

Clean Jumpstart 2021

Realizing President Biden's \$2 Trillion Clean Energy & Infrastructure Investment Vision

President Biden and Vice President Harris campaigned and won on a bold *Build Back Better* plan that called for \$2 trillion in federal reinvestment over the coming 4 years in building “modern, sustainable infrastructure and an equitable clean energy economy.” Now that Congress and the administration have passed COVID relief, the next item on the agenda must be economic recovery and bold investments in America’s clean energy industries, infrastructure, and innovation. It’s time to fulfill Biden’s mandate for the Build Back Better agenda.

This report, *Clean Jumpstart 2021*, is a manual for how Congress can realize President Biden’s vision. It details \$2.3 trillion in investments that will deliver on climate, jobs, and justice.

Momentum has been building toward this moment. Last year, Evergreen and Data for Progress released [A Plan for a Clean Jumpstart to Rebuild America’s Economy](#) to inform debate over economic relief and recovery legislation. That first Clean Jumpstart plan laid out investments that Congress could make to help the nation recover from the pandemic-fueled economic crisis and build a more just and thriving clean energy economic recovery for the 21st century. That plan was necessarily limited in scope, in recognition of the challenge in passing robust clean energy investments under a Republican-controlled White House and U.S. Senate. Even still, some of those proposals, including low income water assistance programs and relief for state and local transit agencies, were enacted in previous legislation. But realizing a full clean energy recovery agenda — aligned with both Biden’s Build Back Better agenda and the [Evergreen Action Plan](#) — remains an unfulfilled opportunity for federal lawmakers now to seize.

Clean Jumpstart 2021 details 39 action steps for Congress and the administration to deliver critical clean energy and infrastructure investments for American communities. The plan is divided into seven sections for action below: Clean Energy Deployment, Sustainable Infrastructure, Clean & Competitive Manufacturing, Agriculture & Natural Resources, Technology Innovation, Workers & Communities, and International Action.

These investments must be made equitably, in line with President Biden’s [Justice40 commitment](#) to Black, Indigenous, and people of color (BIPOC) and low-income communities that have suffered a legacy of environmental racism and economic exclusion. In particular, at least 40% of the investments included in this plan must be directed toward, and implemented alongside, these disproportionately impacted communities. Some programs should devote well more than 40% of their spending to these communities, while some programs may be targeted for policy outcomes that otherwise leave them short of the 40% mark—but, overall, no less than 40% of the total investment must be put toward meeting the Justice40 commitment. And

agencies receiving this money must develop metrics, goals, and accountability mechanisms to track their compliance with this initiative.

Bold reinvestment in clean energy and infrastructure, alongside enforceable sector-specific 100% clean energy standards, and a commitment to justice throughout, can create millions of good-paying union jobs and ensure U.S. leadership in tackling the climate crisis. Congress must take swift action.

I. Clean Energy Deployment

1. Invest in State Clean Energy Leadership

\$60 billion

Congress should provide \$60 billion for investment in state-led clean energy deployment and innovation, through the Department of Energy (DOE)'s State Energy Program (SEP) and new Clean Energy Challenge Grants. States have been on the front lines of the climate crisis — and in building America's clean energy economy. Congress and the Biden administration have an important opportunity to help support and accelerate that leadership with flexible funding that states can use to finance and plan for their energy needs, allowing them to invest in community projects and support job creation in growing clean energy industries. In expanding SEP, Congress should provide states with new tools and incentives to advance equity, to ensure at least 40% of these programmatic investments accrue to disadvantaged communities, as well as the ability to use these funds to cover a greater mix of advanced energy deployment activities.

2. Expand Clean Energy Tax Incentives and Increase Access through Direct Payments and Refundability

\$250 billion

The Renewable Energy Investment Tax Credit (ITC) and Production Tax Credit (PTC) have been among the most important policy drivers of growth in the renewable energy industry since their introduction. Congress should pass a 10-year extension for both credits, or a similar combined technology-neutral credit as proposed in the *Clean Energy for America Act*. This bill should make these incentives refundable, reset the investment credit at 2019 levels for all eligible technologies, expand coverage to include technologies like energy storage, and extend eligibility to non-profit and community organizations that do not hold federal tax liability. These credits should also be increased for projects that pay a prevailing wage and meet certain labor standards, and for projects located in environmental justice and energy transition communities. Finally, in order to further expand equitable access to these clean energy incentives, the tax credits' expansion should be combined with a reauthorization of the 1603 Clean Energy Grant Program, and claimants should be given the opportunity to either claim the refundable credit or to receive a cash grant. Combined with a federal [Clean Electricity Standard \(CES\)](#) — which may include additional federal expenditure — these policies will unlock the rapid transformation necessary for 80% clean electricity by 2030 and 100% by 2035.

3. Launch a Clean Energy Accelerator

\$100 billion

Congress should create a Clean Energy Accelerator (aka Green Bank), capitalized at \$100 billion, to provide low-cost investment for clean energy infrastructure projects in market segments in which the private sector is underinvesting. This federal financing authority would deploy low-cost loans and loan guarantees that will earn a

return, allowing for cost-effective support for clean energy transformation on an ongoing basis. The Accelerator would work directly with state and local green banks, clean energy funds, infrastructure finance authorities, and Community Development Financial Institutions (CDFIs), to leverage aggressive state climate leadership on clean energy deployment, support zero-carbon technology manufacturing, reduce the financial risks associated with innovative technology deployment, and expedite retirement of coal power plants and fossil fuel infrastructure. This Accelerator must target at least 40% of its investment benefits into disadvantaged communities. Additionally, some advocates have also proposed a public asset manager role within this accelerator or similar green bank mechanisms.

4. Extend the Electric Vehicle Tax Credit as a Point-of-Sale Rebate

\$80 billion

The \$7,500 Electric Vehicle Tax Credit should be extended and turned into a point-of-sale rebate, making the credit more accessible for the millions of Americans who do not carry enough federal tax liability to benefit from the current credit. To help scale up electric vehicle manufacturing and put more people to work, the current cap on manufacturers' allowable credits should be eliminated. The rebate should also be increased when used for the purchase of American-built vehicles manufactured with pro-worker labor standards. This policy will be an integral tool in promoting the rapid increase in deployment of new domestic light- and medium-duty EV sales, along with domestic EV manufacturing, over the coming decade.

5. Invest in USDA-Led Next-Generation Rural Electrification

\$21 billion

Funding for the U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS) should be increased to expand the program's capacity to provide low-cost financing for zero-carbon energy generation, transmission and distribution of electricity, including distributed renewable energy and efficiency upgrades, smart grid solutions, and other clean technologies. This funding should also be used to enable rural electric cooperatives (co-ops) to transition away from coal, which can be accomplished by allowing co-ops to write down debt for coal plants and other fossil fuel assets in exchange for a commitment to invest an equivalent amount in clean energy assets. These investments provide an opportunity to revitalize rural economies in the way New Deal-era electrification did a century ago.

6. Enhance DOE Loan Guarantee Programs

\$6 billion

Federal lawmakers should provide expanded resources to support the Department of Energy Loan Program Office (LPO), including appropriated funds to cover the cost of credit subsidies for project applicants building clean energy and industrial decarbonization projects. This investment would help to accelerate the deployment of the \$40 billion in financing already held on these programs. Congress should also explicitly empower the LPO to provide backstop financing for state and local green

banks and clean energy finance institutions, as was proposed in Sec. 1807 of the *American Energy Innovation Act of 2020* sponsored by Sens. Lisa Murkowski (R-AK) and Joe Manchin (D-WV).

7. Expand SBA Green Real Estate Lending for Small Businesses

\$10 billion

Congress should increase funding for green building loan programs by authorizing \$10 billion in new forgivable small business green building loans, and dedicating \$5 billion of those funds specifically to non-profit organizations. The Small Business Administration (SBA)'s existing 504 Loan program provides long-term financing of up to 20 years for businesses to acquire assets for expansion or modernization, and includes a Green Loan Program for borrowers committed to meeting energy efficiency upgrades, generating renewable energy on site, or achieving sustainability improvements. The program funds approximately \$5 billion in loans each year, made as a second mortgage on property through an existing network of over 260 community based non-profit Certified Development Corporations (CDCs). This existing capacity can enable rapid deployment of capital on a national basis. The SBA also typically guarantees 40% of project costs, expanding the leverage of the program through local lenders and small business partners. This program should prioritize women- and minority-owned businesses and go well-beyond the *Justice40* commitment for disadvantaged communities.

II. Sustainable Infrastructure

1. Establish a “Re-Build America” Building Energy Retrofit Initiative

\$225 billion

In order to cut utility bills and energy burdens for ratepayers, jump-start local construction jobs, and decarbonize the nation's building stock, Congress should invest in energy efficiency by funding a major new “Re-Build America” [building energy retrofit initiative](#), as proposed by Evergreen and the Roosevelt Institute. Congress should expand funding and eligible expenditures in DOE's Weatherization Assistance Program (WAP) and the Department of Health and Human Services' Low-Income Home Energy Assistance Program (LIHEAP), and should also invest in retrofits for Municipal, University, School & Hospital (MUSH) buildings. Crucially, it must also involve extending and establishing consumer rebates and refundable credits to help American home- and business-owners fund installation of comprehensive retrofits, electric appliances and heating systems, insulation and window replacement, and more. This new rebate program, as envisioned in the *HOPE for HOMES Act*, would establish a point-of-sale incentive made available directly to consumers and/or contractors — with the incentive paid by the federal government — through a network of certified rebate aggregators. This Rebuild America initiative would be a powerful tool for building energy justice and economic investment in disadvantaged communities.

2. Fund State Revolving Loan Funds for Clean & Safe Drinking Water

\$220 billion

To address America's clean drinking water crisis, Congress should invest in rebuilding America's clean water infrastructure by appropriating funding for the U.S. EPA's Drinking Water State Revolving Fund (DWSRF) and Clean Water State Revolving Fund (CWSRF), as well as for lead-service line replacement, rural water programs, and abatement of per- and polyfluoroalkyl substances (PFAS). Congress should also provide resources for a water efficiency and conservation block grant program modeled after the Department of Energy's EECBG program. These investments are badly needed, and would build upon the Low Income Households Drinking Water & Wastewater Assistance Program created in 2020 legislation. This is another program that should devote the significant majority of its initial investments into disadvantaged communities. In [2015 alone](#), an estimated 77 million Americans' tap water suppliers violated federal drinking water rules, with low-income communities and communities of color disproportionately affected. Investment in clean water infrastructure is an enormous opportunity for building jobs and justice.

3. Support Transit and Rail Transportation Networks

\$210 billion

Congress has the ability to authorize a major expansion of funding for public transit and rail systems, including both new capital for construction projects and funding for continuation and expansion of operations amidst the ongoing drop in revenues caused by the pandemic. Federal lawmakers must build upon the \$30 billion investment in immediate relief provided to transit systems in the *American Rescue Plan*. By authorizing an additional \$210 billion — bringing total investment to \$250 billion — for federal programs that fund public transit, including the Mass Transit Account of the Highway Trust Fund, the Capital Investment Grants (CIG or “New Starts”) program, and the Better Utilizing Investments to Leverage Development (BUILD) program, as well as in the provision of urgent aid through the Public Transportation Emergency Relief Program, Congress could provide a much-needed infusion of resources to already-struggling transportation networks that have been further strained by the pandemic. Investment in rail networks, and electrification, is also crucial for passenger and freight transportation expansion for competitiveness and sustainability in the 21st century. These critical sustainable transportation investments have been called for by a wide coalition of conservation advocates, environmental justice leaders, and labor unions.

4. Expand Rural Broadband

\$30 billion

Congress should act quickly to expand broadband across rural and underserved communities to ensure every American has access. According to the Federal Communication Commission's (FCC) latest [broadband deployment report](#), as of 2017, over one quarter of Americans living in rural areas do not have access to broadband. Federal lawmakers should invest \$30 billion in broadband deployment. And this

should include funds specifically earmarked for Tribal nations to expand service to the [nearly 50% of Native Americans](#) living on tribal lands who do not have internet access. As rural economies begin to recover from COVID-19, it is now more important than ever to put Americans back to work by investing in rural broadband to enable distance learning, telehealth services, and access to a networked global community.

5. Invest in Community Development Block Grants for Hazard Mitigation

\$30 billion

Congress should appropriate an additional \$30 billion for the Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) program to fund state and local economic development priorities, with a focus on climate mitigation and hardening public infrastructure. The CDBG program offers a highly flexible vehicle to provide federal funding directly to states and cities to invest in infrastructure modernization, and has previously been effectively leveraged as a source of funding for state and local governments during economic recessions and natural disasters.

6. Harden Grid Infrastructure and Ensure Electricity Reliability

\$12 billion

Congress should provide funding to meet the urgent need to strengthen and upgrade America's electric grid infrastructure in order to improve the power sector's resilience. These investments are crucially needed in the face of worsening climate disasters — like the 2021 Texas power crisis caused in part by the failure to winterize natural gas power plants. And these investments will enable a rapid clean energy transition. This funding must include reactivating the DOE Smart Grid Investment Grant Program (SGIG), and should support smart electricity infrastructure, solar microgrids, energy storage, and advanced metering technology.

7. Expand Transmission Planning and Financing

\$40 billion

Congress should establish a new Transmission Investment Tax Credit, as proposed in Sen. Martin Heinrich's (D-NM) *Electric Power Infrastructure Improvement Act*, and provide low-cost federal financing in order to meet the investment needed over the next decade to expand transmission infrastructure to help the nation meet its clean electricity goals. This should include investment in anticipatory construction of transmission capacity to areas with significant queues of clean-energy generation capacity awaiting transmission, particularly federal lands across the West, as well as around burgeoning offshore wind projects on the Eastern seaboard. Congress should also offer dedicated support to the Power Marketing Administrations (PMAs) — another powerful engine for mobilizing public investment in transmission and clean power generation — in order to enable them to help their regions plan and build the transmission infrastructure needed to achieve a clean power transition.

8. Invest in the Energy Efficiency Conservation Block Grant Program

\$15 billion

The DOE Energy Efficiency and Conservation Block Grant (EECBG) program, originally established by the 2007 *Energy Independence & Security Act* and first funded in the 2009 *American Recovery and Reinvestment Act*, should be reauthorized and funded at \$15 billion, split between formula and competitive grants. This expanded EECBG program would fund community-level energy efficiency and conservation projects that achieve carbon reduction goals and save ratepayers money. The original EECBG program, funded at \$3.2 billion, provided customers with approximately \$1.76 in energy bill savings for every program dollar spent. EECBG offers a proven, highly effective vehicle for driving new federal capital investment into community-based projects that create jobs, reduce carbon emissions, and save consumers money. This program could be a powerful driver of energy justice and equitable economic growth.

9. Expand Electric Vehicle Charging Infrastructure

\$36 billion

To achieve bold carbon reduction goals across the transportation sector, Congress should invest in the expansion of electric vehicle charging infrastructure. This investment should be carried out through both existing tax incentives and spending programs, as well as the establishment of a new program to specifically channel funding into projects related to electric vehicle charging and associated grid needs. This new grant program should be housed at the Department of Transportation (USDOT) and modeled after the agency's successful BUILD grant program, to support state and local governments and utilities and accelerate deployment of electric vehicle charging infrastructure. This infrastructure expansion should target light-, medium- and heavy-duty vehicles, as well as transit and school buses. Federal funds should be tied to local hiring and strong labor standards.

10. Preserve and Construct New Green, Affordable Housing

\$120 billion

In order to address the affordable housing crisis, take important steps toward decarbonizing the buildings and transportation sectors, and support millions of good jobs in construction and maintenance, Congress should increase investments for the National Housing Trust Fund (HTF) and the Community Development Financial Institutions (CDFI) Fund to support construction, preservation, and rehabilitation of affordable housing through grants to states and community organizations. A significant portion of these HTF funds should be dedicated to public housing, and all funds should be conditioned on meeting the highest standards of electrification, energy efficiency and climate resilience. Congress should also expand the Low-Income Housing Tax Credits (LIHTC) program by at least \$5 billion per year and establish incentives for projects that meet climate goals, fully fund Section 8 vouchers to support all renters making below 50% of median income, and increase block grants that fund affordable housing on Tribal lands. The Department of Housing and Urban Development (HUD) should also develop utility reimbursement and rental

assistance programs that incentivize affordable housing developers and Public Housing Authorities to pursue strong energy efficiency and clean energy measures.

11. Update Community Infrastructure for Flood and Storm Protection

\$20 billion

With climate change-fueled extreme weather putting unprecedented strain on America's aging infrastructure, Congress should act quickly to invest \$20 billion in job-creating infrastructure projects that reduce flood risk and improve the health of our nation's waterways. This funding package should address the backlog of authorized but not-yet-constructed Army Corps of Engineers projects intended to address local flooding, navigation, and environmental restoration needs. It should direct \$7 billion for Critical Construction Funds for Water Resources Development Projects funding flood control and other pressing needs; \$10 billion to modernize inland waterways; and \$2-plus billion for Sewer Overflow and Stormwater Grant Authority funding to states and cities to address combined sewer overflows and stormwater.

III. Clean and Competitive Manufacturing

1. Invest in Advanced Energy Manufacturing Leadership

\$30 billion

Federal lawmakers should re-authorize and expand a new and uncapped Advanced Energy Manufacturing Tax Credit to provide a 30% credit for investments into a variety of clean technology manufacturing facilities, including qualified business investments that reduce greenhouse gas pollution from existing manufacturing operations. The Section 48C credit, passed as part of the 2009 *American Recovery and Reinvestment Act*, provided \$2.3 billion to catalyze \$5.4 billion in non-federal funding that supported tens of thousands of jobs building 183 projects expanding domestic clean energy manufacturing capacity across 43 states. Unfortunately, it was capped at \$2.3 billion, even while \$5.8 billion in eligible project applications went unmet, and even while other successful federal programs invested ten-fold as much in technology deployment. If scaled appropriately, this new 48C credit could cost the federal government approximately \$30 billion while leveraging many billions more in non-federal project funding. And a full half of these investments should be targeted into energy transition communities in which a coal mine or power plant has received closed — as in the American Jobs in Energy Manufacturing Act.

2. Fund the Domestic Manufacturing Conversion Grant Program

\$12.5 billion

The Section 132 Domestic Manufacturing Conversion Grant Program, authorized in the bipartisan *Energy Independence & Security Act* of 2007, can provide funding to upgrade or convert vehicle manufacturing plants to help facilities affordably shift to building clean cars, preserving manufacturing jobs, and investing in the leadership of the American auto industry. As recommended in H.R. 2, the *Moving Forward Act* of 2020, Congress should fund the Section 132 program with \$12.5 billion in order to create manufacturing jobs and scale up the production of electric vehicles, batteries, and other clean car technologies.

3. Implement Clean Cars for Clunkers

\$250 billion

Congress should establish a “Clean Cars for Clunkers” program, modeled on the 2009 “Cash for Clunkers” program, through which Americans can trade in their existing fossil fuel-powered cars or trucks and receive a rebate that can be used for the purchase of a zero-emission vehicle. Like the original Cash for Clunkers, this program would provide a much-needed boost for American car manufacturers and workers by incentivizing manufacturing of clean, 21st-century vehicles. This program will bolster domestic auto manufacturing in the growing race for clean cars that will dominate the 21st-century market.

4. Develop Smart Federal Advanced Manufacturing & Industrial Policy

\$18 billion

Our 21st-century energy needs will require a clean and smart manufacturing agenda, including manufacturing zero-emissions energy technologies, securing and recycling critical elements necessary for clean energy production, and decarbonizing traditional industries. DOE and the National Academies of Sciences (NAS) should lead development of a national plan, with the engagement of DOE’s National Laboratories, while the Department of Commerce should lead a Quadrennial Industrial Review (QIR) to monitor progress and set a defined agenda for industrial competitiveness and prosperity. Congress should appropriate \$600 million for this process, plus \$1 billion dedicated to the DOE Advanced Manufacturing Office (AMO). Congress should also increase funding for the National Institute of Standards and Technology (NIST), including \$13 billion for the Manufacturing Extension Partnership (MEP), and \$1.5 billion for Manufacturing USA. Moreover, federal “Buy Clean” standards should be set to ensure that the \$500 billion spent annually on federal procurement meets baseline climate standards. Congress should also invest money to unlock new strategic growth industries, such as with \$315 million for [offshore wind energy](#) through streamlined agency processes, job training, and supportive industrial engagement. And federal lawmakers should consider complementing these standards with utilization of the Defense Production Act (DPA) to prioritize and quickly scale up clean and advanced manufacturing.

5. Directly Support Industrial Decarbonization

\$22 billion

As [proposed](#) by the Blue Green Alliance, Congress should direct investment through the Department of Energy Advanced Manufacturing Office (AMO) and Loan Programs Office (LPO) to offer grants and technical assistance to help accelerate decarbonization — and economic competitiveness — for traditional manufacturing industries. This should include investments in industrial energy efficiency; combined heat and power (CHP) systems deployment; significant industrial decarbonization projects at energy-intensive industrial facilities; demonstration and deployment of ultra-low emissions facilities across all key energy intensive manufacturing sectors; and deployment of carbon capture, utilization, and storage (CCUS), targeting energy-intensive industries.

6. Expand the Advanced Technology Vehicle Manufacturing Program

\$5 billion

In order to complement investments in energy manufacturing with support for American leadership in manufacturing clean electric cars, Congress should expand the lending capacity of the DOE Advanced Technology Vehicle Manufacturing Program (ATVM), a loan program that has supported car manufacturers including Ford and Tesla to scale up manufacturing of 21st-century clean cars. Congress should expand ATVM's eligibility to cover medium- and heavy-duty vehicles as well as light-duty cars, and should appropriate \$5 billion for enhanced access to this expanded loan authority.

IV. Agriculture and Natural Resources

1. Invest in Soil Carbon and Climate-Smart Agriculture

\$50 billion

Congress should provide \$50 billion in funding to USDA programs that expand on-farm climate solutions. This should include increased funding for the Conservation Stewardship Program (CSP), which is routinely oversubscribed and underfunded, so that small farmers can bring in more revenue by expanding climate friendly on-farm practices. It should also involve investment in other successful conservation programs like the Environmental Quality Incentives Program (EQIP). Conservation practices such as cover cropping and no-till farming both increase soil carbon sequestration and improve crop yields, and federal investment in these practices will also offer meaningful support and new revenue streams for American small farmers.

2. Protect Rural Water Resources for Farms, Fish and Families

\$15 billion

Many rural communities are facing water stress from pollution and drought, and climate change is exacerbating this stress on important watersheds. In order to protect rural water supplies, Congress should invest in Department of Interior (DOI) Bureau of Reclamation programs supporting unmet water resources infrastructure needs, as well as in USDA programs like the Regional Conservation Partnerships Program (RCPP) to protect “critical conservation areas” in the drought-impacted

West. Congress should also reauthorize the interagency Rural Water Supply program, which compelled different federal departments to work together to identify and address critical water supply issues in Western states. Finally, Congress should ensure that all major federal water resources investments are required to demonstrate a net ecosystem benefit.

3. Improve Forest Health and Resilience

\$30 billion

A lack of investment in forest health, and in the U.S. Forest Service, together with hotter and drier seasons and pest infestations driven by climate change, have resulted in regularly occurring massive and catastrophic wildfires — especially in Western states. Congress should increase investment in the U.S. Forest Service’s efforts to prevent wildland fires, protect forest health, and establish opportunities to use biomass from forestry thinnings to make renewable materials — which would create a sustainable revenue stream for rural communities. To achieve these goals, Congress should appropriate \$30 billion for both direct federal forest health investments and for collaborative forestry efforts between federal, state, and local agencies and private landowners. This investment can capture the full carbon storage and forest health potential for reforestation, help address the approximately 1 million acres of forest not yet under best management practices, and create forestry jobs in vulnerable communities.

4. Restoration of Public Lands, Critical Ecosystems and Habitats

\$20 billion

Federal lawmakers should include funding to restore and enhance protections for America’s public lands, including addressing and going beyond the \$12 billion backlog of maintenance projects in National Parks. These steps should further engage state, local, and Tribal governments in co-management of public lands, include commitments to fulfill U.S. government treaty obligations to Tribal nations, and ensure new protections and restoration of Tribal lands. Congress should also appropriate funding for restoration and protection of some of America’s most iconic and valuable ecosystems and watersheds, in order to both protect their valuable resources for generations to come and to create good, local jobs in ecosystem restoration. Congress should direct funding toward restoration of specific critical regional watersheds, through the EPA Geographic Programs for the Chesapeake Bay, Puget Sound, Great Lakes, Long Island Sound, Lake Pontchartrain, the San Francisco Bay, and the Columbia River Basin, as proposed in the *Moving Forward Act* of 2020. These sums should total at least \$6 billion. In addition, Congress should direct another \$2 billion to establish incentive and competitive grant programs to provide farmers, rural communities, and local and tribal governments with financial incentives to restore and enhance watersheds and waterbird habitats, as also described in the *Moving Forward Act*.

V. Technology Innovation

1. Expand Clean Energy Research, Development & Demonstration

\$100 billion

In order to catalyze growth of the next generation of clean energy technologies, President Biden should work with Congress to increase federal investments into research and development on clean technologies and climate solutions to approximately \$100 billion. These federal clean tech RD&D investments should include expanding relevant offices and laboratories housed within DOE, including the newly-created Office of Technology Transitions, as well as partnerships with states to invest in clean energy innovation at public research universities. Congress should also increase and expand the energy-related collaborative research and experimentation tax credit to offer stronger incentives in a wider field of disciplines and attract more private capital to invest in basic scientific research.

2. Develop Carbon Removal & Innovation for the Industrial Sector

\$20 billion

Even while prioritizing a just transition away from fossil fuels and building a 100% clean power sector, the federal government has a role to play in exploring opportunities for industrial decarbonization, and carbon capture and sequestration technologies, in order to clean up carbon-intensive industries. Smart investment in carbon capture will provide an opportunity to place American industries at the forefront of emerging worldwide clean technology innovation. This investment should include investment through the DOE Advanced Manufacturing Office and Office of Fossil Energy for advanced technology research, development and demonstration of innovative materials science, and industrial-use carbon capture. It should also include launching a new federal initiative focusing specifically on carbon removal technologies to pull carbon pollution from the atmosphere and strive toward climate restoration at sustainable global levels.

3. Establish ARPA-Ag & Agricultural Innovations to Tackle Climate Change

\$20 billion

The Biden administration and Congress should take on two key initiatives to invest in American farmers and invest in agricultural leadership: the creation of an Advanced Research Projects Agency for Agriculture (ARPA-Ag), modeled on similar agencies for defense and energy innovation), and the addition of innovation to the practice of Agricultural Extension Services. ARPA-Ag, alongside a new Next-Generation Clean Energy Extension Service initiative, should be focused on ensuring that farming practices maximize long-term natural carbon storage, energy-efficient farm operations, and farm-based clean energy generation. In addition to fighting climate change, these initiatives will promote and accelerate sustainable economic development in rural America.

VI. Workers and Communities

1. Establish Equity Mapping Initiative to Drive 40% of Clean Energy Investments to Disadvantaged Communities

\$100 million

Decades of environmental racism and injustice have caused untold harm to the health and economic stability of Black, Brown, and low-income communities, across the United States. In order to take steps to correct this injustice and meet President Biden’s commitment to direct 40% of all federal clean energy and infrastructure investments into these “disadvantaged communities,” Congress should establish and fund a revamped national [Equity Mapping program](#) to comprehensively identify and map demographic, environmental, health, and socioeconomic conditions, as described in the proposed *Environmental Justice Mapping and Data Collection Act* of 2021. While the creation of a strong Equity Map can form the foundation for President Biden’s Justice40 initiative, implementation of this initiative must also involve creation of a detailed interagency framework to guide investments, in concert with an established definition of “benefits” to disadvantaged communities, robust community and public engagement, and a use of tight metrics and auditing.

2. Create a Civilian Climate Corps

\$70 billion

In the face of ongoing shocks to the economy, the Biden administration must directly create jobs, especially for young people entering the job market and those working in industries in transition. A Civilian Climate Corps will build on the legacy of American service and the construction of job opportunities as it helps to mobilize the American people rising to the climate challenge. President Biden has already acted to lay the groundwork for this initiative, and Congress must now act to fund, implement, and expand the program to deploy 1.5 million Corps members over the next five years.

3. Create Environmental Remediation Jobs to Restore Energy Communities

\$18 billion

The negative public health impacts and associated environmental degradation from a legacy of resource extraction and associated pollution provides an opportunity for public investment and job creation. Congress should appropriate \$18 billion for a new “Restoration Fund” to direct investment towards activities such as orphaned wells (\$8 billion) and abandoned mine clean-up (\$10 billion) that will create jobs and clean up remediation left behind by the fossil fuel industry. This fund could build on and expand the bipartisan 2019 *RECLAIM Act*, which proposed investment in the Abandoned Mine Reclamation Fund to revitalize communities hardest hit by the downturn of the coal industry. The Restoration Fund should condition dollars on local hiring, prevailing wages, the right to organize, and on-the-job training.

4. Stabilize the Black Lung Disability Trust Fund

\$15 billion

Many existing programs intended to support fossil fuel workers are nearing insolvency. Among the most dire is the Black Lung Disability Trust Fund, which is currently predicted to reach \$15 billion in debt by 2050 without Congressional action. Congress can stabilize the Black Lung Disability Trust Fund by extending and raising the coal excise tax rates. Federal lawmakers should invest the dollars necessary to ensure programs that fossil fuel workers and their families rely on remain solvent.

5. Establish a New GI Bill of Rights for Energy Workers

\$60 billion

In order to ensure that no fossil fuel worker or community is left behind during the transition to 100% clean energy, Congress should pass a “GI Bill” for energy workers that will provide necessary funding and support. A new Energy Worker GI Bill of Rights should include guaranteed wage and benefit parity for workers transitioning into new industries; continued health care coverage; stipends for and access to job training; and full financial security for workers who choose not to find new employment and wish to retire with dignity, including promised pensions and early retirement benefits. This package should establish a new program for compensation replacement, education, and training within the Department of Labor. Congress should also include provisions to ensure that fossil fuel companies emerging from bankruptcy cannot shed liabilities that include long-term healthcare or pension obligations.

6. State Buy-Outs for Fossil Fuel-Dependent Communities

\$12 billion

In order to provide needed relief and enable a just transition for fossil-fuel dependent states, Congress should offer energy-producing states a one-time buyout of revenue associated with leasing and extracting fossil fuels on federal public lands, as initially proposed by the [Center for American Progress](#). All states that lease fossil fuels on federal lands would receive 49 percent of revenues associated with leasing and developing the energy resources, with an exception for Alaska, which should receive 90 percent, in recognition of the state’s unique economic characteristics. This buyout should be equal to projected revenues for the next 10 years. And in exchange, states would forgo any shared revenue associated with energy leasing and extraction on federal public lands for the next 10 years, with all revenues instead being directed to the federal Treasury.

7. Commit to Superfund Cleanup & Brownfields Redevelopment

\$30 billion

Nearly 1,400 Superfund sites across the country remain contaminated, and these sites are disproportionately located in or near predominantly Black and brown communities. Congress should provide a robust funding commitment with \$22 billion

Superfund cleanup, as well as \$8 billion for Brownfields redevelopment. These investments must necessarily far exceed the 40% guaranteed benefits of public investments from Biden's *Justice40* initiative. And this agenda should include ramping up investments in Superfund cleanup activities, in partnership with local front-line communities, and reinstating and tripling Superfund taxes on corporate polluters. It should also require increasing resources for Brownfields redevelopment to achieve more sustainable approaches to local land use.

VII. International Climate Leadership

1. Re-Establish U.S. Climate Leadership Through Global Investment & Finance

\$90 billion

The Biden administration and Congress have the opportunity to assert American leadership in a new era of global climate collaboration, with a transformative investment in international action. This investment will also provide an enormous opportunity for American economic leadership in export and job growth. Under the Obama administration, the United States pledged investment in the Green Climate Fund—a multilateral fund that provides grants to developing nations for climate investments. Only a third of that commitment was transferred to the fund before the Trump administration took office, and President Biden made a campaign promise to recommit the remaining funds. However, significantly more investments are needed to restore American credibility on the international stage and provide meaningful support to global climate action. Congress should begin by doubling the United States' initial commitment to the GCF. This commitment should then be expanded upon with other multilateral and bilateral climate and sustainability investment initiatives. Federal lawmakers should also prioritize investment in climate solutions through federal international trade and finance agencies such as the Export-Import Bank (Ex-Im), the International Development Finance Corporation (IDFC, formerly OPIC), the Millennium Challenge Corporation (MCC), the Trade and Development Agency (TDA), the Department of Commerce's Foreign Commercial Service, and the Department of Agriculture's Foreign Agricultural Service.

Conclusion

At the outset of a new decade, the United States faces a set of interwoven and urgent challenges that demand a bold policy response from federal lawmakers. By seizing this moment, and investing in a clean energy recovery, President Biden and Congress can rebuild a more just, equitable, and prosperous economy, and ensure Americans and the international community avoid the most catastrophic impacts of climate change and global environmental degradation.

Clean Jumpstart 2021 details a path forward for Congress and the administration to realize the \$2 trillion investments in clean energy and infrastructure called for in President Biden's Build Back Better agenda. These investments, alongside enforceable sector-specific clean energy standards, and a commitment to justice throughout, can

create millions of good-paying union jobs and ensure U.S. leadership in tackling the climate crisis. Now is no time for half-measures nor delay. The new administration and Congress must seize this moment and pass bold climate investment legislation that confronts America's challenges and builds a brighter future for every community.