial to some, but I see it as an integral aspect of clean energy futures. Our industry is not currently able to compete with China. If we cannot compete with China, the standards we have upheld in nonproliferation will collapse. The US has reason both for climate and national security goals, to secure US energy solutions to stay in the game. The Chinese and Russians are coming in with under-market prices to cut out the US from the global industry.

**A:** There is so much investment we can make in SMRs, especially for sub-Saharan countries. They need power sources, and this is an area in which we can excel. In Canada, they're deploying molten salt reactors, and that company wants to do business in the US. We can do those things, and if we make the investments being called for, we can lead the world.

**A:** There are strong policy arguments for engaging in conversations with the Chinese, but there has been recent drastic shifts in skepticism against China. The political palatability of putting out the message of collaborating with China, even academically, could be a major political liability regardless of party affiliation.

**Q:** *The Europeans have come out with a very aggressive carbon levy. Would Biden accept the levy? How does this affect the US exports if emissions are weighted?*

**A:** We will need to work out with the Europeans that work out for both our businesses. The matter of principle is that we want to be sure that high emitters cannot come in and undercut our industries. This is an essential aspect of Biden's Build Back Better plan.

**Q:** *How is climate diplomacy going to be different this time because of the global environmental justice issue?*

**A:** I think it's going to play out in a couple of different ways. On the domestic front, I think it will

play out very much depending on where we site and build, and what communities we bring to the table. I will cite a recent California bill proposal around trucks. Turns out, a better part of 50% of freight shipments from China goes to the Long Beach area. The people who live near this freight route have much higher asthma cases, much higher pollution, and more. California helped pass a bill that increased electrification and job opportunities while maintaining economic growth. A similar thing is happening at the Texas gulf. There are similar things happening around the country and the world. If we look at who bears the brunt of the climate change damages, it's not the wealthy. The wealthy will always find a nice place to survive environmental stress. But if we look at India where people are living in excess of 110 degrees Fahrenheit with no air conditioning, that's where the problem will be most significant. The US should recognize this. If we can recognize this, we can lead on this issue as the US has historically been a strong leader on these issues.

**A:** I think we should look at trade policy. There are a lot of lessons to be learned there on how we failed on trade policy. A lot of times we were insensitive and mathematically driven. Eventually a lot of Americans reacted negatively and punished politicians both Republicans and Democrats. Accelerating the transition to a clean energy economy must come with a more free and open trade.

**A:** I don't think the racial injustice voices are going to go away. I really think we have reached a point at which we will see a focused agenda on environmental justice to avoid mistakes we've made in the past.

**Q:** *How does Biden's plan to stop leasing federal lands hurt the natural gas industry? Will this also hurt industries that rely on natural gas?*

**A:** I would like to emphasize the importance of paying attention to the workforce in oil and gas communities. The US will need an aggressive plan to assist the communities most impacted by the energy and climate transition. This will need to be an integrated part of the approach. One important dimension to this challenge is the need to rapidly develop technologies for CCUS. That will be a big opportunity for workers in the oil and gas industry.

**Q:** *You've publicly called for a reset at EPA. Can you give us a snapshot of what needs to be done?*

**A:** We have to reassert the importance of pure science. Trump's administration has prioritized politics over science, and the Agency has lost a significant number of scientists. These scientists are being replaced by industry. While industry's voice should be heard regarding regulations, the industry should not be in control of the regulations. It will be important for the next administration to put someone in charge of the Agency who will actually do the job of the Agency, which is to protect the health and environment.