



A NEW COURSE FOR CLIMATE IN THE US?

By Alex Dewar, Tom Baker, and Cornelius Pieper

OVER THE PAST FOUR years, the federal government and state and local governments in the US have sharply diverged on climate change policy. While the Trump administration has pursued broad energy and environmental regulatory rollbacks, many state and local governments have adopted wide-ranging climate policies. Now that Joe Biden has won the presidential election, the federal government is likely to shift decisively on climate policy.

During the 2020 presidential campaign, President-elect Biden developed a comprehensive and far-reaching climate plan, including targets for net-zero emissions by 2050, carbon-free power by 2035, and \$2 trillion in spending to achieve these climate goals. These commitments came in response to growing public concern about climate change and the need to address climate change as a higher policy priority. But with Biden in the White House and either a split Congress or a very narrow Democratic voting majority in the Senate, how much of that agenda can the Biden administration accomplish?

We believe that US companies should prepare for a rapid acceleration of climate action across the federal government, and

that businesses working in the most heavily affected sectors—including energy, machinery manufacturing, and automotive—must prepare now to capitalize on the new opportunities that will arise. Similarly, investors and bankers should accelerate efforts to get ahead of the issue. Although prospects for comprehensive federal climate legislation are limited, rapid change in federal climate policy is likely to occur through a combination of new federal spending, incentives, and regulatory measures. Compounding these developments are ongoing, parallel shifts in investor and consumer sentiment favoring clear action on climate change. Companies that position themselves to benefit from the new spending, incentives, and shifting profit pools—while realigning their strategy to support a low-carbon economy—will reap significant rewards.

New Government Spending and Incentives

President-elect Biden has already committed to rejoining the Paris Agreement on day one of his administration. A critical next step will be to quickly find areas of alignment with the new Congress on climate issues. Crucially, the Biden campaign and Democrats in Congress were already

on the same page regarding most aspects of climate policy, particularly proposals for new federal spending and incentives to promote the adoption of low-carbon technologies. (See Exhibit 1.)

Federal spending and incentives for energy innovation have won bipartisan approval in the past. Already, the value of existing renewable energy tax credits amounts to more than \$8 billion per year—incentives that have a significant impact on US energy markets. In 2020, with Republican support, the Democratic-majority House of Representatives approved \$135 billion in new clean energy authorizations; the Senate has been considering a smaller, bipartisan package for \$24 billion. Both parties have also favored the expansion of tax credits for clean energy production and adoption. As Congress considers further COVID-19 stimulus spending and infrastructure investments, new spending and tax incentive authorizations for clean energy and low-carbon technologies may feature prominently.

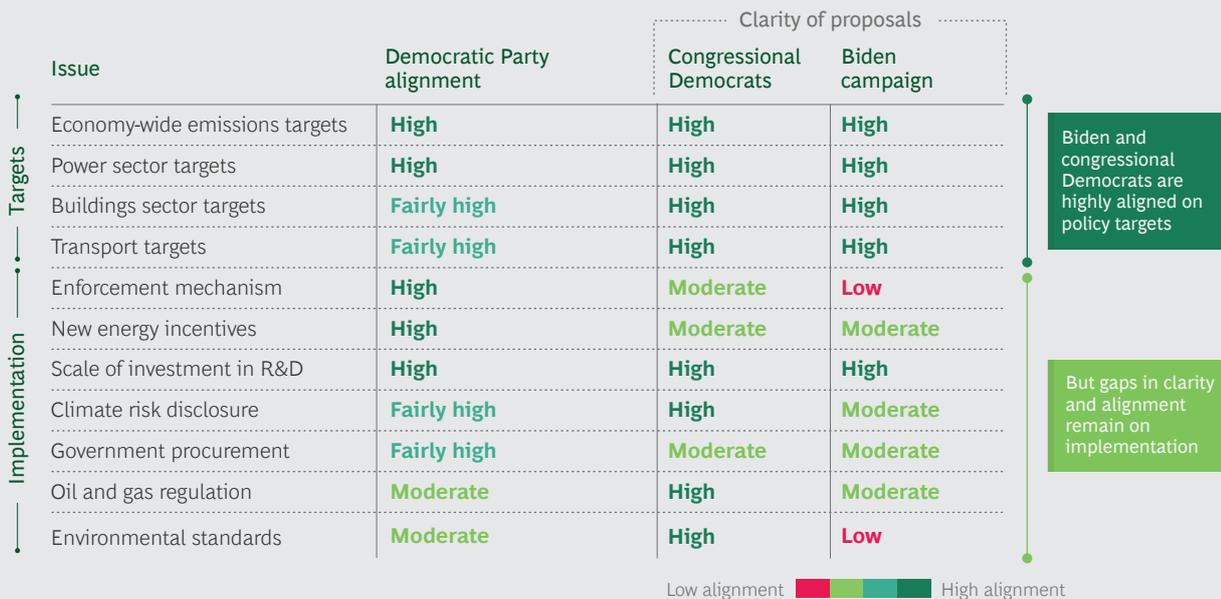
Independent of Congressional action, the Biden administration will have latitude to

create new economic incentives for decarbonization. The Department of Energy and other federal agencies already have tens of billions of dollars of existing loan guarantee authorizations that they can use to channel additional, low-cost capital toward energy and climate innovation. In addition, federal procurement can serve as a powerful lever to create new markets for low-carbon products, such as electric vehicles (EVs), renewable power, hydrogen, and carbon-neutral or carbon-negative products.

New Avenues for Federal Regulation

Although the Biden administration and Congress may find some common ground on spending and incentives, prospects for broad new federal regulatory authority or market-based mechanisms, such as carbon taxation or cap-and-trade programs, appear limited. In recent years, Democrats have steadily moved toward regulatory-driven policy on climate, despite some significant differences within the party. Meanwhile, Republican support for market-based mechanisms such as carbon pricing has diminished. These trends will make it chal-

EXHIBIT 1 | Democrats Are Aligned on Targets for Climate Policy, but Uncertainty Remains About Implementation Mechanisms



Sources: Biden for President; House Select Committee on the Climate Crisis; Senate Democrats' Special Committee on the Climate Crisis; BCG analysis.

lenging for economy-wide, or even sector-specific, climate policies to gain Congressional approval.

Without Congressional support, the Biden administration will have to rely on existing statutory authority to pursue its climate goals. But given the Trump administration’s regulatory rollbacks and a more conservative federal court system that is skeptical of executive regulatory authority, the Biden administration will need to find new approaches.

One avenue that the Biden administration can pursue is the use of federal leasing and permitting authority. Federal agencies can accelerate permitting, open new federal lands to leasing, and use federal rights-of-way to enable the development of renewable power and transmission infrastructure. They can also use this authority to develop infrastructure for carbon capture, utilization, and storage (CCUS) and to adopt carbon removal technologies. As for oil and gas production, the Biden campaign already committed to banning new fossil fuel leases on federal lands—and his administration can go considerably further by limiting new drilling permits, delaying or

rejecting federal permits for fossil fuel infrastructure, and regulating methane emissions and flaring activity. Such steps could limit potential US oil production by up to 20% and natural gas production by 5% by 2024. (See Exhibit 2.)

The Biden administration can also use financial regulatory authority to advance its climate goals. Steps mandating corporate climate risk disclosure and adopting climate risk management in bank supervision can help shift incentives for investment toward low-carbon activities. The Biden administration can go well beyond that by also integrating climate risk evaluation into a wide range of processes conducted by federal financial authorities not traditionally associated with climate policy, such as the Federal Reserve, the Securities and Exchange Commission, or the Federal Trade Commission.

Finally, although the Biden administration probably won’t be able to revive Obama-era regulations in their prior form that the Trump administration or the federal courts overturned, it can try to make novel use of existing statutory authority to achieve its goals. For example, it might attempt to use

EXHIBIT 2 | Executive Actions Could Influence US Oil and Gas Production

Three potential levers for federal executive action affecting the oil and gas industry

Federal leasing and drilling permit ban

- Biden campaign committed to no new federal leases for oil and gas
- Incoming administration could deny new drilling permits on existing federal oil and gas leases

Restrictions on permits for interstate pipelines

- Federal permits can be delayed or rejected by the Army Corps of Engineers, Federal Energy Regulatory Commission, and other agencies

New methane emissions and flaring rules

- Biden administration could introduce broader or more extensive regulations on methane emissions, affecting existing production wells
- New regulatory authority could be used to limit flaring

The impact of maximum regulation could be up to 20% on oil production and up to 5% on natural gas production

Estimated US oil production at year’s end (mmb/d)



Estimated US natural gas production at year’s end (mmb/d)²



Sources: S&P Global; Kirkland & Ellis; US EIA; RFF; press reports; BCG analysis.

Note: mmb/d = million barrels of oil equivalent per day; bcf/d = billion cubic feet per day.

¹Scenario assumes that the Biden administration will implement a federal drilling and leasing ban, freeze new interstate pipelines, and levy a methane emissions and flaring reduction regulation on all new and existing oil and gas wells within the first six months of 2021.

²16.5 mmb/d = 99 bcf/d; 15.6 mmb/d = 94 bcf/d.

Section 115 of the Clean Air Act to mandate greenhouse gas emissions controls on the basis of transboundary commitments. The success of such regulatory measures is uncertain, but the administration will likely pursue new approaches in order to maximize its chances of prevailing.

How to Prepare for a New Course on Climate

Companies need to understand the likely effects of the new federal climate agenda on their business—and recognize that increased federal spending on clean energy and climate resilience can translate into tangible business opportunities. Every dollar invested in a green recovery is a fresh source of revenue for US companies. New incentives and regulations can also shift profit pools in material ways: from internal combustion vehicles to EVs, from natural gas toward electrification in buildings, and from fossil-fuel-based power generation to renewables.

At the same time, regulatory shifts and new federal action in specific sectors will create challenges for companies with carbon-intensive operations. All companies must manage increased uncertainty in this environment, but companies in some of the most heavily affected sectors can take specific actions to prepare for coming disruptions. We see potential for three sectors—energy, machinery manufacturing, and automotive—to be impacted most directly, given the likely focus on spending, incentives, and targeted regulation.

ENERGY INDUSTRY

All companies in the power, utilities, and oil and gas sectors have already had to deal with profound change related to the ongoing energy transition. Going forward, the pace of change is likely to accelerate. Affected companies can take several steps to get ahead of and capitalize on the rapid pace of change:

- **Develop plans to decarbonize.** Most US utilities have already set ambitious climate targets, and a number of oil and gas companies are beginning to as well.

Now is the time to accelerate planning for a lower carbon future. Investing in new technologies and digitization to reduce emissions intensity can help companies get ahead of the curve.

- **Invest in energy innovation.** Companies should identify new sources of capital and incentives to accelerate deployment of renewable power, battery storage, electrification, and biofuels. At the same time, they should accelerate investment in the emerging technologies that receive bipartisan support, including CCUS and hydrogen.
- **Shift existing portfolios and assets.** Companies can take steps now to proactively access new growth markets while minimizing the risk of economically disadvantaged or potentially stranded assets. For power producers, shifting their generation mix will be critical; for oil and gas producers, managing the greenhouse gas intensity of their producing assets can be a valuable lever going forward.

MACHINERY MANUFACTURERS

Machinery manufacturers are already under pressure to decarbonize their operations and supply chains. At the same time, they can benefit substantially from the transition to green technologies. BCG has identified four specific actions that companies can take to reduce the adverse effects of their operations on the climate while capturing a range of new business opportunities. US manufacturers, in particular, can focus on the following:

- **Uncover new ways to participate in low-carbon markets.** Our analysis indicates that the global business opportunity available to low-carbon machinery makers can add up to \$12 trillion through 2050. How new opportunities emerge in the US, however, will depend on where the federal government directs incentives and how companies leverage incentive structures.
- **Manage carbon intensity of the supply chain.** With divergent regula-

tions in force across states and at the federal level—to say nothing of international markets—managing products’ life-cycle carbon footprint will become increasingly critical.

- **Bolster operational risk management practices.** Industry leaders are improving their assessments of specific regulatory or market risks in different geographies, and they are incorporating these capabilities into their supply chains and into certain pricing decisions such as extended warranties and service contract guarantees.

AUTOMOTIVE

Automotive companies should seize opportunities that arise in connection with near-term incentives for EVs, while preparing for the eventual arrival of stricter emissions standards, by taking the following actions:

- **Be ready to respond to accelerated EV market growth.** The government is likely to extend current federal tax credits for EV buyers, and congressional Democrats have proposed to increase the cap for OEMs. These steps would make clean-energy vehicles economically attractive for a broader set of buyers.
- **Capitalize on federal support for EV adoption and infrastructure.** The Biden campaign and congressional

Democrats have committed to making the federal fleet (about 600,000 vehicles) 100% electric, leveraging US government purchasing power to improve battery-EV economics. A future infrastructure bill may include proposals for the expansion of EV charging stations.

- **Expect a stricter regulatory environment.** Today’s split system, in which California’s standards under Section 177 of the Clean Air Act differ from federal standards, will become less divergent, reducing complexity for OEMs. Stronger federal emissions standards will extend through 2030, rather than 2026, putting the industry back on track to meet tighter restrictions as approved during the Obama administration.

PRESIDENT-ELECT BIDEN CAMPAIGNED on the most ambitious climate platform of any presidential candidate in history—and he has indicated that his administration will move quickly to pursue that policy. A transition to a low-carbon economy can have enormous benefits for US businesses, creating thousands of jobs across the country while positioning the US to be a driving force and innovation leader both domestically and abroad. Companies that are prepared to participate in the green recovery can reap substantial rewards.

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