Evergreen Action Plan

A National Mobilization to Defeat the Climate Crisis and
Build a Just and Thriving Clean Energy Economy

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America stands at a moment of crisis: of public health, of economic security, faith in institutions, and of the global climate. This is the moment for elected leaders to embrace a bold agenda that will confront these interrelated crises and build a better future. Success requires commitment to fact-based, science-driven policy, and investment in the public good.

As America grapples with the major health and economic consequences of this pandemic, federal leaders must also work with a long-range vision to rebuild the economy for future growth. Congress today and the next President in January must revitalize economic opportunity while taking action to stop the disastrous impact of impending crises.

The next President and Congress must launch a national mobilization at the scope and speed necessary to defeat the climate crisis, and create millions of good-paying union jobs building a more just, sustainable and inclusive clean energy economy. We have a short period of time to act. And whether we shrink from this challenge, or rise to it, will define America's future. The next President and Congress must make defeating the climate crisis and building a clean energy economy a top priority. And current federal lawmakers should look for every opportunity to make a down payment in this agenda.

As we recover and rebuild from the economic collapse created by global pandemic, and our government's failure to respond, this agenda provides enormous opportunity for economic revitalization: rebuilding infrastructure, growing manufacturing and innovation, protecting workers and front-line communities, and restoring American leadership and global standing.

This was the driving force behind Governor Jay Inslee's presidential campaign, which put forward a comprehensive and actionable "Climate Mission" for the next President and Congress. At the end of that campaign, Gov. Inslee offered his 6-part, 218-page plan as an open-source document for any candidate or elected leader to use. Following in that spirit, this team has adapted and updated the Climate Mission Agenda into a 12-part climate action plan for federal lawmakers: The Evergreen Action Plan.

This plan is built upon 5 key principles:

- ➢ Powering the Economy with 100% Clean Energy: Using targeted clean energy standards and strategies for each key sector of the economy: electricity, transportation, buildings, industries, agriculture.
- ➢ Investing in Good Jobs, Infrastructure, Industries & Innovation: Creating millions of good-paying jobs benefitting every community through major new investments in modernized infrastructure, manufacturing industries, agriculture, conservation, and clean tech innovation, while supporting workers and guaranteeing the right to form a union.
- ➢ Building Greater Justice & Economic Inclusion: Confronting environmental racism and supporting the front-line, low-income, and indigenous communities and communities of color that are hit first and worst by the climate crisis, pollution, and economic disinvestment.
- ➢ Ending Fossil Fuel Giveaways: Ending billions in subsidies and handouts, and holding polluters accountable for their environmental harm. And intentionally transitioning off fossil fuels while protecting workers, stewarding natural resources, and diversifying the local economies that depend on them today.
- ➢ Mobilizing Global Action: Committing American leadership in an ambitious global effort to confront the climate challenge, using every tool in foreign policy: diplomacy, finance, trade, aid and assistance.

Our challenge is very clear: To avoid the worst impacts of climate change, the global community must cut greenhouse gas pollution approximately in half by 2030, and achieve global net-zero pollution by mid-century, according to a 2018 report from the Intergovernmental Panel on Climate Change (IPCC). Implementing this Evergreen Action Plan will help ensure that America meets these targets and leads the world in defeating the climate crisis. As the world's largest historical emitter of climate pollution, and the global leader in technology innovation, America should be among the first to achieve that net-zero target, as fast as possible and well before mid-century.

The Evergreen Action Plan offers a comprehensive program that catalyzes trillions in investment over the next decade into clean energy technology, new infrastructure, and climate solutions. Through bold federal investments and high standards for private markets, these policies will leverage trillions more from the private sector to create millions of high-quality union jobs. The economic impacts of the COVID-19 pandemic have made it more clear than ever before that we must rebuild our economy in response to the clear demands of science. True recovery will come through intelligent, fact-based leadership focused on the future and grounded in growth, opportunity and inclusion.

This plan is built on this team's decades of direct experience advancing ambitious climate policy, and is inspired by modern-day movements fighting for urgent climate action. It is informed by the clean energy successes of state and local governments, as well as past federal progress, and by the ambitious investment vision of a Green New Deal, the bottom-up organizing of environmental justice organizers, front-line communities, and the grassroots leaders fighting against fossil fuel

corporations and their pollution. It synthesizes the original Inslee campaign Climate Mission Agenda into twelve planks.

The Evergreen Action Plan offers a roadmap for national mobilization; a governing document for our nation's lawmakers to use in confronting our defining challenge and in seizing the greatest economic opportunity of the 21st century. Let's get to work.

Evergreen Action Plan

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1) Launching a National Climate Mobilization

Confronting climate change and building a just and thriving clean energy economy must be the foremost priority for the next President's administration. To succeed, the president must launch a national climate mobilization, which puts climate policy at the center of the administration's agenda, and uses every policy and investment instrument, and every channel of coordination. Full economic mobilization involves federal executive and legislative actions that lead the way and engage partners - enabling state, city and county governments, Tribal nations, local communities, industries, academic institutions, businesses, and civil society to take part in transforming our economy, everywhere. To undertake such broad-based transformation requires strong public institutions, public trust, and structural reform to once again do big things, now in the face of a changing global climate.

Prioritization and personnel are policy. A true national mobilization will require the full commitment of the next President, to inform every aspect of decision-making and public action with the commitment to drive change in climate policy. From day one, the President must make key bureaucratic reforms to allow this mobilization to succeed. This begins with personnel, including the choice of the White House chief of staff, and each individual Cabinet secretary, all of whom will have a critical role to play in this mission. It also includes the entities created and the personnel chosen to lead the President's climate mobilization agenda. This prioritization should inform the administration's crafting of the federal budget; its legislative strategy in Congress; day-to-day programmatic and operational decision-making in all agencies; and engagement with state and local governments, tribal nations, communities, and businesses.

No administration in American history has yet made confronting the climate crisis the utmost priority, but that is what is now required. The ambition of this policy agenda depends on the leadership vision and priority established by the chief executive, and the President's insistence on driving this vision throughout the federal bureaucracy.

- **1.1 - White House Office of Climate Mobilization & Climate Council:** To help forcefully drive this agenda throughout the federal government and the national economy starting on day one, the next President should establish by executive order a new White House office and council within the Executive Office of the President (EOP) charged with leading a national mobilization. These should be led by a director, with the title Assistant to the President for Climate Mobilization, and backed by staff acting with the full power and authority of the presidency. The office and council should work across the President's Cabinet agencies to convene, coordinate, drive, and ultimately hold accountable every federal department to this national mission. And this council should have formalized engagement with states and

local governments — such as with the U.S. Climate Alliance of 24 states and two territories that are together committed to upholding the Paris Climate Agreement.

This new office could be modeled on similar entities throughout history. The Office of War Mobilization was created by FDR during World War II, under the Office of Emergency Management he established immediately prior to the U.S. entry into the war — using an executive order that has never been formally terminated or abolished. The creation of a National Climate Council draws on examples such as the National Security Council (NSC) and the National Economic Council (NEC), two White House entities that today hold great power over the direction of federal policy and coordination of federal agencies around the President's agenda. This office and council must wield considerable influence in decision-making, sit close to the seat of power, possess authority that touches every agency, and actively drive both budget-setting and program implementation.

Other existing White House offices must also play a major role in this national mobilization, especially the Office of Management and Budget (OMB), the Council on Environmental Quality (CEQ), as well as the NSC and the NEC. The real and potential power of the modern OMB is tremendous, overseeing drafting and implementation of the $3 trillion-plus annual federal budget, controlling personnel appointments and procurement policy, and holding the final word on regulations for nearly all agencies. The CEQ's staff and its reach can be scaled at the President's discretion, so it can house major new capacity for the executive branch. The CEQ is charged with ensuring that all federal agencies adhere to environmental protection, and it has substantial authority to ensure that every federal agency is committed to reducing greenhouse gas pollution and addressing the climate crisis.

White House offices must also provide important leadership on climate security, as well. The next President should task the NSC to conduct a thorough assessment of U.S. assets for prediction of climate stressors. The President should also create a new Deputy National Security Advisor charged with overseeing coordination and building capacity across agencies and departments that will enable rapid response to climate-related security risks and events and develop and implement Climate Security Roadmaps. Climate and security planning must be incorporated at the J-5 Joint Chiefs of Staff planning level, and in humanitarian assistance, recovery planning, and operations.

- **1.2 - Mobilizing Federal Clean Energy Investments:** The next President will have readily available tools to mobilize massive investments into clean energy, sustainable infrastructure, innovative technologies, and modernizing the built environment. The Department of Energy (DOE) Loan Guarantee and Advanced Technology Vehicle Manufacturing Programs, and the Department of Agriculture (USDA) Rural Utilities Service, together have well over $50 billion in lending authority that can be swiftly deployed as low-cost capital to drive the energy transition. In addition, in March 2020 Congress provided $500 billion in funding for Federal Reserve programs aimed at urgent economic stabilization, and growth, and it will need to invest much more to provide for economic

stability and recovery. The next administration should take swift action to unlock this capital and deploy major clean energy investments that are so promising for economic growth.

Significant opportunity also lies in the federal government's procurement powers, to deploy clean technologies and to support domestic manufacturing. The next President should require that 100% of federal government vehicle purchases are zero-emission vehicles by the end of their first term, while directing the USDA, Department of Defense, and other federal agencies to procure greater levels of advanced low-carbon renewable fuels for heavy-duty transportation. Procurement of 100% renewable energy and energy storage, as well as energy conservation, should also be undertaken at federal agencies' domestic facilities. The Department of Interior (DOI) and USDA should prioritize permitting low-impact renewable energy and transmission development on public lands and offshore waters. Regional authorities like the Tennessee Valley Authority (TVA) and the four Power Marketing Administrations (PMAs) can also be tremendously impactful in shifting to 100% clean power, through planning and creative engagement with their customers, utilization of their borrowing authority, and 3rd-party partnerships in transmission and generation deployment.

The next administration should implement a 'Buy Clean' initiative to ensure lifecycle greenhouse gas pollution is considered in federal procurement contracts. And the next President should use the Defense Production Act to increase domestic production and protect critical infrastructure required to confront the climate crisis. These efforts are just the start of the investments that will be realized in a true national climate mobilization. And each of them should come with a commitment to high labor standards and 'Buy American' provisions, to support union jobs and domestic industries. And ultimately, partnership with Congress will be required to unlock the massive investments that will be needed for full economic mobilization.

- **1.3 - National Environmental Justice Initiative:** In order to avoid the injustices of past nationwide economic mobilizations, and confront the environmental harms and disparities across communities today, the next President must put environmental, economic and racial justice at the heart of this agenda. Doing so includes involving front-line communities directly in the formulation of federal policy.

  On day 1 of their administration, the next President should issue an executive order launching a government-wide environmental justice initiative, which should implement Equity Impact Mapping of American communities, and an Equity Screen on major federal policies and investments, as well as many of the other policies discussed in Section 7 (Building Greater Justice & an Inclusive Clean Energy Economy) of this plan. And as part of this agenda, the President should empanel a Presidential Environmental Justice Advisory Council, composed predominantly of representatives from front-line communities or community groups, and also from labor unions, states and local governments or their associations, Tribal nations, academic leaders, environmental organizations, and businesses.

The next President can transform the White House Council on Environmental Quality (CEQ) into a new Council on Environmental Justice (CEJ) that would for the first time ever center federal environmental policy around equity, justice and inclusion. The CEQ was created under the National Environmental Policy Act (NEPA), 50 years ago, and was expanded by executive order to assume responsibility for coordinating federal programs, issue regulations to agencies, and make recommendations to the president for controlling pollution and protecting the environment. This new council should maintain CEQ's critical historic functions, under the landmark NEPA law, but also provide it with a new, revitalized mission that will drive justice into all climate, energy, and environmental policy and program decision-making across government agencies. This includes responsibility for driving a new and concerted focus into Tribal sovereignty and treaty rights. And this includes broad influence upon federal investments, in partnership with the OMB, and economic policy, alongside the NEC.

These justice-centered reforms in government structures should also include a new Office of Environmental Justice within the U.S. Department of Justice (DOJ), to hold polluters fully accountable under maximum application of federal law. The next administration should use this DOJ-EJ office to pursue maximum civil and criminal penalties — in particular against repeat offenders. The next White House should also be committed to working with Congress to ensure full funding and staffing for the EPA Office of Enforcement, which together with DOE-EJ would help protect all communities from pollution – especially those most-vulnerable and worst-impacted.

- **1.4 - State Climate Mobilization Councils:** Truly effective federal climate leadership requires partnership with state and local governments, and Tribal nations, in driving the transition to a clean energy future. This agenda must mobilize federal agency offices within each state to align strategies and strive toward goals for sustainable economic development, greenhouse gas pollution reduction, and climate resilience, and to achieve a just transition. Furthermore, for the past two decades, states and cities have provided critical leadership on clean energy policies that now provide a foundation for national action. Too often, federal programs and investments have been discordant with solutions pursued by states, cities, and the demands of local communities. Instead, these partners should be seen as the front line of implementation.

  The next administration can ensure alignment between a national mobilization and each state's march toward decarbonization and a just, green economy by establishing federal interagency Climate Mobilization Councils in every state and territory that include all relevant federal agencies operating in that jurisdiction. These councils should be supported by detailed staff from White House offices, such as the CEQ (or CEJ), just as President Franklin Delano Roosevelt's National Emergency Council placed field directors in each state to coordinate New Deal economic relief. They should coordinate across federal programs in service to state and community-led efforts building a clean energy economy - from the rural

conservation investments made by the USDA Natural Resources Conservation Service, to enforcement of pollution standards by EPA regional offices, to urban development and sustainability capacity-building undertaken by regional Department of Housing & Urban Development (HUD) offices.

This new vision for federal-state partnership should involve significantly expanded investments in successful clean energy programs, like the State Energy Program (SEP), Weatherization Assistance Program (WAP) and Energy Efficiency & Conservation Block Grant (EECBG) program, as well as federal support for state and local Green Banks, Clean Energy Funds, and infrastructure finance and economic development authorities. Through these programs states, cities and Tribal nations can quickly deploy investments into local solutions and catalyze job creation in the clean energy sectors that are among their fastest-growing industries. And regional economic development can be further supercharged through entities like the Appalachian Regional Commission and the Tennessee Valley Authority. The next administration must undertake a coordinated, progressive-federalist engagement with all states and local communities, which prioritizes place-based strategies to build America's clean energy future as a matter of economic development.

- **1.5 - Tribal Sovereignty & Treaty Rights:** America's Tribal communities have endured centuries of unjust and discriminatory treatment from the U.S. government and economic systems. Currently, in addition to exclusion and disinvestment, this is also manifested in the form of fossil fuel corporations abusing Tribal lands, waters and communities. The next President must take office armed with a firm appreciation of these current and historical injustices, and a determination to confront them.

  The next administration must be committed to respecting Tribal nations' rights in the decisions that concern their governments, people and historical lands, and should take action to recognize the sovereignty of Indigenous nations. This includes directing federal agencies to engage with Tribal nations in thorough, inclusive, transparent and meaningful consultation. This agenda should further include the establishment of a federal commission to study and make recommendations on policies and government structures to fulfill the U.S. Government's treaty obligations to Tribal nations.

  The next President should re-establish the annual White House Tribal Nations Conference first convened under President Barack Obama, and commit federal agencies to prioritize the expansion of Tribal sovereignty, and investment into Tribal communities, including ensuring parity in access to federal resources. This federal agenda should fully empower Tribal nations, through free, prior and informed consent, to reject fossil fuel infrastructure proposals and to engage with them in joint control and protection of their lands, waters, territories and resources. And, wherever possible, it should return treaty and former reservation lands to tribal trust status, and empower Tribes to take a leading role in environmental stewardship and co-management of public lands and waters.

2) Achieving 100% Clean Power

Despite federal inaction, states and cities have aggressively adopted strong clean energy policy over the past several years. Today, more than 100 million Americans live in a state or city with a 100% clean energy standard. But it's time for the federal government to take a leadership role in national clean energy policy. Federal lawmakers must put the U.S. swiftly on course to achieve 100% clean, renewable and zero-emission energy in electricity generation, using the strength of federal policy and investment to accelerate the transition that is under way thanks to state and local leadership, and technological innovation. Clean electricity will be the backbone of the American economy, powering our homes, vehicles, and industry.

This plan sets ambitious, yet technologically achievable goals that respond to the reality of climate science, while unlocking a massive new wave of productive and job-creating investments – a more than $500 billion investment opportunity over the next decade. These investments will target projects developing new carbon-free power generation and greater energy efficiency, transmission, smart grid and distribution networks – all critical to a clean power ecosystem and job growth. Additionally, to build a truly just and inclusive clean energy economy, the next administration must create opportunities for Americans to build their own local solutions, own their own assets, and retain the financial benefit derived from the clean energy transition in their communities.

- **2.1 - 100% Clean Electricity Standard:** There is growing momentum across the country to achieve 100% clean electricity. As of March 2020, 100% clean electricity laws have been adopted in 8 states, Washington, D.C., and Puerto Rico, and 100% clean energy targets have been embraced by a number of other states plus more than 160 American cities and counties.

  The next President and Congress should enact a bold national 100% Clean Electricity Standard (or "Clean Energy Standard") requiring utilities to achieve 100% carbon-neutral electricity by 2030, and all-clean, renewable and zero-emission energy in power generation by 2035. This two-step policy construct is modeled largely on Washington state's 100% clean electricity standard law, which Gov. Jay Inslee signed in Spring 2019. Notably, this federal plan calls for a more accelerated timeline for a carbon-free power sector than is enshrined in any state's 100% clean energy laws. But the ambitious timeline can be – and can only be – unlocked if it is pursued alongside transformative federal investments and complementary policies. While it is imperative that the power sector must decarbonize on an extremely accelerated time frame, precise deadlines can be flexible within a narrow window to ensure a cross-sector 100% clean energy economy well before mid-century.

  This 100% clean energy agenda should include retiring the entirety of the U.S. coal fleet by 2030, to eliminate dangerous pollution that is poisoning our communities and planet. Here too states and local communities are leading the way, with Washington state closing its last

coal plant and banning imported coal power by 2025, and due in large part to local organizing in opposition, over the past two decades energy companies have shut down 551 coal generators at 227 plants throughout the U.S.

Furthermore, similar to policy enacted in Washington state, this 100% clean electricity standard policy should ensure dedicated support for low-income communities, so that all communities benefit in the transition to a carbon-free power future. And it should be accompanied by policies that promote family-wage union jobs, and inclusive clean energy development, by supporting projects with businesses owned by women and people of color; apprenticeship utilization; prevailing wages determined through collective bargaining; and community workforce and project-labor agreements. And it should be constructed to accelerate the evolution toward performance-based regulation that rewards utilities for delivering affordable, reliable, and zero-emission electricity.

- **2.2 - Clean Air Act Standards to Reduce Greenhouse Gas Pollution:** The urgency of the climate crisis, and the importance of decarbonizing the electricity sector are so great that the next President cannot wait for Congress to take action to reduce greenhouse gas pollution from power plants. Fortunately, the next President will have powerful existing authorities to pursue an agenda to move rapidly towards 100% clean power, using the federal *Clean Air Act*. According to the Environmental Protection Agency (EPA), this law has been used successfully to reduce major air pollutants throughout the U.S. by 73% between 1970-2016, even as U.S. population and GDP grew by 58% and 253%, respectively. And, notwithstanding the legal fate of the Obama administration's specific Clean Power Plan policy, the EPA retains unequivocal authority to regulate greenhouse gas pollution under the *Clean Air Act*, in accordance with the U.S. Supreme Court's 2007 *Massachusetts v. EPA* decision, and the EPA's scientific "endangerment finding" that such pollution clearly endangers public health and welfare.

  Therefore, on day 1 of the next administration, the next President should task their EPA Administrator to immediately develop *Clean Air Act* rules to crack down on greenhouse gas pollution from new and existing power plants. These should come in the form of immediate New Source Performance Standards that prohibit the construction of new polluting power plants. It should also include an Advanced Notice of Proposed Rulemaking that posits a diverse suite of approaches to regulating greenhouse gas pollution from existing stationary sources, including: using Section 111 to set sector-based standards; setting National Ambient Air Quality Standards (NAAQS) to require each state to reduce its greenhouse gas pollution in a manner similar to other air pollutants considered harmful to public health and the environment; and Section 115 of the Act, which concerns U.S. responsibility to reduce harmful air pollution affecting the international community. This action should occur simultaneously to further executive and legislative strategies to decarbonize the power sector.

➢ **2.3 - Creating a Green Bank & Investing in Clean Energy Deployment:** The federal government can catalyze enormous investment in clean energy construction projects through direct spending, financing programs, and through the tax code. And these investments will expand employment opportunities in renewable energy, energy efficiency, battery storage, smart grids, and utility transmission and distribution projects – accelerating job creation in some of the clean energy industries that altogether already employ more than 3.2 million Americans, today.

The next President should move swiftly to deploy capital from existing federal energy financing programs, like the Department of Energy (DOE) Loan Guarantee Program, and Department of Agriculture (USDA) Rural Utility Service, to unlock new investments that speed the clean energy transition. And the President should work with Congress to create a new Clean Energy Deployment Administration or Green Infrastructure Bank, modeled on legislation introduced by former U.S. Rep. Jay Inslee in 2009, and capitalized at $90 billion, to further accelerate deployment of clean energy and assist in the retirement of fossil fuel assets. This entity should also work directly with state and local green banks, clean energy funds, and infrastructure finance authorities, to leverage aggressive state climate leadership for accelerated clean energy deployment.

The next President and Congress should also work to enact new and extend existing federal clean energy tax incentives, and establish a program of payments-in-lieu of tax credits, similar to the 1603 Treasury grant program in the 2009 *Recovery Act* that deployed over $26 billion federal investment to support nearly 110,000 clean energy projects throughout the country, between 2009-11. This larger decade-long program of incentive payments should support renewable technologies like wind, solar and geothermal, as well as energy storage and efficiency, and other clean technology deployment. These incentives should be expanded for less-mature domestic industries like offshore wind power, and also for projects that meet certain labor standards – similar to policy enacted by Gov. Inslee in Washington state. This agenda should also extend direct grants for clean energy projects developed by non-profit organizations, community groups, academic institutions, and others without federal tax liability.

Federal lawmakers can also accelerate the transition to a 100% clean electricity system through major investments in energy efficiency (explored in detail in Section 4, 'Investing in Green Buildings & the Built Environment'). And they can help ensure that the benefits in building a clean energy economy enjoy broad and equitable participation, through federal support for increases in on-bill investments in energy efficiency and distributed energy solutions. Greater federal investment should be made available to front-line and low-income communities – with priority placed upon comprehensive community-developed projects with multiple benefits.

➢ **2.4 - Energy Democracy & Community-Led Energy Transformation**: Federal lawmakers should prioritize bottom-up, community-driven economic development strategies that give

individuals and communities the opportunity to fully own and control their clean energy assets as part of the path to 100% clean energy. This is an agenda for shifting away from corporate, centralized power in a fossil fuel economy to more distributed ownership and power in the clean energy economy. Rather than sending their hard-earned wages to far-off utility and oil corporations, more Americans should have the opportunity to build and own homegrown clean energy solutions.

This includes the creation of a new Clean Community Energy Grant Program to offer direct grants for clean energy projects developed by community-based non-profit organizations, which lack tax liability and therefore often lack access to tax financing for their renewable energy and efficiency projects. This agenda should also include the creation of a new DOE Solar Communities Initiative that sets by 2040 a national goal to meet 10% of total electricity demand through distributed solar energy generation. This program would drive approximately $150 billion in additional investment over the next ten years and it would help achieve 100% clean power with more local, distributed and resilient energy.

The next administration should also relaunch the DOE's Better Communities Alliance, to promote packaged clean energy solutions while also giving local governments better access to DOE funding and support. And this Energy Democracy agenda should further include investing in staff capacity at key federal agencies that interact and operate within local communities in every state — such as the USDA Natural Resources Conservation Service (NRCS) in rural communities, the Small Business Administration (SBA), DOE Weatherization Assistance Program, and the Department of Housing & Urban Development (HUD) in urban areas. The next President should give these agencies explicit charge to partner with community leaders, tribal governments, non-profit organizations, and local and state government officials, to support locally-driven strategies that build an inclusive clean energy economy.

- **2.5 - Transmission & Smart Grid Modernization**: A plan to achieve 100% clean electricity must include a focus on regional electricity transmission and local distribution grid networks, which can also open up new economic development opportunities and improve grid reliability and resilience, through new investments and improved planning, siting and permitting processes.

  Federal lawmakers should establish a new Transmission Investment Tax Credit, and provide low-cost financing through new and existing federal financing programs, to leverage public and private capital to meet an approximate $15 billion annual transmission infrastructure investment need between 2020-2030.

  The next President must also appoint a Secretary of Energy and a Federal Energy Regulatory Commission (FERC) Chairman who will pursue national transmission development of clean energy resources that enhance utilization of existing transmission and distribution assets, improve and expedite inter-regional transmission planning and development, and promote

new sensors and controls and non-wires alternatives to boost electricity delivery capacity. This work should include expedited planning, broad cost allocation, and negotiated siting with state authorities and Regional Transmission Organizations (RTOs), as well as the provision of federal financing for anticipatory construction of transmission capacity to areas with significant queues of clean-energy generation capacity.

This federal initiative should also focus on enhancing utilization of existing assets through Dynamic Line Ratings, demand-response, new sensors and controls, battery storage, and distributed generation resources. And federal lawmakers should build partnerships with states, utilities and local communities, by providing federal matching dollars for smart grid local power distribution networks, including demand-response, storage, micro-grids, and tools to improve cyber-security.

3) Expanding Clean Transportation & Mobility

In 2016, the transportation sector became the largest source of carbon pollution in the United States. Vehicles are also a leading contributor to poor air quality that damages public health, particularly in front-line communities near highways, ports and other transportation hubs. Federal lawmakers must slash pollution from this sector by driving adoption and manufacturing of electric and super-fuel efficient vehicles, requiring increased use of clean fuels and electric transportation, and by expanding clean and affordable mobility options through investments in public transit, rail, transit-oriented development, affordable housing and community smart growth.

These strategies also contain enormous opportunities for the creation of good-paying jobs – especially in the construction of sustainable transportation infrastructure and in maintaining America's global leadership in automotive manufacturing. According to the American Public Transit Association (APTA), the necessary public investments in transit systems could support millions of construction and operations jobs and catalyze nearly $1 trillion in economic activity during the next 20 years. And according to a report from the United Auto Workers (UAW), "the shift to EVs represents a significant economic opportunity to reinvest in the U.S. manufacturing sector and create new advanced manufacturing jobs." But a failure of policy leadership could force American workers to miss this opportunity. As the UAW report notes, "if the production of these components is primarily abroad,a significant shift of the automotive value chain outside the U.S. and a decline in job quality in the automotive industry." This is the moment to seize these 21st century economic opportunities.

- **3.1 - 100% Clean Cars Standard:** The next President should use executive authority to put the United States on a path to achieving 100% zero emissions in all new light-duty passenger vehicles, medium-duty trucks, and buses, by 2030. New, more aggressive federal clean car standards are a crucial strategy for decarbonizing the transportation sector, as light-duty vehicles alone account for approximately 60% of transportation-sector carbon pollution. Furthermore, this transition will eliminate other tailpipe pollution that contaminates the air – especially in front-line and low-income communities. It is also essential for ensuring that U.S. industries stay at the leading edge of global automotive manufacturing, as economic competitors like China, India and Europe are setting clear targets to move to 100% electric and zero-emission vehicles (ZEVs). This plan can ensure that ZEVs are made in the United States, by union workers, and that they are affordable for working families.

  The importance of a swift transition to 100% clean new vehicles is critical to achieving decarbonization goals, as it takes approximately 15 years to "turn over" the U.S. vehicle fleet, and Americans have been holding on to their older vehicles for longer. To reach 100% zero-emission new vehicles on this ambitious timeline, the next administration should use well-established existing authorities to implement a new standard for clean cars requiring

robust annual improvements in vehicle emissions, and reaching 100% ZEVs in light- and medium-duty new vehicle sales by 2030, as well as continued improvements in heavy-duty vehicles. Working with Congress, this agenda should also involve dedicating significant new federal investments to support a diverse and robust American ZEV manufacturing base, including critical materials and advanced batteries recycling strategies.

Federal lawmakers should establish a new Clean Cars for Clunkers program, similar to the Cash for Clunkers program that grew out of legislation first proposed by U.S. Reps. Jay Inslee and Steve Israel in 2009, to offer trade-in rebates for consumers to exchange their fuel-inefficient cars or trucks for new ZEVs, and also for vouchers to cover the cost of transit. The next President and Congress should also expand business and consumer tax credits to ensure ZEV availability and affordability - including a more accessible Electric Vehicle Tax Credit, as a point-of-sale rebate. And the President should use procurement power to drive a rapid electrification of the federal government vehicle fleet to ZEVs, working through the General Services Administration (GSA) Vehicle Purchasing and Vehicle Leasing programs. And federal lawmakers should create partnerships with states, Tribal nations, local governments and utilities to deploy massive investments in electric vehicle charging infrastructure, and in financing the transition to zero-emission fleets for transit and school buses.

- **3.2 - Twenty-First Century Transportation Infrastructure:** Federal lawmakers must reform how the federal government builds transportation infrastructure by significantly increasing federal investments in clean, sustainable and climate-smart transportation infrastructure, and providing local, state and tribal governments with much-needed resources to invest in expanding public transit and connecting people in communities through safe, multi-modal transportation options. The last major federal transportation legislation authorized an average $45 billion annual federal expenditure on highways, but provided only $12.2 billion in average annual transit investments. Furthermore, federal funding will cover 80% of the cost of a highway project, but only 50% of a transit project.

  The next President and Congress should work together to provide a massive increase in annual federal investment in public transit systems. This investment should include new funding and also come with a rebalancing between federal highways and transit spending. It should meet and exceed the funding need identified by the APTA, and incentivize expansion of transit networks throughout America to give Americans more and cleaner transportation choices, and reduce vehicle miles traveled. According to APTA, these investments themselves could support millions of construction and operations jobs.

  The next Transportation Secretary should also implement USDOT performance management rules that require the local deployment of federal transportation investments to be accompanied by life-cycle analyses and reduction strategies for climate and co-pollutants. Through these analyses the federal government can provide major investments into sustainable infrastructure and create millions of jobs, while ensuring against building

infrastructure that locks communities into fossil fuel dependent transportation systems. Comprehensive, strategic and climate-smart local planning, encouraged via federal leadership, can help achieve a more sustainable balance between highways and transit investments.

And it is crucial that the next President and Congress work together to build an integrated American rail system, much like developed nations in Europe and Asia. This would entail major new federal investments in electrifying passenger and rail throughout the country, expanding existing rail lines, and offering federal investments to states and regional partnerships to further develop ultra-high-speed rail. This will create jobs, save time and money for working families, and connect disparate rural and urban population centers with more convenient, carbon-free inter-regional transportation.

- **3.3 - Smart Growth, Affordable Housing & Community Development*:*** How far Americans commute from home to work and the way they travel has a tremendous impact on the climate, local air quality, and public health, not to mention economic cost and quality of life. Adding the cost of transportation to mortgage payments or rent costs and utility payments means that energy costs too often can make home ownership or quality rental housing inaccessible for many of America's working families. Proximity of home to work and local services, increased transit options, and greater walkability all make for less energy-intensive, as well as healthier and more livable communities.

  Federal lawmakers should pursue an agenda that pairs clean and efficient transportation infrastructure with policies that promote vibrant communities, more healthy and walkable neighborhoods, and both the preservation of existing affordable housing and construction of new affordable units. The next administration should work with Congress to provide local, state and tribal governments with increased resources for transit-oriented development, smart growth land use planning, intermodal transportation, commute trip reduction programs, and pedestrian-friendly public spaces. Localities should consider transportation plans that promote biking, walking and shared micro-mobility options such as electric scooters and e-bikes.

  The next administration should establish financial incentives for marrying local zoning rules with inclusionary zoning practices, climate resilience objectives, transit-oriented development, mixed use zoning, workforce housing preservation, and enhanced asset mapping and infrastructure planning to promote urban density. Additionally, the next administration should establish new requirements and provide bonus funding allocations for communities implementing best practices in inclusionary zoning and connecting housing with transit service. This can be achieved through tools like new Department of Transportation (USDOT) performance rules for life-cycle climate pollution analysis in transportation, Department of Housing & Urban Development (HUD) Community Development Block Grant (CDBG) funding allocation and prioritization, and USDA Rural Development funding.

The next President should also relaunch and expand the HUD-EPA-USDOT Sustainable Communities Initiative, with a focus on locally driven bottom-up community development plans that promote climate pollution reductions, smart transportation, affordable and accessible housing, and job creation. Finally, successful federal smart growth agenda must also involve increasing financial incentives for private investment in publicly beneficial green affordable housing and transit-oriented development projects (discussed at greater length in Section 4.3), such as by increasing per-capita allocations for Low-Income Housing Tax Credits (LIHTC), and expanding state and local tax exempt Private Activity Bond (PAB) capacity.

- **3.4 - Clean & Renewable Fuel Standard:** Each mode and fuel used in transport should be scrutinized for its contribution to the climate crisis. The next administration should use its existing authorities to lay out new requirements for cleaner fuels, and invest in America's farmers to help achieve the lowest-carbon alternative liquid fuel alternatives to oil — in particular for hard-to-decarbonize modes of transport like existing vehicles, heavy-duty vehicles, and aviation. Biofuels have helped provide critical alternatives to help chart a clean energy future and break Big Oil's stranglehold on America's political system. But not all biofuels have provided a significant climate benefit.

  The next administration, through the Environmental Protection Agency (EPA) and Office of Management & Budget (OMB), will have significant discretion over federal biofuels policy, especially as the Renewable Fuel Standard (RFS) reaches a key deadline in 2022. And it should use that authority to transform the post-2022 RFS into a Clean & Renewable Fuel Standard (CRFS) that promotes low-carbon biofuels and more low- and zero-carbon alternative fuels, including electricity. This standard should achieve aggressive, continuous improvement in carbon performance of covered fuels. The next administration should also immediately reverse course on the EPA's current practice of granting unwarranted RFS waivers to oil refineries and undermining American farmers and home-grown fuels in favor of Big Oil's profits. And it should invest in research, development, demonstration, and deployment of advanced, low-carbon renewable fuels, via the USDA and the Department of Defense (DOD) Defense Production Act.

- **3.5 - Decarbonizing Aviation & Shipping:** Aviation is one of the fastest-growing sources of per capita greenhouse gas emissions throughout the world. The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) was established in 2016 to reduce climate pollution in international civil aviation, and adopted under the International Civil Aviation Organization (ICAO). CORSIA aims to hold climate pollution from international civil aviation at 2020 levels, which could prevent up to 2.5 billion tons of carbon dioxide emissions — 10 times what U.S. households emit each year. Meanwhile, greenhouse gas pollution from international shipping accounted for just 2.2% of global emissions, in 2012, but is estimated to grow between 50% and 250% by 2050, if left unchecked. The International Maritime Organization (IMO), an agency of the United Nations (U.N.), has

been steadily putting forward its own plans. In April 2018, the IMO released a vision and strategy plan to reduce carbon intensity in shipping by at least 40% by 2030, and 70% by 2050.

But both of these ICAO and IMO initiatives must be only the start to a much bolder domestic and international decarbonization agenda for these heavy-polluting transportation sectors.

The next administration should demonstrate leadership by enrolling our nation in the initial pilot and first phase of the CORSIA program, and encouraging other nations - especially India - to join in the agreement as soon as possible. In May 2019, every major American airline announced their commitment to the CORSIA agreement. The next administration should go much further by working with aviation industry leaders to launch a companion program for domestic air travel, committed to achieving more ambitious pollution reductions on international routes. Rather than freezing emissions at a set date, the administration should set out to reduce emissions in a manner consistent with medium- and long-range decarbonization goals, and include targeted policies promoting innovation and deployment of technologies, like advanced low-carbon biofuels, and zero-emission aircrafts. According to the Energy Transitions Commission (ETC), energy efficiency in aviation could be improved by 35-40%, leading to significant greenhouse gas pollution reductions. The next administration should task the Federal Aviation Administration (FAA) and the DOE to leverage advances gained with the support of the DOD to create the most advanced aircraft efficiency and alternative energy program for the airline industry in the world. Finally, the next President must work with Congress to repeal President Donald Trump's special tax breaks for private jets — a massive, wasteful giveaway to the wealthy that incentivizes unnecessary carbon pollution in luxury travel.

Meanwhile, in shipping, the next administration should put the United States on the forefront of efforts to meet and exceed the IMO's strategic plan. The administration should convene a public-private task force led by the Maritime Administration of the U.S. Department of Transportation, with participation from the DOE and State Department, to accelerate the creation of domestic regulations and legislation that can achieve and improve upon the current IMO climate goals. The President should also work to expand adoption of these same standards among G7 and G20 countries, and coordinate with other IMO parties to impose a fee on the purchase of bunker fuels by large vessels flagged from countries out of compliance with the organization's greenhouse gas pollution-reduction targets.

Finally, by supporting climate action and air-pollution reductions at ports, such as through the World Ports Climate Action Program, the next administration can encourage emissions reductions and investments into sustainable supply chains, renewable power-to-ship solutions; accelerated development of ship electrification, and decarbonization of cargo-handling facilities in port. It is notable that many ports are located in or near urban corridors, and their pollution can be quite harmful for public health – particularly in neighboring low-income communities.

4) Investing in Green Buildings & the Built Environment

Buildings consume 40% of total U.S. energy and 70% of electricity, emitting more than one-third of America's domestic greenhouse gas emissions. Combined, this end-use energy becomes the largest source of greenhouse gas pollution in the U.S. economy. Yet much of this energy is wasted, providing no value to building owners or residents, all while costing money, taxing energy networks and contributing to local pollution. At the same time, clean energy employs more than 3 million people in virtually every county in the United States, and two-thirds of those jobs are in construction and manufacturing. So, a commitment to retool the U.S. built environment for climate solutions offers a smart strategy for both the climate and for economic development.

Effective leadership over the next decade by federal lawmakers can drive substantial new investment into local economies and create millions more highly skilled blue-collar jobs in the clean energy economy. By investing in building energy efficiency, affordable housing, and sustainable local community infrastructure, the federal government can put people to work eliminating pollution, protecting clean water, and building healthier communities. This effort will take many forms, from driving energy efficiency and electrification into residential and commercial buildings, to financing development of affordable housing, to rebuilding America's critical infrastructure.

- **4.1 - 100% Clean Buildings & Energy Efficiency Resource Standards:** Greenhouse gas pollution from buildings increased a full 10% in the U.S. in 2018 – driven especially by heating needs in a cooler winter. And while building emissions grew just 2.2% in 2019, climate pollution continues to increase in this sector, natural gas use and water heating and cooling. The next President and Congress must reverse that trend, by increasing energy efficiency and investing in green buildings and taking advantage of renewables in building electrification. A number of key policies must be part of this effort, starting with setting strong standards and a clear goal to ensure that all new construction runs on clean energy by creating a national Zero-Carbon Building Standard by 2023 that would require all zero-carbon new buildings across the U.S. by 2030. The administration should then partner with states and cities to integrate this standard into new and stronger state and local building codes.

  This strategy should include stronger federal incentives for local governments to enforce standards to adopt "stretch-codes," and for building owners to more rapidly adopt advanced sustainability in new buildings. Here, too, states and cities are already leading the way. And, where local jurisdictions can go faster, the next administration should support the growing movement for zero-carbon buildings, including bans on new gas infrastructure in buildings that have been adopted in more than 20 cities, as of early 2020. The next administration should also accelerate implementation of the federal Fossil Fuel-Generated Energy Consumption Reduction rule, through the Department of Energy (DOE), to eliminate by 2023 fossil-fuel use – including coal, fuel oil and natural gas – in all new and renovated

federal buildings. Together, these efforts will accelerate the transition to zero-carbon buildings at the scale and speed required to reach 100% of all new buildings in the coming decade.

While clean building standards will be useful for setting a better direction in new construction, the majority of energy use and carbon emissions will be driven by the existing building stock. To confront energy use in existing buildings, the DOE should immediately reinstate and accelerate proven appliance energy efficiency standards, and promote zero-emission appliances – including water heaters and dryers - that will help make American-manufactured appliances both cleaner and more competitive in global markets, all while cutting pollution and saving consumers money.

The next administration and Congress should also drive private sector investment into energy efficiency through enactment of a national Energy Efficiency Resource Standard (EERS), that requires utilities to achieve all cost-effective energy efficiency measures as part of their planning for load growth and the deployment of new capacity. Such a standard should be similar to rules set in the Washington state I-937 ballot initiative adopted by voters in 2006. Already a majority of states have EERS policies in place, and a federal EERS can strengthen utilities' performance targets by expanding the definition of "cost-effective" energy conservation to include the costs that climate pollution imposes on society. Implementing a national EERS will ensure that management of the electricity grid takes seriously the contributions that can be made from reducing demand by cutting wasted energy in our nation's existing building stock. This will become especially important as more communities and building owners turn away from natural gas, and petroleum-powered cars, to rely increasingly on electricity powered by renewables.

- **4.2 - ReBuild America: a National Building Energy Upgrade Initiative:** A national mobilization to rebuild the economy for climate solutions must have at its center a strong investment in the reconstruction of the existing built environment. A federal commitment to project-scaled building retrofits will put millions of Americans to work cutting pollution and energy bills for households and businesses through energy efficiency and electrification upgrades in millions of existing residential and commercial buildings throughout the country.

The next President and Congress should use strong consumer incentives, utility requirements, and direct public investments in an ambitious Rebuild America energy retrofit program. Such a program will result in tremendous economic development, while achieving long-term cost savings for American homeowners, renters and business owners through reduced energy bills, and putting millions of construction workers, electricians and mechanical contractors to work. It should include establishing targeted, refundable tax credits for energy upgrades and installing HVAC systems, water heaters (including solar water heaters), envelope improvements, and systems solutions like energy storage and district energy systems, as well as transitioning off of heating oil. These incentives should

extend to commercial equipment, as well, including advanced boilers and chiller replacements. And also establishing a reserve fund for inclusive financing, through utility on-bill investments in cost-effective energy efficiency upgrades, which can also help reach all customers, regardless of income, credit score, or renter status.

Furthermore, in the next administration the Internal Revenue Service (IRS) should establish clear policy guidance on the use of Real Estate Investment Trusts (REITs) for portfolio-scale green building retrofits and distributed energy assets, and the DOE's Federal Energy Management Program (FEMP) should expand use of Energy Saving Performance Contracts (ESPCs) in public and institutional buildings. And it should task federal agencies to prioritize green and clean energy assets in Housing & Urban Development (HUD) investments, and to set Community Reinvestment Act (CRA) incentives for banks that will further engage private capital markets in decarbonization.

In addition, federal lawmakers should partner with labor unions, building owners and managers, and the U.S. Green Building Council, to create a national training program for building operations and maintenance staff to reduce energy use. Federal funding can train builders, inspectors, energy managers, equipment technicians, and janitors in proven strategies that cut down on wasted energy in buildings. This program should be modeled after the successful "Green Supers" training programs that have helped lower climate emissions in major metropolitan areas across the country.

Finally, direct federal investment should support retrofitting and upgrading schools and public building stock for federal, state, local and tribal governments — putting Americans to work making schools cleaner and healthier, and cutting taxpayer energy costs and pollution in public buildings.

- **4.3 - Preservation and New Construction of Affordable Housing:** In early 2020 there is an absolute shortfall of 7 million affordable homes in the U.S. market, with only 4 homes available for every 10 families in need of safe and affordable housing. Market forces alone will never provide enough inventory to meet this need, especially at prices that are affordable to individuals with very low income; government policy and direct public investment are therefore required. Unfortunately, total federal spending on new construction and maintenance for public housing has plummeted dramatically over the past two decades. A bold effort to reinvest in the fabric of communities for sustainability, upgrading and constructing new green and high-performance homes and rental housing, and substantial new investments in climate resilience within the built environment, are urgently needed.

  The next administration and Congress should work together to increase investments for the National Housing Trust Fund (HTF) and the Community Development Financial Institutions (CDFI) Fund, to at least $42 billion annually, to support construction, preservation, and rehabilitation of affordable housing through grants to states and community based

organizations. And $5 billion of these HTF funds should be specifically dedicated to upgrades and improvements to local public housing. Utilization of these funds should be tied to meeting the highest standards of energy efficiency and climate resilience.

Federal lawmakers should also enhance existing incentives for privately constructed affordable housing: expanding the Low-Income Housing Tax Credits (LIHTC) program by at least $5 billion per year, and increasing per-capita allocations and establishing new bonus incentives for affordability commitments that extend beyond the required 15-year LIHTC compliance period, as well as for projects near employment and transit centers, and projects that adopt aggressive green building, zero-carbon, and climate resilience goals as part of new construction or rehabilitation. Bonus incentives should be established tied to communities of need identified through Equity Impact Mapping (see Section 7.1). Likewise, allocations of state and local tax exempt Private Activity Bonds (PAB), and rehabilitation of existing building stock by expanding the use of Medicaid to share costs of supportive housing services for qualifying families, can both create new streams of capital investment in green and affordable housing.

The next administration should work through HUD and with Congress to undertake further improvements to the existing network of policies supporting public, non-profit and privately built affordable housing, including fully funding Section 8 Housing Choice Vouchers to support all renters making below 50% of average median income. Currently fewer than 25% of eligible renters get the vouchers they are entitled to receive. Increasing funding for housing affordability on Tribal lands is also essential, through the Indian Housing Block Grant, Indian Community Development Block Grant (CDBG), and other programs that fund facilities and affordable housing.

HUD should also be directed to develop utility reimbursement incentives and rental assistance funding that provide the strongest possible incentives for affordable housing developers and Public Housing Authorities to pursue strong energy efficiency and clean energy measures, while overcoming split incentives from the federal recapture of locally achieved energy savings at the property level. This will rationalize incentives for building owners and property managers to invest in cost-saving building retrofits that improve living conditions, green energy use, the environmental impact of buildings, and it will permanently lower bills for tenants and homeowners.

Finally, by establishing a Refundable Tax Credit for rent-burdened families, the next administration and Congress can reimburse the portion of rent payments that exceed 30% of household income for families making less than the average median income. These funds should further be used for down-payments to promote home ownership.

- **4.4 - Preventing Homelessness & Displacement in the Face of Gentrification:** The growing crisis of housing affordability, coupled with renewed investment in dense urban environments and economic growth, mean that it is increasingly urgent to build stronger

protections against rising housing costs and displacement, even as we rebuild and restore affected communities. Climate gentrification can be seen in Miami's Little Haiti neighborhood, for example, where a low-income community rich in cultural heritage and home to many Haitian immigrants is increasingly pressed by local developers aggressively attempting to buy up land on higher ground, as sea level rise threatens Miami's historically highest value property: the beach. To protect low-income people from eviction and homelessness, federal lawmakers must pursue a range of measures to increase access to capital and provide a stronger framework of rights in order to prevent displacement of communities. All of these measures can further be linked to Equity Impact Mapping (see Section 7.1) as a tool for climate justice in the federal policy implementation, to ensure that communities of high poverty and at-risk of gentrification receive additional targeted incentives for rental assistance and affordable housing stabilization.

The next President and Congress should champion the creation of a National Housing Stabilization Fund that can offer temporary rental support and financial assistance to families facing economic dislocation or short-term financial challenges due to lost wages, bills for medical care, transportation, and child care. This fund should provide a range of supportive services that help stabilize vulnerable working families during challenging financial times. Reassessing Community Reinvestment Act (CRA) guidelines can also help anticipate and avoid displacement in gentrifying areas, particularly examining the role of non-bank lenders, which do not fall under CRA jurisdiction but make up more than half of all home loans in some communities.

Federal lawmakers should also improve enforcement of existing fair housing laws, and put in place new stronger protections for tenants, including from housing discrimination based on income source (to protect recipients of Section 8 Vouchers), housing status (to provide legal support for the homeless), and gender identity and sexual orientation (to expand protection against discrimination and exclusion). These protections can help remove causes of homelessness. Guaranteeing a tenant's rights to legal counsel when facing eviction, working through HUD, the Department of Justice (DOJ), and the Consumer Financial Protection Bureau (CFPB), and in collaboration with states and cities, and ensuring effective legal representation, can also go a long way toward reducing economic dislocation in the face of new climate motivated community investment. Improving use of rent stabilization, and requiring demonstration of just cause in the event of eviction can further minimize displacement for low income renters.

Finally, federal lawmakers should direct federal support directly to the community level, and such aid to cities and states should be pursued for expansion in the context of climate-driven reinvestment in the built environment. For example, renewing federal funding for the Energy Efficiency & Conservation Block Grant (EECBG) program will be particularly helpful in expanding local investment in zero-carbon construction projects.

➢ **4.5 - Energy Affordability through a Universal Clean Energy Service Fund:** To ensure that Americans of all income levels enjoy the full benefits of clean and reliable power as the U.S. shifts to 100% clean electricity, the next President and Congress should establish a new Universal Clean Energy Service Fund (UCESF), overseen by DOE, to reduce energy bills for working families. Modeled on the Universal Service Fund that promotes universal access to telecommunications services, this new program will be integral to improving protection of ratepayers and restructuring how energy is used at the community level. Today the "energy burden" for American families – the percent of household income spent on energy bills – is more than three times larger for low-income families than for middle- and high-income households. One in five Americans have had to reduce or forego food, medicine and other necessities to pay an energy bill. As the United States launches a massive investment in rebuilding our energy networks, the UCESF program can ensure access and connectivity to this new infrastructure for working families in a way that creates economic savings and empowers them to spend more of family budgets on other needs.

Today, many states have similar public benefits funds to prevent utility shut-offs and hardship for low-income, elderly or other vulnerable groups, including small businesses. The UCESF can enhance and buttress these existing programs, providing opportunities to integrate with other energy assistance that can drive new capital into healthier and more affordable housing.

The UCESF would reduce monthly electricity costs for qualifying families and ensure that every American has access to affordable and pollution-free electricity. Further it can be integrated with the federal Low-Income Home Energy Assistance Program (LIHEAP) overseen by the Department of Health & Human Services (HHS), the current primary federal vehicle for helping low-income families pay their energy bills for home heating in order to provide a seamless one-stop access to support for low-income families. LIHEAP funding has been severely reduced and is only currently sufficient to fund one out of five eligible households. In fact, many of the goals of a UCESF could also be achieved through a major reinvestment in and reforms to reinvision LIHEAP.

The UCESF should further be integrated with the DOE Weatherization Assistance Program (WAP) as well as with the ReBuild America initiative. WAP supports energy-saving building retrofits for low-income renters and homeowners working through states and non-profit community service organizations, and will be a natural implementation vehicle for directing UCESF funds into smart and financially viable projects that cut utility bills. To help ensure the broadest access to energy efficiency and renewables for low income ratepayers, The UCESF should also be linked to a reserve fund for "inclusive financing" programs offered through utility on-bill financing programs to ensure that funding for direct energy payments is linked to building energy retrofits that safe money over time. Eligibility verification should be streamlined across all of these federal and state programs, to allow low-income consumers the option to pay energy bills that include efficiency, solar energy, and beneficial electrification.

5) Promoting Clean & Competitive American Industries

The International Finance Corporation estimates that there is a $23 trillion investment opportunity created by just the initial commitments to the Paris Climate Agreement of the 21 largest developing countries. This massive emerging market is an incredible opportunity for the United States to assume a leadership role in manufacturing the clean energy solutions that will power the 21st century. Jumpstarting America's clean manufacturing industry will lead to millions of good-paying jobs.

Furthermore, the industrial sector is America's third-largest sectoral source of greenhouse gas emissions, representing over 20% of domestic greenhouse gas pollution. And there is enormous opportunity to confront these emissions, cut waste and inefficiencies, and catalyze deployment and innovation in industrial technologies and processes that will both address climate change and also sustain globally-competitive American manufacturing industries.

To seize these opportunities, the next President must assert a bold agenda for strategic industrial policy and robust investment in American industrial capacity.

- **5.1 - Advanced Manufacturing Investments & Industrial Policy:** To achieve a sustainable and prosperous U.S. clean energy economy and create good-paying American jobs, the next administration must commit to the necessary federal investments and industrial policies that can rapidly scale domestic manufacturing. The federal government can provide real benefits in the form of 21st century industrial policy, strategic planning, public-private partnerships, clear and stable market rules, and technical assistance using new and existing agency expertise and resources, as well as with direct investments, tax incentives, and low-cost financing.

  Among these industrial investments, the next administration should work with Congress to establish a new, uncapped Advanced Energy Manufacturing Tax Credit, much like that passed in the 2009 *Recovery Act*, but much larger, to incentivize investment and growth in domestic manufacturing capacity for clean energy industries, such as wind turbines, electric vehicles, and advanced batteries. These credits should be conditioned upon or expanded for employers offering family supporting wages and benefits, enforced through Project Labor and Community Benefits Agreements, Prevailing Wage laws, re-established federal overtime requirements, and other strong worker protections. This agenda should also include tripling and making more accessible the financing authority in the Department of Energy (DOE) Advanced Technology Vehicles Manufacturing (ATVM) program.

  The next administration should focus on expanding federal support for technical assistance and skills-training programs for businesses, states, and local governments, including the Department of Commerce's Manufacturing Extension Service, and Advanced Manufacturing

Partnerships, and related efforts. And it should establish a Quadrennial Industrial Review (QIR), to be conducted by the U.S. Department of Commerce, working with the DOE and the Department of Defense (DOD), to map strategic industries and identify sound industrial policies — including critical materials and rare-earth elements, global demands, and domestic production capacities — and support sustained American competitiveness and industrial growth that enable a livable climate.

- **5.2 - Buy Clean Program:** The federal government is one of the nation's largest owners of real estate and developers of land and infrastructure; that also makes it one of the largest purchasers of energy-intensive building materials, such as steel and cement. In this capacity, federal policy coordinated through the General Services Administration can make a tremendous difference in pushing materials producers to lower their carbon footprints. This can give domestic manufacturers a leg up — because they are often among the lowest-carbon producers. Currently, the United States is the largest importer of "embodied" carbon pollution — meaning the carbon pollution created in making the goods it imports is more than contained in any other nation's imports (twice as much, in fact).

  To confront this challenge and opportunity, the next President should launch a federal Buy Clean program to direct federal procurement of low-carbon materials in a manner that reduces climate pollution and closes this "carbon loophole" — making reducing climate pollution a business advantage for American manufacturing enterprises. A similar federal program will incentivize reductions in those emissions through efficiency and fuel-switching, driven through transparency and competition, for materials used in federally funded infrastructure including cement, steel, concrete, glass, iron, mineral wool, and other products. The next President should also work with states and local governments to implement similar programs. (The State of California, which spends more than $10 billion per year on infrastructure projects, was the first state to implement a Buy Clean program.) And Congress should pass additional incentives for corporate buyers to match the federal government's Buy Clean commitment.

- **5.3 - Cracking Down on Super-Pollutants:** Climate "super-pollutants" such as hydrofluorocarbons (HFCs) and methane have tens to thousands of times more warming impact per ton of emissions than carbon pollution, and largely stem from sources in manufacturing and agricultural industries. Unfortunately, the Trump administration has abandoned effective international collaboration to confront HFCs, by failing to support the Kigali Amendment to the Montreal Protocol. In doing so it has harmed American manufacturing industries, which have supported domestic implementation. U.S. manufacturing enterprises have already invested more than $1 billion in technologies that slash HFCs. These HFCs are found in appliances such as refrigerators, heat pumps, air conditioning systems and in some aerosols, and safer alternatives are available. And safer alternatives are available. The Trump administration has also rolled back important rules protecting against methane pollution, even as scientists have come to understand

atmospheric methane has been underestimated, and its growth is very likely tied to the growth in hydraulic fracturing ("fracking") for oil and gas.

In the face of this retrenchment by the federal government, states are acting: At least fifteen states have taken action to phase out HFCs in accordance with Kigali. The next President must follow that leadership, and pursue both executive and legislative action to put the U.S. back on course in reducing these super-pollutants and supporting clean manufacturing. This action will also give domestic manufacturers a competitive advantage — one that has been estimated to support 30,000 American jobs and increase U.S. exports by $5 billion.

The rise in global methane pollution has also been traced to the expansion of oil and gas extraction – especially through hydraulic fracturing (or "fracking"). According to one estimate, U.S. oil and gas industries leak 13 million metric tons of methane pollution into the atmosphere each year — causing enormous climate damage, along with directly costing American energy consumers $2 billion annually. This unsustainable industrial activity must be confronted by federal lawmakers.

The next administration should also use executive and legislative action to confront methane pollution. This includes requiring oil and gas companies and utilities to find and stop methane leaks in pipelines delivering gas to power plants and industry, and taking action to incentivize the removal or repurposing of gas distribution pipelines to buildings. This commitment must be accompanied by a firm commitment to crack down on the fossil fuel production that drives domestic methane pollution (see Section 9.2). The next administration should also support the deployment of biogas methane capture and utilization technology in wastewater treatment, livestock operations, and landfills, which will be used in specific applications that cannot be easily or cost-effectively electrified — provide on-site power (e.g. such as through co-generation), and provide value for farmers and local governments.

➢ **5.4 - Top Runner Industrial Efficiency & Carbon Intensity Standards:** The next administration has the opportunity to place U.S. industries at the forefront of emerging global clean technology innovation. American manufacturing offers tremendous capacity to benefit the climate through meeting higher standards of efficiency, pollution abatement, and fuel switching in the near term. Steadily increasing industrial standards tied to technology leadership offers greater market certainty and cost competitiveness, and a program that sets new output-based standards every few years based on top industry performers can drive a race to the top and encourage continuous improvement in America's factories.

To capture this opportunity for global manufacturing leadership, the next administration should work to implement new standards for carbon intensity of domestic manufacturing processes and equipment that encourage the production and sale of super-efficient

equipment, appliances, and electronics. DOE has identified the potential to double the business-as-usual rates of energy efficiency improvement across the cement, chemicals, iron and steel, and natural gas and petroleum industries, using current industry trends and technologies. And the potential for boiler electrification is limited but offers additional emissions reductions. This agenda should also involve working with Congress to establish tax incentives for industrial waste-heat recovery and carbon capture, to help capture a further decrease in energy demand from domestic industries, and for performance improvement and fuel-switching – all of which can help businesses meet carbon-intensity reduction targets.

- **5.5 - Increasing Clean Energy Exports & Global Competitiveness:** American manufacturing can power the world's transition to clean energy, and help create millions of good jobs in the U.S. The next President should take advantage of this opportunity, while simultaneously providing the global community with affordable clean energy technologies.

  The next administration should focus the attention of federal international trade and finance agencies, such as the Export-Import Bank (Ex-Im), the Overseas Private Investment Corporation (OPIC), the Millennium Challenge Corporation (MCC), and the Foreign Agricultural Service, to accelerate American clean energy and sustainable products exports. They should also work with global development and investment institutions, such as the World Bank, International Monetary Fund (IMF), and other multilateral development banks, to develop clean energy, clean water, and sustainable infrastructure in developing nations around the world. This agenda should also include reinstituting bilateral programs for enhanced clean energy development and deployment with key strategic partners.

  Additionally, federal lawmakers should work together to ensure that America's trade policies support, and do not undermine, the global transition toward clean energy, by implementing a Climate Duty to close the carbon loophole and promote continuous climate pollution reductions across nations. Once America commits to an ambitious national climate agenda, the next administration should direct the Department of Commerce and U.S. Trade Representative to design and institute a Climate Duty to be assessed upon the embodied climate pollution of imports from nations not committed to implementation of strong climate pollution reduction plans under the Paris Climate Agreement. This policy should be developed working with key industries, workers, and other domestic and international stakeholders, with a particular emphasis on energy-intensive, trade-exposed industries. Such a measure will not only protect these industries, incentivize low-carbon supply chains, and provide a balance on America's trade relationships, but it will also help to provide a supplemental enforcement provision for the Paris Agreement.

6) Growing Sustainable Agriculture & Rural Prosperity

Today, America's rural and agricultural communities face a triple threat. First, an urgent challenge of scattershot policies from an erratic Trump administration that's harder to predict than the weather. Second, from the cumulative impact of decades of America's failure to invest in rural infrastructure or put the needs of family farms over the profits of large corporations. And third, a mounting climate crisis causing massive and accelerating harms. Together these three challenges place an untenable burden upon our nation's rural communities and its farmers. The next President of the United States has the opportunity to take on all three crises facing rural and agricultural communities, through urgent, long-term, and visionary reinvestment in a more resilient and prosperous future.

- **6.1 - Investing in Agricultural Innovations to Defeat Climate Change:** America can grow climate solutions and build thriving rural and agricultural economies by ensuring farmers and ranchers benefit financially and ecologically from the positive impact their crops and farming practices provide. It's estimated that at least 50% of the world's soil carbon has been released as a result of land use change and monocropping, while carbon-rich soil also boosts production and yields and helps create a sponge in the soil that allows for better absorption and water retention in the face of both flooding and droughts. One recent soil health project study by the National Association of Conservation Districts (NACD) showed how a no-till/cover crop system could increase yields by $110 per acre.

  The next federal administration should create new revenue streams that compensate producers for building ecosystem services, especially in removing carbon from the atmosphere and storing it in soil and forests. These investments in rural communities and a healthy climate create both economic opportunity and environmental protection: crop productivity, drought and flood resilience, stormwater retention, water filtration, air quality, and preservation of pollinators and other biodiversity.

  The next administration should establish performance-based payments for on-farm carbon removal, building upon the Soil Health Demonstration Projects authorized in the 2018 Farm Bill, and by determining the appropriate conservation practices and their climate benefit-value, and establishing payment systems and programs that reward producers who are storing carbon in their landscapes. This should begin by tapping into existing USDA programs like the Commodity Credit Corporation - an agency with $30 billion in borrowing authority - and those of the Farm Service Agency (FSA) and the Natural Resources Conservation Service (NRCS). The next administration and Congress should also establish a permanent, sustained source of revenue for American farms.

  Ensuring a climate-smart crop insurance program should also be a part of this critical agenda, as it currently backs more than 80% of all major U.S. field crops, at a price tag of $9

billion annually, but it does not account for the largest risk to America's working lands: climate change. Key reforms are needed to protect farms, taxpayers, and the climate.

The next President should also work with Congress to provide a major increase in funding for the Conservation Stewardship Program (CSP), and build upon the 2018 Farm Bill which, for the first time, provided a general directive for the CSP to focus on soil health and authorized soil planning and climate mitigation as activities eligible for payments. The 2018 Farm Bill also increased incentives for crop rotation, cover cropping, and rotational grazing – all crucial strategies for soil health, carbon removal, and environmental conservation. Unfortunately, both the 2014 and 2018 Farm Bills cut funding for the CSP, which must be restored and then significantly increased.

The next administration should also work with Congress to expand other successful USDA conservation programs, like the Conservation Reserve Program (CRP), the Environmental Quality Incentives Program (EQIP), and the Regional Conservation Partnership Program (RCPP), and increasing their focus on climate-smart agricultural and land-use practices. It should extend conservation compliance measures to cover soil health improvements. Federal lawmakers should confront nitrous oxide - a greenhouse gas 250 times more potent than carbon, which accounts for more than 50% of U.S. cropland greenhouse gas emissions - with a targeted nutrient management strategy. The next administration should also launch public-private waste management partnerships for better soil, and expand the federal "sodsaver" policy to preserve grasslands nation-wide.

There is also enormous climate benefit to be achieved through on-farm and on-ranch methane capture. And the next administration should invest directly, through aforementioned federal programs, in the deployment of anaerobic digesters to capture methane from livestock operations, for use in on-site energy generation or in reuse as a biogas replacement for fracked gas, for energy and industry and in the production of co-products. It should establish payment systems through existing USDA programs to compensate farmers and ranchers for methane capture, similar to payments for soil sequestration. And it should promote multi-pronged methane abatement strategies, including rotational-grazing, conversion to dry scrape, composting digestate, innovations in animal feed, enhanced solid separation, thermochemical conversion, and more.

Finally, this carbon farming agenda should extend also to rewarding carbon removal in forests. Just as it should reward farmers for carbon removal and environmental services, the next administration should pursue and reward partners in capturing the full potential of forest expansion for deep decarbonization, estimated at 40-50 million acres over the next 20-35 years. This includes incentivizing improved forest management in private working forests, reforestation of marginal farmlands, and long-term protection through voluntary conservation easements.

- **6.2 - Keeping Farmers Farming:** Today the combination of economic structures built to benefit large corporations, the Trump administration's chaotic agriculture and trade policies, and increasingly costly disasters have together stacked the deck against American farmers. President Trump's trade agenda has created costs where export sales and new market opportunities once existed. Under the Trump Administration there has also been a rise of enormous agribusinesses that have squeezed small family farms to the point of breaking. These large businesses, which have grown in size as they have merged vertically and horizontally, can now effectively set prices and control entire swaths of America's agriculture sector. Just 5% of U.S. agricultural operations conducted 75% of sales in 2017. Meanwhile, new farmers struggle to find the capital or land to even begin, and many farmers and farm workers find themselves under attack from the Trump administration's anti-immigrant policies and its racist tweets. In 2018, U.S. farm income hit a 12-year low, and in 2019 farm loan delinquencies reached the highest point since the start of the decade.

  The next President must take office committed to reversing each of these troubling trends – to ending Trump's chaos governance, to supporting farmers and farm workers, and to stopping large agribusinesses from taking advantage of America's rural communities. They should reverse Trump's disastrous trade policies, and confront mergers, consolidations, and abusive corporate practices that have led to agricultural monopsony, and instead pioneer an agriculture policy that supports the producers who have underpinned America's food system and rural economies.

  The next administration should rebuild stable, long-term agricultural trading partnerships, through the repeal of tariff wars and by increasing investment in the USDA Market Access Program to provide new resources to help American farmers bring their crops to market. It should protecting against agribusiness consolidation, by appointing Federal Trade Commission (FTC) commissioners who will aggressively enforce America's antitrust laws and use them to protect family farms against irresponsible vertical and horizontal integration in the agriculture industry, and by empowering the Department of Justice (DOJ) to better protect against anti-competitive behavior in agricultural industries.

  At the same time, the federal government must do more to protect farm workers' rights, and also ensure they are protecting from climate change. These workers, many of whom are immigrants, have no right to join a union and very few worker protections. And as temperatures around the globe rise, climate change adds new threats to the health of the farm workers who already spend long days outside in hot, humid conditions. The next President must work with Congress to pass the *Asuncion Valdivia Heat Illness and Fatality Prevention Act*, to make sure workers are trained to deal with heat exposure, have access to safe water and can take breaks to protect themselves.

  The next Secretary of Agriculture must also help diverse, beginning, women and young farmers succeed, by addressing institutional discrimination within federal agricultural programs, and increasing outreach and financing programs for underserved communities.

The USDA also can lead inbreaking down barriers for land access, working with Congress to expand funding for the Beginning Farmer & Rancher Development Program and allowing all young farmers and ranchers to be eligible for the federal Public Service Loan Forgiveness Program.

- **6.3 - Next-Generation Rural Electrification:** During the New Deal, visionary policies fueled rapid expansion of rural economic development through the Rural Development Administration in USDA. These assured sustained federal financing for modern infrastructure in communities that had been passed over by private industry due to the relatively high cost of serving users in rural areas. Today many of these same programs still exist within the federal government, and America can rely on them once again to ensure that vibrant rural economies thrive in a new clean energy economy. In this way, the same tools that originally enabled electrification to span from coast to coast can once again bring modern, clean, smart and affordable energy and communications infrastructure to thriving rural communities.

  The next President should work with Congress to increase the accessibility of and double funding for the USDA Rural Utility Service (RUS), and Rural Housing and Rural Business Service, to provide low-cost financing for zero-carbon generation, transmission and distribution of electricity, including distributed renewable energy and efficiency upgrades, as well as broadband infrastructure, smart grid solutions, and other technologies. This should include debt relief to allow rural electric cooperatives to write down or restructure loans for stranded coal plants and other fossil fuel assets, in order to redirect billions of dollars from cooperative members' bills toward modern clean energy assets. The Rocky Mountain Institute recently published an analysis estimating the bargain cost of just $35-$40 billion to retire the entire fleet of domestic coal plants. Although additional investments will be necessary to support workers and communities in the economic transition.

  Finally, federal lawmakers should promote new Energy Districts and rural Energy Democracy. Energy Districts, modeled on the Soil Conservation Districts established as part of the New Deal, and also on existing locally-created Energy Districts in Iowa. Today, the Winneshiek Energy District in northeastern Iowa is a collaborative community energy district that aims for 100% locally owned, efficient, renewable energy by midcentury – and serves as a model for what can be done around the country. And by massively increasing Natural Resources Conservation Service (NRCS) staff throughout the country, the next administration could build many more partnerships that promote locally-driven plans in rural communities for renewable energy, smart grid, and energy efficiency projects.

- **6.4 - Diversifying Rural Economies:** The needs of rural communities should be central to the Quadrennial Industrial Review led by the Department of Commerce, and through Equity Impact Mapping to identify differences in environmental justice and investment. Rural communities face both challenges and opportunities that come from lower population density, distance to urban markets, and proximity to open space and natural

resources. Strategies for economic diversification and new investment in infrastructure and economic development are essential to ensuring that America's rural communities remain vibrant places to raise a family, to make a living, and to offer hope of new beginnings for succeeding generations. Just as a strong commitment to public investment was essential for rural electrification, engaged and thoughtful policy is important for all aspects of building diverse, thriving rural economies, that "crowd in" private capital, attract new industries, and offer meaningful access to increasingly globalized markets. Reinvestment in diverse and prosperous rural places must be at the heart of a national mobilization to build a sustainable economy and confront the climate crisis.

Expanding rural broadband connectivity is fundamental to giving rural Americans the tools necessary to meet the challenges of the modern economy. Estimates range from $130-150 billion in total funding necessary to support rural broadband demand. While much of that can come from the private sector, the next administration should pursue at least $80 billion in public investment in rural broadband. The Universal Service Fund should be updated into a broadband rural subsidy program by broadening the base of contributors to include Big Tech. Currently the fund is financed through interstate phone call minutes and, as a result, revenue is dwindling for the High Cost, Lifeline, E-Rate, and Rural Healthcare facilities.

Broadband access must also be expanded for Tribal nations, to guarantee quality internet. Providing $5 billion in subsidies to low-income rural Americans will also help make sure the internet is affordable even in hard-to-serve areas. Other key policies that the next administration should prioritize include committing to net neutrality, removing barriers to locally owned and created broadband networks, and supporting a nationwide public safety network (FirstNet). Additional funds are needed to support 911 call centers that must manage new service demands for text message and video with first responders. And ensuring school broadband access through the federal E-Rate program is also essential, as education - from K-12 to higher education and advanced professional training - has increasingly moved online. Today, access to broadband is essential infrastructure for lifelong advancement, economic opportunity, and entrepreneurship.

Also, while farming, forestry, mining, and other natural resource-dependent industries occupy a special place in rural economies, service-sector and manufacturing industries actually represent larger sources of both employment and earnings in rural America. In fact, manufacturing jobs represent a higher percentage of total employment in rural counties than they do in metropolitan areas. To promote economic development, business growth, and increased prosperity, the next President should place special focus on rural manufacturing and supply chain development. Establishing rural Redevelopment Corridors can value regional strengths and unique attributes of communities. Systematic assessment of the existing infrastructure, skills and industries, and natural resources of a community, help identify regional competitive advantages, create jobs, and drive equitably shared growth.

To further support rural economic development and diversification, existing regional authorities like the Appalachian Regional Commission (ARC), Tennessee Valley Authority (TVA), Delta Regional Authority, and Denali Commission should be charged with elevating and coordinating federal investment and technical assistance to support state initiatives and local priorities.

- **6.5 - Funding Economic Transition & Restoration of Impacted Communities:** Rural communities can pay a real price as sacrifice zones for extractive industries. This is especially true during times of transition. As mines and power plants close, entire communities are too often left to foot the bill, with abandoned infrastructure, neglected health and environmental hazards, a torn social safety net, and decimated local economies. To ensure that communities that bore the cost of resource extraction are first in line to receive the benefits from new investment in a clean energy economy, the next President should establish two stable long-term funds: a Re-Power Fund to invest in bottom-up, locally driven economic and workforce development, and a Restore Fund, focused on creating good jobs through site cleanup, environmental remediation and ecological restoration.

  The Re-Power Fund should invest in communities impacted by changes in fossil fuel industries through locally driven economic and workforce development strategies. The program should concentrate investment in re-development corridors that build on existing assets and support new business growth in advanced manufacturing and new clean-energy industries, infrastructure investment, and provide supplements to any foregone local tax revenue. And it should prioritize development of energy-related industries that can access existing energy utility and transportation and shipping infrastructure that is frequently abundant and of high quality in these communities — ensuring that new job creation is centered on growing high wage and high value-added industries that draw on the existing skills of workers and strong local supply chains. The Re-Power Fund will build on the heritage of energy producing regions as an asset, focusing on re-industrialization built around growing and globally competitive new energy industries, while ensuring strong worker protections.

  Also, establishing a dedicated Restore Fund for communities will create new skilled union jobs in environmental reconstruction that holds historic polluters accountable to pay for the environmental, health and community damages caused by coal, oil and gas extraction. The program should support comprehensive reclamation, hiring local workers for restoration projects in areas where mining, drilling, mountaintop removal, and fracking have damaged human health and natural ecosystems, harmed water tables, and polluted fields, riverbeds, and valleys. The Restore Fund should supplement, and not replace, existing resources like the Abandoned Mine Fund. Jobs for reclamation and restoration, and it should be required to pay prevailing wages and to allow workers the opportunity to organize. It should be administered in a manner that prioritizes community hiring for

transitioning workers. And Restore Fund jobs will be long-term, with projects taking years to complete, and would be available to fossil fuel employees in addition to other ‘G.I. Bill’ training programs that allow workers to remain fully employed. (See Section 8.1.)

7) Building Greater Justice & an Inclusive Clean Energy Economy:

For too long, policymakers have treated the crises of climate change and widening economic inequality as separate; considering economic justice and environmental concerns with little regard for one another. But these crises are deeply interrelated, and they demand integrated and community-driven solutions. The 2018 National Climate Assessment found that the impacts of climate change disproportionately affect low-income populations, both urban and rural. And low-income communities are most often communities of color. In 2018, the Federal Reserve reported that white families have 10 times the net worth of black families and more than 8 times the net worth of Hispanic families. Another recent study showed that "redlined" communities – primarily communities of color historically locked out of fair and affordable home ownership – face 2.4 times the rate of hospital admissions for asthma compared to non-redlined neighborhoods in the same cities.

For decades, corporate polluters have used lower-income communities as dumping grounds, and these communities face an enormous and unequal burden. Likewise, Tribal nations are on the front lines of climate change, and have known a history of injustice and exclusion from discriminatory policies.

Federal efforts to build an inclusive clean energy economy must recognize and address the legacy of economic, environmental and racial injustice that has been inherent in past industrial transformations. The next President and Congress must prioritize investment into front-line and low-income communities and communities of color that bear the brunt of legacy pollution and climate change, and that have been left behind in the current American economy.

- **7.1 - Equity Impact Mapping & an Equity Screen to End 'Sacrifice Zones':** Disparate environmental impacts in the United States are not accidental, but are rooted in a long history of deep structural inequality and systematic disenfranchisement spanning the sweep of American history. Disadvantaged communities and communities of color were allowed to become 'sacrifice zones' — cancer alleys and down-wind communities that for too long have borne the brunt of prejudiced environmental and economic systems, denied full access to the tools of government protection or wider public concern. To effectively address structural imbalances in our economy with community-led strategies, federal lawmakers need better access to information and better integration of that data into decision-making to set informed policies that account for the cumulative impacts of exposure to pollution, health disparities, and economic inequality – ranging from transportation and housing inequity, to concentrations of persistent poverty.

  The next President should take immediate executive action to launch a cross-agency Equity Impact Mapping initiative, ideally through the Office of Management and Budget (OMB), to track cumulative environmental impacts, pollution hotspots, and income inequality. Building

on a track record of state leadership in programs, like California's CalEnviroScreen and the Washington State Environmental Health Disparities Map, and the next White House should lead a major initiative to identify Census tract and community-level information of environmental harms, as well as patterns of economic inequality, racial demography, and vulnerability to climate change. These assessments would provide transparency for better-targeted federal policies to address structural inequality and provide front-line and vulnerable communities with the resources they have been too often denied.

The next President should concurrently take executive action, with coordination through OMB, to establish an Equity Screen on major federal policy actions, using the mapping initiative, through which federal agencies' climate, energy and environmental investments, regulations, permitting decisions, and other major actions would be evaluated. This policy builds on state-level progress, such as New York state's Equity Screen, and at the federal level it can be implemented by strengthening Executive Order 12898. It should be applied both at agencies' headquarters, as well as in implementation, operations and decisions at the regional, state and field-office levels. The next President should also work with Congress to codify this Equity Screen into law.

The next administration should be committed to a comprehensive agenda for social justice, and direct federal agencies to examine historical patterns of racial discrimination and environmental racism, and their relation to community harms like health disparities, lead-contaminated drinking water, over-incarceration, lower rates of home ownership, and resulting disparities in wealth and opportunity that exist today.

- **7.2 - Clean Water for All:** The next President's environmental justice agenda must include a new federal Clean Water for All initiative to ensure that every American has access to clean water, as a human right. This initiative should be designed to address the enormous backlog of drinking water, wastewater and stormwater projects in the United States. In the Great Lakes region alone, the investment need is over $170 billion during the next 20 years to help maintain drinking water for more than 30 million Americans. And this Clean Water for All initiative should target the front-line communities most at-risk of contaminated water.

  Implementation should involve fully funding the Drinking Water State Revolving Fund and the Clean Water State Revolving Fund, and infusing other federal investments to help close an $82 billion annual funding gap in drinking, waste- and stormwater infrastructure.

  No family should have to choose between paying their water bill and paying for food, clothing, and other essentials. Water prices are rising across the country and low-income families increasingly cannot afford the cost of services. The next administration should work with Congress to ensure that clean drinking water is not only available but also affordable for all Americans, especially low-income families, through a new Low-Income Water Affordability Program (modeled on the Low-Income Home Energy Assistance Program, LIHEAP).

A well documented crisis of lead poisoning, particularly in urban and low income communities, can be traced to a lack of investment in aging water infrastructure. From Flint, MI to elementary schools in Los Angeles, CA Americans are being poisoned by lead in their drinking water. The next President must take targeted, concerted action and make major investments to identify and remediate lead-threatened drinking water in America.The next administration should establish a lead abatement grant program, specifically focused on schools, daycare centers and federal buildings and a Lead Safety Tax Credit to incentivize homeowners to invest in remediation, as called for in Senator Warren's plan to Fight for Justice As We Combat The Climate Crisis.

- **7.3 - Pollution-Free Communities:** Despite President Trump's claims that America has "crystal clean" water, the truth is that the federal government has of late been a wish-fulfillment service for big polluters. More than 5,000 U.S. water systems serving roughly 18 million people have been cited by the EPA for unsafe levels of lead in water. Air pollution is a major health and economic harm: One 2019 report published in the Proceedings of the National Academy of Sciences (PNAS) estimated that air pollution causes 107,000 American fatalities, and costs more than $800 billion to the U.S. economy, each year. These burdens fall disproportionately on low-income communities and those of color. The next administration must be committed to an agenda for pollution-free communities, and achieving absolute local pollution reductions in disproportionately impacted communities.

  Clean Air: The next President must confront the impact of air pollution in communities throughout America, which has left more than 130 million people living in areas with unhealthy levels of ozone and particulate matter (PM2.5) pollution. This is compounded in communities of color, with African-American and Latinx households especially breathing more air pollution than white households, largely from on-road sources like diesel trucks.

  Solving these issues requires aggressive enforcement of existing Clean Air Act regulations and promulgating new standards to reduce dangerous air pollution, from PM2.5 and ozone to mercury and carbon. Realizing this agenda requires stringent tailpipe standards for cars and trucks, and working with local communities on further actions to confront transportation emissions to improve local air quality. It also includes federal action to ensure closure of every coal plant by 2030, and achieving 100% clean, renewable and zero-emission electricity by 2035, with targeted investments to ensure the swiftest clean energy transition in front-line communities. This means confronting pollution from new and existing buildings, as well as from industrial facilities. And in each of these areas the federal government should partner with local jurisdictions to go further, faster.

  Toxics-Free Communities: Of all the actions the Trump Administration has taken to undermine federal safeguards for environmental and public health, few are as brazen as the work of the EPA to undermine protections for Americans against toxic chemicals. But even prior to the Trump administration, there had been only meager federal leadership on

chemical safety. While there are tens of thousands of chemicals in commerce today, the EPA has banned only a small fraction of them. Whereas the European Union (EU) restricts over 1,300 chemicals in cosmetics, the U.S. Food & Drug Administration (FDA) has done the same for just 11 such products.

Some states have shown leadership: Washington state has been one of the nation's foremost leaders in chemical safety — fighting for a thorough understanding of chemicals used in modern-day commerce, and breaking new ground in regulating those that could be dangerous. The federal government must assume leadership in confronting the prevalence of harmful chemicals in American communities, fields, workplaces and waters, and the dangers they present to children, in particular. The next President must especially follow the leadership of states by implementing nationwide bans on per- and polyfluoroalkyl substances (PFAS), which have contaminated drinking water at more than 600 sites in 43 states throughout the U.S. The next administration should also implement industrial safety regulations, based on those being advanced in leading states like Washington and California, that will require companies to implement modern practices to prevent the chemical explosions, fires and releases – such as the 2019 fire at the Philadelphia Energy Solutions refinery – that occur each year in communities across the nation. The next administration should also strengthen and ramp up enforcement of existing chemical safety laws like the Toxic Substances Control Act (TSCA), and support states to continue their leadership protecting their residents from harmful chemicals.

Superfund Cleanup and Brownfields Redevelopment: The next President should work with Congress to increase investment in Superfund cleanup, and in Brownfields and "Brightfields" redevelopment of sites that are largely located in urban and marginalized communities. Today, nearly 1,400 Superfund sites remain to be decontaminated, and as of 2015, approximately 53 million Americans lived within 3 miles of a final, deleted, or proposed Superfund site, including 40% and 27% overrepresentations of African-Americans, and Latinx-Americans, respectively.

There are strong examples of local leadership leveraging federal funding alongside non-public investment to build healthier and more sustainable communities. The ReGenesis project, in South Carolina, is a model for the country and a symbol that hard work and strategic investment by the federal government, driven by local priority-setting, can meet ambitious environmental goals today.

This agenda must 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 also requires increasing redevelopment of Brownfields to achieve more sustainable approaches to local land use. And the next President should provide additional funding for the National Institutes of Health's (NIH) National Clearinghouse for Worker Safety and Health Training, to protect the health and safety of workers who perform clean-up activities.

- **7.4 - 40% of Investments into Disadvantaged Communities:** Building a just, green economy requires policies to strengthen communities from the ground up, including the opportunity for local residents to build wealth and participate in new economic opportunities. The next President should be committed to an agenda of targeted investment in disadvantaged communities – in particular those experiencing the greatest burdens of environmental harm, economic inequality, and climate change. Data show that economic development patterns that isolate low-income communities and concentrate environmental harms alongside poverty are the result of decades of systematic policy choices. And these communities are frequently communities of color.

  The next administration and Congress should work together to direct at least 40% of all green federal investments into disadvantaged communities, utilizing data obtained through its Equity Impact Mapping initiative. These investments should range across the next administration's full green and just investment agenda: from deploying clean energy and energy efficiency; building sustainable energy, transportation and water infrastructure; remediating pollution; supporting clean and competitive American manufacturing industries; catalyzing clean-tech innovation; achieving a just transition, and more. And this 40% guarantee is a necessary floor that follows in recognition of the number of Americans living in poverty and a legacy of exclusion for historically redlined communities. Some states have committed to invest at least 35% of their green investments into disadvantaged communities, while 40% has been put forward by environmental justice leaders as a key funding level to address inequity and ensure inclusive prosperity and economic opportunity – a number that is appropriate nationwide in building a truly just, equitable and inclusive American clean energy economy.

  Furthermore, access to credit and capital is a persistent challenge for many small businesses owned by and located in communities of color – exposing these communities to predatory lending practices, driving disparities in economic growth, and contributing to income inequality. As part of this agenda, the next President should also focus on expanding federal tools for investment in marginalized communities and broadening access to capital investment and markets for women- and minority-owned small businesses. This should included and more targeted funding from Small Business Administration (SBA) programs like the 7(a) Loan Program and the SBA Certified Development Company 504 program, the Community Development Financial Institutions (CDFI) Fund, and the Department of Commerce the Minority Business Development Agency (MBDA) and the Economic Development Agency (EDA). It should also include strengthening federal procurement standards for local hiring, utilization of women-, minority- and veteran-owned businesses.

- **7.5 - Community Self-Determination:** Economic transition can be truly just only if local communities are involved in building their own solutions, and if public resources ensure that individual working families, regions, or industries do not carry the full cost and risk of building a sustainable and prosperous future that benefits all of society. Local leadership

must be respected and supported, and through it, America can accelerate the transition to a new energy future. Already, amidst federal inaction, states, Tribal nations, cities and local communities have been America's climate leaders, and are actively accelerating their progress to confront the crises of climate change. The next administration should support that local leadership and remove federal barriers to local action.

This begins with a firm commitment, and new structures, that will ensure front-line community involvement in the development of federal policies and the implementation of federal programs. The next administration should commit to this and should realize this engagement from the local level – through field office community engagement, and State Climate Mobilization Councils (from Sec. 1.4) – to Washington, D.C., with the creation of a Presidential Advisory Council on Environmental Justice.

The next administration should also work with Congress to establish a multi-agency Transformative Climate Communities (TCC) Program, modeled on California's TCC program, which will invest 100% of its funding into building capacity, organizing, developing and implementing sustainability plans led by disadvantaged communities. The administration should also invest in staff capacity at key federal agencies – including USDA agencies in rural areas, and HUD agencies in urban regions – which work directly with local communities and officials in the construction and implementation of coordinated plans of action.

Furthermore, the next administration should work to empower local governments to reject fossil fuel infrastructure and consumption of specific fossil fuels – such as coal-fired power plants and diesel transportation fuels – in their jurisdictions. And it should offer technical assistance in the development and implementation of such policies. Also, the next President should act to reverse harmful Trump Administration actions that have undermined state and local authority, such as under the Clean Water Act, to reject fossil fuel projects.

8) Creating High-Quality Union Jobs & a Clean Economy Workforce

American workers built the largest middle class in history and created unprecedented opportunities. A determined movement of workers, organized through labor unions, transformed industries once defined by sweatshops and child labor into an economic engine that has provided generations of family-supporting wages, benefits, and job security. Skilled labor remains the backbone of American economic and industrial might. But for decades workers and their unions have been squeezed by stagnant wages and relentless attacks from increasingly powerful corporations and right-wing special interests.

The next President must place good jobs for the American worker at the heart of any plan to invest in climate solutions. This will create millions of high-paying, high-skilled union jobs building a stronger and more sustainable economy. New policy must empower workers in every industry with tools to collectively bargain, challenge racial and gender inequality, and close the gap between wealth and poverty. New clean energy investments coupled with high standards for both job quality and environmental accountability can lay a foundation for a renewed commitment to worker justice, fair wages, and family supporting benefits that lift up workers, communities, and the economy.

- **8.1 - A 'G.I. Bill' for Impacted Energy Workers & Communities:** After the national mobilization in World War II, America guaranteed those who served access to secure medical care, educational training, homeownership, and meaningful retirement benefits. Today, workers in fossil fuel industries already face dislocation from market forces as industry shifts to cleaner, cheaper alternatives. Coal miners and workers in coal-fired power plants — whose labor fueled generations of national wealth and prosperity — have been particularly hard-hit, facing layoffs as employers move to ever greater automation through strip mining and mountaintop removal, and as utilities repower away from fossil fuels. Faced by these mounting economic pressures, fossil fuel companies — and coal companies in particular — have abused weak national bankruptcy laws to make workers and mining communities bear the risks and costs for this contracting industry.

  Coal companies have been the worst actors: shedding pension obligations and limiting responsibility for long-term health care, life insurance, and the Black Lung expenses of their miners, retirees, and surviving family. All this, while rewarding top executives with compensation bonuses. Despite President Trump's pro-coal rhetoric, 40% of the U.S. fleet of coal-fired power plants has closed its gates since 2010, with gigawatts more retirements planned during the Trump presidency and beyond.

  America can and must do better for coal workers, and for all energy workers and their communities. The nation must value the skills, infrastructure, and heritage of these communities as the precious assets they are. The next President must renew America's

commitment to energy workers and their families centrally within any transition to a clean economy. These efforts should be modeled on the solemn promise of the 'G.I. Bill' to WWII veterans, and can also improve upon scalable policies and previous federal and local efforts to provide economic security to workers facing plant closures and industrial transition. Also learning from the experience of the G.I. Bill, America must recognize that deeper patterns of injustice too often intersect with economic dislocation, and a modern 'G.I. Bill for Energy Workers' must guarantee support for all impacted workers — regardless of race, gender, or regional geography.

First, the next President must provide impacted workers with financial security by shoring up retirement benefits through federal backstops to the troubled pension system. The President must work with the Pension Benefits Guarantee Corporation (PBGC) and key stakeholders including labor unions, to stabilize America's retirement system, and protect the deferred wages of retired workers. Under a jobs-focused climate plan, the federal government must ensure that the United Mine Workers Association (UMWA) Health and Retirement Funds continue for the 87,000 Americans who depend upon them. More broadly, the next administration must dedicate itself to shoring up and standing behind the solvency of all defined-benefits pension funds to guarantee that all workers retire in dignity. To ensure that qualifying employees and their families continue to have access to health insurance coverage, the next President must backstop the solvency of the Black Lung Disability Trust Fund — which is already $6 billion in debt. Further, any energy workers losing health benefits as a result of layoffs or corporate bankruptcies should be guaranteed access to health care, with their former employers still required to meet historic coverage obligations as well as retiree or survivor benefits.

Likewise, under this agenda, income support and educational training stipends should be provided for all workers seeking to move into related or new professions. All employees and contractors of companies directly involved in the extraction and processing of fossil fuels should be eligible for this program. Training programs can be run through local unions that have relationships and training expertise to quickly support workers as they transition to future employment. In addition, as is outlined elsewhere in section 6.5 on rural reinvestment, a Re-Power Fund can provide significant new resources for economic development and diversification, which builds on legacy assets of skills and infrastructure in resource-dependent communities. Similarly, a 'Restore Fund can directly re-invest in communities scarred by extractive industry, establishing stable, well-paying jobs through environmental remediation, and engineering ecological restoration.

- **8.2 - The Right to Organize and Collectively Bargain for Workers & Communities:** Strong unions level the economic playing field for workers and empower them in an economy that has been increasingly tilted in the favor of CEOs and corporations. The right to organize a union is essential to ensuring that public investments in a clean energy-powered economy create good jobs with family-supporting wages for everyone — regardless of race, gender or geographic location. States such as Illinois, New York, Washington, and Connecticut

simultaneously enjoy both the highest unionization rates and wage growth rates in the country. The rights of workers to organize in every sector must be an essential part of America's economic success in a clean energy future.

To return towards the union density of the post-war economic boom, however, a number of artificial policy barriers to worker organizing must be removed in conjunction with new investment in repowering the economy. Centrally, this means repealing provisions of the federal Taft-Hartley Act that permit so-called "right-to-work" (RTW) laws in states, which result in lower wages for workers relative to their counterparts living in non-RTW states. RTW laws limit workers' collectively bargaining rights and protections from predatory employers, and they are purposefully designed to eviscerate union membership. Eliminating these laws will ensure that everyone who benefits from union representation pays their fair share of that representation.

The next administration should also prioritize support for worker organizing by working with Congress to amend the *National Labor Relations Act* to recognize establishment of a represented collective bargaining unit when a majority of workers vote to form a union or sign authorization cards to join a union, and by setting standards for swiftly establishing first contracts between employers and bargaining units. And it should work with municipalities to co-enforce labor laws and standards, by contracting with labor unions and community organizations to inform and assist workers in understanding and exercising their labor rights, including the minimum wage and paid sick and family leave.

Robustly protecting the rights of workers when employers break labor laws or retaliate against them, through swift and consistent enforcement of federal law can force changes in corporate behavior and give worker-organizing efforts the opportunity to succeed. This includes increasing fines on illegal corporate activity, broadening strike rights, giving workers a private right of action when their rights are violated, and expanding misclassification and joint-employer protections. (The Protecting the *Right to Organize (PRO) Act* in Congress provides a road map for specific action.)

Furthermore, the next President must appoint members of the National Labor Relations Board (NLRB) who would enforce the 2015 Browning-Ferris ruling on Joint Enforcement Standards, which can give workers and employers alike fair, predictable, and timely adjudication of cases before the NLRB. And the next administration should evaluate potential improvements to the National Labor Relations Act, such as: expanding opportunities for industry-wide collective bargaining; reforming the NLRB adjudication process; and reviewing the impact of federal preemption of local labor law. New protections that end forced arbitration clauses in employment contracts would offer further protection for workers' rights.

A strong economy empowers workers to enjoy good wages and benefits, while families and communities also enjoy increased economic security. Deployment of federal investments

and grants through state, local, and tribal governments to fund the transition to an environmentally sustainable economy will lead to better outcomes through Community Benefits Agreements, Project Labor Agreements, and strong Prevailing Wage laws. Requiring Community Benefits Agreements (CBAs) can ensure that the benefits of new investment in economic development create broadly shared public value. CBAs have been effective in supporting green buildings, affordable housing, and job training around the country, in projects like the development of San Francisco's Bayview-Hunters Point neighborhood and the Staples Center in Los Angeles. Requiring that federally funded construction and infrastructure projects sign Project Labor Agreements (PLAs) to ensure fair wages for all jobs can also ensure competition based on quality and efficiency rather than a race to the bottom on wages and employment standards. Further, strengthening Prevailing Wage Laws by extending Davis-Bacon Act requirements to all federally funded projects, regardless of source of funds, and to all federal contractors helps set prevailing wages to meet contract-bargained wages in specific sectors within a geographic area. Together these measures prevent the costs of economic transition from being pushed onto workers and their communities, even as they share benefits more broadly.

- **8.3 - Rebuilding Career Ladders through Apprenticeships & Training:** Building a new economy based on clean energy will demand historic investment in creating clean energy jobs. With this rise in economic activity, skilled workers will be in high demand, meaning that worker training and apprenticeship programs will be essential for training the next generation of American workers. Apprenticeships have been expanding in the United States in recent years: There were more than 533,000 registered apprentices nationwide in 22,000 programs in 2017, a 42 percent increase in apprenticeships since 2013. But, apprenticeships still under-serve potential workers and potential employers. A serious plan for clean energy jobs should nearly triple the number of people participating in apprenticeships by 2030, to 1.5 million. The next President must offer a White House-led partnership with labor unions, community and technical colleges, and K-12 schools, and educators, to develop programs that bring workers from school to jobsite, and train for skills that improve their work product and expertise while raising pay and benefits.

  Ensuring that federal agency resources are coordinated to link the growth of clean energy sectors to investments in job training, job placement, and strong career ladders for professional advancement should be led by the Department of Labor, in partnership with the Department of Education. Partnerships with America's labor unions will support labor-led apprenticeship and pre-apprenticeship programs that guarantee secure, family-wage jobs and turn into careers. Dedicated programs for green industrial and construction job training and placement should be established under the Workforce Innovation & Opportunity Act (WIOA). A well-structured program will link public investments in clean energy infrastructure to apprenticeship and pre-apprenticeship training and utilization commitments, and back these commitments with strong hiring and retention commitments by employers. Partnering with union experts and federally funded workforce providers to create labor-management training and certificate programs that improve

worker safety, expand worker skills, and protect opportunities for workers to join unions. Washington state and the SEIU Healthcare NW Training Partnership — the nation's largest training provider serving home health care workers — offer one showcase of how training partnerships can build better performing industries.

- **8.4 - Ensuring Family-Supporting Wages & Benefits:** Investing in employee wages and benefits is not only good for working families, it's also good for the economy as a whole. The quality jobs that result from clean energy investment can offer an average wage of $25/hour, or an annual salary of more than $50,000 a year for a 40-hour work week — enough to support raising a family in much of the country. This rate matches pay for skilled, trained workers in the field today. The next President should condition new federal investments and grants to state, local, and tribal governments on employers offering family supporting wages and benefits. This should be enforced through Project Labor Agreements, Prevailing Wage laws, federal overtime requirements, and other strong worker protections that prevent a "race to the bottom" from unfair competition over wages and employment standards. Raising the federal minimum wage to $15/hour by 2024 (pegged to the median hourly wage thereafter) and establishing national paid sick leave are also crucial steps in raising pay for all workers.

The next President should also commit to following Governor Inslee's lead in Washington state and modernizing the nation's overtime rules, which is urgently needed to protect and adequately compensate millions of workers who receive no overtime pay. The Obama Administration advanced rules that expanded the overtime threshold to $47,476, but the Trump Administration reversed those rules, essentially cutting overtime pay for an estimated 4 million workers. Strong standards for high-road wages and benefits will benefit every sector, from manufacturing industries to health care and education and ensure wage standards are set so all employees and sectors benefit.

Every employee deserves to be fairly compensated for their work, regardless of race, gender, or any other factor. One of the best ways to ensure this is to expand the rights of workers to organize and collectively bargain. In addition, new laws and standards are needed to curb the abuse of corporate power that artificially keeps wages low, and to enforce basic wage and labor law, to require transparency and equity in pay and benefits, and to shift power in the workplace back to employees. Because attacks on workers disproportionately impact women and workers of color, stronger protections on pay equity and transparency can have a tremendous impact on social justice. States are passing strong provisions for compensation transparency and worker mobility that greatly improve the ability to bargain for better pay. Such legislation can require disclosure of salary information by employers for listed positions, bar employers from asking for salary history, and restrict the use of non-competition agreements and "no-poach" agreements that limit a worker's ability to move to different jobs or seek better wages.

Finally, the next administration should utilize the Office of Federal Contract Compliance Programs to increase enforcement and transparency by requiring companies that apply for federal funds to report on their compliance to workplace laws can require companies to fix compliance problems before receiving federal funds. Likewise, the next administration should prohibit employers working on federally funded projects from trying to persuade workers against joining a union, in order to ensure that building a more environmentally sustainable economy makes a downpayment on economic justice and workplace economy as well.

➢ **8.5 - Creating a Climate Conservation Corps (CCC):** Mobilizing the American people to rise to the defining challenge of our time – defeating climate change – offers a powerful potential to tap the spirit of public service that is deeply embedded in our American tradition. When President Franklin Delano Roosevelt, created the Civilian Conservation Corps (CCC) in 1933 that put Americans to work to "conserve our precious natural resources," he correctly predicted that the CCC would "pay dividends to the present and future generations." Likewise in proposing the creation of the Peace Corps, in 1960, President John F. Kennedy recognized that America held an "immense reservoir of such men and women – anxious to sacrifice their energies and time and toil to the cause of world peace and human progress." Today, creating a Climate Conservation Corps (or "Climate Corps") will capture the best energies of our nation's young people, and provide a structured path for Americans of all ages to engage in the urgent work of ensuring the future of our nation and the planet.

Eleven years ago, President Barack Obama signed the *Serve America Act*, which included a provision authored by then-U.S. Representative Jay Inslee that established a national Clean Energy Service Corps. This built upon the Conservation Corps network - a movement that today involves over 25,000 Americans. But the Clean Energy Service Corps was never fully funded, after a new majority took office following the 2010 elections. The next President should bring a renewed and expanded commitment to this vision, by launching a Climate Corps that will give young people the opportunity to serve in the domestic and global effort to secure a healthy future, and will provide Americans of all ages and backgrounds with education, skills, job-training and employment opportunities to thrive in building the clean energy economy.

This Climate Corps should have three elements. The first, a National Climate Service Corps, will give young Americans the opportunity to serve in creating sustainability solutions in their own communities, learning how to retrofit buildings, install solar panels on rooftops, and build healthier pollution-free communities with clean water, food security, and green development. And it will address the backlog of public lands projects while rebuilding resilient communities in the face of increasingly devastating climate disasters.

The second component is a Global Climate Service Corps, which would give Americans the opportunity to conduct a tour of service overseas while building expertise in climate

mitigation and resilience, clean water, and sustainable economic development. Both programs will prioritize opportunities for low-income and disadvantaged young men and women as well as those with advanced degrees who can put their skills to work.

The third component is a Green Careers Network, to build on national service to create permanent jobs in a clean energy economy. By expanding investment in skills-training, apprenticeships and on-the-job education, this effort will award credentials and build career ladders for long-term employment in good jobs in partnership with labor unions, local businesses, technical schools, non-profit organizations, and community development institutions – working with existing infrastructure for training and placement to connect Americans with new jobs and lifelong careers. Sustaining this alumni network can also help to grow new green industries. By creating opportunities to meet the climate challenge constructively through these programs, a Climate Corps will tap the greatest renewable resource of all – the creativity, ingenuity, and talents of America's young people – and engage them deeply in service to the nation.

9) Ending Fossil Fuel Giveaways

Bold action to confront the climate crisis and ambitious greenhouse gas pollution-reduction goals simply cannot be achieved unless America as a nation is prepared to take on the greatest and most powerful special interests that are preventing action: fossil fuel corporations. The United States and the world are on a dangerous and unsustainable path. Our nation is now the world's largest producer of oil and gas, and growth in our fossil fuel production is accelerating faster than any other country. By itself, this trend alone has the potential to squander the opportunity to prevent the worst impacts of climate change. While around the world, fossil fuel reserves under development today already exceed the amount that can be burned if the global community is to meet the goals of the Paris Climate Agreement and remain within the targets recommended by the Intergovernmental Panel on Climate Change (IPCC).

Despite the harm that fossil fuel corporations continue to visit upon our communities — especially communities of color, and those in poverty — they are continuing to draw down massive government subsidies and other giveaways that sustain their business model. It is time to challenge the legacy of subsidized pollution, delayed action, and political obstruction that threatens the nation with tremendous human and financial costs and the prospects of a diminished future. Achieving a sustainable pathway will be hard, but no other option is consistent with our shared survival.

- **9.1 - Ending Fossil Fuel Subsidies:** The first rule of getting out of a hole is to stop digging. And the first rule in defeating climate change is to stop giving subsidies and special breaks to fossil fuel corporations whose pollution is responsible for driving global climate change. In 2019, the IMF released a report revealing that governments around the world suffer more than $5 trillion each year in costs associated with fossil fuels, with the United Statesas the second-worst offender among all nations in subsidies and externalized pollution costs. And while the IMF's methodology includes a broad array of subsidies and social costs from fossil fuels, a previous version of the report, from 2015, found that just the three categories of direct fossil fuel subsidies, climate damages, and local public health impacts from air pollution combined to cost the United States more than $400 billion each year.

  The next President must focus on eliminating subsidies for oil, gas and coal corporations, by working with Congress to repeal tax credits and deductions like those for intangible drilling operations, last-in first-out accounting, royalty payments to foreign governments, accelerated depreciation of gas pipelines, and the carried interest tax exemption on funds according to fossil fuel reserve exposure, among many others. The President should also work with Congress to revise the 45Q tax credit so that it can be applied only where captured carbon is not used for additional fossil fuel production.

The next President and Congress should also work together to establish or reinstate taxes and fees on polluters to hold them accountable for the damage they cause and the necessary costs of remediation, site cleanup, worker health impacts, oil spills and more. This includes ending the tar sands oil exemption from per-barrel tax payments into the Oil Spill Liability Trust Fund (worth approx. $50 million annually), and reinstating Superfund taxes that support cleanup of the nation's most-polluted sites.

The next administration should also take executive action to recoup payments for fossil fuel extraction by ending outdated royalty exemptions and increasing rates, even as it takes aggressive action to restrict fossil fuel production. According to Oil Change International, taxpayers could recover $3 billion in revenues if the federal government were to apply even a 20% royalty rate for drilling on public lands – the lowest rate charged by the state of Texas. Likewise, U.S. taxpayers have already lost out on nearly $30 billion in revenues over the past 30 years from the failure of federal leasing policy to recoup fair market value for the costs of coal reserves on public lands in the Powder River Basin.

The next President should work with Congress to implement a Climate Pollution Fee (also known as a carbon price), to close the biggest government subsidy enjoyed by fossil fuel industries: the ability to dump their greenhouse gas pollution into the atmosphere for free. While putting a price on carbon pollution does not represent a silver-bullet climate solution, nor even a primary strategy for emissions reductions, it remains an effective tool for both ensuring that polluters pay and for generating new revenue to reinvest in communities. This fee could be applied initially in key economic sectors with the greatest emissions impact, and should be applied as far upstream as possible. It should also apply not only to carbon pollution, but should increase for methane, F-gases, and other forms of greenhouse gas pollution to recognize their differential heat trapping potential and risks. Importantly, the revenue generated from this fee can provide dedicated support for front-line and low-income communities in addressing the impacts of climate disasters, as well as funding environmental quality protections and clean energy economic development.

Finally, the next President should initiate a comprehensive examination of federal government support for fossil fuels, and take action to eliminate them. For example, the President should direct the Secretaries of Defense, Energy and the Treasury to evaluate and report on the current and historical costs of protecting oil supplies around the globe, which have been estimated at $81 billion annually, and to recommend policy actions through which the federal government can recover those costs that have benefited oil companies' profits.

➢ **9.2 - Banning New Federal Leasing & Phasing-Out Fossil Fuel Production**

American fossil fuel production has stepped on the accelerator at just the moment that it should have hit the brakes. Today, the United States is the world's largest oil producer, the largest producer of natural gas, and the third largest producer of coal. Under President Trump, America is on pace to expand extraction of oil and gas by four times the amount

produced by any other country in the world, representing 60 percent of global production growth.

Scientific reality demands that we put an end to fossil fuel development, while economic necessity demands that we wind down the growth of the fossil fuel industry thoughtfully and intentionally. If the federal government leads the transition to a clean energy economy, it can also protect and honor workers and communities during this global transition. A critical step in any policy to achieve freedom from fossil fuels is to stop giving away our public trust resources to benefit the world's richest companies, even as the public carries the cost of transition for workers and communities.

The next President should use executive action to ban all new fossil fuel leasing on federal lands and offshore waters, including coal, oil, gas, oil shale, and tar sands, on day one. In 2018 the U.S. Geological Survey reported that fossil fuels produced on federal lands and offshore waters were responsible for approximately 24% of America's carbon pollution. And in addition to banning all new leases, the next President should demand federal land and coastal management agencies utilize all existing authorities to cancel and refuse to extend existing fossil fuel leases, to the extent allowed under current law. This includes terminating leases that were not validly issued, and directing the BLM to end the practice of issuing lease suspensions, resulting in the expiration of unused leases that oil and gas companies have spent years stockpiling. Through executive action, the next administration should also reverse the Trump Administration's attempts to shrink or repeal national monument designations, and should prevent fossil fuel extraction in or adjacent to critical public lands, such as the Alaska National Wildlife Refuge (ANWR), the Florida Everglades, and the Petrified Forest National Park in Arizona.

The reality of the climate crisis also requires the federal government to confront the practice of hydraulic fracturing (or "fracking'). Fracking has enabled rapid growth in the oil and gas industry, with fracked gas driving U.S. production to jump 85% between 2010 and 2018 (in barrels of oil equivalent) and establishing the U.S. as the largest oil and gas producer in the world. This unprecedented growth in domestic oil and gas production represents a real and sustained threat to meeting U.S. emissions reduction goals. Fracked gas and oil wells also produce substantial methane leakage, which in combination with the pollution associated with burning gas has been shown to overwhelm the greenhouse gas benefit that the industry claims to hold over coal. Fracking also poses significant risks to groundwater and drinking water supplies.

The next administration will require Congressional action to enact any outright ban on fracking, and a robust plan to protect fossil fuel workers and their communities should be included in any legislative action. In the interim, executive action can, and should, be taken to restrict how the practice harms American communities and the planet. These include robustly and steadily increasing air pollution restrictions, especially for methane; expanding health and safety protections including establishing set-backs to protect community

residents; closing the "Halliburton Loophole" and applying effective federal clean water safeguards and information disclosure provisions to protect local communities from the underground injection of fracking fluids, under the Safe Drinking Water Act and the Clean Water Act.

To identify and realize the policies necessary a complete transition from a fossil fuel-based economy, the next President should establish a Presidential Commission on Energy Transition, focused on phasing-out fossil fuel production nationwide, with a special focus on ensuring equity and justice in any transition for workers and the protection of communities that are reliant upon fossil fuel extraction (such as those policies discussed in Sec. 7.1). It should be composed of Cabinet officials from key federal agencies, as well as representatives from state, local and tribal governments, labor, industries, and academia, community and environmental justice advocates, and other public and private sector stakeholders.

- **9.3 - Holding Polluters Accountable:** The Trump Administration has effectively removed the cop from the beat of environmental protection, allowing corporate polluters to run rampant. In early 2019, the Environmental Protection Agency's (EPA) inspection rate of polluters had fallen to a 10-year low, while the civil fines levied upon polluting businesses is at its lowest level in 25 years. The number of criminal cases that the EPA has referred to the Department of Justice (DOJ) fell to its lowest level in 30 years. And, not content with failing to enforce existing law, the Trump Administration has undermined 95 different environmental standards that protect Americans' clean air, lands and water.

  The next President must be committed to holding polluters accountable, through new, enhanced and restored environmental standards, penalties, and enforcement actions, that address damages from climate change and other ongoing liabilities from our fossil fuel dependence, such as oil spills, decommissioning of coal plants, eliminating fugitive methane emissions from fracked gas wells, and more. This agenda is broadly supported by the public: 57% of Americans support making fossil fuel companies pay for the damages that climate change is causing in their communities.

  Further, the next President must appoint Cabinet officials who share this vision and give them direction and discretion to aggressively enforce environmental and consumer protection statutes under their purview. At the EPA these statutes include the Clean Air Act, Clean Water Act, Toxic Substances Control Act (TSCA), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and more. And the U.S. Fish & Wildlife Service and National Oceanic & Atmospheric Administration (NOAA) share jurisdiction over the Endangered Species Act.

  This agenda also includes restoring and strengthening EPA protections against coal ash pollution. In 2019, the first comprehensive national study of coal ash pollution found that

91% of U.S. coal plants were contaminating local groundwater with unsafe levels of toxic pollutants, including arsenic.

The next President must also strengthen enforcement of existing laws governing climate and fossil fuel pollution and punish those who break laws and pollute communities. This includes holding fossil fuel companies accountable for climate and public health damages - and rejecting any proposal to limit fossil fuel companies' legal liabilities for the climate damages that their pollution has caused, or for their role in misleading investors and the public about the dangers of climate change. Oil companies' own experts warned them decades ago that these climate dangers could be "severe" or even "catastrophic." The next administration should preserve the rights of states, tribes, local governments and American citizens in federal and state courts in the pursuit of justice against fossil fuel companies. Much like lawsuits against tobacco companies in the 1990s, these suits seek to hold fossil fuel companies accountable for the accelerating harms their corporate decisions have caused and are causing in American communities. And, similar to the 1990s, the next Department of Justice should be prepared to support them. The next President should also establish an Office of Environmental Justice (DOJ-EJ) within the DOJ, to hold offenders fully accountable under maximum application of federal law (as discussed in Section 1.3).

Finally, because preserving the rule of law is of paramount importance for the future of our planet, as well as for our democracy, the next President must commit to only appointing federal judges and justices who will uphold and respect the bedrock foundations of U.S. environmental and climate law. This includes the *Chevron Doctrine* of deference to federal agencies' authority and expertise in the implementation of regulatory safeguards that protect public health, welfare, and the environment, and also the landmark 2007 *Massachusetts v. EPA* Supreme Court decision, which held that greenhouse gas pollution is in fact pollution that is subject to the federal Clean Air Act.

- **9.4 - Rejecting New Fossil Fuel Infrastructure:** To realize our clean energy future, America must stop building the infrastructure of the past. As the next administration launches a massive program to leverage investment of nearly $1 trillion annually to build new, modernized and sustainable infrastructure for a 21st century economy, it must invest only in climate-safe infrastructure that does not contribute to the greenhouse gas pollution that is driving the climate crisis, and fund only climate-smart infrastructure that is not unduly vulnerable to the impacts of climate change. That means declining to build new fossil fuel infrastructure, including pipelines, power plants, and export terminals.

  As part of their commitment to put climate action at the center of a governing agenda, the next President should take executive action to implement a "Climate Test" on infrastructure projects, requiring an evaluation of the lifecycle climate pollution and climate change impacts, under the National Environmental Policy Act (NEPA) and other applicable environmental statutes. And, the President should work with Congress to codify this into law.

The next President should also task federal agencies, such as the Federal Energy Regulatory Commission (FERC), the Army Corps of Engineers, and federal land management agencies, to apply existing legal authority to reject permits for fossil fuel pipeline projects that are incompatible with ambitious climate progress and environmental protection. These agencies should also be tasked to revoke federal support, including land easements and environment permits, for fossil fuel projects that endanger the climate as well as local communities, like the Dakota Access and Keystone XL pipelines.

The next administration must also confront the buildout of fracked gas infrastructure, including pipeline assets and export terminals, which is locking the U.S. and global economies into continued fossil fuel dependence and greenhouse gas pollution for decades to come. Legacy gas infrastructure leaks 13 million tons of methane pollution and directly costs U.S. consumers $2 billion each year, and it continues to deepen America's fossil fuel dependence. The next administration should strengthen BLM and EPA standards to require oil and gas companies and utilities to find and stop methane leaks in pipelines, and work with Congress to incentivize the removal or repurposing of gas distribution pipelines. It should also work with Congress to end FERC's authority to pre-empt states' abilities to reject natural gas pipelines.

The next President should also take executive action to reverse the Trump Administration's attempts to undermine states' authorities to protect their own clean air and waters from fossil fuel projects. And they should direct their agencies to fully empower Tribal nations, through free, prior and informed consent, and the enforcement of treaty rights, to reject major infrastructure proposals that would adversely impact their people, land, water, or cultural resources.

Finally, the next President should reinstate the Crude Oil Export Ban, through a Presidential declaration, and work to make the ban permanent. And also work to set similar restrictions on exports of other fossil fuels, including coal and liquid natural gas (LNG), to ensure the United States does not export its climate pollution around the world.

- **9.5 - Confronting Fossil Fuel Finance & Improving Corporate Climate Transparency:** Despite the accelerating climate crisis, Wall Street banks, asset managers and insurers continue to finance fossil fuel development, all while hundreds of the world's largest corporations lack transparency into their environmental impacts. Without proper regulation, and appropriate market structures, investors and corporations will fail to shift their own investments with the scale, speed and awareness that is necessary to avoid the worst crises. Meanwhile, it's clear climate change is a threat to our financial system.

  Some investors are calling for greater action from governments to regulate the financial sector contributions to and risks from the climate crisis. In 2018, at a meeting of the United Nations Framework Convention on Climate Change (UNFCCC), 414 global investors

representing $31 trillion in assets urged that body to increase its climate ambitions. The next administration should take a cue from this pressure, and help guide investors toward off-ramps for their fossil fuel financial holdings, which continue to drive climate change, shifting capital instead toward investments in a clean energy economy and assistance in transition for workers and communities.

As a first step, the next President should use existing financial regulations – specifically the Dodd Frank Wall Street Reform and Consumer Protection Act – to manage climate change as a systemic threat to our financial system. Senator Elizabeth Warren has wisely called for the Federal Reserve to use its authority under Section 165 of the Dodd-Frank Act to set "enhanced prudential standards" on financial institutions based on their exposure to climate change risks, which could include more stringent stress testing, capital standards, and margin requirements. And the next administration should direct the Financial Stability Oversight Council (FSOC) to study climate risk to the financial system and include a section of each FSOC annual report devoted to climate risk and financial stability and recommendations for further regulation.

To further help avoid a climate change-driven financial crisis, the next administration should use experts to assist credit rating agencies in understanding physical and financial risks that climate change presents to companies' investment holdings. It should urge the Securities & Exchange Commission (SEC) to more closely monitor the climate risks held by publicly traded insurance companies, whose vulnerability to large-scale physical or financial climate damage could threaten systemic economic harm.

The next President's appointees to the SEC – including commissioners and directors of corporate finance and enforcement – must prioritize enforcement action and corporate disclosure of climate change vulnerabilities, and the contributions that corporate operations, supply chains, and investments are making to the global climate crisis and structural economic risk. These appointees should support new and existing standards concerning disclosures of climate risks, greenhouse gas pollution-reduction targets, fossil fuel and deforestation-related holdings, as well as climate change expertise in the composition of governing boards. And they should also support greater investor power in the filing of shareholder resolutions and other proposals focused on climate change; new rules that require U.S. banks to report annually how much fossil fuel debt is created or held as assets with respect to oil, gas, and coal; and reforms to reserve-based lending and debt-restructuring rules to recognize global carbon constraints.

In her campaign plan, Senator Warren also called for explicit federal policy goals for divesting public pensions from fossil fuel holdings, and for the next administration to push the SEC and the Department of Labor to declare carbon-intensive investments as inconsistent with a pension fund manager's fiduciary duty. Such clear-eyed assessment and steady financial oversight will help financial markets to improve their climate accounting and minimize risk for investors.

Finally, the next President should also support the Federal Reserve joining the global Network on Greening the Financial System (NGFS), which includes over 30 central banks and supervisors that together cover roughly 50% of global Gross Domestic Product, with the aim of better managing climate-related risks and promoting the timely transition to a clean energy economy.

10) Leading in Clean Technology Innovation & Restoring Climate Science

Under the Trump Administration, the United States has abandoned its historical role as a leader in scientific research and pragmatic public investment in innovation to spur the growth of new industries. From the Apollo Program, to the early beginnings of the Internet and broadband technologies in Defense Advanced Research Projects Agency (DARPA) labs, to the mapping of the human genome, federal investments in research and development have often created transformative new economic opportunities. Whether he's asserting that climate change is a Chinese hoax, alleging that windmills cause cancer cancer, or blatantly misleading the public about the scientific reality of the COVID-19 pandemic, or the death toll of Hurricane Maria, the current president is remarkably untethered to facts and hostile to science. The next President has both a unique obligation and an opportunity to restore the esteemed role of scientific analysis and data-driven decision-making to American policy and governance. It is especially urgent that the climate policy agenda of the next President be informed by the best science, and that the tools of research and development be deployed to enable significant reductions in carbon pollution so as to confront the climate crisis head on with the backing of rigorous science. The next President will be well served by pursuing a suite of strong new scientific and research initiatives to bolster clean energy deployment and sustain a decade long climate mission.

- **10.1 - Clean Energy Research & Development:** Current federal spending on research and development for clean energy technology is well-below what is needed to catalyze the next generation of new energy technologies necessary for meeting America's Climate Mission and capturing the economic opportunity ahead. Therefore the next President should work with Congress to increase federal investments into research and development on clean technologies and climate solutions to approximately $35 billion annually over the next decade.

  These federal clean tech R&D investments should include growing the Department of Energy (DOE), including the the Office of Energy Efficiency & Renewable Energy (EERE), Office of Science, and Advanced Research Projects Agency-Energy (ARPA-E), as well as the network of DOE National Laboratories. Further, this should include partnering with states to invest in ongoing clean energy innovation work at state research institutions throughout the country such as the University of Washington Clean Energy Institute that Governor Inslee created in 2013 and which is making advancements in next-generation solar and energy storage technologies today.

  Further, Congress should 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.

  This federal clean energy innovation agenda should focus across a full range of technological

needs for research, development, demonstration and deployment, including: advanced renewable energy, energy efficiency, high-voltage transmission, grid modernization, next-generation battery storage, as well as advanced small modular nuclear reactors, hydrogen, and enhanced geothermal. It should also zero in on new energy storage technology and recycling for advanced batteries to power transportation, including heavy-duty trucks and short-haul aviation, and in making zero-emission marine shipping a reality. This agenda should also research gains to be made in energy efficiency in aviation and shipping. And it should prioritize the development and deployment of advanced low-carbon biofuels and synthetic fuels, in partnership with industry leaders.

This federal clean technology research and innovation agenda should also extend into the international domain, with the United States re-engaging in global partnerships on clean energy, including the Clean Energy Ministerial and Mission Innovation, as discussed in Section 12.

- **10.2 - ARPA-Ag & Agricultural Innovations to Tackle Climate Change:** American agriculture has long been a world leader in innovating scaled efficiency and productivity in food cultivation, making American farmerland a breadbasket for the world. Additionally, the treatment of our lands and soils will increasingly become central to the suite of natural solutions necessary to restore a carbon balance to our cultivated and wild lands. The next President's innovation agenda should help America's farmers once again excel where they have always led: providing feed, fuel, and fiber to the world.

  The next administration should take on two particularly key initiatives as part of this agriculture innovation agenda: The creation of an Advanced Research Projects Agency - for Agriculture (ARPA-Ag, modeled on similar agencies for defense and energy innovation), and in the addition of innovation to the practice of Agricultural Extension Services. In addition to fighting climate change, together these initiatives will promote and accelerate sustainable economic development in rural America.

  ARPA-Ag, and a new Next-Generation Clean Energy Extension Service initiative, should be focused on ensuring that farming practices maximize long-term natural carbon storage. The next administration and Congress should expand federal investment in research, development, demonstration and deployment of agricultural climate solutions. Additionally, the next administration should work to harness the promise of bio-energy, so new plant-based products can be rapidly disseminated to bring economic opportunity and renewed prosperity to farm communities while displacing reliance on fossil fuels as industrial feedstocks. And, the next administration should focus on farm-based energy generation alongside zero-net energy and zero-water waste on farm agricultural practices. Because farms are large consumers of energy, particularly as a result of pumping and moving water throughout the farm, there is significant opportunity for farms to generate local distributed energy — sourced from the sun, wind and biofuels.

➢ **10.3 - Industrial Innovation & Carbon Removal:** Eliminating greenhouse gas pollution from industrial sources provides an enormous challenge. But doing so also provides an opportunity to place U.S. industries at the forefront of emerging worldwide clean technology innovation, and a potential $11-$21 trillion global investment market. American manufacturers have tremendous capacity to benefit the climate and their own bottom lines, in the near-term, by meeting higher standards of efficiency, pollution abatement, and fuel switching - including electrification. But in the decades ahead some of the hardest and most costly emission reductions will be those in certain industrial processes.

Even as America endeavors to switch away from the use of fossil fuels to alternative feedstocks, altogether, the federal government has a role to play in exploring opportunities for industrial carbon capture and sequestration technologies. According to a report from Energy Transitions Commission on deep decarbonization: "achieving net-zero CO2 emissions in the harder-to-abate industrial sectors will probably be impossible, and certainly more expensive, without a role for carbon capture and sequestration: it is likely to be the only route to achieve total decarbonization of cement production … and, in some locations, is likely to be the most cost-effective route to decarbonization of steel, chemicals, and hydrogen production."

Furthermore, related to carbon removal from industrial processes, the federal government also has a role to play in the pursuit of atmospheric carbon removal technologies, and the demonstration and deployment of carbon-based building materials – both of which may become necessary for climate stabilization, if even deeper global decarbonization is proven to be needed to protect climate stability.

The next President should recognize the opportunities, challenges and urgency of committing to an industrial deep decarbonization agenda, including carbon capture, sequestration, and removal. This agenda should include transforming the DOE Office of Fossil Energy into an Office of Industrial Decarbonization, and through it, funding 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.

➢ **10.4 - Climate Science: Understanding Impacts & Dangers:** The United States must assist local communities and vulnerable populations in preparing for any impacts of the climate crisis that can no longer be avoided. But America's ability to comprehensively track the impacts of climate change has been hamstrung by the policies of the Trump administration.

President Trump has sought to undermine climate science, and America's scientific community in general. The next administration will have its hands full in reversing this damage. Efforts to defeat climate change can succeed only if America and the wider community of nations are fully informed on the challenge before us.

The next administration should work with Congress to restore recent budget cuts for federal scientific agencies, which have been aggressively defunded under the Trump administration, with deep rollbacks in every year of his administration. In the proposed 2021 budget these cuts ranged from a 12% cut for the National Aeronautics & Space Administration (NASA) Science Office, to an almost 24% cut for the U.S. Geological Survey, to a 41% reduction in the USDA's Agriculture and Food Research Initiative. Beyond immediately restoring these agency budgets to pre-2016 levels, funding in basic scientific research should be substantially increased to bring the United States back into the top tier of nations for investment in university research funding.

Finally, substantial increases in both funding and interagency coordination should be undertaken in the areas of Earth System Sciences, GIS mapping, planetary observation systems, and science education, to establish a government-wide "Mission to Planet Earth" engaging NASA, the USDA, the National Oceanic & Atmospheric Administration (NOAA), the U.S. Geological Survey (USGS), the Federal Emergency Management Agency (FEMA), the National Geospatial-Intelligence Agency (NGA) and other federal agencies, as well as states' climatologist, energy, natural resources, and emergency management offices, and both university and private researchers, to better understand the regional and localized impacts of a changing climate — including short-term response options, long-term forecasts, and strategic planning solutions to minimize the impact of environmental, economic and climate disruption on citizens, communities, and the U.S. economy.

- **10.5 - Climate & STEM Education:** One part of America's deepened commitment to leading-edge research and development must be a stronger focus on feeding the front-end of our scientific and skilled labor pipelines. By investing in STEM and climate science education, the next administration can prepare today's students as a new generation of scientific research and engineering, to deeply understand and directly confront the local and global environmental challenges their generation faces in the 21st century.

  The next President should take office committed to increasing federal support for STEM education, particularly for schools in low-income and historically under-resourced communities, and to launching new climate science educational initiatives to prepare the next generation of climate scientists to carry forward the critical work of responding to this challenge.

  This agenda should include increasing investment in K-12 STEM and climate change education, especially for all students to understand the changing world around them and its causes and solutions. It should further include increasing funding for higher education in STEM and scientific research, including further investment at Historically Black Colleges & Universities (HBCUs), Hispanic-serving institutions, Tribal Colleges and Universities, and other "minority-serving institutions" – and through increased assistance via the Minority Science and Engineering Improvement Program.

The next administration should also support STEM education and scientific and technical career paths through a student loan debt-forgiveness program for graduates entering clean energy, sustainability, and climate science-related jobs in the non-profit and public sectors. It should also act to strengthen school-to-work pipelines through greater support and promotion of technical and trade-based skill certification programs, apprenticeship programs, community and technical colleges, and AmeriCorps, as well as through the creation of a robust Climate Conservation Corps (see Section 6.5).

11) Building Climate Resilience, Adaptation & Recovery

The climate crisis is no longer a point on a graph of future impacts; it is a reality impacting hundreds of millions of American lives today. From devastating wildfires in California to historic flooding on the Mississippi River, to increased frequency and severity of hurricanes in Puerto Rico, to sea level rise threatening Miami, the climate crisis is already here.

While America embarks on an ambitious plan to halt the worst impacts of climate change in the future, the nation must also take action to help communities dealing with impacts today. The principle of building resilience must become enshrined throughout all federal investments and policy — from a focus on building climate-smart infrastructure, to mitigating damages to America's land and water ecosystems, to limiting the disparate costs of disasters affecting front-line communities, which are disproportionately communities of color, or low-income communities. The next President and administration must be committed to building up America's climate resilience.

- **11.1 - Climate-Resilient Infrastructure**: The Trump Administration has utterly failed to deliver on past promises of reinvestment in America's infrastructure. Meanwhile, the American Society of Civil Engineers (ASCE) has once again given America's infrastructure an overall "D+" grade. The next administration and Congress have the opportunity to help create millions of American jobs rebuilding America's infrastructure and built environment — and doing so in a way that is climate-safe (i.e. reduces greenhouse gas pollution) and climate-smart (resilient against future impacts of climate change). This plan details a robust agenda for investment in America's infrastructure, ranging from drinking water and stormwater infrastructure, to housing, electricity transmission and distribution, transportation, and more. And each of these positive investments offers an opportunity for rebuilding to promote climate resilience and defend against the worst impacts of this crisis.

  To insure current and future infrastructure investments against climate risk, the next President should take executive action to ensure all federal infrastructure dollars, and the entirety of the federal budget, are appropriated and spent with a focus on resilience. And, the next President should in particular take action to require a Climate Test as part of the National Environmental Policy Act (NEPA) process when reviewing all major infrastructure projects. Reviews should examine the emissions impacts of projects, and any vulnerabilities that the project might have to the future impacts of the climate crisis – such as heat waves, sea level rise, and extreme weather events.

  One crucial example in the need for greater resilient infrastructure investment is in coastal and inland waterways. The next administration and Congress should partner on investments in culverts, dams, levees, seawalls and locks, as well as green infrastructure such as mangroves, wetlands and barrier islands. Flooding, storms, and erosion associated with climate change-driven sea-level rise now threaten $1 trillion in coastal property.

➢ **11.2 - Prioritizing Front-line Populations in Disaster Preparedness, Response & Recovery:** The 2018 National Climate Assessment showed that the harms of climate change disproportionately impact low-income populations, and communities of color. And these harms are accelerating. As part of his campaign, Gov. Jay Inslee and his team traveled throughout the country, visiting with and learning from community leaders facing climate change impacts and environmental pollution. His team met community leaders in Detroit, MI who have suffered long term health impacts after living the majority of their lives in the shadow of the Marathon Oil Refinery and being forced to breath dangerous air pollution. And he and his team visited Miami's Little Haiti neighborhood which is facing displacement and climate gentrification as a result of sea level rise and most severe hurricanes. among others. These are the faces of Americans already facing the harms of climate change. It is clear the federal government is not doing enough to support these people or their communities.

The federal government must do more to protect fence-line communities from the dangers posed by polluting facilities during climate-fueled disaster events and it must be central to a national climate mobilization. For example, in Houston in 2017, Hurricane Harvey caused dozens of unplanned leaks from high-risk chemical facilities - releasing 7 million pounds of toxins. But state regulators had turned off air quality monitoring stations because of the heavy winds and rain. As a harmful benzene plume settled on the city of Manchester, TX, – a community of 3,000 in which 97% are people of color and 90% are low-income – one nonprofit deployed mobile monitoring stations and found levels of cancer-causing benzene so high that workplace safety regulations would have required breathing equipment.
To confront these dangers, the next President and administration should:

- reinstate and strengthen the Environmental Protection Agency's (EPA) Chemical Disaster Rule that was undermined by the Trump Administration;
- commit to fully implementing the multi-agency National Mitigation Framework – an intergovernmental initiative predicated on involving whole communities;
- direct the EPA Administrator to require that polluting facilities share information and emergency response plans with neighbors in case of explosions or chemical disasters and to require buffer zones between chemical facilities and homes and schools.
- task the EPA and the Federal Emergency Management Agency (FEMA) to partner together to implement continuous monitoring requirements for toxic pollutants, and create mobile monitoring teams that track toxins released during natural disasters.
- increase EPA inspections and monitoring, impose significant fines on facilities that spill toxic air and water contaminants, and study the impact of unplanned chemical releases including cumulative impacts of daily exposures for fence-line communities.
- reverse actions initiated by Trump's EPA and congressional Republicans to exempt industrial agricultural facilities from emergency emissions release reporting requirements.

The next President should also work with Congress to provide a major reinvestment in the cost-saving and life-saving Hazard Mitigation Program, increasing funding by a factor of 10 times or more. For every dollar invested in this program, the government and affected communities save $6 overall.

To better assist front-line communities in preparing for, enduring, and recovering from climate impacts, the next administration should follow the smart proposals put forward by Senator Elizabeth Warren's presidential campaign. These include a call for strengthening rules to require disaster response plans that uphold the rights of vulnerable populations, like guidelines to protect sensitive locations, evacuation services and shelters that are fully accessible to people with disabilities, and ensuring that at-risk individuals have ongoing access to health care services if they have to leave their community or have a disruption in care. These rules should further require a sufficient number of disability specialists in state emergency management teams and FEMA's disaster response corps.

The next administration should also focus on ensuring a just and equitable recovery, especially when scam-artists can take advantage of vulnerable populations, as they have done in the aftermath of major hurricanes. This should focus on prioritizing the right to return for individuals who have been displaced during a disaster, confronting climate gentrification, and centering the voices of front-line communities in planning reconstruction, return, or, if-necessary, their relocation.

Post-disaster housing assistance should also be reformed to better protect renters. The next administration and Congress should work together to amend the Stafford Act to make grant funding more flexible for families and communities, and create a Rebuild by Design pilot program, modeled on the Obama Administration's work after Superstorm Sandy, to provide states and local governments with federal resilience investments that allow for creative and innovative solutions.

- **11.3 - Managing water resources in a changing climate:** A clean, safe and reliable water supply is a vital lifeline for all American communities, and ecosystems. Amidst the stressors and damage to water supplies from accelerating impacts of climate change, every aspect of America's water infrastructure is in need of greater federal investment – from municipal drinking- and stormwater systems, to drought-resilient water supplies for agriculture, to floodplain protections against climate-driven flood disasters. Water infrastructure all around the nation is failing or inadequate. From lead-poisoned drinking water in Flint, Michigan, to broken levees and widespread flooding in Davenport, Iowa, to frequent drought in California's Central Valley.

  To address this crisis, the next administration should work with Congress to deploy major investment into the suite of water infrastructure that must meet 21st century climate-smart standards.

This includes increasing federal funding for water resource management in chronically under-funded programs at the U.S. Departments of Interior and Agriculture – in particular the Bureau of Reclamation and the Natural Resources Conservation Service (NRCS) – that help secure drought-resistant water supplies in river basins throughout the West. The federal government should provide support for locally-driven partnerships and strategies, like the Yakima Basin Integrated Plan, in Washington. It should also include the National Drought Resilience Partnership and the National Integrated Drought Information System (NIDIS). These programs focus on water use efficiency, aquifer recharging, water reuse, community response and recovery, and coordination of the federal response to drought situations.

The next President should also prioritize building flood-resilient rural communities. This includes investments in the Army Corps of Engineers and EPA water infrastructure programs; up-front investments in the Federal Emergency Management Agency's (FEMA) pre-disaster hazard mitigation and the Department of Housing & Urban Development's (HUD) community development block grants; using post-disaster investment to reduce future risk, including reforms to the National Flood Insurance Program (NFIP); partnership with Congress to enact a federal flood risk management standard; and financial resources to support relocation grants. This should also include, for example, federal support for flood protection in the Missouri and Mississippi river basins, including $7.8 billion for inland waterway infrastructure improvements requested by 88 Midwestern communities as a part of their Bold Plan to Revive and Reinforce the Infrastructure of the Mississippi River Corridor. This plan estimates such an investment will create more than 147,000 jobs. The next administration should further champion creation of a federal Floodplains By Design initiative, modeled on the Washington state program of the same name that has aimed to modernize floodplain management for people, farms and fish, amidst the stressors of climate change, environmental degradation, and a growing regional population.

- **11.4 - Blue New Deal:** A healthy is not possible without a healthy ocean. And yet, the oceans have absorbed 93% of the heat trapped by planet-warming greenhouse gas pollution and 90% of the world's fish stocks are overfished or exploited. And for the approximately 40% of Americans who live in coastal counties, a vibrant and productive ocean is critical to economic and biological success. In late 2019 Senator Elizabeth Warren's campaign put forward a revolutionary plan for a "Blue New Deal," which recognized that oceans must be a central part of our solution to the climate crisis and that coastal communities around the globe are particularly suffering from climate change's accelerating impacts.

  To better prepare fishing industries and coastal communities for the impacts of climate change, the next administration should issue new guidance and regulations from the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service that more accurately account for the impacts of climate change. Fishing and associated industries could support an additional 500,000 jobs - often in rural communities -

with rebuilt and sustainable fish stocks.

Given the ocean's role as a planetary carbon sink, the next President should sign an executive order directing NOAA to establish a domestic blue carbon program that will support ocean-based carbon sequestration projects, ranging from regenerative ocean farming of kelp and shellfish, to reforestation of mangrove forests, seagrass beds and wetlands. And Blue Carbon Zones should be established in federal waters to identify and better manage highly productive carbon sinks.

To further support coastal communities, Congress and the next President should work together to expand investments and streamline permitting to develop America's incredible offshore wind energy potential. And the next administration should work with Congress to invest in programs that improve the health of marine and freshwater ecosystems, and that restore wetlands and coastal habitats. This includes EPA Geographic Programs, and NOAA coastal restoration and salmon recovery programs, as well as Army Corps of Engineers shellfish aquaculture permitting.

Given the outsized negative impact plastic pollution is having on the health of our ocean ecosystems, the next President should lead the United States in supporting national and international efforts to confront plastic pollution - including policies that confront production and use of single-use plastics, and others that promote more widespread and efficient recycling practices with greater integrity and that establish markets for recycled materials, such as recycled-content standards.

Given the cross jurisdictional nature of our oceans, the next President should ensure the U.S. joins Canada, France, Chile and other nations, and several U.S. states, in the International Alliance to Combat Ocean Acidification. Additionally, the next administration should promote international progress in fisheries management policies and best practices to recover and support fully sustainable fish stocks - and confront nations that continue to support over-fishing. Additionally, the next administration should take action to promote marine-protected areas at home and abroad, including rejecting any actions taken by the Trump Administration to repeal or shrink the size of marine national monuments. And to protect global biodiversity and ensure a stable planet, the next President should work towards a global effort to protect 30% of the world's natural areas by 2030.

- **11.5 - Improving Forest Health & Protecting Public Lands:** 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. Recent wildfires have killed hundreds of people, destroyed communities, all while becoming major contributors to greenhouse gas emissions. In 2018, emissions from California wildfires almost equaled those from the state's electricity sector.

Separately, America's public lands have been under attack by President Trump. The Trump Administration has moved aggressively to remove protections for the Arctic National Wildlife Refuge (ANWR), and for over 2 million acres of public land around Bear Ears and Grand Staircase- Escalante. The lands Americans own together as a country are some of this nation's greatest assets, and when protected and invested in, can increase the health and resilience of ecosystems, boost rural economies, and provide the opportunity to create renewable energy that can help defeat climate change.

The next President must fight for increased investments in the U.S. Forest Service, to prevent wildfires and protect forest health. And along with this, the next administration should pursue federal-state-local collaboratives to capture the full carbon storage and forest health potential for reforestation, and to address the million acres of forest not yet under best management practices. In Washington state, for example, federal, state, tribal, local, and private landowners are working together to improve forest health on over 1.25 million acres over the next 20 years.

In addition, by using sustainable forest biomass from forestry thinnings to make renewable materials, the next administration can create a sustainable, revenue-generating product for rural communities that helps displace plastics. Sustainably sourced forestry waste can put into motion a virtuous cycle of sustainable job creation, forestry protection, carbon removal, and wildfire protection.

The next President must also assume office with a commitment to preserving America's public lands and the outdoor recreation economy. This includes reversing the Trump Administration's rollbacks to lands protections, and investing in the federal backlog of public lands projects - which has reached nearly $12 billion for National Parks, alone. This agenda should also include fighting for full and permanent funding for the Land & Wildlife Conservation Fund (LWCF). And, it should further engage state, local and Tribal governments in co-management of public lands.

12) Asserting U.S. Leadership in the Global Effort to Defeat Climate Change

In the face of the accelerating climate crisis, the need for the United States to engage as a good-faith partner in the community of nations has never been greater. However, President Trump has chosen a path of disengagement, retrenchment, and ugly nationalism. On June 1, 2017, he announced his plan to pull the United States out of the Paris Agreement on Climate Change. That announcement sent a clear message to the world: it can no longer rely on America to pull its weight in responding to this global crisis, or to step up and help those most vulnerable to climate impacts. Instead, this administration has built a foreign policy based on isolationism and xenophobia. It has allied itself with dictators to deliberately sabotage international progress on democracy, human rights and the rule of law, and it has effectively handed U.S. domestic and international climate policy over to polluters and fossil fuel executives. The next President must immediately reverse course, and re-engage the United States not only in the Paris Agreement, but as a determined, leading actor in the global climate response. The next administration must utilize all of the tools available in diplomacy and foreign relations, international trade, finance, aid, and assistance — with an unwavering focus on global climate action that honors our common humanity.

- **12.1 - Rejoining the Paris Agreement & Global Climate Action:** By mobilizing the country to invest in climate solutions, recommitting to the Paris Climate Agreement, and putting climate action at the center of American foreign policy, the United States can lead the way in responding to the rapidly intensifying global climate crisis and accelerating the transition to a more sustainable global economy. In doing so, it can simultaneously re-establish its place as a leader, trusted partner, and reliable actor in the community of nations, while restoring and strengthening ties with close allies as well as nations in the most vulnerable parts of the world.

  The next President must take immediate action to recommit America to the Paris Agreement, and to increase both U.S. and global ambition through the pact with a new, stronger Nationally Determined Contribution (NDC) of 50% reduction in domestic greenhouse gas pollution by 2030. Theadministration should pledge to mobilize more than its share of the global investment in climate finance for developing countries. And the U.S. should initiate high-level bilateral negotiations and technical dialogues with major economy countries to encourage them to join in submitting more ambitious Paris targets.

  But in prioritizing climate change in its foreign policy, the next administration must go much further, and precondition U.S. cooperative diplomatic engagement upon countries' commitment to taking ambitious action. It should strengthen supplemental enforcement of the Paris Agreement by instituting domestic policies that use American economic power to compel ambitious greenhouse gas pollution reductions from international partners, such as through enforceable climate standards in U.S. trade agreements, and the establishment of a carbon duty on imports.

The next administration should also increase U.S. participation in the Warsaw Mechanism on Loss and Damage, under the United Nations Framework Convention on Climate Change (UNFCCC). The Paris Agreement calls for enhanced cooperation among the parties to the agreement, and the United States should engage in that work and support a special program under the Global Climate Change Initiative to assist vulnerable countries. Further, in the UNFCCC process itself, there is more that the United Statesmust do to improve access of under-represented stakeholders, including indigenous communities and youth. And it should urge the UNFCCC to monitor the participation of fossil fuel corporations in ongoing global climate discussions, and exclude them if they continue to oppose action, just as international tobacco treaty discussions froze out tobacco companies.

A stronger global effort on climate change also requires greater U.S. support for subnational action, including through groups like the U.S. Climate Alliance, the international Under 2 Coalition, and the We Are Still In coalition. State, local and tribal governments, universities, businesses, non-governmental organizations (NGOs), faith communities, and other civic institutions have remained committed to the Paris Agreement, and are some of America's best ambassadors for engagement on global action. The states engaged in the U.S. Climate Alliance together account for 55% of the American population and a $11.7 trillion combined economy - larger than all other countries' except the United States and China. The next administration should integrate their leadership and further catalyze private sector ambition commensurate with national commitments, through public pressure.

Beyond the Paris Agreement, the next administration should also ratify the Kigali Amendment to the Montreal Protocol, to slash Hydrofluorocarbons (HFCs), as well as advance new international efforts to reduce other super-pollutants, like methane and black carbon. It should join the Powering Past Coal Alliance (PPCA) — a global coalition of national and sub-national governments, businesses and organizations committed to phasing out coal power plant pollution by 2030. And it should commit to full implementation, and going beyond, the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), and achieving and exceeding the pollution-reduction goals in shipping agreed to by the International Maritime Organization (IMO). Finally, the next administration should promote global collaboration that can achieve progress in sustainable land-use and forestry, ocean conservation, and ocean-smart climate action.

- **12.2 - Welcoming Refugees & Promoting Stability amidst Climate Disruption:**
  President Trump's policies have been a dangerous cocktail of humanitarian and climate disaster: Pairing a willful ignorance of climate science with utter disregard for human suffering. Trump's xenophobic positions on immigration are already colliding with the increasing role played by climate change in displacement and migration. The next President must recognize that the climate crisis is here and is already causing suffering and instability on a massive scale. These climate impacts are driving instability, such as in the conflict in Syria, where a three-year climate-related drought forced 1.5 million people from rural

farming areas to the urban periphery; in crop failure and displaced persons in Central America particularly in the northern triangle of Guatemala, Honduras and El Salvador, which is driving both urbanization and international migration; and internal migration in Bangladesh and an increasing number of small island states. Climate change is already contributing to an expanding refugee crisis both directly, with 24 million people displaced on average each year around the world since 2008 due to extreme weather events, and indirectly, as climate change impacts force people to migrate in search of food, water, shelter, or to avoid conflict.

The global security threats of climate change have been made perfectly clear. The Trump Administration's own *Worldwide Threat Assessments of the U.S. National Intelligence Community,* released January 2019, states that "climate hazards such as extreme weather, higher temperatures, droughts, floods, wildfires, storms, sea level rise, soil degradation, and acidifying oceans are intensifying, threatening infrastructure, health, and water and food security. Irreversible damage to ecosystems and habitats will undermine the economic benefits they provide, worsened by air, soil, water, and marine pollution." In the COVID-19 pandemic in Spring 2020, Americans have seen the dangers that result when federal leaders ignore scientific assessments of impending global crises.

The next administration must build a more humane and intelligent American posture toward the global community of nations. It should advance foreign and domestic policies that address the human and environmental impacts of climate change that are occurring today. And, it should adapt America's immigration policy to the reality of climate migration, increase spending on climate security, and lead on better-coordinating global responses to increasingly frequent climate disasters.

To effectuate this, the next President should fully consider immigration and refugee policies in the context of climate change. The President should at a minimum raise the ceiling for annual refugee admissions to allow acceptance of historic numbers of refugees, meeting and then far exceeding the target of 110,000 refugees that was set during the final year of the Obama Administration. The administration should repeal the Trump Administration's "Remain in Mexico" policy that forces asylum seekers from Central American countries to await adjudication of their case in Mexico. Likewise it should repeal the Trump Administration decisions that eliminated Temporary Protected Status (TPS) protections for immigrants and refugees from El Salvador, Haiti, Honduras, and Nicaragua, and for individuals in the Deferred Enforced Departure (DED) program. The President should order the withdrawal of all U.S. military personnel deployed to the U.S.-Mexico border in support of immigration enforcement, and cancel the funding streams currently being reprogrammed to fund Trump's border wall.

The next administration should restore and expand U.S. foreign assistance funding for the Northern Triangle nations of El Salvador, Guatemala, and Honduras. And it should restore the Central American Minors (CAM) program to allow for reunification of qualifying minor

children from the region, as well as expand in-country processing of immigrants seeking entry to the United States from these nations. It should further evaluate options for adoption of the U.N. Global Compact for Safe, Orderly and Regular Migration, to ensure U.S. participation in a globally coordinated strategy to address the challenges posed by climate-fueled migration.

Under the next administration the United States should also prioritize climate security in the U.N. Security Council. In international governance, there is no higher body capable of elevating global security risks and mobilizing international cooperation. This must include appointing a U.N. Ambassador who not only understands the climate challenge and is capable and committed to keeping it before the Security Council, but who will also operate with a mandate to expand engagement on climate change beyond the UNFCCC. This work also means prioritizing climate change in the U.S. Permanent Mission to the U.N. And the next administration should advocate for the creation of a U.N. Special Rapporteur on Climate and Security to oversee the emergence of global climate-related security threats, conflict, instability, and humanitarian crises, and regularly report on the effectiveness of the U.N. response to these challenges.

- **12.3 - Setting Strong Climate & Labor Standards in International Trade:**
  Historically, American trade policy — including most international trade agreements — has been an impediment to effective climate action, and environmental protection more broadly. America's trade agreements have frequently preferred corporate profits over protections for workers, consumers, public health, and the climate or the environment. Instead, international commerce should be a tool for helping to sustainably lift nations and communities out of poverty, and for supporting mutual economic growth and benefit. Strong labor and environmental standards — whether reversing child labor, guaranteeing fair pay and the right to organize, or halting the flow of carbon or toxics into the air and water — can allow responsible companies to compete on the basis of true value creation and innovation rather than externalizing public costs. The next President must be committed to using American trade policy to confront climate change.

  American trade policies, trade agreements, and trade relationships should all be evaluated to ensure they are consistent with the swift and just transition to a global carbon-free future. This includes ensuring that enforceable climate standards are a part of any U.S. trade agreements, to condition their terms upon each party's commitment to adopt, maintain and implement policies specifically to fulfill their commitments to the Paris Agreement, as well as other agreements like the Kigali Amendment to the Montreal Protocol. In trade policy, the next administration should also reject the Investor-State Dispute Settlement (ISDS) system, and its Trump-era replacement, which give foreign and domestic private-sector investors broad powers to sue governments over climate protections and environmental standards before unaccountable third-party panels.

  U.S. trade policy has too often treated labor and environmental standards as ancillary to

other economic and social objectives within agreements, resulting in a legacy of economic insecurity for workers and stranded capital investments in industrial communities, along with growing environmental inequity and unchecked climate burdens. The next administration should commit only to well-crafted "High Road" trade policies with meaningful labor and environmental standards at their core, which can promote economic growth while defending workers' rights and aggressively advancing climate protection. This includes implementing the International Labour Organization's (ILO) Core Labor Standards to provide a benchmark for robust worker protections. And going further – expanding on these core labor rights and offering additional support to ensure a living "floor" wage for workers, without forced overtime. U.S. trade priorities should also include adoption of consumer right-to-know clauses; elimination of procurement provisions that require the U.S. government to treat foreign bidders the same as domestic; linking agreements to development funding and technical assistance to ensure sufficient resources and capacity to undertake robust enforcement; and allocating resources for co-enforcement by labor and NGOs, so that pro-worker organizations can advocate for workers when governments do not.

The United States can also use its power in international commerce to establish rules that incentivize beneficial cross-border exchange of clean energy technology, investment, and expertise, to help defeat climate change while disincentivizing ongoing trade in climate-destabilizing fossil fuels and deforestation. With a renewed commitment to the Paris Agreement and recognition of the environmental, labor, and human rights shortcomings in past trade regime, the United States can also lead in the establishment of a new baseline for trade rules that support ambitious global climate action, including: increasing trade barriers on fossil fuels and products causing or resulting from deforestation practices; working with trading partners to lower tariffs and non-tariff trade barriers to climate solutions and other environmental goods and services such as clean energy, water-treatment, and pollution-control technologies; and using trade agreements with developing countries to facilitate cross-border innovation and collaborative technology development in clean energy solutions.

Finally, in order to best support U.S. domestic manufacturing in the global transition toward clean energy, and to ensure commensurate action from global partners, the next President should work to enact a Climate Duty on imports — a border-adjustment fee to be assessed on imported goods (e.g. steel, cement, glass, etc.) whose lifecycle greenhouse gas content exceeds a certain threshold that reinforces rising standards in the United States. Such a measure will not only incentivize low-carbon supply chains, protect energy-intensive trade-exposed industries, and provide a balance on America's trade relationships, but it will also help to provide a supplemental domestic enforcement provision for the Paris Agreement.

- **12.4 - Driving Investment in a Sustainable Global Economy:** Just as the United States helped establish a foundation of global stability in the 20th century through a Marshall Plan that restored peace and prosperity following the ravages of World War II, today it must

again help catalyze global investment in response to the climate challenge. Reversing climate impacts will require massive new capital flows to deploy clean energy technology, upgrade infrastructure, advance community resilience, improve agricultural and forestry sustainability, protect oceans and marine ecosystems, and put in place climate mitigation and adaptation solutions on a global basis. By helping to catalyze these investments, the United States can also help promote justice for developing countries, which are already bearing the impacts of climate change. Years ago the U.N. Environment Programme (UNEP) estimated the need for global investments in climate solutions and sustainability to be 2% of annual GDP. And, since that estimate, the urgency of climate action and of the Paris Agreement's 1.5 degree goal has been made ever clearer, harder, and more expensive.

Under the next President the United States must help catalyze transformative global investment to spread clean energy solutions and sustainable development. Such action also affords an enormous economic opportunity for America in the global race for clean technology development. The International Finance Corporation estimates that the initial commitments to the Paris Climate Agreement offered by just the 21 largest developing countries alone will create a $23 trillion investment opportunity, between now and 2030.

The next administration should immediately double America's commitment and then go further in investing in the Green Climate Fund, to help meet and then exceed prior commitments to mobilize $100 billion per year in climate mitigation and adaptation initiatives in developing countries. It should 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. In the past these institutions have delivered large public impacts.

The next administration should also – together with the U.S. investment community – fast-track measures to accelerate sound, sustainable and reliable investments in developing countries based on their current pledges to the Paris Agreement for the creation of new renewable energy and infrastructure systems. The next administration should initiate a campaign among donor countries to require the World Bank and all multilateral development banks to only fund development projects that enhance climate resilience, do not increase greenhouse gas emissions, and work within recipient country mitigation goals. And, by promoting Green Bond initiatives and catalyzing new green-banking institutions, the United States should leverage additional private capital investment as well. Additionally, the next administration must ensure that all development assistance is climate-safe and climate-smart, such as USAID and the Department of State investments in food, health care, water, energy and infrastructure.

Finally, the next President must be committed to reinvigorating bilateral programs for

research, policy innovation and technical cooperation. Under the Obama Administration, the U.S.-China Climate Change Working Group had more than 20 cooperative initiatives, and the U.S.-India Joint Working Group on Combating Climate Change had 15 programs, ranging from cooperation on climate resilience to improving investment in clean energy. All of these groups were supported through the Global Climate Change Initiative (GCCI) — an umbrella fund shared between the State Department and USAID, which incubated and funded the programs under these bilateral groups, focusing their priorities and ensuring that congressionally mandated funds for climate-related assistance abroad are well-spent. The next President should restore the GCCI, and work with Congress to quadruple its budget. Their administration should also re-institute bilateral and multilateral programs for enhanced clean energy development and deployment with key strategic partners, such as the Partnership to Advance Clean Energy (PACE) program with India, and the Power Africa Initiative dealing with energy access. And it should expand the map of bilateral climate working groups to other advanced emerging economies such as Indonesia, South Africa, Mexico, and South Korea. And, it should restore U.S. engagement in the Clean Energy Ministerial and Mission Innovation.

- **12.5 - Taking on Petro-States and Creating Climate Accountability:** One of the most significant impediments to ambitious global climate action has been consistent opposition from fossil fuel industries and leaders of nations that prop them up, like Russia and Saudia Arabia. In global geopolitics, fossil fuel resources have often served as a "sword or a shield," in the words of the European Parliament, for undemocratic or authoritarian nations to exert foreign policy influence out of proportion with their underdeveloped national economies. The next President must lead the transition to a clean energy future, with a recognition of the impediment and outsized influence that fossil fuel industries represent to global climate progress, and by pursuing strategies to build global alliances to protect workers and communities from fossil industry transitions that are already well under way.

  Additionally, there are other critical drivers standing in the way of effective global climate action that also demand major strategic action in U.S. foreign policy. For example, while China is making strides in reducing its domestic carbon pollution under the Paris Agreement, it is simultaneously supporting the construction of fossil energy and infrastructure in other countries, as part of its "Belt and Road Initiative" (BRI). The BRI is a massive global development project – worth a projected $6 trillion, 46 times as large as the U.S. Marshall Plan following World War II.

  Under the next President, the United States must establish accountability on climate change as a hallmark of American diplomacy and global relations. This means rejecting the foreign policy goals and anti-democratic practices of "Axis of Oil" countries such as Russia, Saudi Arabia and Iran. The next administration should utilize anti-corruption authority in U.S. law to impose consequences for undermining climate international cooperation. And it should not only cease to cooperate with countries that impede efforts to confront global climate change, but it should use the Global Magnitsky Act to hold to account individuals and

entities responsible for human rights violations and corrupt activities that contribute to targeting civil society advocates, including climate activists. It should also hold governments and corporate actors accountable for violating international best practice in forest governance and/or reneging on commitments to protect globally important forest resources vital to biodiversity, combating climate change, and protecting indigenous peoples.

The next President must challenge China to dramatically shift the priority to clean energy and other green projects under its BRI. The President should also work with China to revive and expand the U.S.-China Clean Energy Research Center, while negotiating an agreement on ending subsidies for fossil energy in other countries — a process that began during the Obama Administration. And should promote U.S.-China cooperation in establishing collaborative agreements for sustainably-produced commodities with Brazil, Indonesia and other tropical nations which are major suppliers of beef, soy, palm oil, cocoa, and coffee. Further, the United States should help build capacity in BRI countries to make non-fossil energy projects central to economic development. Serving the demand for renewable energy represented in the NDCs of 31 BRI countries in South Asia, the Middle East and Africa, for example, amounts to a $469 billion investment opportunity for American businesses to access.

Finally, and crucially, the next President must fight to end all global fossil fuel subsidies, which the International Monetary Fund (IMF) estimates would reduce global fossil fuel pollution by 21%, while raising revenue to support public investments by 4%. The next Treasury Secretary should issue guidance so that the United States will use its voice and vote to object to oil, gas, and coal projects at multilateral development banks. And the administration should use America's presence in the OECD Working Party on Export Credits and Credit Guarantees to advocate strongly for an end to export credits for all oil, gas, and coal activity.

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