Insight

The Biden Administration's Energy and Climate Policies in Its First Year

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Executive Summary

- The Biden Administration established national goals for the reduction of greenhouse gas emissions upon submitting updated nationally determined contributions under the Paris Climate Agreement.
- In order to accomplish these goals, the administration has proposed sector-specific policies to increase the adoption of electric vehicles and renewable generation, among other technologies.
- The administration's climate policies have not resulted in any substantive legislative changes; instead, the administration has relied on various executive orders and regulations to implement some of its goals, thus limiting these policies' long-term impact.

Introduction

Since his campaign, President Biden has declared climate change a top priority for his administration and presented various policies to address it. The president included a broad range of climate policies in both his American Jobs Plan (AJP) and more recently, the Build Back Better Framework (BBBF), among other documents and statements. As the Biden Administration nears its one-year anniversary, it has gone as far as to declare that the president has "pulled every lever to position America to scale up clean energy."

Yet while some of President Biden's policies have translated into legislation by way of the Bipartisan Infrastructure Framework (or BIF, enacted as the Infrastructure Investment and Jobs Act on November 15, 2021), the Build Back Better Act (BBBA), which contains the bulk of his climate policies, has thus far failed to gain the support necessary to become law. Meanwhile, the administration has employed executive orders (EOs) and regulations to impose some of its policies—but these could be easily overturned by a future administration.

The following outlines the Biden Administration's successes in implementing its proposed climate policies by way of executive order, regulation, and legislation.

Climate Change Commitments

On January 20, 2021, President Biden recommitted the United States to the United Nations Paris Climate Agreement. As a result, the Biden Administration updated the nationally determined contributions submitted by the Obama Administration following the United States' initial commitment. In addition, President Biden issued its first climate-focused executive action, the Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis. This EO called on agencies to review regulations to identify areas where environmental justice was not well-addressed and listed particular regulations to be considered. It also focused on revising regulations promulgated during the Trump Administration. A week later, the president issued the "Executive Order on Tackling the Climate Crisis at Home and Abroad." This EO highlighted the administration's many climate change policies, which include increasing domestic manufacturing and unionized labor, among others.

Currently, the United States is committed to reducing net greenhouse gas emissions 50 to 52 percent by 2030 as compared to 2005 levels. To accomplish this goal, the administration proposed various policies within several contributing sectors – electricity generation, transportation, industrials, buildings, and agriculture. In particular, the administration established a goal of 100 percent carbon pollution-free power generation by 2035.

Generation

Following President Biden's AJP, an early version of the BBBA (the reconciliation bill) included a clean electricity standard (CES) intended to result in 100 percent carbon pollution-free power generation industry by 2035. In practice, the CES would involve a credit trading system. Lawmakers ultimately decided against including it, however, and it was replaced by the Clean Electricity Performance Program—yet that, too, was eventually removed from the BBBA.

The administration has called attention to the need for an expanded system of interstate electricity transmission lines and expedited review of proposed transmissions projects. The Infrastructure Investment and Jobs Act includes funding for the National Interest Transmission Corridor program, which calls for the Department of Energy to identify regions in the United States where transmissions congestion suggests expansion is necessary. It also includes the Transmission Facilitation Program, which will allow the Department of Energy to contract for capacity on transmission lines that would otherwise lack commitments necessary to operate. This would essentially subsidize the construction of transmission lines for which there are few ready and willing customers. These programs have been included in the administration's Building a Better Grid Initiative.

Most recently, the administration announced it plans to hold a sale of offshore wind farm rights in New York and New Jersey and complete environmental review of the Gulf of Mexico and Northern California for offshore wind. According to the Bureau of Ocean Energy Management, the New York and New Jersey "sale could result in 5.6 to 7 gigawatts of offshore wind energy, enough to power nearly 2 million homes." In addition, five federal agencies committed to a Memorandum of Understanding to improve coordination and prioritize the review of renewable energy projects sited on federal land.

President Biden's BBBF also called for the expansion of existing home energy and efficiency tax credits and a new rebate program for electrification, both of which are intended to reduce the cost of rooftop solar panels to consumers. Nevertheless, these proposals have yet to be included in any version of the BBBA.

Transportation

In August, President Biden issued an Executive Order on Strengthening American Leadership in Clean Cars and Trucks. The EO set "a goal that 50 percent of all new passenger cars and light trucks sold in 2030 be zero-emission vehicles, including battery electric, plug-in hybrid electric, or fuel cell electric vehicles." It also called on the secretary of Transportation and the administrator of the Environmental Protection Agency (EPA) to "consider" new vehicle emissions standards that are to be promulgated by July 2024. In particular, these agencies are encouraged to consider adopting California's standards. It also called for these agency heads to work with the secretary of the Department of Commerce to improve supply chains for electric vehicle components. In addition, electric battery manufacturing was identified as ripe for review with respect to limited supply chains in the president's Executive Order on America's Supply Chains.

The Infrastructure Investment and Jobs Act includes grants for the construction of electric vehicle charging infrastructure. Draft BBBA language from the Senate Environment and Public Works Committee includes $690 million "for the acquisition, installation, and maintenance of zero-emission and electric vehicle-related infrastructure for the Federal fleet." The Biden Administration has also called for electric vehicle tax credits, which have been included in the BBBA; while the bill continues to be debated, a recent version does provide additional credit to those vehicles manufactured in the United States at unionized plants.

The administration's most consequential action in the past year with respect to transportation emissions was the amendment of two regulations—the Department of Transportation's Corporate Average Fuel Economy standards for model years 2024-2026 and the EPA's revised greenhouse gas emissions standards. The new standards are more stringent than the Trump Administration's rules. But, like the Trump Administration's rulemaking, Biden's may be revised by a future administration.

Industrials

To address emissions from the industrial sector, President Biden's AJP called for the creation of 15 decarbonized hydrogen demonstration projects and a new production tax credit. Both hydrogen demonstration projects and the establishment of clean hydrogen qualifications were included in the Infrastructure Investment and Jobs Act. In addition, AJP called for 10 demonstration facilities for carbon capture retrofits of steel, cement, and chemical production facilities and expansion of the 45Q carbon capture tax credit. Again, the Infrastructure Investment and Jobs Act includes carbon capture demonstration facilities.

During the past year, the Biden Administration issued regulations to phase down hydrofluorocarbons (HFCs) by 85 percent by 2036 under the American Innovation and Manufacturing Act, enacted on December 27, 2020. HFCs are "highly potent greenhouse gases" used in mechanical equipment to serve as refrigerant, among other things.

Buildings

President Biden's AJP called for the development of energy-efficient homes, as well as commercial and government buildings. The Infrastructure Investment and Jobs Act includes $3.5 billion for the Weatherization Assistance Program, which assists low-income homeowners, $550 million in the Energy Efficiency and Conservation Block Grant Program, and $500 million in the State Energy Program to assist localities with clean energy programs and projects.

The Department of Energy regulates the efficiency of various appliances, and the Biden Administration has proposed to amend the Energy Conservation Program for Appliance Standards. The amendment would affect the reporting standards for dishwashers and ceiling fans, among other appliances.

Agriculture / Land Use

President Biden's AJP proposed a $10 billion investment in conservation and resilience workers to work on “conserving our public lands and waters” through a Civilian Climate Corps. The president included a proposal to develop the Corps in the BBBF, as well. Since then, the Department of Energy has launched the Clean Energy Corps and plans to hire 1,000 employees.

The BBBF seeks “increased investments in climate smart agriculture” to reduce emissions on “roughly 130 million cropland acres per year, representing as many as 240,000 farms” through grants and loans. The Infrastructure Investment and Jobs Act did not address these proposed policies.

Other Proposals

The president’s call for increased funding for research and development and demonstration projects to foster innovation in energy technology has been one of a few areas that won bipartisan consensus. The Infrastructure Investment and Jobs Act includes funding for dozens of research and development programs focused on energy, climate, and transportation. It did not, however, include the funding to launch ARPA-C, a climate-dedicated research institution that would mirror ARPA-E and DARPA proposed by the administration.

The Biden Administration has focused on the reduction of methane emissions, the financial sector’s role in addressing climate change, and leveraging the federal government’s procurement power to increase sales of particular energy sources and technologies. In particular, the administration aims to reduce methane emissions from oil and natural gas fields. The president’s AJP calls for spending $16 billion to plug orphan oil and gas wells, and the Infrastructure Investment and Jobs Act included the program, which will issue grants to states.

The administration has also focused on the financial risks associated with climate change, for which the president issued an executive order in May. In addition, the Financial Stability Oversight Council (FSOC) released a report that provides recommendations without legal force to the financial system to assess climate-related risks. FSOC was formed following the housing market crash of 2008 to identify risks to the financial system.

In December, President Biden issued the Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability. The provisions of the EO attempt to leverage the government’s buying power in each of the sectors discussed. The EO directs the federal government to achieve:

(i) 100 percent carbon pollution-free electricity on a net annual basis by 2030, including 50 percent 24/7 carbon pollution-free electricity, as defined in section 603(a) of this order;

(ii) 100 percent zero-emission vehicle acquisitions by 2035, including 100 percent zero-emission light-duty vehicle acquisitions by 2027;(iii) a net-zero emissions building portfolio by 2045, including a 50 percent emissions reduction by 2032;

(iv) a 65 percent reduction in scope 1 and 2 greenhouse gas emissions, as defined by the Federal Greenhouse Gas Accounting and Reporting Guidance, from Federal operations by 2030 from 2008 levels
It also includes a few goals that do not include benchmarks, such as:

(v) net-zero emissions from Federal procurement, including a Buy Clean policy to promote use of construction materials with lower embodied emissions;

(vi) climate resilient infrastructure and operations; and

(vii) a climate- and sustainability-focused Federal workforce.

The EO is much like President Obama's Executive Order Planning for Federal Sustainability in the Next Decade, which was later revoked by President Trump's Executive Order Regarding Efficient Federal Operations. In the past, government attempts to "green" procurement and practices of federal agencies have seen little success. For example, federal building energy intensity has yet to meet the statutory requirement created by the Energy Independence and Security Act of 2007 to reduce energy intensity by 30 percent when compared to 2003.

Conclusion

Simply rejoining the Paris Climate Agreement and producing the United States' nationally determined contribution will do little to mitigate climate change. While the Biden Administration has addressed climate change through executive orders and regulations, these actions can easily be reversed by future administrations. Meanwhile, the administration's climate priorities have largely not been codified in law, beyond the extension of funding to existing environmental programs in the Infrastructure Investment and Jobs Act. It is clear that funding research and the development of innovative climate and energy technologies enjoys bipartisan support, but support for the president's other—and more substantial—policies to mitigate climate change has proved elusive.