

6 Ways President Biden Can Use Executive Action to Take on the Climate Crisis

In 2022, President Biden Must Mobilize Executive & Legislative Action for Climate, Jobs & Justice

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February 2022

Table of Contents

I.

Introduction

4 Principles for a Whole-of-Government Agenda on Climate, Jobs & Justice

II.

Major Investment Legislation Remains the Most Important Step for the Climate in 2022

III.

6 Ways President Biden Can Use Executive Action to Take on the Climate Crisis

1. Powering Towards 100% Clean Electricity
2. Building Clean Vehicles & Transportation Infrastructure
3. Cleaning up the Built Environment
4. Leading the World in Clean Manufacturing
5. Confronting Fossil Fuel Industry Pollution & Giveaways
6. Promoting Climate-Smart Agriculture & Healthy Forests, Waterways & Oceans

IV.

A Note on the Conservative Federal Judiciary Hostile to Decades of US Environmental Law

V.

Conclusion

I. Introduction

President Joe Biden was elected on the most ambitious and comprehensive [climate platform](#) of any presidential candidate in American history. And, in the first days of his administration, the president launched a “whole-of-government” agenda that’s aimed to tackle the climate crisis, create millions of good jobs, and build a more just, equitable and prosperous clean energy economy. While the administration made important progress throughout its first year, realizing that full vision requires greater progress in 2022. It is already clear how major climate investment legislation is critical to achieving President Biden’s climate commitments. This paper offers 6 important ways that President Biden can use executive action to mobilize the federal government on climate during his second year in office.

At the start of 2022, more urgent progress is needed on both legislative and executive action. US greenhouse gas pollution (or “climate pollution”) [grew 6% in 2021](#)—a rebound after the COVID-related economic downturn the year prior. In Congress, climate legislation remains unrealized, despite months of negotiations. The US Senate continues to delay its consideration of legislation similar to the Build Back Better Act (BBBA) passed by the House of Representatives in November 2021. Enacting the \$555 billion in [climate investments](#) contained in that bill, through whatever means necessary, is the single most critical step the federal government can take for the climate in 2022. However, such legislation by itself won’t be sufficient to meet President Biden’s climate goals. Multiple analyses (discussed in section II of this paper) have shown that these investments will

also need to be complemented by robust executive action.

In 2021, the administration took a number of key steps using existing authorities, including regulatory measures such as finalizing rules to reduce [climate super-polluting Hydrofluorocarbons \(HFCs\)](#) and [promulgating Clean Car Standards](#). The most important commitment that President Biden made in 2021 was for the US to cut its greenhouse gas pollution by 50-52% below 2005 levels by 2030. In addition, in November 2021, the Biden Administration released a report—[The Long-Term Strategy Of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050](#)—that also demonstrated a commitment to achieving this critical mid-century goal. And for good reason: to [avoid the worst impacts of climate change](#), and stabilize global warming at or below 1.5C, the global community must cut carbon pollution (the most prevalent greenhouse gas) by 45% by 2030 and achieve net-zero emissions by 2050. The Long-Term Climate Strategy report also notes that “transitioning to a clean energy economy will create between 500,000 and one million net new jobs across the country this decade.” And that avoided air pollution over this time period will [prevent 85,000-300,000 premature deaths](#). But meeting this 2030 commitment in the US can only be realized if President Biden mobilizes both the legislative and executive branches of the federal government for greater progress, in his second year in office and throughout the remainder of his presidency.

Circumstances demand full mobilization on climate in 2022, with final passage of

transformative climate legislation, and more rapid progress through robust executive action. This paper provides a tangible roadmap for achieving this necessary climate mobilization.

Before diving into actionable policy recommendations, this paper offers 4 key principles for the Biden Administration to deepen throughout its agenda for climate, jobs and justice: i) Realizing Whole-of-Government Climate Action; ii) Advancing Environmental Justice; iii) Supporting Good-Paying Union Jobs; and iv) Engaging State Climate Leadership. Section II of this paper provides an overview of the critical need to enact major climate investment legislation in the first months of 2022. Section III explains the 6 areas where the Biden Administration can take executive action on climate this year. They are:

1. Powering Towards 100% Clean Electricity
2. Building Clean Vehicles & Transportation Infrastructure
3. Cleaning Up the Built Environment
4. Leading the World in Clean Manufacturing
5. Confronting Fossil Fuel Industry Pollution & Giveaways
6. Promoting Climate-Smart Agriculture & Healthy Forests, Waterways & Oceans

In section IV, this paper explains the obstacles that radical conservative judges may pose to federal policy progress against the climate crisis. And why the Biden Administration must press ahead with regulations and other executive actions, without reservation or delay, despite those challenges.

Finally, while this paper outlines many important actions for the White House and federal agencies to take in 6 key areas, it does not touch on every step that the Biden

Administration must take as part of a whole-of-government climate agenda. In particular, it is worth noting that while this paper is focused on ways that President Biden can advance domestic action that will reduce US climate pollution, there are simultaneously many steps that the administration must take using its broad authority in the international domain to make progress against a global challenge.

4 Principles for a “Whole-of-government” Agenda for Climate, Jobs & Justice

As the Biden Administration embraces further executive action on climate, this paper highlights 4 principles that it should continue to strengthen throughout its agenda: mobilizing a true “whole-of-government” effort; advancing environmental justice; supporting good-paying union jobs; and expanding partnerships with states, Tribal and local governments. The administration has already demonstrated a commitment in each of these areas, which can be built upon in 2022 and beyond.

i) Realizing Whole-of-Government Climate Action:

The Biden-Harris Presidential Transition Team promised a “whole-of-government” climate agenda, with every agency taking a leadership role to confront the climate crisis. President Biden formalized that commitment in an executive order signed on January 27, 2021. This spirit of collective responsibility for tackling the climate crisis is reflected throughout many agencies. However, in 2022, the president must continue to deepen this commitment. It must be reflected in everything from the rules promulgated by financial regulators, to robust industrial and trade policy supporting decarbonization as well as domestic manufacturing and competitiveness, to actions that confront the fossil fuel subsidies represented in policies

that support extraction and pollution. In 2021, Evergreen’s [‘5 to Mobilize’](#) initiative identified 5 ways that each of 23 different federal agencies should assert their leadership on climate, environmental justice, and good union jobs building a just and thriving clean energy economy. The Biden Administration made important progress in its first year in office. Now, in 2022, each agency should be called upon to do more, and to break down silos in service of maximizing impact in a “whole-of-government” effort.

ii) Advancing Environmental Justice (EJ):

Addressing the disproportionate environmental burden faced by Black, Brown, Indigenous and low-income communities due to historic pollution and disinvestment is foundational to achieving the Biden Administration’s environmental justice commitments. There are massive opportunities to improve public health and environmental justice outcomes by shifting to a more equitable and just clean energy economy. Last year, the president started out strong by announcing the [Justice40 Initiative](#), which sets a goal of directing no less than 40% of the benefits of climate investments towards disadvantaged communities. This commitment, inspired by policies won by front-line communities and environmental justice advocates in New York State’s Climate Leadership & Community Protection Act, is central to ensuring that the US builds a more just and equitable clean energy economy. The administration also [established](#) a White House Environmental Justice Advisory Council (WHEJAC), and Interagency Council (WHEJIC), tasked with engaging local environmental justice leaders and advancing policies across government to address environmental injustices.

President Biden can build on this progress in 2022, especially by following the guidance of

these councils. This should include advancing aggressive clean air and water regulations that will better protect overburdened communities from pollution and its cumulative impacts; finalizing and utilizing the new Climate & Environmental Justice Screening Tool; and deepening engagement with states and communities to ensure that new federal funds are reaching the communities in need. The administration must also hold agencies accountable to Justice40 by ensuring that benefits are tangible and that agencies build rigorous and timely tracking systems for funds and benefits (including the release of robust agency pilot programs demonstrating how this can be done). The Biden Administration should also look for every possible opportunity to modernize program rules to maximize environmental justice benefits. However, new legislative action is also critically important. And while the [Infrastructure Investment & Jobs Act](#) (IIJA) did include some funding for programs that are priorities for environmental justice communities, such as lead pipe replacement and Superfund cleanup, it is the investments in the BBBA that would realize a transformative EJ agenda for the nation.

iii) Supporting Good-Paying Union Jobs:

From the outset, President Biden has made clear that his climate agenda isn’t just about stopping pollution, but is also about supporting high-quality jobs, worker rights, and economic justice, in building the clean energy economy. This commitment to good, union jobs is consistent with the demands of activists who have built solutions, and [achieved successes](#), throughout the country. And the Biden Administration has made important progress in its first year. This includes holding a [record-breaking offshore wind lease sale](#) in the Northeast that will lead to projects being built with union labor and Made in America materials; prioritizing clean energy tax credits tied to labor standards and



domestic content; Buy America Provisions; and in President Biden's [visits](#) to unionized auto factories where he touted the opportunity to build union-made electric cars in the US.

The Biden Administration can continue advancing this commitment to good jobs in 2022. This should include a concerted focus on implementing the nearly 70 recommendations to promote worker organizing and collective bargaining contained in a new report from the [White House Task Force on Worker Organizing and Empowerment](#), led by Vice President Kamala Harris and Labor Secretary Marty Walsh. It should also include focused implementation of the prevailing wage requirements, [Project Labor Agreements](#), and the new Made in America Office that were created by President Biden in January 2021 and February 2022 executive orders, and some of which were codified in the IIJA. The administration should also commit to ensuring Biden's proposed [Civilian Climate Corps](#) provides apprenticeship and pre-apprenticeship pathways for its members to good union jobs. Moreover, environmental justice communities, as well as communities that have been historically dependent upon the fossil fuel industry, must also be prioritized in the creation of good-paying union jobs. However, realizing a transformative agenda for good union jobs—and building

our clean energy future—is inextricably tied to legislative action, in that significant new federal investments must be provided by Congress. Passage of the climate investments contained in the BBBA is of paramount importance.

iv) Engaging State Climate Leadership:

Engaging with states, Tribal and local governments will be critical to accelerating climate progress and realizing President Biden's 2030 commitments. The progress that states have made on climate, [good jobs](#) and [environmental justice](#) over the recent decade, has [deeply informed](#) this unique opportunity for policymaking in the nation's capital. States that have led on climate action have also led on creating new jobs in the clean energy economy. According to an [analysis](#) produced for the [US Climate Alliance](#)—a bipartisan coalition of 25 governors that remained committed to the Paris Climate Agreement after President Trump announced he would remove the US from the accord—around 133,000 clean energy jobs were created in alliance member states between 2016 and 2019, a growth rate of nearly 7%. That significantly outpaced the national economy-wide job growth rate during the same period. Tribal nations, country and municipal governments, and local communities [have led on climate](#), too.



Now, it is the federal government's turn to deploy investments, through the IJJA and BBBA's climate provisions, along with executive actions to help support the acceleration of climate progress at the subnational level. Enhanced federal-state coordination and collaboration will allow the Biden Administration to leverage policy, investment and governing capacity at all levels. Partnerships with state governments will be especially important for the administration's critical climate goal of achieving 100% clean electricity by 2035, given state and regional authority over US electricity and transportation systems. The Biden Administration has laid important groundwork, including the [appointment](#) of an Infrastructure Coordinator, former New Orleans Mayor Mitch Landrieu, with a mandate to work with states in the implementation of new federal investments. During COP26 in Glasgow, National Climate Adviser Gina McCarthy committed to new cooperation with subnational governments. And already in 2022 the White House has [launched](#) a coalition of state and local governments to advance building performance standards, supported by federal technical assistance. It has also released a [guidebook](#) for state, Tribal and local governments, and other stakeholders, to help them understand and access resources passed in the IJJA.

Next up, the Biden Administration can use these commitments and progress points to build even more robust federal-state partnerships and place-based strategies towards mutual climate goals. Many of the federal actions discussed in this paper are resources and authorities available to support state, Tribal and local governments, and the administration's investment in intergovernmental engagement can amplify their impact.

II. Major Investment Legislation Remains the Most Important Step for the Climate in 2022

Enacting the clean energy, environmental justice and other [climate investments](#) that were contained within the BBBA would be the most transformative climate action ever taken by the US government. They are also extremely cost-effective—the clean energy tax credits, for instance, would deliver [benefits](#) valued at roughly 3–4 times their cost. These investments would also create [good jobs](#) and [reduce energy costs](#) for American families. Failure to pass them is not an option.

President Biden has shown he is [deeply committed](#) to getting these climate investments over the finish line. And indications are that they enjoy broad support across the Senate and House Democratic caucuses—including from [those](#) who refused to support the overall BBBA legislation. While this opposition may have resulted in the demise of that particular bill, public comments since then have also shown there is a path forward on many of the bill's components, including its climate investments, this year.

Some of the BBBA's most effective [climate provisions](#), among the bill's \$555 billion in climate investments, and measured on a greenhouse gas reduction basis, include: expanded and more-accessible tax incentives for clean electricity generation, transmission, storage, electric vehicles, advanced manufacturing, industrial decarbonization, and building energy efficiency; a fee on methane pollution; and federal rebates for home electrification. The BBBA's [\\$163 billion](#)

in long-overdue investments in environmental justice are critical to improving the lives and livelihoods in communities historically left behind. Other [important climate investments](#) in that bill include the creation of a Clean Energy Accelerator and a Civilian Climate Corps; funding for energy transition communities and workers; investments in climate-smart agriculture; and resources to support state, Tribal and local climate leadership.

Again, enacting these climate investments is the single most important action that President Biden and Congress must take in 2022, and would provide for major progress towards meeting the president's goal of cutting greenhouse gas pollution by 50–52% below 2005 levels by 2030. However, multiple analyses have shown that these investments will need to be complemented by executive action if the US is going to reach this 2030 goal.

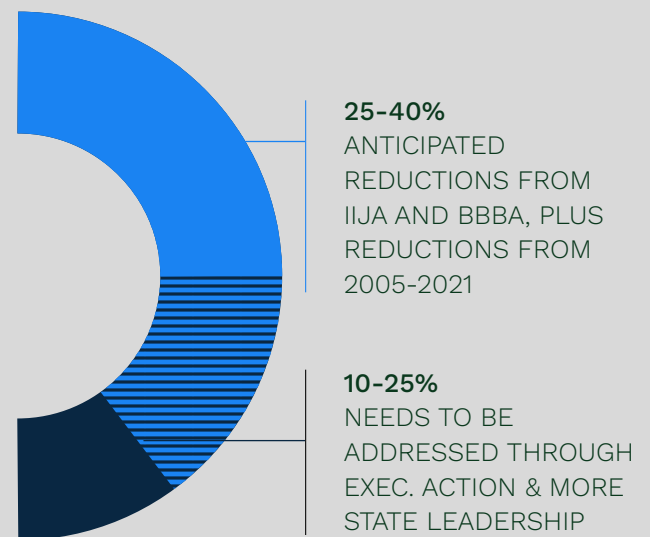
In August 2021, Senate Majority Leader Chuck Schumer (D-NY) sent a [letter](#) and an accompanying [pie chart](#), to his Senate Democratic colleagues arguing that the climate investments being considered by the 117th Congress would put the US “on track to reduce US emissions to approximately 45% beneath 2005 levels by 2030.” The overwhelming majority of these reductions would be delivered through investments contained in the BBBA, with only marginal contributions delivered through the

since-enacted IIJA. Later, a group of over 20 advocacy organizations released the “Climate Test,” reflecting the same Schumer analysis to show where these investments would deliver climate pollution reductions throughout the US economy. An examination of the Climate Test’s findings shows that the climate investments that were passed in the final House version of the BBBA would help cut US climate pollution by 2030 by approximately 40% below 2005 levels—a smaller number than 45%, following the removal of the Clean Electricity Performance Program (CEPP) from the bill. This analysis shows a gap of approximately 10% of 2005-level US emissions that would need to be addressed through other measures in order to meet President Biden’s 2030 goal.

However, another modeling analysis, conducted by the group Energy Innovation, shows that BBBA’s climate provisions would cut climate pollution by only 854-1,059 million metric tons (MMT), or around 25% below 2005 levels, in 2030. According to this analysis, the US would need to make at least half of its progress toward cutting pollution 50% below 2005 levels through other non-legislative measures.

Further modeling from both the Rhodium Group and the Princeton University ZERO Lab also demonstrates that these legislative investments would deliver major climate progress over the coming decade, but that there are remaining gaps that would need to be filled through other measures.

Path to a 50% Reduction in Greenhouse Gas Pollution by 2030.⁰¹



While each of these analyses shows a different picture of US emissions in 2030, all of them demonstrate that legislation to deliver transformative public investments, which will catalyze even greater private sector investment, are absolutely critical to meeting President Biden’s climate goals. They also all show that greater progress on executive action, and also more state action, are all necessary to fulfilling the bold climate vision that President Biden has committed to the American people and the international community.

⁰¹Compilation of studies from Energy Innovation (2021) and Climate Test (2021).

III. 6 Ways President Biden Can Use Executive Action to Take on the Climate Crisis

President Biden can and must take bold executive action to meet his own climate commitments, even as he puts his shoulder to the wheel to pass climate investment legislation. Here are 6 key ways the Biden Administration can use executive action to tackle some of America's highest greenhouse gas-polluting sectors.

1. Powering Towards 100% Clean Electricity

Decarbonizing the power sector is the linchpin to achieving a safer climate future. The electricity sector is responsible for approximately a quarter of domestic greenhouse gas pollution. And by cleaning up pollution from electricity generation, while electrifying transportation, buildings and parts of heavy industry, the US could ultimately reduce around three quarters of its carbon pollution. Recognizing this, President Biden took office with an ambitious and achievable commitment to reach 100% carbon-free electricity nationwide by 2035. The Biden Administration's Long-Term Climate Strategy report refers to this 2035 goal as a "crucial foundation" for achieving net-zero emissions.

As Evergreen pointed out in its February 2021 paper A Roadmap to 100% Clean Electricity by 2035, this challenge begins with moving the nation to 80% carbon-free electricity by 2030—up from approximately 40% of US power generation in 2020. This transformation of the

power sector over the coming decade would reduce its carbon pollution by over 85% by 2030, while also cutting deadly sulfur dioxide (SO₂) and nitrogen oxide (NO_x) emissions by 88-93% and 71-80%, respectively—providing massive public health benefits. It is also projected to support hundreds of thousands of jobs each year and will grow the economy by nearly \$1 trillion by 2030. This clean electricity transition is achievable, and will create a more affordable and resilient power grid.

In his American Jobs Plan, released in March 2021, the president proposed a Clean Electricity Standard (CES) that would require electric utilities to achieve 100% clean power by 2035. This policy was then advanced in BBBA legislation, led by Sen. Tina Smith (D-MN), as a Clean Electricity Performance Program (CEPP) that was consistent with Senate budget reconciliation rules and aimed to achieve 80% clean power by 2030. However, this provision was ultimately removed from the bill, at the behest of Sen. Joe Manchin (D-WV). Nonetheless, the technology-neutral investments in carbon-free power that have remained part of that bill's climate provisions could deliver massive progress on a 100% clean electricity agenda.

The passage, and subsequent efficient, effective and equitable implementation, of new federal investments in the power sector, in the BBBA and also in the IJA, is of

paramount importance. These investments would provide [tangible savings](#) for Americans on their utility bills, on the order of \$500 per year for the average household. However, modeling shows that these investments would likely result in a maximum of approximately [61-69% clean power by 2030](#), making additional executive action, and state leadership, essential for adequate progress toward a carbon-free grid.

To date, state policy leadership has been a primary driver on clean electricity. This began decades ago, with policies like Renewable Portfolio Standards (RPS) and Net Metering, and has more recently involved passage of 100% clean electricity requirements. Starting with Hawaii in 2015, [12 states](#), Washington, DC and Puerto Rico have now enacted a binding 100% clean power requirement. As of the start of 2022, several other governors have followed suit through executive orders. And it's not just blue states—100% clean electricity has also been embraced in purple states (e.g., Maine, Nevada, Virginia) and red states (e.g., Nebraska). This is a crucial foundation to build upon. All state governments must take more steps to lead—and accelerate—in their clean electricity progress.

Therefore, the Biden Administration should turn to using existing authorities, BBBA passage and IIJA implementation, and strengthened partnerships with states, to make progress toward 80% clean power by 2030, on a path to 100% clean electricity by 2035. Such executive actions should include:

- **EPA Must Pursue a Coordinated Approach to Tackling Pollution in the Power Sector:** The Clean Air Act is a powerful, [popular](#), foundational US environmental law that has for decades helped protect Americans from air pollution while promoting innovation and a [growing economy](#). Combined with authorities granted to the Environmental

Protection Agency (EPA) under laws like the [Clean Water Act](#) and the Resource Conservation and Recovery Act (RCRA), the Biden Administration must aggressively pursue a coordinated, comprehensive strategy to tackle pollution from the power sector. EPA Administrator Michael Regan has already [noted](#) the benefits of such a coordinated strategy, increasing the efficiency of regulatory efforts and delivering maximum benefits to communities and businesses alike.

In 2022, the EPA must issue a draft new source performance standard to prevent carbon pollution from new power plants. And it must also issue a new draft rule confronting such climate pollution from existing plants (Both new source and existing source rules are expected in summer 2022, per the [Unified Regulatory Agenda](#) released in December 2021 by the White House Office of Management & Budget (OMB).) The [Evergreen Action Plan](#) calls for the president to take swift action on both these rules, along with a robust exploration of other ways the [Clean Air Act](#) can be used to confront climate pollution.

A truly comprehensive clean air agenda must also begin with updating and enforcing rules that reduce criteria and toxic air and water pollution from power plants, starting with the dirtiest sources. In April 2021, Evergreen joined the Natural Resources Defense Council, Earthjustice, and several other environmental organizations [in urging the EPA](#) to pursue a comprehensive multi-pollutant agenda. That includes restoring the “appropriate and necessary” finding that the Trump Administration removed from the Mercury & Air Toxics Standard (MATS)—as the [EPA moved](#) to do earlier this year. It includes also updating the [Cross-State Air Pollution Rule \(CSAPR\)](#), National Ambient Air Quality Standards (NAAQS) for [particulate matter](#)



(PM) and ozone, along with other protections against the air pollution that poisons Americans' lungs. It should also include rules confronting coal ash and effluent that leach into American waters—such as recent Biden Administration [announcements](#) cracking down on coal ash under RCRA. These rules will rely on long-standing EPA authorities to protect public health and the environment, critical to their ability to fulfill their mission. Their implementation will result in major benefits for environmental justice, as well as co-benefits for the climate.

This clean air agenda should also go hand in hand with efforts the [EPA has begun](#) to expand local air pollution monitoring and targeted enforcement. Environmental justice communities would especially benefit from more local monitoring to accurately assess pollution impacts and inform local solutions, as well as enforcement to punish bad actors and prevent noncompliance in the future. Air pollution hot spots have often been [overlooked](#) due to the large size of Clean Air Act monitoring areas. The EPA can minimize these hot spots by leveraging their authority to [reduce emissions](#) from existing sources in the power sector, which will decrease particulate matter and NOx pollution. Also, as it currently stands, EPA only tracks and

reports emissions of facilities above 25 MW. It should expand reporting to facilities under [25 MW](#), and include reporting of all fuel types, including biomass. The EPA should also close illegal loopholes that allow for excess pollution from power plants during periods of shutdown, startup and malfunction, and compel plants to use the effective pollution control technologies they have installed but often turn off.

- **FERC Should Support Robust Regional Power Markets for a Clean Energy Future:**

The Federal Energy Regulatory Commission (FERC) is a critically-important actor in driving the US towards clean electricity. As an independent agency, FERC is not strictly beholden to the priorities of President Biden. However, with the president's newest appointment, commissioners acknowledging the need to address climate through regulation now have a majority on the panel for the first time since 2017.

FERC took some important actions in 2021, including issuing an [Advanced Notice of Proposed Rulemaking](#) (ANOPR) on regional transmission planning, cost allocation and generator interconnection, and opening an [Office of Public Participation](#). It also took steps to [limit the adverse impact](#) that the

commission's prior Minimum Offer Price Rule (MOPR) would have on clean power generators. In Congress, the IJJA delivered to FERC strengthened [backstop transmission siting authority](#), in cases where it may be needed to overcome state objections to needed infrastructure projects.

In 2022, FERC should move forward aggressively to promote cleaner, cheaper electricity in wholesale power markets. This includes following on its ANOPR by issuing a final rule on regional transmission planning this year; prioritizing cost allocation in regional and interregional transmission; reforming interconnection processes for the nearly 800 GW of clean energy resources languishing in the queues; carefully scrutinizing compliance filings under Order 2222 to ensure distributed energy resources (DERs) can fairly access and participate in providing services to wholesale energy markets; providing intervenor compensation to allow equitable participation; and removing state opt-out provisions from commission orders supporting renewables. Expansion of competitive wholesale electricity markets in the West and Southeast are also key tools to complement state efforts to decarbonize the electricity sector at least cost. In addition, and importantly, Chairman Rich Glick has [indicated](#) that FERC will continue to take steps forward in better evaluating climate and environmental justice impacts in its fossil gas docket.

- **White House & DOE Can Use Federal Tools to Support State Clean Electricity Leadership:**

State leadership has laid the path for 100% clean electricity. And, as part of expanding its partnerships with states throughout its climate agenda, the Biden Administration should be particularly attentive to new federal-state collaboration to speed this transition to carbon-free power. There are

a number of important [climate investments](#) proposed in the BBBA to support state and local governments, and utilities, in their clean energy progress, and federal agencies should prioritize these investments in power sector decarbonization. However, there are a number of existing federal authorities—and new funding provided in the IJJA—that can help states unlock investment in a cleaner, smarter, modernized electric grid. (These efforts should be consistent with the Justice40 Initiative, and prioritize investment in disadvantaged communities.) And, in addition, the cooperative federalism enshrined in federal environmental laws like the Clean Air Act means that Biden's EPA should engage closely with states to develop new climate pollution standards, as the EPA has done before.

DOE has already recognized the importance of state action, and state-federal partnership, in establishing a new [State and Community Energy Program](#) to “work more closely with states, localities, and communities in the planning and deployment of decarbonization solutions.” DOE should also prioritize implementation of the reforms that the IJJA and Energy Act of 2020 provided for its Loan Guarantee Program, especially that which will enable any state energy finance authority or green bank to leverage loan guarantees to back cost-effective clean energy upgrades. It should prioritize implementation of its [Building a Better Grid Initiative](#), through its newly-established [Grid Infrastructure Office](#), to reduce barriers to renewable deployment nationwide. In addition, DOE should dedicate programmatic resources and national labs to provide technical assistance to those among the nation's 2,500 non-profit electric utilities who request aid in charting their own path to 100% clean energy. (As the [Los Angeles Department of Water and Power](#) did with assistance from DOE's National

2. Building Clean Vehicles and Transportation Infrastructure

Transportation is America's largest source of greenhouse gas pollution, responsible for approximately 30% of US emissions, spread across hundreds of millions of cars, trucks, trains, planes, ships, and other small mobile sources that move goods or people. Transportation is also a major source of deadly air pollution, like particulate matter (PM), which 'disproportionately and systematically' impacts communities of color and low-income communities, representing an ongoing environmental injustice.

An effective agenda to eliminate pollution from the transportation sector will focus on deploying new zero-emission vehicle technologies like electric vehicles (EVs), and cleaner fuels. And it must also involve systemic and non-vehicle mobility solutions, like the expansion of public transit and rail transportation; decreasing air pollution from ports; smart growth policies like zoning reforms that promote affordable housing and infill development; and other policies to reduce pollution in frontline and disadvantaged communities and improve public health and access to economic opportunities.

In 2021, the Biden Administration set some important goals for the country, including making 50% of all new car sales EVs and producing 3 billion gallons of sustainable aviation fuel, by 2030, and making all 600,000 federal government vehicles EVs. And, at the start of 2022, the Biden Administration has a powerful set of tools for driving down climate and other harmful pollution throughout the transportation sector, with both long-held legal authorities, and also investments and authorities newly signed into law in the IJA. In addition, the BBBA proposed transformative clean transportation investments—like US

electric vehicle consumer and domestic manufacturing incentives that can act in symbiosis with executive actions to drive even greater sectoral transformation. These new investments can also support high-quality union jobs for Americans building the electric vehicles that will dominate the global future.

Using existing tools through executive action, the Biden Administration can make important climate progress by focusing on the following areas:

- **USDOT Should Focus on Building Climate-Smart & Equitable Transportation Infrastructure:**

The US Department of Transportation (USDOT) and DOE must ensure that implementation of federal transportation investments contributes to the task of reducing climate pollution. The IJA provides a historic level of investment in transportation infrastructure. And its implementation "could be an important part of the US response to climate change," according to the Georgetown Climate Center. "Or it could lead to more greenhouse gas pollution than the trajectory we are currently on."

USDOT should promulgate a new Performance Management Rule at the Federal Highways Administration (FHWA) that ensures the local deployment of federal transportation investments are accompanied by analyses and reduction strategies for climate and co-pollutants. The Trump Administration in 2017 delayed and in 2018 ultimately repealed the first FHWA greenhouse gas pollution performance rule. Now, the department should finalize a new measure, and engage with states to maximize its impact, using also its own discretion in the provision of other federal funds. USDOT should work to ensure that states and metropolitan planning

organizations are prioritizing funding for transit, micromobility, pedestrian walkways, electric vehicle charging, existing roadways, and other sustainable infrastructure that will help drive down carbon and other types of pollution, rather than more roads and freeway expansions that would increase it. FHWA has already taken an important step in the right direction, with a December 2021 memorandum encouraging states to use IIJA transportation funding to “prioritize the repair, rehabilitation, reconstruction, replacement, and maintenance of existing transportation infrastructure.” Now, it can take the next step by ensuring states and local agencies are comprehensively planning transportation infrastructure to meet this critical climate moment.

These performance management rules also provide the opportunity for USDOT to demand more from states in identifying and prioritizing projects in disadvantaged communities, which often lack safe, affordable and low-emissions transportation options. Indeed, federal investments can better align with both climate and environmental justice goals. Specifically, USDOT should ensure that environmental justice and underserved communities are prioritized in federal investments in such a way that is consistent with Justice40 commitments.

The EPA could also have a role to play in building healthier, more equitable transportation infrastructure, by addressing the largest source of pollution hot spots: vehicles. This could be done by requiring greater adoption of pollution control measures that reduce vehicle emissions, such as through better traffic management, particularly in non-attainment zones.

• EPA & USDOT Should Drive a Faster Transition to 100% Clean Cars & Trucks:

Passenger vehicles comprise nearly 60% of US climate pollution in the transportation sector, making them the most-polluting sector of the American economy. Meanwhile, heavy-duty trucks are also a major contributor to both climate and local air pollution that harm public health, particularly in communities of color and low-income communities. A new interactive tool published by the Clean Air Task Force shows that diesel emissions from the US transportation sector are responsible for “more than 8,800 deaths, 3,700 heart attacks, hundreds of thousands of respiratory illnesses, and nearly \$1 trillion in monetized health damages per year.”

To achieve both climate and environmental justice goals, and to advantage US workers and businesses in the race to dominate growing global markets for zero-emission vehicles, it is imperative that federal policy—including robust standards, and new public investments—support a rapid and sustained transition to clean cars and trucks.



Fortunately, the federal government has strong existing authorities to confront light, medium and heavy-duty vehicle pollution, through both tailpipe pollution and fuel economy standards. Also fortunately, the global auto market has real momentum toward zero emission vehicles. Global sales of EVs are projected to nearly double in 2022, reaching approximately one in every seven vehicles sold. Recognizing this, in January 2022, General Motors announced plans to invest \$7 billion in electric vehicle and advanced battery manufacturing facilities in Michigan, which will support thousands of US jobs. Ford, too, recently announced that it would spend \$10-\$20 billion across its firm as it shifts to more EV production. And earlier this month the Biden Administration announced the groundbreaking of a new EV charger manufacturing facility in Tennessee that will produce up to 30,000 vehicle chargers per year. Still, federal policy must drive a faster clean vehicle transition.

In 2021, the Biden Administration's EPA and USDOT National Highway Traffic Safety Administration (NHTSA) took the important step of finalizing Clean Car Standards for light-duty vehicles that replaced weak Trump-era standards—so feeble that even auto companies did not support them. This year, the Biden Administration will need to build on that progress, as they've begun to do by finalizing California's waiver to operate its own clean car rules, as it had done for decades prior to the Trump Administration. The administration should also begin to build a robust post-2026 regulatory framework that will drive the transition to 100% zero-emission light duty vehicles sales, as called for in the Evergreen Action Plan. In addition, strong standards should be promulgated for heavy-duty vehicles that effectively confront carbon and toxic air pollution from

large trucks—a rule that the EPA has already deemed a priority in 2022, in the OMB Unified Agenda. This latter rule should help put the nation on the path to reach 100% zero-emission new truck sales by 2035.

• **EPA, DOE and USDA Can Grow Clean Fuels for the Future:**

While the Biden Administration has begun to confront climate pollution from the transportation sector using vehicle standards, it also has the opportunity to reduce emissions in the fuels that power those vehicles. This includes using executive action in the implementation of existing policies such as the Renewable Fuel Standard (RFS), and engaging broader Clean Air Act authorities to drive deeper emissions reductions. It also includes prioritizing new infrastructure and innovation investments in the IIJA for transportation fuel decarbonization.

The current fuel standards under the RFS are set to expire in 2022, after which the statute—first passed in the Energy Policy Act of 2005 and expanded upon in the Energy Independence & Security Act of 2007—gives the EPA and OMB greater discretion to improve the program. The program can be modified to promote climate pollution reductions, by reducing reliance on the most carbon-intensive fuels, measuring on a lifecycle basis, and limiting land-use change impacts.

In considering the future of RFS and federal fuels regulation, the Biden Administration also has the opportunity to leverage other existing authorities in the Clean Air Act's section 211, which gives the EPA broad power to regulate pollution from fuels, and fuel additives, and to ultimately promote more low-and

zero-emission alternatives. By exploring the use of these federal authorities, the Biden Administration could hold fuel providers responsible for the pollution associated with their products and make further progress on carbon pollution reduction goals, as [some states](#) have done, while also decreasing the prevalence of harmful fossil fuel emissions in communities across the country.

Finally, with new federal funding provided in the IIJA for alternative and zero emissions fuels infrastructure, key federal agencies should prioritize these dollars in ways that will drive climate pollution reductions, and help transform hard-to-reach sectors. USDOT and DOE took a good step in December 2021 when transportation and energy secretaries Pete Buttigieg and Jennifer Granholm [announced](#) a new joint office focused on deploying EV charging infrastructure. EPA has the opportunity to prioritize electrification with its new funds for alternative-fuel transit buses. DOE and EPA should also prioritize their electric vehicle, transit and charging infrastructure investments in disadvantaged communities, and ensure alignment with Justice40. USDA should focus on supporting advanced, low-carbon biofuels. And DOE should prioritize use of its new research, development and demonstration funding to develop clean fuels that will support deep decarbonization. For example, DOE's new [National Hydrogen Strategy](#) and Regional Clean Hydrogen Hubs Program can support the development of clean hydrogen fuels that could help transform aviation, shipping, and other hard to electrify transport modes.

3. Cleaning Up the Built Environment

Cleaning up the building sector by creating a nation of all-electric carbon-free, climate-ready, healthy, and affordable buildings is essential to achieving President Biden's climate, equity, and economic goals. Direct fossil fuel use in buildings for heating and cooking is responsible for [13% of national greenhouse gas pollution](#), making building heat the fourth highest sectoral source of climate pollution in the country. Buildings also heavily influence how the nation's energy system operates—as they consume [25% of the nation's fossil gas](#) and [76% of the nation's electricity](#). Buildings drive the demand that results in electricity system peaks, leading to more greenhouse gas pollution from fossil fuel power plants, and higher energy bills, as well as outages and other adverse impacts on consumers and the economy.

But cleaning up the built environment isn't just about lowering carbon pollution; it's also about environmental justice, improving climate-readiness, and improving energy affordability for all communities. The [70 million residential buildings that rely on fossil fuel heating appliances](#) are massive contributors to air pollution, which has a [disproportionate impact on lower-income and frontline communities](#). As of 2017, the burning of fossil fuels in US buildings overtook coal power plants as the second largest contributor to poor outdoor air quality, [causing an estimated 18,300 early deaths and \\$205 billion in health impacts, annually](#). Meanwhile, gas stoves and cooktops generate [unsafe levels](#) of indoor air pollution, releasing [methane](#), particulate matter, carbon monoxide, and nitrogen oxide into homes. 2021 demonstrated the importance of homes and workplaces (often the same place now-a-days) as shelters against the growing impacts

of climate change. The June 2021 [Pacific Northwest heat wave](#) killed approximately 800 people because many of its victims had limited or no access to air conditioning. And in 2022 as fossil gas prices spike across the world, and Americans [face record-breaking heating bills](#), the [country's energy burden crisis](#) is once again highlighted.

The investments in the IIJA, and the yet-unrealized climate investments in the BBBA, will help achieve progress, but will not put the nation on a path to fully realize these goals. The IIJA contains modest investments in proven programs like the DOE's Energy Efficiency & Conservation Block Grants (EECBG) program and the Weatherization Assistance Program (WAP). BBBA contained critical new investments in programs like the High-Efficiency Electric Home Rebate Program and the Hope for Homes Program, and improvements to the 25C Residential Energy Efficiency Tax Credit to further encourage the adoption of zero-emission appliances and whole-home energy upgrades. However, simultaneous aggressive executive action by key administrative agencies will also be necessary to actualize President Biden's clean buildings goals. The most important executive actions the Biden Administration can take with existing authorities in 2022 include:

- **DOE Should Move Faster to Update Appliance Energy Efficiency Standards:**

President Biden's DOE should finalize efforts to unwind the Trump Administration's regressive efficiency standard rulings, [adopt light bulb standards](#) that would phase out incandescent lamps, and accelerate the updating of nearly 50 eligible appliance standards. Updating appliance standards is a massive opportunity for the administration to generate long-term energy and carbon

pollution savings that will help achieve the president's 2030 and mid-century climate goals, and save consumers money. The American Council for an Energy-Efficient Economy (ACEEE) and the Appliance Standards Awareness Project (ASAP) [estimate](#) that appliances standards could reduce carbon pollution by 1.5 to 2.9 billion metric tons cumulatively by 2050, lower annual utility bills for typical households by \$350, and dramatically cut peak electricity demand.

In his [Executive Order](#) on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, President Biden directed DOE to take action towards achieving these goals, and while DOE has made significant strides towards achieving these goals, the Office of Information and Regulatory Affairs (OIRA) has slow-rolled final adoption. To correct this delay, the administration needs to promptly direct OIRA to revert to the approach taken during the Obama administration and grant categorical non-significance determinations for appliance test procedures and early stage standards documents. In addition, to eliminate future delays, the Biden Administration should appropriately staff OMB and OIRA as [called for by over 50 Members of Congress](#).

- **White House Should Implement Federal Building Performance Standards:**

In 2022, the President Biden's White House Council on Environmental Quality (CEQ) should follow through on the president's [Executive Order Catalyzing America's Clean Energy Economy Through Federal Sustainability](#), by implementing a Federal Building Performance Standard to drive pollution reduction across the federal government's 318,000 buildings.

The administration recently announced a Building Performance Standards Coalition with 31 cities and 2 states to adopt or strengthen building performance standards by Earth Day 2024. This is an important step, especially in a sector in which jurisdiction is primarily housed with many diffuse local and state governments. But the administration has not yet finalized its own performance standard for federal buildings.

The Biden Administration should aim to launch this standard no later than June 2022. And through it, should aim to aggressively reduce and eliminate onsite greenhouse gas and NOx pollution from the existing building stock and prohibit these pollutants in new construction. Additionally, early pollution reductions driven through this program should be prioritized in federal buildings located in underserved or historically disadvantaged communities, consistent with the administration's Justice40 Initiative.

- **EPA Can Spark a 100% Clean Heating Transition:**

For President Biden to achieve his goal of reducing building sector greenhouse gas pollution by 50% by 2035, the EPA should spark a clean heating transition by using Clean Air Act Authority to regulate emissions from fossil fuel appliances.

The nation's fossil fuel appliances emit 425,000 tons of nitrogen dioxide (NOx), more than all of America's fossil gas power plants, causing billions in public health and climate damages. Inside homes and businesses, gas cooktops generate enough pollution to exceed outdoor air quality standards and dramatically increase the risk of childhood asthma.

Recognizing the negative contribution these appliances have towards poor air quality,

local air districts throughout California have regulated NOx pollution from fossil gas appliances for decades. These regulations have been refined and strengthened with input for stakeholders, including the fossil fuel appliance industry, and serve as a template for appliances regulation in other states, including in such states as Texas and Utah.

The EPA should build upon these successful state and local rules, to develop national Clean Heating Rules for all residential and commercial appliances starting with furnaces and water heaters, before expanding rules to other fossil fuel heating appliances like boilers and cooktops. The Clean Heating Rules should aim to achieve 100% zero-emission appliance sales by 2030. These rules should be developed in close collaboration, or as a joint rulemaking with DOE's appliance energy efficiency rulemakings. The EPA should also coordinate with state air agencies, such as the California Air Resources Board, and local air districts, such as the South Coast Air Quality Management District, who are already working to confront harmful pollution from fossil fuel appliances, as well as state public utility commissions to ensure energy affordability considerations are incorporated into the standard.

- **White House Must Ensure an Equitable Clean Building Transition:**

To achieve President Biden's environmental justice goals, the White House should continue to untangle barriers holding back an equitable transition to clean buildings throughout the federal government. While there are numerous opportunities for progress to achieve this goal, this paper highlights three initiatives for 2022. First, to capitalize on the \$3.5 billion in funding appropriated to the Weatherization



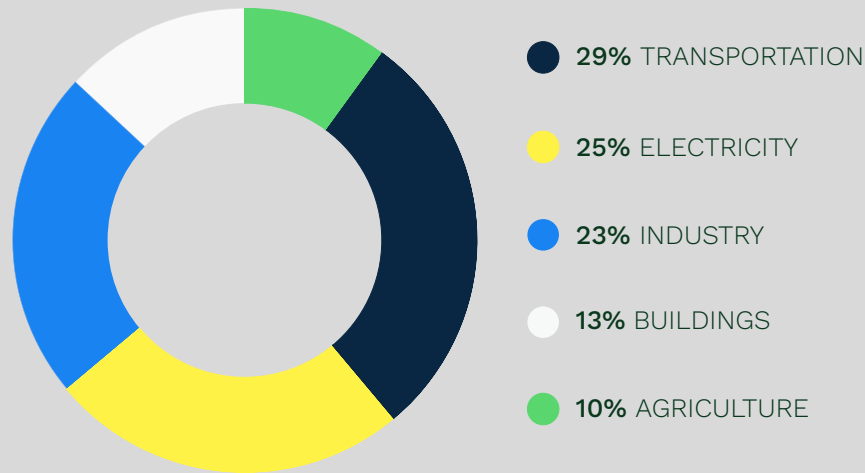
Assistance Program (WAP) to support low-income households, the administration should update the program's cost-benefit ratio and savings to investment ratio (SIR). This update should include improved health and safety of eligible participants, as approved in the Consolidated Appropriations Act of 2021, and incorporate the social costs of carbon, nitrous oxide, and methane, as directed in President Biden's Executive Order on Restoring Trust in Government Through Specific Integrity and Evidence-Based Policymaking. In addition, DOE should also issue a Request For Information on how additional program updates can further the administration's goals. WAP should also prioritize much greater than 40% of its investment into disadvantaged communities, to meet and exceed its Justice40 commitments.

Second, to ensure energy affordability in new housing construction, regardless of housing type, HUD should reject DOE's proposed

two-tier energy code for new manufactured housing and adopt a strong energy code for all manufactured homes. Manufactured housing accounts for 7% of all new housing in America and is overwhelmingly occupied by low-income and energy-burdened households. By adopting a strong energy code for new manufactured housing, the first update since 1992, HUD has the opportunity to relieve nearly 1 million energy burdened households, and reduce greenhouse gas emissions 120 million metric tons over the next 30 years.

Finally, the Consumer Product Safety Commission (CPSC) should investigate the health threat posed by gas stoves and cooktops, under the Consumer Product Safety Protection Act. Consumer warnings on these appliances would inform consumer decisions about the health risks, and recalls may be warranted where gas stoves, cooktops, and indoor fossil-fuel appliances have been improperly installed without adequate exhaust ventilation.

U.S. Greenhouse Gas Pollution by Economic Sector (2019)



4. Leading the World in Clean Manufacturing

The industrial sector—including steel, cement, chemicals and petrochemicals, paper, aluminum manufacturing, and more—accounts for around a quarter of US climate pollution, although that number rises to 30% once the emissions associated with industrial electricity consumption are taken into account. And, unlike most other sectors, this one's emissions are only forecasted to grow. The industrial sector is also a major source of non-carbon greenhouse gases, like HFCs and methane—climate “super-pollutants” with much greater, and more near-term, impact on planetary warming. Decarbonizing industry presents a complex challenge, with a wide variety of sources and technologies.

Yet there are promising opportunities, too. Deploying cost-effective ‘low hanging fruit’ technologies, measures, and processes that are already available on the market is an enormous opportunity for significant

emissions reductions. And there are major opportunities in developing and bringing to market new technologies that will be needed for deep industrial decarbonization across the globe. The industrial sector is uniquely dependent upon, and vulnerable to, the changing dynamics of international markets. That means a focus on trade policy goes hand in glove with industrial decarbonization. And here the Biden Administration deserves real plaudits for early actions. For example, in October 2021 the US and European Union announced the world's first carbon-based sectoral trade arrangement on steel and aluminum, which will bolster both parties' steel industries, while cutting both carbon pollution and costs.

Domestic policy action—and robust executive action—is critical for cleaning up industry and putting the US in a strong position to take advantage of the estimated \$23 trillion global investment opportunity created by just the initial commitments to the Paris

Climate Agreement. These opportunities will be seized through industrial process and materials efficiency; use of innovative material and advanced technologies; clean hydrogen; deployment of carbon capture, utilization and storage; electrification of industrial processes; and use of bioenergy. Opportunities also exist in building out new clean energy manufacturing industries, and in the conversion of existing manufacturing facilities for production in the clean energy economy. In February 2022, the Biden Administration made a great leap to advance a cleaner industrial sector, announcing a suite of actions across agencies, including initial action on many of the steps called for in this paper. By seizing on both near- and long-term opportunities, the US can assume a leadership role in manufacturing the clean economy solutions that will power the 21st century.

As the single largest purchaser of goods and services in the world, the US government can play an outsized role in spurring manufacturers to shift low-carbon products and processes. For example, in the US, public construction projects made up 46% of domestic cement demand and 18% of steel demand in 2018. And within the domestic industrial sector, cement and steel production are, along with chemical production, the biggest contributors to climate pollution. (If the steel industry were its own country, it would be the 3rd highest emitting nation in the world) Recognizing this leverage, the Biden Administration launched its Buy Clean Initiative, in 2021, to “promote use of construction materials with lower embodied emissions,” and in February 2022, launched the first-ever Buy Clean Task Force. This initiative can be built out further in 2022.

The IJA, and the Energy Act of 2020, have also provided the Biden Administration with a number of new tools that can be used—and

should be prioritized—for industrial decarbonization. The climate investments in the BBBA would also provide enormous opportunities for direct investment emissions reductions at a range of eligible facilities. And there are new dollars and existing authorities that can build American leadership in advanced energy manufacturing. For instance, to spur innovation across the sector, the Biden Administration announced a new Initiative for Interdisciplinary Decarbonization Research in February 2022.

Finally, adequately confronting climate pollution in the industrial sector will require the Biden Administration to lean into their whole-of-government approach, and to utilize existing tools they have, such as Clean Air Act authority over climate pollution, that are already being deployed for other sectors of the economy. This should be accompanied by standards the administration has already advanced to confront climate-super pollutants, like HFCs, to cut emissions while supporting growth and innovation in domestic manufacturing enterprises.

The Biden Administration should use the following actions to take on industrial sector climate pollution:

- **White House Can Transform Markets with the Buy Clean Initiative:**

President Biden’s Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability launched a “Buy Clean” initiative, requiring the government to consider carbon pollution in procurement decisions, and encouraging the acquisition of materials with lower embodied emissions. And in February 2022, the Biden Administration announced the establishment of the first Buy Clean Task Force, which will leverage its purchasing

power to drive markets for low-carbon products and grow cleaner manufacturing and construction industries. After all, Buy Clean will not only result in climate benefits, but will also provide a [competitive advantage](#) to domestic manufacturing industries and workers, whose operations regularly have lower carbon footprints than overseas competitors.

To seize the full opportunity of the Buy Clean Initiative, the Biden Administration's new Buy Clean Task Force should encourage the development of a baseline environmental performance standard for all direct federal procurement of construction materials. As outlined in a recent [group letter](#) co-signed by Evergreen Action, this standard should increase in rigor over time as technology improves, providing a pathway to meet the administration's carbon reduction goals. The administration should also implement a high-quality, transparent reporting mechanism, such as an improved Environmental Product Declaration (EPD) that better accounts for the lifecycle impact of inputs, to verify the embodied emissions for low-carbon materials. In addition, the administration should design preferential procurement incentives, and incorporate the Social Cost of Carbon into cost-benefit analyses (depending on the outcome of the [legal challenge](#) to the Biden Administration's adoption of this measure), to encourage the use of low-carbon industrial building materials.

The Biden Administration also has the opportunity to multiply the impact of its Buy Clean Initiative by encouraging state and local governments to join in the effort. After all, state governments like [California](#) were the first to move on Buy Clean policies. Through focused engagement, America's states and cities can join the Biden Administration in leading by example, and in transforming markets towards low-carbon materials.

• **DOE Must Prioritize New Investments for Industrial Decarbonization:**

Although the climate investments contained in the BBBA would deliver overwhelmingly more significant climate progress, the Biden Administration already has some important tools at its immediate disposal to advance industrial decarbonization, through the IJJA and the Energy Act of 2020. And the Biden Administration should prioritize this sector in implementation. DOE has begun to seize on this opportunity, as it has announced [departmental restructuring](#) and new offices of Clean Energy Demonstrations and Manufacturing and Energy Supply Chains, which will drive the deployment of these new federal funds in industrial transformation. DOE also [announced](#) plans to launch three major clean hydrogen initiatives: \$8 billion for Regional Clean Hydrogen Hubs to build out its use in the industrial sector and beyond, \$1 billion for a Clean Hydrogen Program to decrease the cost of hydrogen produced from clean electricity, and \$500 million for Clean Hydrogen Manufacturing and Recycling Initiatives.

Some of the other [biggest opportunities](#) include implementing investments in a newly-funded Industrial Emissions Demonstration Projects program; several programs supporting carbon capture demonstration projects, infrastructure, and carbon utilization (CCUS); and investment in the creation of four regional Direct Air Capture (DAC) hubs. Regarding the investments in hydrogen and CCUS, in particular, DOE should choose to prioritize their focus on the industrial sector, where they could be most needed to drive meaningful emissions reductions. Notably, carbon is not the only by-product from fossil fuel combustion, and these investments in CCUS technologies should be limited to areas in which clean electrification does not present a readily-available option, and should not support any additional fossil fuel

production. DOE implementation should also ensure CCUS demonstration projects are not located in overburdened communities, a recommendation that could be further strengthened in CEQ's recent [guidance](#) on responsible CCUS development.

- **White House Can Secure US Leadership in Advanced Energy Manufacturing:**

Robust federal policy action is needed not only to decarbonize traditional manufacturing, but also to assert US leadership in the growing clean energy manufacturing sector. The Biden Administration has [recognized](#) the opportunity to embrace muscular industrial policy for this purpose, as is evidenced in the nature of new investments proposed in the BBBA and passed in the IIJA, to promote domestic content, supply chains, and good US jobs. And it's also seen in some of the executive actions the administration has advanced—such as its June 2021 [executive order](#) on shoring up domestic advanced energy supply chains, and its February 2022 [announcements](#) supporting clean and competitive American industries. In some ways, the lessons that informed this moment in federal policymaking were hard-won; when in 2009 major new federal investments catalyzed explosive growth in clean energy installations, as with solar, they fell short in providing sufficient support for domestic manufacturing of these same technologies. And as a result some US industries have lost ground to overseas competitors.

Now, in 2022, President Biden has the opportunity to use long-held and also brand new federal authorities to accelerate the build-out of US clean energy manufacturing. This can be done by prioritizing implementation of new programs in the IIJA, like DOE's Battery Material Processing Grant Program, and expanded eligibility in the department's Loan Guarantee

Program that can be used to back domestic critical minerals development as well as US manufacturing of advanced batteries, clean vehicles, aircraft, maritime and other technologies. This is an opportunity for the new DOE Office of Manufacturing and Energy Supply Chains, and for the Department of Commerce's existing Manufacturing Extension Service and Advanced Manufacturing Partnerships programs. This is also a moment for the president to seize on the established authorities provided in the [Defense Production Act](#). These empower the federal government to address security imperatives and can be used to support domestic manufacturing and supply chains, direct markets, and drive deployment of clean energy technologies. For example, the administration can and should lean into its own massive physical footprint and energy consumption (such as through the Department of Defense and General Services Administration), and use these for the installation of more Made in America clean technologies.

- **EPA Should Advance Industrial Climate Pollution Standards:**

To fully confront climate pollution in the industrial sector, the federal government will also need to embrace systemic solutions, such as sectoral performance standards or requirements that incentivize all heavy-emitting industrial facilities to reduce their emissions. The Biden Administration has been right to first prioritize early action in trade breakthroughs and major new federal investments. The common-sense next move that the Biden Administration should explore is the use of EPA Clean Air Act performance standards requiring air pollution limitations on all new chemical factories, fossil gas processing facilities, petroleum refineries, and other heavily-polluting plants. New source standards



would be necessarily followed upon by existing source performance standards—both of which have been recognized in climate analyses, like that published by the [Rhodium Group](#), as important parts of achieving the administration’s 2030 and 2050 emissions goals. Standards impacting energy-intensive and trade-exposed industries should be advanced alongside policies that ensure reciprocity from trade partner nations, or that address the lack thereof.

More generally, the Biden Administration has already levied important climate pollution standards upon domestic manufacturers in ways that will both protect the climate and enhance their competitiveness. The recently-enacted [American Innovation and Manufacturing Act](#) (AIM Act), passed as part of the Energy Act, has directed the EPA to establish a program to swiftly reduce supply of HFCs, and cut these climate super-pollutants by 85% by 2035. This sort of policy action has also been anticipated to give domestic manufacturers a competitive advantage, [supporting](#) as many as 30,000 American jobs

and \$5 billion in increased US exports. The Biden Administration announced [strong initial rules](#) in 2021, and has committed that the EPA will soon begin a rulemaking to [update](#) how the agency will issue allowances and trading in this program, in 2024 and beyond. The AIM Act gives EPA the authority to prohibit the use of HFCs in specific applications. It also gives the EPA the authority to manage HFC emissions from already installed facilities—for example, through tighter leak repair requirements, and end-of-life refrigerant disposal practices. The EPA should move forward in both of these areas in 2022.

Finally, DOE, too, has a role to play in driving efficiency and emissions improvements in the industrial sector. The department should adopt new efficiency standards for industrial electric fans, motors, pumps, and commercial boilers. DOE should also research ways that these standards, and the potential for others, can drive cost savings, competitiveness and industrial decarbonization.

5. Confronting Fossil Fuel Industry Pollution & Giveaways

There's one segment of industry that demands particularly aggressive confrontation: the fossil fuel industry. As outlined in the [2021 Production Gap Report](#), America's fossil fuel production is dangerously inconsistent with Paris Agreement limits and climate science. The US is already the world's [largest oil producer](#) and [4th largest coal producer](#), and this year became the [biggest liquefied natural gas \(LNG\) exporter](#) on the planet.

To meet global climate targets and environmental justice commitments, it's imperative that President Biden use significant existing federal authorities to confront harms that this industry—and its direct and indirect climate pollution—are propagating upon Americans and the international community. That begins with confronting fossil fuel industry pollution and giveaways in three key areas: phasing out extraction from public lands and waters; carefully scrutinizing the climate impacts of new energy projects; and tackling, through regulation, the subsidized pollution represented in low-cost financing enjoyed by fossil fuel projects.

Fossil fuel production from public lands was responsible for nearly a [quarter of US greenhouse gas pollution](#) on average between 2005 to 2014. And as of 2021, oil and gas leasing engulfed [26 million acres](#) of public land and over 12 million acres of offshore waters. [Over half](#) of these acres are stockpiled by the oil and gas industry— not yet being used for oil and gas extraction, but also locked away from the American people for other uses. To achieve a safe and livable climate, President Biden should use all existing authorities to end oil and gas drilling on, and the hoarding of, public lands and waters, once and for all. Fortunately, there are robust existing tools for advancing these goals.

In January 2021, President Biden issued an [executive order](#) that temporarily paused new oil and gas leases on public lands and offshore waters. The president's pause on leasing of public lands was challenged by Republican state attorneys general in federal court, resulting in a preliminary injunction that prevented the administration from maintaining the outright "pause" on leasing. The Biden Administration is [appealing](#) the ruling. In addition, on January 27, 2022, the US District Court in the District of Columbia issued a [ruling](#) invalidating the Interior Department Bureau of Ocean Energy Management's (BOEM) Lease Sale 257, off the Gulf Coast—the largest in US history—telling the Biden Administration that the sale was illegal because they failed to adequately consider its potential contribution to climate change. This decision presents a clear opportunity for the administration to begin more comprehensively analyzing the significant climate impacts of their leasing decisions. And any full and fair assessment of these climate impacts will show that continued, expanded extraction of fossil fuels from our public lands and waters is incompatible with US climate goals and leadership.

Meanwhile, although the Department of Interior released a [report](#) on oil and gas leasing reform on public lands and waters, the Biden Administration has yet to complete a comprehensive review of the total impacts of the federal fossil fuel program, including how the president plans to align future fossil fuel development with his climate goals. The administration should follow the court's guidance and do more to fully account for the impacts of this program. This information can help them rein in oil and gas abuses of federal lands and waters on public lands, even as the administration continues to defend the full leasing pause in court.

In addition, the administration should lean into the authorities they have over the environmental permitting for all major infrastructure projects, and ramp down the development of major-polluting facilities, like pipelines and export terminals. The administration must utilize a more robust and consistent consideration of the full climate and pollution impacts of these projects to ensure permitting approval decisions aligns with their climate goals.

Finally, the administration can take steps to better scrutinize the flow of cheap capital to fossil fuels and associated infrastructure projects, while simultaneously ensuring our financial system is prepared to weather the inevitable impacts of climate change. The administration outlined an impressive vision to rein in climate-related risk and its underlying drivers (fossil fuels) in its May 2021 [executive order](#), and now must move quickly to implement that vision.

The most important actions the Biden Administration should take with existing authorities to confront the pollution from and giveaways to fossil fuel corporations are:

- **Interior Must End Abuses of Public Lands and Waters by Oil and Gas Corporations:**

The Interior Department has a range of tools to confront the ways in which fossil fuel corporations abuse public lands and waters. While *Louisiana v. Biden* enjoined the administration from maintaining the outright pause on lease sales, the court did not eliminate the Biden Administration's extensive authority to consider the impacts and merit of each lease sale on a case-by-case basis. As the *Louisiana v. Biden* appeal continues, the administration should use all existing authorities to align federal leasing decisions with its own climate goals, with a recognition of the growing scientific

consensus that our dwindling global carbon budget leaves no room for expanding fossil fuel [production](#).

The Biden Administration should do everything possible to end all new onshore and offshore leasing. For instance, a robust, thorough and more accurate analysis of the climate impacts of federal leasing decisions, as is required under the National Environmental Policy Act (NEPA), would provide ample support for determining that new fossil fuel projects and continued extraction are not in the public interest. As was noted in the recent federal court [decision](#) invalidating BOEM lease sale 257, the court found that “there is little doubt that a more complete consideration of total greenhouse gas emissions would have significantly informed BOEM’s decision.” This includes a thorough review of proposals before the administration like ConocoPhillips’s [Willow Project](#), the single largest proposed oil and gas project on public lands, which could lead to nearly 600 million barrels of oil extracted from Alaska’s fragile western Arctic over the next 30 years. A full and fair accounting of the climate impacts of increased Arctic extraction will showcase the incongruity with the president’s climate goals, and should therefore be rejected.

Moreover, later this year, the Bureau of Land Management (BLM) is expected to propose a Methane Waste Prevention Rule, which would reduce methane emissions from the oil and gas sector, and a Fossil Fuel Rule, to update BLM’s process for leasing “to ensure the protection and proper stewardship of public lands,” including climate impacts. These regulatory initiatives are clear opportunities to require more robust and consistent consideration of the climate impacts of the agency’s decisions.

To tackle onshore leasing, specifically, the Secretary of Interior should use the authority to engage in significant **withdrawals** of federal land from leasing availability. President Biden should do the same with offshore leasing and **withdraw** any unused areas of the Outer Continental Shelf (OCS). And, as Interior's Bureau of Ocean Energy Management (BOEM) develops a new Five-Year OSC Leasing Plan, for 2022-2027, it should include no new oil and gas leasing areas.

- **White House Should Confront Fossil Fuel Industry Pollution Head-On:**

US fossil fuel corporations' pollution, production and planning are incompatible with US's own commitments under the Paris Climate Agreement. The Biden Administration can and should deploy pollution standards that crackdown on the sector's emissions—of methane, in particular. The EPA should strengthen and finalize robust **methane standards**, including by ensuring that all oil and gas wells are subject to regular Leak Detection and Repair regardless of their Potential to Emit, and requiring an end to routine flaring, with proper enforcement to ensure unlit flares are not venting methane. The EPA should also develop a community monitoring program that actively engages with frontline communities; educates and certifies community members; and requires immediate follow-up on complaints filed by community members.

President Biden can and should deploy other federal powers to confront the abuses that fossil fuel corporations levy upon American communities. This should include implementing a Climate Test in NEPA reviews of major new energy infrastructure projects, which would ensure that all federal project reviews consider the full impacts of climate pollution, including **scope 3 emissions**, and reject those whose upstream and

downstream pollution fails to conform with US commitments under the Paris Climate Agreement. Critically, the president should also ensure his agencies conduct a full and fair assessment of the climate impacts of proposed liquefied natural gas (LNG) export terminals—which should lead to clear determinations that allow only those projects that are truly in the public interest. Finally, the administration should take further executive action, wherever possible, to end costly and counterproductive subsidies in the form of federal financial support for fossil fuel corporations.

- **Treasury, Federal Reserve & SEC Should Address Climate-Related Financial Risk:**

The administration should also move swiftly to implement its May 2021 **executive order** aimed to ensure that federal financial regulators take meaningful action to both stabilize our financial system in the face of inevitable climate-driven economic shocks, and address the underlying drivers of that risk: fossil fuels. The **recent guidance** from the Office of the Comptroller of the Currency (OCC) was an important first step, notifying large banks that they must begin to take climate change and the risks it presents seriously, but more must be done.

Federal financial regulators must use all tools at their disposal to ensure financial institutions are not only aware of risks presented by climate change and climate-risky assets like fossil fuel projects, but are taking steps to internalize their true costs. This should include Climate Risk Supervisory Guidance from the Federal Reserve and requiring climate scenario analysis from all regulated entities. The Securities & Exchange Commission (SEC) should move expeditiously to propose and finalize long-promised climate disclosure rules that will again be an important first step, but far from sufficient.



6. Promoting Climate-Smart Agriculture & Healthy Forests, Waterways & Oceans

America's farms, lands, and waters have the capacity to be powerful natural carbon sinks. The Land-Use, Land-Use-Change, and Forestry (LULUCF) sector removed roughly 12% of national carbon pollution from the atmosphere in 2019, according to the [EPA](#). However, when agricultural lands and forests are used or forced into unsustainable practices, they become a potent source of climate pollution.

For instance, America's forests are [experiencing](#) bigger, more destructive, and more severe wildfires. Fire emissions from America's forests were [3 times higher](#) in 2020 than the 21st century average in California, Oregon, and Washington. NASA [attributes](#) these increasing trends to climate change, a century of intentional wildlife suppression management, and the expansion of urban areas. Fortunately, IIJA provided nearly [\\$3 billion](#) to reduce hazard fuels and restore America's forests and grasslands. And in January 2022, the USDA Forest Service [unveiled](#) a 10-year [wildfire crisis strategy](#) to tackle catastrophic wildfires.

Meanwhile, agriculture accounts for 10% of the nation's [greenhouse gas pollution](#), pumping carbon and two other even more potent climate-warming gases—NOx and methane—into the atmosphere. In his January 2021 [executive order](#), President Biden directed the USDA to collect input from diverse stakeholders on how to encourage the voluntary adoption of climate-smart agricultural and forestry practices. That executive order, and the broader needs of this critical sector, also helps illuminate the following executive actions for progress in 2022:

• **USDA Must Invest In Climate-Smart Agricultural Practices:**

In November 2021, USDA unveiled a [Climate-Smart Agriculture and Forestry Partnership Initiative](#) that will provide incentives for climate-smart conservation practices on farms and working lands. This initiative will tap into the Commodity Credit Corporation (using parts of its \$30 billion annual budget), as called for in the [Evergreen Action Plan](#), and leverage that program's specific power to aid in the expansion or development of new markets. In this case, this program can help establish new markets for sustainable agricultural practices and products.

Implementation of this program must focus on robustly building out incentives for farmers to utilize climate-smart strategies like cover crops, no-till practices, and extended crop rotation. It should also work to accurately measure and monitor the greenhouse gas savings from the initial pilot climate-smart practices. This can build upon some of the additional steps made during the 2018 Farm Bill. And, as the USDA embarks on these pilot projects, it should ensure equitable outcomes for Black, Brown, Indigenous, and other producers and communities of color to align with the President's Justice40 commitments, and build on the USDA's initial progress to redress its own legacy of injustice in farm programs.

In addition, the USDA's Risk Management Agency should make changes in the Federal Crop Insurance Program (FCIP) to better reward climate-smart conservation practices. For example, the FCIP could strengthen its risk rating model to consider risk reduction benefits of climate-smart and conservation practices (like healthy soils) in the context of climate risk.

- **USDA & the White House Should Focus on Healthy Forests:**

The Biden Administration can take further steps to protect one of America's powerful natural carbon sinks: forests. To avert the risk of catastrophic wildfires, the USDA Forest Service, and state and community partners, must focus on continuously deploying preventative forest management tools like thinning and controlled burns to minimize the risk of high-emitting, catastrophic wildfires, while also slashing the greenhouse gas pollution that fuels wildfire risk.

Furthermore, following passage of the IIJA, the Forest Service will deploy billions of dollars to combat wildfires in 11 Western

states over the next ten years. As the agency does this, it should continue to prioritize the involvement and leadership of Native American tribes and underserved communities. And in light of the global extinction crisis, the Biden Administration must use forest management approaches that center biodiversity gains alongside carbon benefits. In particular, the Biden Administration must take executive action to protect older forests on public lands from logging. The federal government should also leverage its purchasing power to reduce international deforestation, ensuring federal procurement does not support unsustainably sourced products.

Ultimately, the biggest challenges to sustainable forestry are global in scope, and implicate US trade and international policy, and multiple other federal agencies. One way that the Biden Administration should address supply-side deforestation is by including international deforestation, biodiversity, and human rights concerns alongside climate change in its financial regulations. For instance, as recommended by Climate Advisers, the SEC could direct the Federal Stability Oversight Council (FSOC) to work with the Task Force on Climate-Related Financial Disclosures to strengthen guidance on nature-related financial risks, including deforestation.

- **EPA & NOAA Act to Protect Oceans, Waterways, and Coastal Communities:**

Throughout 2022, the Biden Administration should also continue to advance the president's 30 by 30 initiative, and its focus on protecting and restoring inland waterways and coastal ecosystems, while centering Indigenous and local leadership.

For example, in May 2021, President Biden's EPA reversed a Trump-era policy

and restored the authority for states and Tribes to protect lakes, streams, rivers, and wetlands impacted by potentially damaging energy projects – a move that should be commended for returning the authority to frontline communities, particularly Indigenous communities, to safeguard waters. Moreover, this year, the EPA is revising the definition of the Water of the United States (WOTUS) rule to protect public health, the environment, and downstream communities.

To protect ocean ecosystems and coastal communities, the Biden Administration should prioritize nature-based solutions, with an eye towards protecting oceans and coastal ecosystems. In October 2021, the White House convened its first meeting of the Ocean Policy Committee (OPC), an interagency body that coordinates ocean science and technology and streamlines policy across the federal government. As the OPC develops a cross-agency ocean-climate action plan to mitigate climate impacts, it should prioritize a just and inclusive blue economy and support the development of coastal carbon sinks. After all, mangroves and salt marshes, also known as “blue carbon,” sequester carbon at a rate 10 times greater than tropical rainforests—and offer five times the storage. The Biden Administration’s National Oceanic and Atmospheric Administration (NOAA) should also build out blue carbon programs to support ocean-based carbon sequestration projects, spanning regenerative ocean farming of kelp and shellfish to preservation and reforestation of mangroves, seagrass beds, and wetlands.

The administration should similarly explore new opportunities to establish marine national monuments, akin to the recent restoration of Northeast Canyons and Seamounts National Marine Reserve. These marine ecosystems function as critical habitats, carbon sinks,

and support American communities through fishing, tourism and other marine industries, as well as coastal storm protection.

Finally, the Biden Administration has made “unprecedented clean energy progress” on offshore wind development, and should continue to prioritize its focus in these areas to empower coastal communities to help lead America’s clean energy economic transition.



IV. A Note on the Conservative Federal Judiciary Hostile to Decades of US Environmental Law

Unfortunately, as the Biden Administration should set out to embrace more regulatory and executive actions on climate, it faces a conservative federal judiciary that is often hostile to US environmental laws and to decades of established legal precedent. This includes the Supreme Court of the United States (SCOTUS), which former President Donald Trump and Senate Leader Mitch McConnell (R-KY) successfully packed with radical right-wing justices. The Biden Administration must move ahead boldly, despite these challenges.

Later this month, SCOTUS will take the very unusual step of hearing a challenge against the EPA's regulation of greenhouse gas pollution from existing fossil fuel power plants under the Clean Air Act, in *West Virginia v. EPA*, even though no such regulation is currently in force. The Clean Air Act is a foundational, effective, and very popular US environmental law that has for 50 years successfully cut air pollution while supporting innovation and a growing economy, at an incredible return on investment. And for most of its history it has enjoyed broad bipartisan support. It was originally signed into law by a Republican president in 1970, and its major reauthorization and expansion were signed into law by another Republican president, in 1990.

However, in 2022, radical conservative Supreme Court justices who have ripped up

decades of precedent—as seen with the Voting Rights Act and *Roe v. Wade*—may attempt to also do the unconscionable with the Clean Air Act. Such a judicial action would be a blatant politicization of the Court, delivering through legal order what extreme Republican members of Congress have repeatedly tried and failed to accomplish through legislation. (Such as in 2011, when a new Tea Party House Republican majority took office on a promise to repeal the Affordable Care Act and cut government spending, but instead made its first legislative priority an attempt to remove Clean Air Act authority to regulate carbon pollution.) Such action by SCOTUS would be a terrible blow to the power of the federal government to protect Americans from air pollution, and to US and global efforts to confront the climate crisis.

It's not just the Clean Air Act, either. In 2022 SCOTUS will also consider limiting the protections provided by the Clean Water Act. And the Biden Administration's climate and environmental agenda faces similar challenges from lower federal courts. For instance, in 2021, a federal judge in Louisiana issued an injunction against the president's exercise of established authorities to prevent the abuse of public lands and waters from oil and gas leasing, in the *Louisiana v. Biden* case now before the 5th Circuit Court of Appeals. Another federal judge has issued a stay against President Biden's efforts to update and utilize the Social Cost of Carbon.

Far from absolving the Biden Administration of its responsibility to move forward with bold executive action, however, this situation should instead inspire the administration to robustly advance its whole-of-government agenda, recognizing that some initiatives may

fall to overtly political decisions handed down by conservative judges in the federal courts. At the same time, this judicial context also places even greater importance on the need for Congress to deliver major new climate investments, through legislation.



V. Conclusion

There are only eight years left in this critical decade for the US to transform its economy and meet the ambitious and necessary commitment to slash greenhouse gas pollution in half below 2005 levels. That means that this year—2022—is the year for President Biden to harness the full power of both legislative and executive action to tackle the climate crisis, and create millions of good jobs and greater environmental justice in a more equitable and prosperous clean energy economy.

The path forward is clear: The most critical step that the federal government must take in 2022 is the passage of the \$555 billion in climate and environmental justice investments that were contained in the Build Back Better Act, through whatever means necessary. These investments are essential to meeting both near-term and long-term climate goals. President Biden must also deploy bold executive actions to power the nation towards a 100% clean electricity future, and drive forward fast on clean cars

and sustainable and equitable transportation infrastructure. The Biden Administration must also advance a robust clean buildings agenda for the nation; move aggressively to ensure clean and competitive US industries; confront fossil fuel industry pollution and giveaways; and take action to promote healthy forests and oceans, as well as climate-smart agriculture.

To make effective and equitable progress in each of these efforts—and to build a just and thriving clean energy economy—the Biden Administration can and should deepen its commitment to the following principles: realizing a whole-of-government approach to climate action, advancing environmental justice, prioritizing good-paying union jobs, and engaging state climate leadership.

President Biden has the opportunity, and the duty, to mobilize greater legislative and executive action to ensure his climate goals are met. This is our moment for climate action. And this moment will not come again.