

# POLICY BRIEF

**RECOMMENDATIONS  
FOR THE NEW  
ADMINISTRATION**

## **Climate Policy in 2021: An Opportunity for Bipartisan Action**

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*This brief is part of a series of policy recommendations for the administration of President Joe Biden. Focusing on a range of important issues facing the country, the briefs are intended to provide decision-makers with relevant and effective ideas for addressing domestic and foreign policy priorities. View the entire series at [www.bakerinstitute.org/recommendations-2021](http://www.bakerinstitute.org/recommendations-2021).*

Climate action offers a ripe opportunity for a closely divided federal government to negotiate robust bipartisan energy and environmental policy. The private sector is already moving to embrace environmental, social, and governance (ESG) agendas, with net-zero goals being announced across the energy landscape and beyond. A bipartisan legislative push that provides regulatory certainty for investors could lay the groundwork for significant progress on climate. The best-case scenario would see a roster of complimentary efforts led by Democratic majorities in the House and Senate working with Republican colleagues for broad constituent benefits. Done right, bipartisan cooperation could morph into comprehensive climate-focused legislation on the scale of the Clean Air Act.

President-elect Joe Biden made campaign pledges to strive for net-zero carbon emissions by 2050 and a carbon-free electric power sector by 2035. These goals hinge upon support for renewables, upgraded electric transmission

infrastructure, greater electrification and increased efficiency in different sectors, and increased research and development (R&D) funding for national labs and research universities.<sup>1</sup> All of this would be accompanied by the continued decline of fossil fuel employment led by dwindling coal use in power generation, with federal support for miners and oil industry workers and their communities.<sup>2</sup>

Not all of the items in Biden's plan will be supported across the aisle, or indeed, among all Democrats. But since the end goal is a net reduction in carbon emissions, it can be achieved along multiple paths. Recognizing this point offers potential for substantial gains. Indeed, several legislative pathways already have varying degrees of bipartisan support and each would play a role in reducing emissions. Many of these measures already appear in different forms of draft legislation and include incentives for carbon capture technologies, expanding R&D, creating more resilient renewable energy supply chains, increasing the use of nature-based solutions,



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and addressing greenhouse gas (GHG) emissions other than CO<sub>2</sub> (methane, nitrous oxides, and fluoride gases).

Of course, the Biden administration and its congressional allies can pursue some goals without the support of the substantial Republican minority. This would be unfortunate, however, because the president would be left to pursue a truncated climate agenda that would ultimately be less effective and durable, since it would engender active opposition within Republican-led states.

In reality, climate policies should not be a battleground. The fact that coal-state Sen. Joe Manchin (D-WV) is in a position to chair the Senate Energy Committee suggests the likelihood for a nuanced and complimentary approach. As the 2015 lifting of the U.S. ban on crude oil exports shows, compromise is possible.<sup>3</sup> Bipartisan climate policy can succeed if parties recognize merit in the myriad ways to reduce GHG emissions. Below, we present proposals that would fit such a bipartisan approach to carbon neutrality.

**It may be possible to capture an easy bipartisan win by pairing continued incentives for carbon capture with new incentives for wind, solar, and utility-scale batteries.**

## **BIPARTISAN CLIMATE ACTION PROPOSALS**

### **1. Prioritize the retention of the existing U.S. nuclear power fleet and aggressively support advanced reactor designs and modular technologies.**

The beleaguered nuclear power sector, the only dispatchable source of zero-carbon baseload power, requires immediate help to retain plants nearing the end of their operational lives. Nuclear power is currently too costly to be a favored low-carbon choice for new construction, but existing plants are a very low-cost source of carbon-free power. Advanced reactor designs and modular technologies hold promise for a lower-cost future for nuclear power, and they could be paired with battery storage to maximize capacity utilization.<sup>4</sup> With support from the Biden administration, a bipartisan Senate bill, such as the American Nuclear Infrastructure Act of 2020, could make a difference.<sup>5</sup>

### **2. Advance fiscal support for multiple low-carbon options.**

It may be possible to capture an easy bipartisan win by pairing continued incentives for carbon capture with new incentives for wind, solar, and utility-scale batteries. For example, extensions of the production tax credit for wind (expiring at the end of 2021)<sup>6</sup> and the investment tax credit for solar (reduced to 10% for commercial projects and phasing out by 2023 for residential projects)<sup>7</sup> can be complemented by expanding the 45Q tax credit for carbon capture. Further incentivizing offshore wind—including in the Gulf of Mexico where oil companies already operate—could also pay dividends for the 2035 goal of decarbonizing the power sector. And, given the importance of carbon capture technologies for decarbonizing industries that have few non-fossil options for process heat, such a suite of incentives could prove very effective.<sup>8</sup> Moreover, legislative support is already bipartisan.<sup>9</sup>

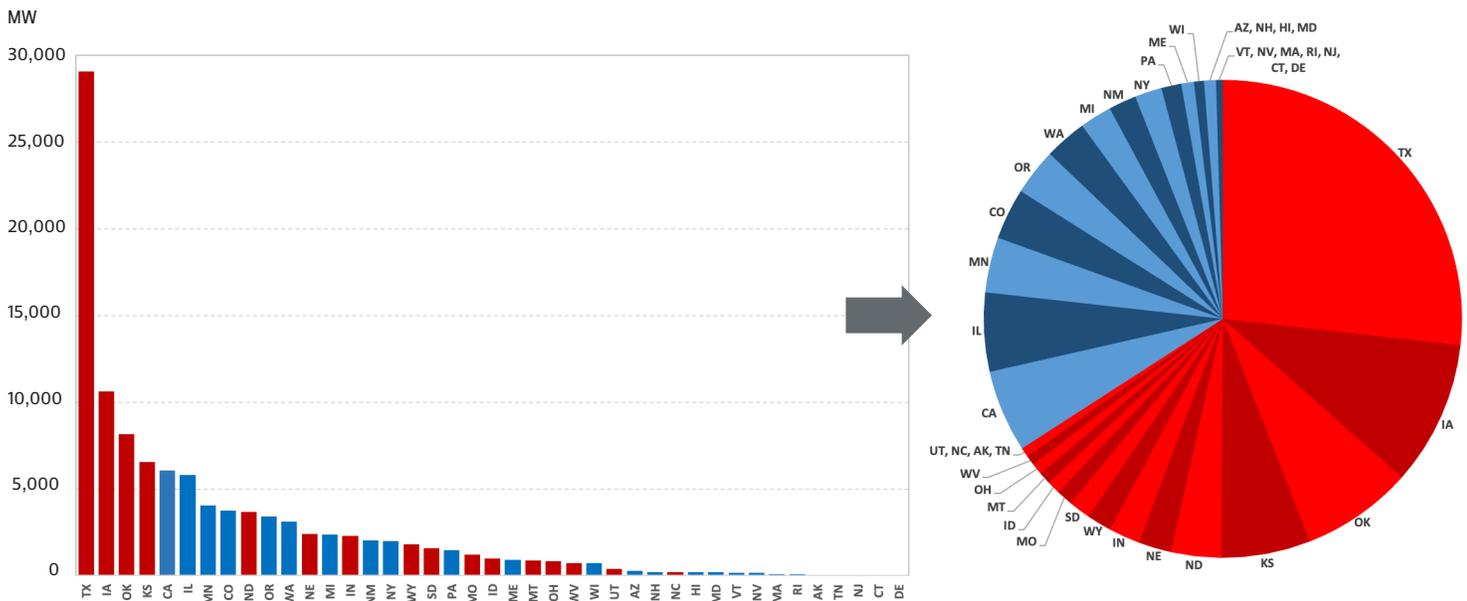
### **3. Address non-CO<sub>2</sub> greenhouse gases by explicitly regulating their reduction.**

Non-CO<sub>2</sub> GHGs accounted for about 20% of all GHG emissions in the U.S. in 2018. These gases include methane (10%), nitrous oxides (7%), and fluorinated gases (3%). While the sources of these GHGs are varied, with a few exceptions, their mitigation costs are low in comparison to CO<sub>2</sub>. Existing technologies can be deployed to address significant sources of each.

### **4. Expand existing U.S. Department of Energy programs to support demonstration of industrial scale hydrogen.**

Hydrogen has significant potential as an energy source. A market for hydrogen already exists for various industrial, refining, and chemical applications. But expanding the market to new uses—including energy storage—requires the creation of new color-coded value chains that can be supported by federal policy. Hydrogen is currently produced through steam methane reformation (so-called grey hydrogen), which results in CO<sub>2</sub> emissions. Capturing

**FIGURE 1 — INSTALLED OPERATING WIND CAPACITY BY STATE (JULY 2020)**



**SOURCE** Energy Information Administration, Preliminary Monthly Electric Generator Inventory, November 24, 2020, <https://www.eia.gov/electricity/data/eia860M/>.

the emissions in the process results in carbon-free hydrogen (blue H<sub>2</sub>). It is also possible to produce carbon-free hydrogen using electrolysis powered by renewables and biochemical conversion of algae (green H<sub>2</sub>). Finally, there are other colors in the evolving hydrogen palette (yellow for biomass and turquoise for methane pyrolysis), and each, except grey, employs methods to eliminate CO<sub>2</sub>. Each of these technologies is at a different maturity level. Demonstration at scale is required to push all to commercial reality.

**5. Support legislation to reward ecosystem services and advance nature-based solutions for carbon sequestration.**

Natural solutions utilize photosynthesis, nature’s own carbon sequestration technology, to provide potentially huge levels of carbon removal at low cost. These include enhancing natural carbon sinks through forestry, land management practices, and through the use of soil amendments.<sup>10</sup> The bipartisan Growing Climate Solutions Act, introduced in June 2020, would help farmers and other landowners monetize carbon storage capacity on their lands.<sup>11</sup>

**6. Reintroduce a phased commitment to improve energy efficiency standards in transportation and building codes.**

Efficiency is a virtual source of supply and is proven to reduce environmental impacts of energy services in all economic sectors. Efficiency standards in the automotive sector will advance efforts to achieve net carbon neutrality in transportation, and augmenting building efficiencies through weatherization programs and smart technologies might prove a reasonable part of a bipartisan climate bill.<sup>12</sup>

**7. Fund the development of energy transportation infrastructures, such as transmission lines and hydrogen and CO<sub>2</sub> pipelines.**

Transmission capabilities are vital to the development of product value chains. If transmission cannot be developed, investment both upstream and downstream of a pipeline or wire will not be forthcoming.

### 8. Make a long-term commitment to expanded research and development of carbon-neutral (or carbon-negative) technologies.

R&D plays a vital role for all industries. A bipartisan mandate to expand appropriation to the U.S. Department of Energy's various national laboratories, as well as support for energy-related work at research universities, can pave the way for long-term sustained innovation that is necessary to advance carbon-neutral goals in a commercially sustainable way.

### 9. Seek legislative approaches to explicitly price CO<sub>2</sub>.

Transparent and predictable carbon pricing would level the playing field for competition among fuels, technologies, and approaches (i.e., carbon offsets vs. clean energy supplies vs. efficiency standards). A carbon price would steer investment and consumption toward lower-carbon energy sources. Carbon revenues could either be rebated to households or, perhaps, used to provide a social safety net for economic victims of climate policy. Several relevant bills have been introduced: the Energy Innovation and Carbon Dividend Act of 2019 (with 82 co-sponsors, all but one who were Democrats),<sup>13</sup> the bipartisan Stemming Warming and Augmenting Pay (SWAP) Act,<sup>14</sup> and the Climate Action Rebate Act of 2019.<sup>15</sup>

## CONCLUSION

The outcome of the 2020 elections provides a real opportunity to create durable climate policy. Many of the clean energy options typically identified with Democrats are most prominent in Republican-dominated parts of the country (see Figure 1). Installed operating wind capacity as of July 2020 in the U.S. was 108,648 megawatts (MW). In states that voted for Donald Trump, the total was 71,570 MW compared with 37,078 MW in those that voted for Biden.<sup>16</sup> While Figure 1 does not correct for the amount of land for siting and available wind resources across each state, it shows that support for wind generation is agnostic to political orientation. We believe

support for climate action can be similarly crafted, for more universal appeal. So, while a Democrat-led but closely divided Congress could obstruct some climate ambitions unveiled in Biden's campaign, there are enough potential pathways for major GHG reductions that should receive backing from both sides of the political divide.

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