Insight

Biden's Day One – Evaluating Biden's Climate Proposals

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Executive Summary

- Presidential candidate Joe Biden's Plan for a Clean Energy Revolution and Environmental Justice provides a list of "day one" orders he would issue to address climate change should he take office.
- Biden would rejoin the Paris Climate Agreement, which would require the United States to set specific emissions-reduction targets, providing greater clarity to markets.
- In sum, however, Biden's proposed orders miss the mark: They are light on promoting the innovation and sensible incentives necessary to make dramatic changes in emissions, and heavy on federal mandates.

Introduction

As the election draws closer, Democratic presidential candidate and former Vice President Joe Biden has provided voters with a plan to address climate change in concert with a series of other connected issues. This proposal includes both executive orders he would issue immediately upon taking office and plans for programs and policies he would push Congress to implement within his first year.

While Biden's climate "year one" policies emphasize increased innovation in clean energy and industrial products and processes, little of that is seen in his "day one" proposals. Instead, these focus on reversing the Trump Administration's policies and orders, including rejoining the Paris Agreement on climate change (the Paris Agreement), increasing methane regulation for producers, and closing the Artic National Wildlife Refuge to drilling. Biden's day one proposals also include more mandate-oriented policies for climate mitigation, such as efficiency standards, and conservation-focused efforts, such as banning new drilling on

public lands.

The Day One Plan

While these executive orders are only part of his broader proposal, they provide a useful indicator of where a Biden Administration would head on climate policy—not least because any legislation will struggle to pass Congress. These struggles will only be further exacerbated by Biden's plan initially lauding the Green New Deal as a "crucial framework" even though he denounced it at the first presidential debate.[1]

The executive orders characterized as day one orders include:

- Recommitting to the Paris Agreement on climate change;
- Developing methane pollution limits for oil and gas operations;
- "Greening" the federal government's facilities and vehicles;
- Modifying the Clean Air Act's fuel economy standards to ensure 100 percent of newly sold light and medium-duty vehicles will be electric;
- Increasing the use of biofuels;
- Creating efficiency standards for appliances and buildings;
- Requiring all federal permitting decisions to include a climate change analysis;
- Requiring climate change disclosures from publicly traded companies;
- Conserving 30 percent of America's lands and waters by 2030;
- Closing the Arctic National Wildlife Refuge to drilling and establishing more national parks and monuments;
- Banning new drilling on public lands; and
- Accounting for climate costs in royalties and doubling offshore wind by 2030 by developing renewables on federal lands.

Providing Clarity

Climate change has increasingly become an issue Americans care about. A vast majority of Americans believe that climate change is occurring and has been driven by sources related to human activity, and a majority also believe that the government should take action to mitigate it.[2] Notably, polling completed by the American Action Forum indicates that a majority of voters support addressing climate change even in the face of an economic recession. That said, it is relatively low on the priority list for a large majority of voters

when compared to issues such as the COVID-19 pandemic, recession, and social inequity.

State and local governments, as well as foreign governments, have embraced policies and implemented programs to address climate change. Similarly, companies operating in the United States have made commitments to reduce carbon emissions while financial institutions consider climate change when making investments. The federal government, however, has not demonstrated a commitment to addressing the issue.[3]

With the private sector as well as local and foreign governments signaling the importance of addressing climate change, it is important for the federal government to provide leadership on the issue. This can provide clarity to markets and reduce risk for consumers and businesses alike. Recently, a Commodities Futures Trading Commission subcommittee approved the release of a first-ever federal report on the risks presented to financial markets by climate change, suggesting that they are systemic in nature. The report recommends that all relevant regulators consider climate change and calls for more coordination and clarity among stakeholders.[4] For this reason, Biden's plan to recommit to the Paris Agreement is essential from a standard-setting perspective. While the Paris Agreement is non-binding and relies completely on self-determined targets, committing to targets at all could provide clarity for participants in private markets.

In addition, Biden's promise to recommit to the Paris Agreement on climate change is a promising first step in establishing a benchmark for further legislation. The Paris Agreement was the result of the United Nations Framework Convention on Climate Change 21st Conference of Parties. The Agreement serves as a framework for a global response to the threat of climate change by aiming to prevent global temperature rise more than 2 degrees Celsius above pre-industrial levels. The Agreement calls for each participating country to determine its post-2020 climate actions in order to accomplish this aim. As a result, the United States will need to establish its own standards for cutting carbon emissions.

Addressing the Major Sources of Emissions

When taken at face value, Biden's proposed day one orders take up many of the issue areas addressed by policymakers attempting to develop policies to mitigate climate change. The largest contributor of emissions is the transportation sector, and Biden proposes that the United States make fuels "greener" by introducing more ethanol while simultaneously working toward the eradication of the combustion engine altogether. The second-largest contributor of emissions is the power sector. Biden proposes doubling offshore wind and increasing the development of renewables on federal land to increase the availability of clean energy.

Research has consistently shown that mitigating climate change, particularly in the largest-emitting sectors, is dependent on the development, commercialization, and implementation of new technologies. In short, innovation is required to best implement even the most seemingly natural solutions, and Biden has relied on innovation in characterizing the success of his climate policies.[5] evertheless, the orders proposed for day one seem plainly focused on mandates while failing to reflect his interest in innovation.

Mandates in Action

Biden's proposal rightfully states that transportation is the fastest growing contributor of greenhouse gases.[6] Yet even here the day one proposals do not focus on innovation; the transportation-relevant provisions of Biden's plan provide an example of the proposal's frequent reliance on government mandates. To address these emissions, Biden's executive orders call for modifying the renewable fuel standard (RFS) as well as the Clean Air Act's (CAA) regulatory scheme to include regulations requiring the sale of 100 percent electrified light and medium-duty vehicles. It does not suggest a timeline for the implementation of these rules. Unfortunately, these mandates rely on expanding existing regulatory regimes and have driven up costs in the past while simultaneously being subject to changes by each administration and uneven implementation with waivers for industry.

The RFS mandates that ethanol, which is largely produced by processing corn, must be blended into gasoline, which artificially drives up demand for ethanol. While the RFS was imposed for both environmental and energy-security purposes, past research from the American Action Forum indicates that, due to the inefficiencies created by ethanol use, the RFS imposes roughly $4-$16 billion of cost each year. The increased use of a less-efficient fuel appears to be at odds with the push to 100 percent vehicle electrification.

The CAA resulted in the corporate average fuel economy (CAFE) standards, which determine how far a vehicle must be able to travel when consuming a gallon of fuel. The CAFE standard varies based upon vehicle classification – light, medium, and heavy duty. In practice, it calls for automakers to improve the miles traveled per gallon on an annual basis. In addition, the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule promulgated by the Trump Administration sets fuel economy and carbon dioxide standards that increase 1.5 percent in stringency each year from model years 2021 through 2026. Biden's proposed action would result in the modification of these rules to implement a timeline that eliminates emissions and, as a result, the combustion engine from new vehicles. Recently, Governor Newsom of California proposed a similar rule that would ban the sale of vehicles with combustion engines from the state in 2035.[7]

In this case, not only would consumers need to have access to a variety of vehicles to meet

their needs, but the electric grid would also need to be updated to meet the demand created by charging vehicles. With few electric vehicle options currently on the market, it is difficult to imagine consumers finding options to meet their needs. The Boston Consulting Group estimates that by 2030 "vehicles that will impact utility operations the most—plug-in hybrids and battery [electric vehicles]—will account for 20% to 30% of new sales and 7% to 12% of all cars and trucks in use." The study, which modelled the impact of electric vehicles on the grid, found that "utilities will need to invest between $1,700 and $5,800 in grid upgrades per electric vehicle…through 2030." These costs would be included in the rate base, or the pool of costs that ratepayers are responsible for paying, which could drive up costs about 12 percent.[8]

The key to success in transitioning to lower-emissions vehicles is the availability of commercialized technologies. In order to reduce the costs of modifying the grid to better address the rising number of electric vehicles, utilities should use advanced electricity metering and controlled demand system. These technologies allow for more efficient use of energy as demand shifts in a market. The International Energy Agency (IEA), however, found that technologies that support the electrification of end uses, particularly heating and transportation, need to improve to meet the United Nations' Sustainable Development Goals in its scenarios depicting a "major transformation" to energy systems.[9] In particular, technologies such as smart charging must advance beyond the prototype stage.[10]

But the need for technological development is not limited to the transmission and distribution industries. In order to achieve 35 percent of the reductions necessary under the IEA's Sustainable Development Scenarios, technologies that are currently prototypes or demonstration projects must be further developed. An additional 40 percent of the reductions are dependent on technologies that are not employed by the mass market.[11] Policies that spur this innovation are critical, including public and private investment in research and development. In addition, reform of regulations that impact how markets operate are necessary to effectively bring these technologies into practice.

Conclusion

Biden's day one orders are ambitious and sweeping. Unfortunately, they are light on innovation and sensible incentives, and heavy on federal mandates.

[1] https://www.utilitydive.com/news/climate-change-presidential-debate-biden-trump-talk-ener

gy-policy-coal/586131/

[2] https://media.rff.org/documents/Climate_Insights_2020_Policies_and_Politics.pdf

[3] https://subscriber.politicopro.com/energy/article/2020/09/climate-pledges-depend-on-what-happens-to-trump-1989992

[4] https://www.americanactionforum.org/insight/cftc-acknowledges-climate-change-as-a-systemic-risk-to-the-economy/#ixzz6ZRPsEj8T

[5] https://joebiden.com/climate-labor-fact-sheet/

[6] https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks

[7] https://www.gov.ca.gov/2020/09/23/governor-newsom-announces-california-will-phase-out-gasoline-powered-cars-drastically-reduce-demand-for-fossil-fuel-in-californias-fight-against-climate-change/

[8]https://www.bcg.com/publications/2019/costs-revving-up-the-grid-for-electric-vehicles

[9] https://www.iea.org/reports/world-energy-model/sustainable-development-scenario

[10] https://www.vox.com/energy-and-environment/2020/7/14/21319678/climate-change-renewable-energy-technology-innovation-net-zero-emissions

[11] https://www.iea.org/reports/clean-energy-innovation/innovation-needs-in-the-sustainable-development-scenario#abstract