

Assessing Themes in the Biden Energy and Environment Platform

Nicolas D. Loris

KEY TAKEAWAYS

Americans want abundant access to reliable, affordable energy that improves their quality of life, fuels the economy, and protects the environment.

The Biden energy plan consists of mandates, subsidies, and regulations that pave the way for higher prices and more cronyism with minimal environmental benefit.

Eliminating subsidies, empowering choice, and removing barriers to competition will deliver more economic and environmental benefits than a top-down approach.

Democratic nominee and former Vice President Joe Biden released his policy vision on energy and environmental issues. A central tenet of the plan is more government intervention into energy and transportation markets. On one hand, there are proposals to subsidize and mandate preferred energy sources and technologies. On the other, the plan would prohibit and regulate the development of other natural resources. Combined, these policies would harm consumers multiple times over through higher energy prices—and lead to more cronyism and corporate welfare in energy markets. Other proposals, however, could open the door for more innovation and competition in energy markets, which could generate both economic and environmental benefits. This *Backgrounder* assesses the major policy themes in Mr. Biden's energy and environment platform.

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A New Green Stimulus

In July, Democratic nominee and former Vice President Joe Biden unveiled a more detailed energy and climate plan. Initially calling for \$1.7 trillion in spending over 10 years to achieve net-zero greenhouse-gas emissions (GHG) by 2050, Mr. Biden is now proposing to spend \$2 trillion over four years to accomplish the same goal.¹ In addition to the subsidies, the plan would require a heavy dose of mandates and regulations to achieve such an aggressive emissions target and his goal of 100 percent emissions-free electricity by 2035. In fact, Mr. Biden's policy site says that "the Green New Deal is a crucial framework for meeting the climate challenges we face."²

Green New Deal-like policies would give the government far more control over the energy economy—and strip away choices that should be left to consumers. These policies would be harmful for taxpayers, ratepayers, families, and businesses across the country. Higher prices for goods and services would destroy far more jobs than any subsidized programs would create. In terms of climate effects, any unilateral reduction in emissions would barely affect global surface temperatures or sea levels.

While incomplete on details, the plan does offer some potential opportunities for bipartisan policy reform that could deliver meaningful economic and environmental benefits. This paper examines many of the major themes presented in Mr. Biden's energy platform to measure how they would impact the economy and environment.³

Topline by the Numbers

Mr. Biden wants to achieve a carbon-dioxide (CO₂) emissions-free power sector in 15 years and economy-wide net-zero emissions in 30 years. To force a transition away from conventional fuels, the campaign proposes to spend \$2 trillion over four years. That spending equates to roughly *\$1.37 billion per day* to subsidize politically preferred technologies—everything from renewable power and electric vehicles to energy-efficiency upgrades in buildings.

Higher taxes and more government spending would likely be necessary to fund these programs. Another potential revenue source put forth by the campaign is a CO₂ tariff on imported goods. More specifically, a Biden Administration would "impose carbon adjustment fees or quotas on carbon-intensive goods from countries that are failing to meet their climate and environmental obligations."⁴

What This Means: More Subsidies and Regulations. A government-mandated shift away from conventional fuels toward 100 percent emissions-free electricity would require a massive overhaul of how Americans produce and consume energy. In 2019, CO₂-free power supplied 37 percent of the nation's electricity (wind and solar supplied 9 percent).⁵ Conventional sources of energy generate more than half the country's electricity because they are abundant, affordable, and reliable. With respect to total energy use, coal, oil, and natural gas supply about 80 percent of the world's energy needs.⁶

That is not to suggest it will always be this way. Market forces have changed energy markets over time as prices, technological innovation, and consumer preferences have changed. In recent years, natural gas has overtaken coal as the largest source of electricity, generating economic and environmental benefits.⁷ The cost of wind and solar are declining, and proponents argue they are cost-competitive without subsidies.⁸ Unsurprisingly, the same proponents still lobby for these subsidies (many initially crafted as temporary) to be expanded.

However, achieving a 100 percent emissions-free power sector in 15 years would require a combination of stringent, costly regulations on conventional fuels. Shutting otherwise financially viable power plants, pipelines, and other infrastructure—not to mention keeping the actual resources in the ground—would result in potentially hundreds of billions of dollars in stranded assets. Such a dramatic shift away from affordable, reliable power sources would result in higher electric bills for households and businesses, resulting in higher costs for food, clothes, health care, and all the other goods and services consumers routinely buy.

Taxpayer-funded subsidies would also be necessary to achieve 100 percent emissions-free electricity in such a time frame. More government spending would result in more cronyism and corporate welfare as politicians steer investment choices to politically enticing projects. Some projects would likely fail, squandering taxpayer dollars. Many projects would inevitably succeed, too, but that merely suggests that government spending will have offset private money that would have been invested in the project (often by large companies with substantial market capitalization rates).⁹

If emissions-free energy sources, whether renewable, nuclear, or hydropower, are cost-competitive, they do not need subsidies or costly, unwarranted regulation of their competitors to increase their share of the country's electricity generation. Instead, such special treatment from Washington only prolongs a dependency on government, undermining the long-term competitiveness of the energy resource or technology.

Though often promoted this way, neither the regulations nor the subsidies are net job creators. Regulations force businesses to spend money that could have otherwise been spent elsewhere in the economy for more productive use. Similarly, subsidies have an opportunity cost by dictating the flow of labor and capital that could have been invested more productively elsewhere in the market. Instead, higher energy prices shrink production and consumption, resulting in net job losses.

Furthermore, given the complex nature of supply chains, the dishonesty of emissions reporting from some countries, and political favoritism for companies across the world, a CO₂ tariff would be costly, bureaucratic, and likely to result in retaliatory action from other governments.¹⁰ Whether or not a carbon tariff is legally permissible under the World Trade Organization may depend on how it is structured.¹¹ Importantly, because the U.S. accounts for only 15 percent of global GHG emissions, domestic action to achieve a unilateral net-zero GHG target would be climatically ineffective.¹²

Environmental Considerations. In addition to the lack of climate benefits, it is important to remember that alternative energy sources require mining and manufacturing, and can produce their own waste streams. There are environmental considerations to take into account when disposing of lithium-ion batteries and solar panels, or even wind turbine blades that are difficult and expensive to transport and crush at landfills. Massive land-use changes would also be required to expand renewable power. American Enterprise Institute senior researcher Benjamin Zycher estimates that land use necessary to meet a 100 percent renewable target would require 115 million acres, which is 15 percent larger than the land area of California.¹³ These challenges are not themselves a reason to forego renewable power, but rather illustrate the importance of setting objective, transparent public health and safety standards that allow all energy sources to compete in the market.

Policies that prohibit conventional energy development in the U.S. could very well make the planet worse off. Limits on coal, oil, and natural gas production in the United States will not stop the global consumption of these natural resources. Production (and jobs) would likely shift to other countries in which environmental and safety standards are not as rigorous. Even with attempts to offset the outsourcing of pollution with a carbon tariff, the likely result would be higher levels of pollution and greenhouse-gas emissions.

The Policy Themes

The energy and environment plan is comprehensive in its range of policy initiatives, but lacks detail on the specifics of how those initiatives would be implemented. Many of the policy goals are a microcosm of the topline themes of restricted access to an abundance of natural resources and substantial government intervention with subsidies, regulations, and mandates. Other ideas, if proposed and implemented correctly, offer a window of opportunity to drive innovation and move economic and environmental progress forward. Outside the infrastructure and agriculture proposals, some of the major themes of the energy and environment plan include:

Blocking Access to Resource Development and Ramping Up Regulations for Oil and Natural Gas. The former Vice President's proposal calls for banning new oil and gas exploration permits on federal lands and prohibiting exploration and production in the Arctic National Wildlife Refuge and offshore in the Arctic.¹⁴ The platform also calls for implementing methane regulations and charging a climate fee through higher royalty payments on new and existing oil and gas operations.

According to the campaign website, a Biden Administration would require "any federal permitting decision to consider the effects of greenhouse gas emissions and climate change."¹⁵ In order to achieve the net-zero emissions target, Mr. Biden would impose a legally binding enforcement mechanism to reduce CO₂ and other GHG emissions, though it is unclear what mechanism would be.¹⁶

What This Means: Higher Prices and Lost Opportunities, Particularly for Western States and Alaska. The proposal wisely omits a call for a ban on hydraulic fracturing, a process that has been critical to job creation and safely delivering affordable, reliable energy to families and businesses while reducing pollution and CO₂ emissions.¹⁷ However, blocking energy development on federal lands and increasing regulations on existing wells would increase costs and strip opportunities away from businesses for minimal environmental benefit. Western states, Gulf Coast states, and Alaska, who have long viewed energy development as an integral part of their states' economy and budget, would suffer.

Furthermore, the proposal would ignore the guiding principles of multi-use land under the Federal Land Policy and Management Act. Federal lands managed by the Department of the Interior are extensive and diverse, with national park land making up only a small fraction. Ranchers, farmers, tourists, hunters, and other individuals and groups have an interest in how the federal agencies manage federal land and waters.

Additionally, no single project requiring a federal permitting review of its cumulative effects would alter the climate in a meaningful way.¹⁸ Instead, considering GHGs would be unnecessarily costly and time-consuming and would be used as another obstacle to block or delay projects in years of red tape and litigation. Including such analysis would likely slow the development of many of the emissions-free energy projects, including new transmission lines that the Biden platform supports.

Imposing Electric Vehicle Subsidies, Cash-for-Clunkers, and Higher Fuel-Economy Mandates. The proposal calls for restoring the \$7,500 federal electric vehicle tax credit, working with states to deploy half a million electric vehicle (EV) charging stations, and restoring a cash-for-clunkers rebate program that would “swap old, less-efficient vehicles for these newer American vehicles built from materials and parts sourced in the United States.”¹⁹

Biden’s proposal attempts to electrify the transportation sector, subsidize high-speed rail, and ensure that all buses are American-built and have zero emissions by 2030. Furthermore, his platform proposes a more stringent fuel-economy mandate than the Obama Administration’s 54.5 miles-per-gallon proposed target for model year 2025. The Trump Administration’s revision proposes a 1.5 percent increase in fuel economy through model year 2026, which would attain an estimated 40 miles per gallon.²⁰

What This Means: Mandates Affecting Vehicle Markets and Consumer Choice. Restoration of the full EV tax credit would extend a subsidy that has accrued to wealthy individuals. According to research from the University of California at Berkeley, 90 percent of these tax credits accrue to America’s top income quintile.²¹ A Congressional Research Service report found that 78 percent of the tax credit’s recipients had an adjusted gross income of \$100,000 per year or more.²² The push to extend this tax credit, initially designed to phase out per vehicle manufacturer, delegitimizes this initial intent as well as the purported infant-industry argument to get a nascent technology off the ground. As is generally the case, industries become dependent on the preferential treatment and supposedly “temporary” credits—and instead become permanent fixtures in the tax code. Furthermore, federal subsidies to expand EV charging stations would duplicate what states, localities, and utilities are already doing.

The cash-for-clunkers program was tried in 2009 in the Obama Administration. Economists concluded that it had *no* meaningful impact on vehicle purchases or the overall economy. Rather, the subsidy resulted in consumers making purchases a few months earlier than they otherwise would have, and at a high emissions abatement cost.²³ A 2017 study in the American

Economic Journal found that half of consumers who used the rebate would have purchased a vehicle during the two-month window the program was open; for the rest, the rebate accelerated car purchases up to eight months.

Importantly, because the program intended to incentivize fuel-efficient vehicle purchases, there were restrictions on which vehicles were eligible. The same authors estimate that, because fuel-efficient vehicles are cheaper, the program steered consumers to vehicles that cost \$7,600 less (on average) than other gas guzzlers.²⁴ As a result, the program reduced total spending on vehicles by as much as \$5 billion.²⁵

The 2009 program called for the destruction of traded-in vehicles, which raised fears that it would adversely affect the used car market, but because many of these vehicles were at the end of use, the destruction did not meaningfully impact used car prices.²⁶ Even if this cash-for-clunkers program improved on the deficiencies of the previous program, it would *still* have the problematic effect of the government nudging consumers into buying certain vehicles.²⁷

Similarly, fuel-economy mandates override consumer's preferences. If consumers value saving money on gasoline over other vehicle characteristics, they will choose to purchase more fuel-efficient cars. In fact, a 2016 *Journal of Public Economics* study examined consumers' willingness to pay for fuel efficiency based on changes in gas prices and found that consumers fully value fuel economy the way that they should.²⁸ However, consumers also value other vehicle attributes such as weight, engine power, size, and safety. When the federal government imposes more stringent fuel-economy mandates, regulators override these preferences and skew investment decisions that automakers must make in order to comply with the mandate. Forcing automakers to install various fuel-saving technologies is costly. Mandates that drive up the sticker price by thousands of dollars per vehicle would price buyers out of the market. This has the consequence of driving up demand for used cars, increasing their price as well.²⁹

Electric vehicles, cash for clunkers, and fuel-economy mandates all have the same underlying problem: The federal government is using its authority to prod consumers to use the technology or fuel source of its choice. Each time the government presses its thumbs on the scales of production and consumption, it infringes on the rights of consumers. The market does a far better job of meeting car buyers' needs. Both the subsidies and fuel-economy mandates are inefficient ways to address environmental concerns.

Commercializing Clean-Energy Innovation and Government Procurement. Through its offices of applied science and loan programs, the Energy Department has gone far beyond basic research to spend taxpayer

dollars to commercialize specific energy technologies for conventional, nuclear, and renewable fuels. Throughout the former Vice President's energy and climate platform is the pursuit of a "historic investment in clean energy innovation" that would significantly ramp up that spending.³⁰ In this context, "investment" equates to government spending of \$100 billion *per year* on alternative energy sources and electric vehicles through federal procurement, pumping more money into the commercialization of emissions-free technologies, and creating an Advanced Research Projects Agency on Climate to meet Mr. Biden's clean-electricity and net-zero emissions targets.

What This Means: Opportunities for Innovation, but also for Cronyism. There is no need to saddle Americans with higher levels of debt when the electricity market and transportation-fuels market are significant financial opportunities for the most innovative, cost-competitive companies to capture.³¹ Markets meet the needs of a wide variety of consumers' preferences—and energy should be no different, whether those preferences are affordability, reliability, or environmental. Instead of relying on price signals and market demand, companies rely in part on the government to push their technologies forward. When the government attempts to drive technological commercialization, it circumvents the competitive process that properly assigns risk and reward in an open market.

That is not to suggest, however, that government research and government procurement (for both the Department of Defense [DOD] and non-military government energy use) have no value to alternative energy technologies, to innovation broadly, or to generating environmental benefits. However, they must be carried out with the appropriate responsibilities of the federal government and taxpayers in mind.

For instance, using the procurement process to force the military to purchase more expensive renewable power or biofuels for no meaningful national security benefit would leave fewer resources to carry out its mission. On the other hand, alternative technologies provide advantages that enhance mission capabilities. Lighter, more efficient batteries lengthen the duration of a foot soldier's mission and reduce the weight of a soldier's backpack. Solar photovoltaics can also lighten a soldier's load and extend the travel distance of a drone. Policymakers should ensure that spending on alternative technologies at the DOD is primarily mission driven and opens channels to government research, so that innovators can turn these technological endeavors into economically viable products.³²

The same can be said for basic scientific research in America's national laboratories.³³ An appropriate and productive role for America's national

lab system is to conduct the basic research to meet government needs that the private sector would not undertake and allow the private sector, using private funds, to tap into that research and commercialize it when there is an attractive opportunity to do so. Policymakers should identify and eliminate bureaucratic obstacles, inefficiencies, and duplication within the national labs that slow opportunities for technology transfer and commercialization.

Furthermore, government spending on energy efficiency, alternative energy sources, or electric vehicles for other government agencies should only be carried out if these programs save energy and save taxpayers money. There should be a demonstrated federal government purpose other than advancing a specific technology, and these programs should be implemented only with proper transparency, oversight, and demonstrated energy savings verification.

Although a 100 percent clean-electricity standard and government intervention into the commercialization process is misguided, the platform does recognize one important obstacle to achieving that goal: red tape. The plan proposes “cut red-tape to promote faster and easier permitting” for next-generation energy transmission lines and distribution.³⁴ This is a welcome commitment: Lengthy permitting time frames, frivolous lawsuits, and NIMBYism³⁵ have plagued the construction of all types of energy (and public works) projects.

However, other parts of the plan would add layers of red tape (such as climate consideration in federal permitting), demonstrating inconsistency and more preference for some projects over others. Policymakers should establish a predictable permitting process that ensures projects can be built safely and on time for *all* energy and infrastructure permits, whether that project is a natural gas pipeline or a solar array.

Offering Energy Subsidies Through Government-Subsidized Workforce Training Programs and Unionized Green Jobs. Another major part of the Biden platform would build on the green stimulus passed as part of the American Recovery and Reinvestment Act of 2009. The plan promises millions of “green” jobs across a wide range of sectors, including decarbonized manufacturing for steel, cement, and infrastructure, and would double down on government-subsidized workforce training programs. The plan also has a significant energy efficiency component, calling for the weatherization of two million homes, offices, schools, and warehouses. It would also provide cash rebates and low-cost financing to electrify home appliances (away from natural gas) and to install products such as energy-efficient windows.³⁶

What This Means: Ineffectual Training and Unnecessary Government Intervention in Labor Markets. Homes, offices, and storefronts make up 40 percent of the country’s total energy use, and efficiency gains can save significant money on utility bills. Therefore, it is often said that families and businesses are leaving “free money” on the table when they forego investing in energy-efficiency upgrades.³⁷ If that is the case, however, homeowners and business owners can make those investments with their own money rather than having taxpayers cover a portion of the up-front cost.

There exists a market that provides that information for consumers to make those decisions. The private sector conducts energy audits that identify how homes and businesses could save energy—and those audits continually improve. In fact, newer technologies are using artificial intelligence to identify the least energy-efficient buildings in a city, which could extend to office buildings and homes across the country.³⁸ The analytics identify why houses use as much energy as they do, from building envelopes and heating systems, all the way down to household appliances. Better information will empower home and business owners to make investment decisions and realize energy savings when they believe it is the best use of their money.

However, the mere fact that energy savings opportunities exist does not necessarily mean consumers or businesses are acting irrationally when they choose not to invest in energy efficiency. Families and businesses have other preferences and budget constraints. Instead of choosing to install energy-efficient windows, a family may want to spend that money on a vacation or on clothes for their children. A manufacturer may be able to install a new piece of equipment that saves energy, but chooses not to because its employees are familiar with the equipment they already have.

Moreover, it is not the role of government to provide subsidized workforce training programs for these jobs. The market will expand and contract as necessary to determine the number of engineers, architects, welders, construction workers, and educational programs to train people for this work. The government, on the other hand, has a poor track record of trying to “create” self-sustaining markets for green jobs and energy efficiency.

When the government spent billions of dollars in the stimulus bill to make homes more energy efficient, there were problems of poor workmanship, uncompetitive bidding, poor recordkeeping, and companies overcharging for products. A 2012 Department of Labor Office of Inspector General report found that program fell well short of its retention goal. Only 16 percent of participants remained employed longer than six months. Moreover, much of the training was delivered to workers that already had

jobs—and was not necessary for them to perform their jobs. The same report also found that more than 20 percent of training certificates went to workers who had only one day of training, and 47 percent of trainees received five or fewer days of training.

Finding Opportunities for Economic and Environmental Progress.

Several proposals in the Biden platform could potentially result in beneficial economic and environmental outcomes. For instance, the plan calls for eliminating fossil-fuel subsidies, reducing environmental liabilities by addressing abandoned mines, tackling access to rare-earth minerals, and making America a leader on clean-energy exports. The plan also calls for investing in more climate-resilient infrastructure.

What This Means: Potential for Domestic Resource Development and Reducing Environmental Liabilities but Also for Protectionism and Preferential Treatment.

While the goals of these proposals are well-intentioned, they either lack specificity, lack consistency across all energy sources, or fail to take the right approach to achieve the desired outcome. Policymakers should eliminate fossil-fuel subsidies *and* should pursue eliminating all energy subsidies.³⁹ Further, what constitutes a fossil-fuel subsidy is subject to interpretation: Many proposals to eliminate subsidies for fossil-fuel industries have called for stripping away broadly available tax provisions that are not specific to the oil and gas industry.⁴⁰

Abandoned mines, mostly located in the western states,⁴¹ do present a public health and safety risk, as well as a tremendous environmental liability. The problem can be remedied by fixing the laws and regulations that discourage remediation. Creating an incentive structure that allows non-profit community organizations, the private sector, and property owners to collaborate with governments at all levels would encourage clean-up, reduce liabilities, and transform land into productive uses.⁴² Simply throwing more money at a broken incentive structure is not the solution. In fact, simply dedicating more funds can exacerbate the problem if the money is focused more on creating jobs and economic revitalization rather than reducing the public health and safety risks that abandoned mines pose.⁴³

Recognizing that his plan proposes to significantly ramp up wind and solar, the Biden platform calls for “addressing issues like reliance on rare earth minerals.”⁴⁴ It also calls for subsidies to make America a world leader in clean-energy exports. The goals of wanting rare-earth development and clean-energy production in the United States are not inherently bad. However, neither is the goal of cheaper imports. If it makes economic sense to import cheaper minerals, solar cells, or wind turbines, the industry as a whole and consumers would be better off because of it.⁴⁵

Global leadership will not come from protectionism and subsidies; instead, shielding U.S. companies from competition would be a disincentive to innovate and lower costs. Instead, policies that open access to domestic and international markets and provide regulatory certainty would encourage American companies to thrive in a competitive environment and provide domestic and international consumers with more choice. This is certainly the case with the abundance of U.S. rare-earth minerals that does little good where burdensome regulations and excessive litigation thwart extraction.

Whether it is for conventional fuels, nuclear, or renewables, the most effective way to drive innovation and embolden American competitiveness is to remove barriers to employment, business expansion, entrepreneurship, capital formation, and supply chains.⁴⁶

When it comes to spending on more climate-resilient infrastructure, adapting to land and water changes over time can be a cost-effective, pragmatic response. Spending on more durable infrastructure would enhance resiliency and protect human lives. Using the best scientific and technical information available improves our ability to reduce dangers from future climate-related challenges. Establishing thorough readiness plans in coordination with the private sector, local communities, and first responders and identifying future vulnerabilities is simply commonsense policy. The role of policymakers should be to reduce the socialization of risk in insurance markets so that the private sector bears the full cost—and can make educated, data-driven decisions about where to invest and what materials to use.⁴⁷

Conclusion

Many of the policy themes presented thus far in the Biden energy and environment platform, if enacted, would result in far more government intervention, which in turn will lead to higher costs and more cronyism. Congress and the next administration should be unwinding the various mechanisms by which the federal government picks winners and losers among energy sources and technologies. They should reduce ineffective bureaucratic obstacles to innovation in the government labs and the construction of a new transmission line. Additionally, they should be consumer-centric rather than Washington-centric. Doing so will put America on a path that supplies affordable power, a stronger economy, and a healthier environment.

Nicolas D. Loris is Deputy Director of the Thomas A. Roe Institute for Economic Policy Studies and Herbert and Joyce Morgan Fellow in Energy and Environmental Policy, of the Institute for Economic Freedom, at The Heritage Foundation.

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