Demos

Frontlines Climate Justice Executive Action Platform

Policy Memorandum

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We are a dynamic "think-and-do" tank that powers the movement for a just, inclusive, multiracial democracy.

Through cutting-edge policy research, inspiring litigation and deep relationships with grassroots organizations, Dēmos champions solutions that will create a democracy and economy rooted in racial equity.

Our name means "the people." It is the root word of democracy, and it reminds us that in America, the true source of our greatness is the diversity of our people.

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Preamble

As communities across the country, as well as countless people all over the world, face accelerating impacts and risks of climate change, federal, state, and local leadership in the United States is critically important for advancing immediate and aggressive climate action in public policy.

The science shows we no longer have the luxury to act incrementally. We must rapidly transform every sector of society if we are to limit global warming to 1.5 degrees Celsius. But urgent action on climate change cannot come at a price of expedience and further sacrifice for frontline communities. Frontline communities are primarily communities of color, Indigenous communities, and struggling working-class communities most impacted by fossil fuel pollution and climate change—which are all the more vulnerable due to historic and continuing racism, segregation, and socioeconomic inequity.

In tackling the urgency of the climate crisis, prioritizing the most impacted communities for the protections and benefits of an economy-wide renewable energy transition is a moral imperative. This is, in large part, the meaning of a "just transition." The economic transition we need to reverse the climate crisis must not leave behind impacted communities and workers. Racial and economic equity must be at the core of all climate solutions.

The executive branch can set the stage for a transformative climate justice agenda by taking immediate action at this intersection of climate, racial justice, and economic transformation. The Frontlines Climate Justice Executive Action Platform speaks to this opportunity by identifying regulatory rulemakings and other executive actions to advance an equitable climate agenda from day one. While major legislation in many areas will ultimately be needed to advance a bold federal agenda of climate action, this platform proposes a set of actions the executive branch can take without new legislation, major new appropriations, or other congressional authority. However, many of the proposed executive actions can be harmonized with, be complementary to, or set a direction for statutory advancement of transformative climate action when that becomes possible.

This platform identifies actions in 4 basic categories that speak to the policy work and movement-building that frontline leaders in the climate movement have developed over many years, as they have forged a clear vision of equitable and resilient social and economic transformation:

- **A. Environmental Justice:** Protecting frontline communities from continuing harms of fossil fuel, industrial, and built environment pollution.
- **B. Just Recovery**: Ensuring just and equitable recovery from, and resiliency against, climate disasters.
- C. Climate Equity Accountability: Elevating equity and stakeholder decision-making in federal climate rules and programmatic investments.
- **D. Energy Democracy**: Remaking the monopoly fossil fuel energy system as a clean, renewably-sourced, and democratically-controlled commons.

In each of these areas, the platform presents a policy outline of possible rulemakings, executive orders, or other presidential actions that, taken together, aim to put frontline needs and priorities at the center of climate policy, including empowering grassroots stakeholders to be decision-makers in the process.

This platform builds on the hard-fought history of environmental justice advocacy that escalated in the 1980s, launched a principled national movement in 1991, and was formally recognized in federal policy in 1994 with President Clinton's historic Executive Order 12898. E.O. 12898 requires federal agencies to develop strategies for "achieving environmental justice," but even by its own limited mandate, it has not been enforced, and frontline communities now face climate change impacts that only compound ongoing racial disparities in pollution exposure and fossil fuel harms.

Taken together, the actions recommended in this platform address continuing disparities, establish greater accountability for a just transition, and lay groundwork for systemic changes needed to end fossil fuel dependency and build a just and equitable renewable energy future. In these key respects, it is inspired by the principled vision put forward by the Equitable and Just National Climate Platform, and it is aligned with the Climate Justice Alliance's Just Transition: A Framework for Change. It also respectfully acknowledges the place of Native leadership in a just transition, as formulated in the Indigenous Principles of a Just Transition. This platform also complements proposed executive actions in the Climate President Action

Plan, including supply-side restrictions to limit fossil fuel extraction, economy-wide greenhouse gas (GHG) mitigation standards, and Department of Justice intervention to protect non-violent climate change activists from criminalization by states and localities, to pursue significant cases against environmental racism under civil rights laws, and to investigate and pursue, or otherwise support, civil and criminal lawsuits against fossil fuel companies. All of that and much more is needed, but the focus of this platform is specifically on the needs and priorities of frontline communities in the face of climate crisis.

In the broader landscape, the emerging paradigm of a Green New Deal captures the scale and urgency of the climate crisis. However, a primary—and science-driven—focus on aggressive GHG reductions is not inherently equitable for communities facing disproportionate local pollution, largely from the same facilities and sources driving the climate crisis. There are many reasons for this, including that the most polluted communities will tend to be "last in line" for GHG reductions, because these reductions are likely to be the most costly. Longstanding and worsening political power imbalances also often determine who will be protected by, and who will benefit from, any public policy, including climate policy and related investments.

The promise of climate policy for frontline communities lies in targeted policy design that prioritizes protections, direct emissions reductions, job creation and other economic benefits, and resiliency gains for the most impacted communities, including greater control of decision-making—all of which animates the executive action platform that follows. It also lies in addressing deeply interconnected crises of housing affordability, gentrifying economic development, and financial extraction of labor, community, and natural resources. Those challenges cannot be solved by the executive branch on its own and will require extensive state and local action, major federal legislation in some cases, and massive public investment through appropriations, bonding, and other means.

In contrast with the promise, the peril of climate policy lies in deferment of and underinvestment in equitable and transformative solutions, and elevation of false solutions that put markets, unproven technology, and, ultimately, private investors in charge of the transition—not the most impacted communities and the most equitable solutions.

Together, this understanding of the promise and the peril of climate policy is the vision of frontline leaders working in the hardest-hit communities and regions, developed over many decades. This vision has been building from local action to regional and national networks and strategies, which have accelerated in the last several years. Many organizations representing frontline communities have led in this process. The Gulf South for a Green New Deal Policy Platform is one powerful example of a locally-driven and regional vision of climate justice for the most impacted communities.

Ultimately, winning a frontline climate action agenda starts with the vision of frontline leaders. Moving forward requires elevation of that leadership, grassroots power-building, and commitments of national allies and public officials to support the frontline vision and its policy components as a clear priority in the federal landscape in 2021 and beyond.

In the first 100 days of a new term, the executive branch could bring dramatic developments in federal climate policy. This executive action platform will help to ensure that, however bold in tackling climate change, federal climate policy is centered on advancing racial justice and ensuring a just and equitable economic transformation for the most impacted communities.

I. Environmental Justice

What is the Problem?

Deep and Persistent Inequities of Environmental Protection

For decades we have known that low-income communities and communities of color face greater environmental burdens than affluent white communities. In spite of strong environmental laws on the books since the 1970s, and federal environmental justice directives starting in the 1990s, significant environmental disparities remain along the lines of race and class.

The extractive, unsustainable logic of fossil fuel-dependent capitalism disproportionately affects communities of color, Indigenous communities, and low-income communities up and down the fossil fuel supply chain, from extraction to consumption. "Upstream" pollution impacts and the health and safety risks of mining, drilling, and transmission of fossil fuels affect many low-income areas and communities of color, including in Indian Country, the Central Valley and other parts of California, Appalachia, Texas, Pennsylvania, and elsewhere. "Downstream" impacts include significant health disparities attributable to concentrated stationary and mobile sources of fossil fuel pollution, and the data clearly show how these disparities primarily impact Black, Latinx, Asian-American, and Indigenous people. Throughout the fossil fuel economy and related industries, disparities in political power by race, income, Indigenous status, and other factors protect corporate interests and perpetuate and compound local and planetary pollution harms.

Proximity to extraction, air, water, and soil pollution, hazardous chemicals, and hazardous waste is highly racialized. Environmental justice (EJ) advocates have long pointed out that low-income communities and particularly communities of color host a disproportionate share of landfills, incinerators, industrial facilities, refineries and fossil fuel infrastructure, and other pollution sources, many of which contribute to serious health problems such as respiratory ailments, cardiovascular disease, and cancer. As noted, tribal nations and Indigenous communities face additional threats from fossil fuel

extraction and transmission, mineral extraction, and nuclear waste, among other unwanted land uses.

These environmental disparities work alongside social stressors to produce cumulative health effects greater than the sum of their parts. Not only are some communities exposed to more environmental harm, but they are more vulnerable to the effects of environmental harm because of structural racism and/or poverty.2 For example, communities denied access to quality health care, healthy food, and affordable housing will suffer more severe health consequences as a result of pollution increases compared to more affluent neighborhoods with different underlying social indicators.³ To address the complex and compounding interactions and effects of pollution, health, and socioeconomic disparities, primarily affecting communities of color, the Frontlines Executive Action Platform follows the lead of environmental justice advocates in placing major emphasis on the need for integrating cumulative impacts and risk analysis, not just for consideration, but as a determinative or decisive factor, in regulatory policy and agency decisions in fulfillment of statutory pollution control objectives.

Slow and Indeterminate Progress on Pollution Inequities Underscores Profound Climate Risks Facing Communities of Color

The environmental justice movement spent years documenting these disparities and advocating for rights and protections under environmental laws, and by 1994 successfully convinced President Bill Clinton to sign Executive Order 12898, which instructs federal agencies to develop strategies for achieving environmental justice, "to the greatest extent practicable and permitted by law."⁴

Slow and indeterminate progress in the federal government's stated goals of environmental justice is well-documented today and widely criticized by advocates. In the wake of E.O. 12898, environmental justice concerns have been taken up in advisory councils, multiple policy guidances and strategic plans, and dedicated grant programs, among other things.⁵ A 2015 evaluation of the federal response to environmental justice by David Konisky and his colleagues concludes, however, that the federal government and, in particular, the Environmental Protection Agency (EPA), "has repeatedly and systematically failed to incorporate environmental justice considerations into core programs and decision-making."

Compounding this failure, climate policy, emerging since the late 2000s and punctuated with the failed Waxman-Markey cap-and-trade legislation, has often been indifferent at best to environmental

justice concerns. In theory, reducing GHG emissions and aggregate pollution will benefit everyone; and in theory, the communities exposed to the most pollution have the most to gain from emissions mitigation policies.⁷ In practice, however, power differentials—especially by race—result in unequal environmental protections that allow pollution inequalities and risks to persist,⁸ and in some cases environmental policy has increased inequality.⁹ Climate policy has threatened similar patterns by disregarding local pollution impacts in policy design of GHG reductions.

In an historic and continuing context of structural racism and the income and wealth gaps pervasive in U.S. society, race-neutral environmental policy can lead to discriminatory outcomes for vulnerable communities—which is exactly what we have seen. What is needed, instead, is a comprehensive but targeted approach to environmental protections, climate policy, and climate investments—an approach that takes racist disparities in health, wealth and income, political power, and other vulnerabilities fully into account and prioritizes protections and benefits for the most impacted and vulnerable communities.

Illustrative Findings

Persistent Environmental Inequality

- A variety of inequalities based on race and income exist in the U.S., including but not limited to life expectancy, disease rates, incarceration rates, poverty, unemployment, proximity to environmental hazards, and proximity to unwanted land uses. There is clear evidence that disproportionate exposure to polluting facilities and other pollution sources leads to a disproportionate amount of pollution, pollution-related negative health impacts, and other hazards.¹⁰
- Decades of data have shown that middle- and high-income neighborhoods are exposed to less pollution than low-income neighborhoods, and that Black and brown neighborhoods are exposed to more pollution than white neighborhoods with the same average income.¹¹
- Air pollution is disproportionately caused by white Americans' consumption of goods and services, and then disproportionately inhaled by Black and Latinx Americans. On average, Latinx communities are exposed to about 63 percent more PM2.5 pollution than they produce, and Black communities are exposed to 56 percent more PM2.5 pollution than they produce.¹²

- The era of legally mandated segregation has passed, but industry and local governments are still able to zone neighborhoods of color as "residential/industrial areas," allowing residential and industrial facilities to be built side-by-side and resulting in predictable negative health outcomes for residents. Locally unwanted land uses (LULUs) include siting of coal and gas power plants, industrial facilities, incinerators, hazardous waste dumps, oil refineries, plastic plants, steel mills, pesticide plants, cement kilns, sewage treatment plants, rubber factories, asphalt patching plants, large-scale pig and cattle feedlots, tanneries, and auto crushing operations.¹³
- For example, in Louisiana's "Cancer Alley" (along the Baton Rouge to New Orleans river corridor), heavy industry has received discharge permits to dump 140 million pounds of toxic waste into communities of color along the Mississippi River. ¹⁴ According to EPA data, some of these communities face a cancer risk over 50 times higher than the national average, as in the predominantly Black community of St John's Parish. ¹⁵
- By mid-April 2020, St. John's Parish also had the highest COVID-19 death rate in the U.S., marking a tragic and disturbing real-time example of disproportionate pandemic risks connected to underlying pollution and health disparities by race.¹⁶

Compounding Existing Social Injustices

- Evidence shows that environmental and social stressors converge in many low-income communities, and that residential context plays an important and independent role in health disparities, which indicates the need for targeted place-based approaches to policymaking. ¹⁷ One effective approach is to use cumulative impacts screening to map, characterize, and target vulnerable communities for interventions that improve existing conditions and prevent future harm. ¹⁸ Screening for cumulative impacts, or similar vulnerability analysis, has been a consistent demand from grassroots environmental justice leaders. ¹⁹
- Recent research finds the Flint, Michigan, lead-poisoning water crisis to be the tip of an iceberg of drinking water safety risks particularly affecting communities of color and small low-income communities across the country. More than 5,600 community water systems serving nearly 45 million people were in violation of health standards of the Safe Drinking Water Act between 2016 and 2019.²⁰

- More than 2 million people lack reliable and equitable access to safe drinking water and sanitation. Race and Indigenous status are the strongest predictors of water access inequities, and Indigenous households are 19 times more likely to lack indoor plumbing than white households.²¹
- Climate-fueled extreme weather can magnify existing environmental disparities, by exposing vulnerable communities to additional toxins in the wake of a disaster. For example, following Hurricane Harvey, the *Houston Chronicle* identified more than 100 Harvey-related toxic releases, most from facilities built in low-lying areas surrounded by communities of color.²² Researchers have identified 872 "highly hazardous" chemical facilities within 50 miles of the Gulf Coast that would be vulnerable to similar extreme weather events.²³

Utilitarian Environmentalism Perpetuates Environmental Inequality

- According to the EPA, nitrogen dioxide (NO2) emissions have dropped 57 percent since the 1990 Clean Air Act Amendments were passed.²⁴ But as the overall levels have dropped, racial disparities have stayed more or less the same. Black and Latinx people experienced 37 percent higher exposures to NO2 than white people in 2010—only a slight decrease from the 40 percent gap in 2000.²⁵
- Some scholars see this persistent inequality as evidence of a clash between 2 different paradigms: the utilitarianism of the traditional environmental movement has fought to reduce overall pollution, often regardless of distribution, while the environmental justice movement has fought to reduce or prevent disproportionate environmental harms in specific communities. Regulating individual bad actors for the common good implies a different definition of success than fighting for equal access to environmental benefits within a rights-based framework informed by civil rights struggles. Scholars are careful to note that the environmentalists and regulators implicated in this paradigm conflict are often sincere in their desire to address inequalities, even if their efforts have been insufficient. This suggests that the paradigm conflict is also structural, i.e. baked into legacy environmental laws, regulations, and institutions.²⁶
- For example, the Clean Air Act may have reduced overall pollution, but it has also resulted in area pollution hotpots, or microclimates, containing deadly levels of pollution that far exceed federal standards. Low-income communities and communities of

color are much more likely to live in these polluted microclimates and suffer health effects as a result. As currently regulated under the Clean Air Act, the EPA generally considers ambient air quality on the scale of large regional "air districts" or still large sub-areas described as "aid sheds," which can and often does have the effect of masking significant or severe levels of pollution exposure in specific places or localities within the larger areas. States are often effectively shielded from having to remediate these pollution hotspots under Clean Air Act standards.²⁷

• Due to advances in monitoring technology, local or smaller area microclimates are now difficult to dispute, but for many years environmental justice advocates have been trying to alert regulators to the threat posed by hotspots. ²⁸ But many academics and most traditional environmental organizations downplayed or denied the risk of hotspots, beginning with the 1990 Clean Air Act Amendments that allowed for tradable pollution permits. Research on the early pollution trading programs and environmental justice was not conclusive and even at odds, depending on national or local focus. More recent research, examining the first 4 years of California's cap-and-trade program, found clear evidence of environmental justice inequities in the distribution of emissions reductions under the program. ²⁹

Federal Commitment To Environmental Justice Has Fallen Short

- President Clinton's 1994 Executive Order 12898 was a major victory for the environmental justice movement, but the political victory has largely failed to translate into reducing pollution disparities in environmental justice communities. The executive order directs all relevant agencies to develop policy strategies for "achieving environmental justice," but the evidence shows that federal agencies and even the EPA itself generally have not used environmental justice standards or equity analysis to determine pollution control standards, permitting of toxic facilities, and other federal environmental actions.³⁰
- Recent reports from the Government Accountability Office, EPA's
 Inspector General, and the U.S. Commission on Civil Rights all
 conclude that the EPA has "failed to integrate environmental
 justice considerations into its decision-making process or make
 them a core part of their mission," according to Steve Lerner.³¹
- Since 1994, the EPA and state-level agencies have not increased regulatory enforcement against the most important sources of pollution in minority and low-income communities despite their

- explicit plans to do so.³² In fact, EPA inspection data suggest that EPA inspections in Black communities were more likely *before* the 1994 executive order.³³
- Legal action to prevent or a put a stop to environmental injustice
 has been elusive at best. Although it has relevant legal authority,
 the EPA has made little use of statutory provisions, such as Title
 VI of the 1964 Civil Rights Act, to protect communities from disproportionate environmental burdens.³⁴
- The recent increase of "bomb trains" carrying crude oil poses significant and disproportionate risks to communities of color, but the Department of Transportation has found no reason to regulate them, regardless of DOT's responsibility for addressing adverse environmental justice impacts of agency policies and actions, as required by E.O. 12898.³⁵

Indifference To Environmental Justice Concerns In Climate Policy

- California's cap-and-trade program has contributed to statewide emissions reductions, although the extent of this impact is debatable by many measures.³⁶ At the same time, in many environmental justice communities, the policy has resulted in *higher* emissions, reflecting distributional inequities in emissions reductions under a cap-and-trade system employing carbon allowances and offsets.³⁷ Early feedback from the environmental justice community was dismissed by regulators and environmental groups, resulting in a lawsuit from environmental justice groups that delayed the law's implementation.³⁸
- At the federal level, the Waxman-Markey cap-and-trade legislation, introduced in 2009 and authorizing a full battery of market-based compliance mechanisms for polluters, is seen as a low point for relations between traditional environmental groups and environmental justice groups. One longtime environmental justice leader described the interactions with green groups at the time as feeling like "warfare, and not from us." In May 2008, environmental justice leaders sought intervention with green group CEOs at the EJ Forum and, according to one leader, received a unanimous "no" to a proposal to include co-pollutant regulations in the bill. "The big greens wouldn't do it," they said.³⁹
- In 2016, the Clean Power Plan opened the door to expanded carbon trading regimes like California's, without addressing co-pollutants or pollution hotspots. Guidance language on en-

- vironmental justice concerns was added for "consideration" by states, but substantive policy changes were not made.⁴⁰
- More recently, however, these conflicts have started to give way
 to increased dialogue between environmental justice advocates
 and traditional environmental groups, resulting in intentional
 efforts, trust-building, alliance-building, and certain limited collaborations among some actors.⁴¹ The recent Equitable and Just
 National Climate Platform reflects a significant advance in this
 conciliatory trend.⁴²

Executive Actions For Environmental Justice

1. No Hotspots Policy

The president should make it a top priority to establish a federal air pollution No Hotspots policy, in concert with a comprehensive strategy of regulating and substantially remediating cumulative environmental impacts in overburdened communities, encompassing air and water pollution, hazardous waste, and toxic chemicals.

Rationale

Pollution Concentrations and Cumulative Impacts Regulation

Many frontline communities face a disproportionately high incidence of local air pollution and associated health risks. In theory, climate policy presents an opportunity to reduce this pollution across America, including in frontline communities, because about 80 percent of the sources of climate pollution in the form of greenhouse gas (GHG) emissions are also sources of local air pollution. However, due to the fact that GHGs are globally-mixed pollutants, the question of where GHG reductions occur is not central to climate mitigation. Thus, there can be mismatches, in varying degrees, between policies aimed at cutting GHGs and the goal of reducing local air pollution. As such, even strong climate policies that successfully reduce GHGs nationwide may not cut emissions in all communities, allowing "hotspots" (or geographic concentrations) of local pollution to continue or possibly grow worse.

While there is no precise definition, in policy, law, or otherwise,

of the term pollution hotspots, at the most basic level it refers to populated geographic areas that are disproportionately exposed to air pollution and other environmental stressors—i.e., there is more pollution in the area, or more pollution per person, compared to other areas and their populations. Hotspots are typically urban or suburban, where large numbers of people are exposed to high concentrations of pollution, and this is more commonly experienced by communities with significant populations of people of color.⁴⁵

Persistent "near-source" pollution, for example from living near a highway or a cluster of industrial facilities, is sometimes described as creating a hotspot microclimate. Both stationary and mobile sources of air pollution contribute to the making of hotspot microclimates, and combined effects of ambient air pollutants (ozone, particulate matter [soot], carbon monoxide, lead, nitrogen dioxide, sulfur dioxide), hazardous air pollutants ("air toxics" like cadmium and benzene), toxic chemicals that contaminate soil and water, and hazardous waste and general waste management should be considered together for a comprehensive approach to pollution hotspots. As noted, effects and interactions of multiple environmental stressors combined with underlying health and socioeconomic inequities comprise a complex reality of place-based vulnerabilities and risks for local populations.

In all its dimensions, the problem of pollution hotspots has been a fundamental—and justifiable—concern in communities of color and the environmental justice movement for many decades. Through the National Environmental Justice Advisory Council (NEJAC), environmental justice leaders have expended extraordinary time and effort almost since the introduction of E.O. 12898 to develop recommendations for EPA implementation and enforcement of environmental justice.46 These recommendations have informed EPA policy initiatives such as Plan EJ 2014,47 and it is fair to say that environmental justice is, on some level, stated policy of the federal government in some respects. But, as noted above, environmental justice is neither law nor enforceable policy as part of federal pollution control, primarily for lack of clear, consistent, specific, and, most importantly, binding rules and standards in pollution programs—and the will to enforce them. More than 25 years since the issuance of E.O. 12898, a comprehensive federal No Hotspots policy, combining rules and standards explicitly devised to dramatically remediate, mitigate, and ultimately prohibit concentrated pollution in overburdened communities, is long past due, and should be a first-order priority in a new administration.

To this end, it is increasingly clear to advocates that a strong possible pathway for establishing environmental legal authority to remediate pollution hotspots and correlated pollution exposure disparities by race and income is adoption of cumulative impacts assessment as a determinative measuring stick for regulation of pollutants and permitting of pollution sources. In fact, consideration of cumulative impacts is well established in a wide scope of environmental laws, regulations, and policy guidances, reaching back at least to the National Environmental Policy Act (which established the widely applied requirement for Environmental Impact Statements, including cumulative impacts, in federally permitted and/or otherwise federally supported projects or other actions affecting the environment).⁴⁸

The National Environmental Justice Advisory Council has advocated for this view over many years, but significant hurdles remain for an integrated strategy based on cumulative impacts assessment, primarily because:

[t]he mechanisms to translate this legal authority into action in permitting, enforcement and other contexts has yet to be articulated [....] and this must be done both in terms of individual permits proceedings and area-wide approaches where a permitted facility is but part of the problem. If EPA were merely to issue a directive under one statutory authority to "address cumulative impacts," neither its program offices, the states that implement delegated programs, regulated sources nor the general public would know what actions are mandated by such [a] requirement. Moreover, this general directive is most unlikely to be construed in the absence of specific guidance to cover the many relatively unregulated sources of pollution that add to a disadvantaged and underserved community's cumulative risk.⁴⁹

Clearly it is true that an integrated strategy to remediate pollution hotspots is challenged by fragmented governance of multiple statutes covering different forms and sources of pollution and environmental risk. These include air and water pollution, hazardous waste, toxic chemicals, Superfund cleanups, and more. The reality, however, is that otherwise disparately regulated sources of pollution and environmental risk do not affect local populations, and especially population health, in isolation from one another: they have combined, interactive, and additive effects over time that, in combination with so-cioeconomic and mental health stressors (including psychological and emotional effects of racism), result in significant health dispar-

ities that persist over time and are strongly correlated with race and income population characteristics in a given place.

Cumulative impacts analysis can be a lens for policy development to undo the damaging reality of persistent multi-source pollution exposures and risk in poor communities. ⁵⁰ But, as NEJAC has stressed, federal regulatory policy cannot truly address this problem without significant changes in policies governing EPA determinations and decisions. Among other things, but arguably most important, EPA should, by rule or other directive, elevate cumulative impacts analysis as a significant if not determinative factor in pollutant standard-setting and permitting of new and existing sources. Cumulative impacts require holistic solutions, and it should be a primary commitment of future administrations to establish a new regulatory policy to this effect under existing statutory authorities, and to work with Congress to codify such a policy as permanent law.

Air Pollution Hotspots

The No Hotspots policy outlined here identifies potential rules, standards, or other directives to effectuate remediation of air pollution hotspots, encompassing both ambient air pollution and air toxics.

The president should pursue a variety of mechanisms for achieving this, including, principally:

- Require EPA to develop rules, standards, and policy directives comprising a federal No Hotspots policy to reduce air pollution and pollution inequities, and to restrict or prohibit further pollution, in overburdened communities. Under Clean Air Act (CAA) authority, major components of the No Hotspots policy should be mandatory as much as the law can allow, or otherwise strongly directed or heavily incentivized.
- Require EPA to establish comprehensive and aggressive GHG mitigation standards and rules, as allowable by law, to reduce U.S. GHG emissions, economy-wide, under Clean Air Act authority. The correlated reduction of local co-pollutants can be an important co-benefit of reducing GHG emissions, but this completely depends on how the latter reductions are distributed within a state or region, or nationwide. Design and implementation of GHG mitigation policies should seek to maximize co-pollutant reductions in vulnerable communities and should be required to do so in connection with any use of pollution trading or other market-based mechanisms of mitigation.

While EPA should undertake rulemakings and other policy directives of a No Hotspots policy under current statutory authorities, many of the regulatory principles of a No Hotspots policy may involve legal interpretations that should be codified in future legislation to become permanent law. In advancing a federal No Hotspots policy, the president should work with Congress to achieve statutory codification of the strongest possible version of a No Hotpots policy established by rulemakings and executive policy directives.

A strong federal No Hotspots policy, focused on air pollution, is more than reasonable and justifiable under the public health goals of the CAA. In fact, it is essential for CAA goals because clean air should not be, and is not intended to be in the relevant environmental statutes, unequally accessible depending on where you live. By ensuring greater equity and justice in standards, permitting, and other policies of pollution control, the public health goals of the CAA are better and further realized—all the more so as the COVID-19 health crisis has only further laid bare the pollution inequities that put the health of some communities and populations at much greater risk in an age of accelerating climate-related disasters. Equity and justice in public health should be a stated policy principle of the No Hotspots rulemakings and directives, and this can be clearly supported as a matter of agency compliance with Executive Order 12898.

Executive Actions

Air Quality Control Measures and Policies Should be Refined and Better Targeted to Address Pollution Hotspots

The federal No Hotspots policy should focus on U.S. air quality rules for criteria air pollutants (the National Ambient Air Quality Standards or NAAQS, under Sections 109-110 of CAA) and hazardous air pollutants or air toxics (under Section 112 of the CAA). This approach could complement climate rules but would not depend on them. EPA should start by requiring mapping of identifiable hotspot areas using community vulnerability assessment tools, as well as expansion of targeted air quality monitoring (including mobile monitoring) in hotspot areas, including for sensitive receptor locations such as schools and hospitals. This mapping and monitoring of pollution hotspots must be sufficient to ensure that ambient air quality readings conducted to determine attainment of the NAAQS include more granular, localized measurements from frontline communities (which

is all too often not the case). Importantly, near-source pollution from stationary and mobile sources, and indirect-source pollution from transportation design, public and private fleet hubs, ports, and other structural sources of concentrated vehicle and equipment emissions affecting overburdened communities, should be considered jointly in the hotspots monitoring regime.

Building on expanded and targeted monitoring, regulatory revision focused on NAAQS determinations and enforcement, as well as air toxics permitting, can be foundational for a comprehensive No Hotspots policy. Potentially in different combinations, principled modifications and additional changes in policy for determining air quality compliance or permitting decisions, to be established with force of law in a rulemaking proposal, or by other policy means, could include:

- Air districts or other compliance areas (such as air basins or sometimes counties) should incorporate greater flexibility in scale so that NAAQS attainment designations do not have the effect of masking local non-attainment. Possibly this could be done by adding modularity to NAAQS geographic areas, showing mixed attainment and non-attainment areas within the larger area, including counties.
- NAAQS attainment definitions should be refined to prevent or discourage states from ignoring pollution hotspots. In a given larger compliance area, a designation of partial geographical attainment should require targeted remediation of non-attainment areas for state compliance.
- Consistent use of Cumulative Impacts and Risk Analysis (CIRA) in a defined scope of EPA determinations is required. This policy is established in a Cumulative Impacts Directive, established by another executive order of this platform (see below). EPA should further undertake a specific rulemaking or policy directive to establish special determinative authority of cumulative impacts analysis in permitting decisions affecting overburdened communities, qualified according to a rubric developed in a separate proceeding under the Cumulative Impacts Directive.
- EPA should undertake rulemakings or other policy directives to establish a No Added Burden standard, or a Net Aggregate Pollution Reduction standard, as federal policy on pollution permitting in overburdened communities. Building on a series of policy guidance reports by the National Environmental Justice Advisory Council, stated policy goals in the EPA's Plan EJ 2014

(both cited above), and the Integrated Urban Air Toxics Strategy developed under authority of section 112(k) of the Clean Air Act,⁵¹ the EPA should establish new permitting standards for major and area sources in overburdened communities. New permitting standards should require careful assessment and significant weighting of cumulative impacts and risks in permitting decisions and specifications for new or expanded facilities, and in some cases for permitting renewals. CAA section 112(k), and the Integrated Urban Air Toxics Strategy, speak clearly to the problem of cumulative impacts and should be interpreted to have an intent of limiting not only a given facility's specific pollution, but this pollution considered as an added burden on top of existing pollution from other nearby sources, as well as other community risks and vulnerabilities such as excessive heat and unsafe drinking water. In overburdened areas, permit applications must meet a no added burdens test, essentially meaning that a permit must be denied if it is clearly or likely going to result in net additional pollution in the area and the test cannot be met by modifications of the permit specifications or equivalent direct reductions elsewhere in the same community. At a minimum, a rulemaking or a policy directive of urban air toxics strategy must strengthen procedural requirements of "considering" environmental justice. Short of a No Added Burden rule, due consideration of environmental justice and cumulative impacts should not just be required at some indeterminate level in procedure, and should not have a vague or discretionary status in decision-making, but should have a clear procedural mandate and status in decision-making, weighted by some specific factor of limiting adverse health impacts for overburdened communities. At a bare minimum, this could require additional safeguards like buffer zones and more holistic, area-based application of technology standards and consideration of costs (see below). But it would be better, unequivocally, to set a standard of No Added Burden in overburdened communities.

• Air toxics technology standards should be modified and better targeted to limit or prohibit added pollution in overburdened communities. For hazardous air pollutants, technology standards should be refined to weigh location of polluting facilities, as well as co-location of other pollution sources, in consideration of technological costs as a factor in emissions reduction compliance. Section 112(k) of the CAA, focusing on multi-source pollution in urban areas, reflects Congress' deep concern that even smaller

sources, co-located in densely populated areas, could pose significant risks to public health. That section of the Act calls for a national strategy and support of state efforts to target these urban hotspots for pollution reduction. In addition, Section 112(d) enables EPA to hold smaller sources to the same strict pollution reduction requirements (the Maximum Achievable Control Technology, or MACT standard) as major sources. Using these provisions to strengthen air toxics standards in urban areas is justifiable as a significant matter of public health under the Clean Air Act. The intent is to ensure greater stringency of direct industrial emissions reductions in highly co-polluted communities, where public health should be prioritized over costs to business.

- Technology standards for the NAAQS should be applied holistically. When new sources are built in overburdened communities located in attainment areas, Best Available Control Technology (BACT) determinations should not be limited to add-on pollution controls that can be installed at the particular source, but should look broadly to operational and other performance-based measures to control ambient air pollutants like smog (ozone) and soot (particulate matter). Moreover, given that the text of the CAA directs regulators to consider the pollution "emitted from or which results from any major emitting facility," BACT determinations could also be broadened in scope to consider the pollution associated with the energy demand of the new source and include investment in on-site renewable energy and energy storage, as long as the investments and emissions impacts are comparably localized.
- Establish a Zero Emissions Vehicle standard for mobile sources of diesel emissions (Section 202). For communities experiencing cumulative impacts of pollution from multiple sources, diesel emissions, which are responsible for 70 to 80 percent of added cancer risk from air pollution, are a public health threat multiplier. This regulation should be targeted to cover in-state diesel emissions: transit buses, school buses, other public fleets, utility fleets, and certain private fleets such as contract garbage trucks and local delivery trucks. Retirement of legacy fleets should be accelerated, and states must find ways to share the costs of getting older diesel vehicles off the road.
- Explore potential rulemaking to authorize designation of high-volume transit corridors and hubs in overburdened urban and suburban areas, including highways, freight delivery hubs, ports, bus depots, etc., as stationary pollution sources under CAA air

pollution rules, and effectively regulate transportation design by emissions standards applied to stationary sources; consider how traffic congestion can be designated as a source of air pollution requiring remediation through congestion controls, including mass transit solutions, congestion pricing, and affordable housing near jobs centers.

- Establish federal ZEV mandate for passenger vehicles and lightand moderate-duty trucks, with crediting rules that accelerate the most impactful emissions abatement for public health, i.e. in the most heavily trafficked states and metro areas.
- Require the Department of Transportation and regional transit authorities to develop a national blueprint and implementation plan for rail shipping expansion and regional rail electrification, with a primary goal of reducing heavy-duty trucking in urban areas.
- Use EPA ZEV standards to pressure Congress for massive investment in electrifying trucks and passenger vehicles (and in related infrastructure), as well as port operations.

Link Climate Mitigation with Co-Pollutant Reductions in Policy Design of GHG Standards and Especially in Connection with Market-Based Compliance Mechanisms

Climate mitigation policies should seek alignment between climate and environmental justice goals. This could complement, but not replace, hotspots regulation under the EPA pollution control programs. The connection between climate mitigation and environmental justice is particularly logical and justifiable in connection with pollution trading and other market-based compliance mechanisms, which are widely allowable and even encouraged under federal CAA programs (as was the case with the proposed Clean Power Plan, for example). Market-based mitigation mechanisms entail a right of polluters to continue polluting while achieving compliance by purchasing pollution allowances or paying a tax. In theory, pollution pricing reduces overall costs of compliance, in part by incentivizing and accelerating lower-cost pollution reductions, and, more generally, by giving firms with varying compliance costs financial flexibility in how they will meet emissions standards. Communities overburdened by pollution, however, should not be additionally harmed, or disproportionately underserved, by a policy focused on lowering costs of compliance for polluters. Market-based compliance only further underscores how climate mitigation is inherently indifferent to the location of GHG emissions reductions, since reducing 1 ton of emissions in one place has the same mitigation effect as reducing 1 ton of emissions in another place.

Dēmos generally opposes market-based mechanisms of climate mitigation, and particularly cap-and-trade, whereby polluters receive or purchase allowances for continuing pollution and these are bankable and tradeable for purposes of managing the costs of emissions reductions under the pollution cap (or total allowable emissions).⁵² Another common form of alternative compliance that can enable further local pollution is carbon offsets, whereby continuing emissions of polluting facilities are paid for of "offset" by purchasing emissions reductions somewhere else, often in the form of afforestation, land conservation, and other carbon-sinking projects.

Many experts are skeptical of the effectiveness of these pollution pricing tools, relative to effects of regulatory mandates, major public investments, and broader economic trends affecting the energy system.⁵³ At the same time, pollution pricing, and pollution trading in particular, poses risks to vulnerable communities by introducing financial flexibility that can lead to inequities in the distribution of pollution reductions. California's cap-and-trade system is a case in point.⁵⁴

We recognize that pollution pricing has been part of CAA policy for many decades and its outright prohibition is unlikely in the future. Therefore, if rulemakings for a new clean power standard in the states, and/or for climate mitigation standards in other sectors, such as industry, transportation, buildings, and agriculture, continue to expand the use of market-based compliance mechanisms, such rulemakings should incorporate environmental justice restrictions on the use of the pricing mechanisms. GHG allowances, carbon offsets, or other market-based compliance mechanisms used by owners of facilities for the purpose of enabling continuing pollution should be prohibited or restricted in or near frontline communities. A mix of restrictions and incentives is also conceivable. Restrictions or targeted incentives could include:

- Place-based restrictions or prohibitions on the use of pollution pricing instruments by facilities in or near environmental justice communities.
- Pollution pricing structure that places higher value on emissions reductions in frontline communities.

- Limiting the use of offsets to natural carbon sinking projects in or near frontline communities.
- State rules or policies requiring or effectuating significant pollution abatement in low-income communities, and/or state investments in low-income energy efficiency and solar access, generate enhanced emissions reduction credits for states.

The rationale for this should be clearly stated in the No Hotspots policy: a policy to this effect is required of states because market-based compliance mechanisms pose risks of deferring pollution abatement, or worsening pollution, in the most polluted communities. There must be safeguards to ensure direct and proportionate emissions reductions in the most polluted communities. This policy principle clearly comports with the statutory public health purposes of the CAA, which most interpreters of the law agree should not be weighed against costs to business. Effectively, this establishes a federal policy goal of factoring local pollution co-benefits into the design of GHG mitigation plans, without attempting to co-regulate GHGs and local co-pollutants in climate mitigation policy—which could be legally complicated under existing provisions and rules of the CAA.

Environmental justice restrictions on pollution trading is especially important as market-based compliance mechanisms are increasingly common in climate policy. Its revocation by the Trump Administration notwithstanding, the Clean Power Plan is indicative of likely continuing expansion of pollution trading as a component of federal climate policy. State and regional policy is also moving rapidly in this direction, including high-level proposals for a massive regional cap-and-trade system in the transportation sector across the Northeast. However, no matter what the future trajectory of market-based mitigation may entail, federal climate policy should establish rules for ensuring that market flexibility for polluters does not defer, diminish, or divert the potential public health co-benefits of GHG mitigation in the most vulnerable communities.

Other Second-Best Executive Action Approaches to Address Pollution Hotspots

- Strong federal incentives and detailed guidance for states to develop their own mandatory environmental justice protections in the context of a State Implementation Plan.
- Federal investments to target and accelerate voluntary pollution abatement strategies in frontline communities.

• Scientific and technological research to support more intensive abatement reduction strategies at lower cost.

Notably, the 3 approaches described above—pollution controls refinement and permitting changes based on cumulative impacts analysis, limiting pollution trading/pricing in federal policy, and federal investment in voluntary state and local environmental justice strategies, are not mutually exclusive and could be pursued jointly in certain combinations.

2. Additional Executive Actions for Environmental Justice

a) Reaffirm, Revise, and Expand Executive Order 12898 (1994)

- Reaffirm policy directives for "achieving environmental justice," and, via a new implementation memorandum, establish consistent and appropriately detailed compliance terms for agencies. Establish centralized oversight of agency requirements of assessing and addressing EJ impacts of federal policies and actions, including strategic policy development of agencies with the goal of achieving environmental justice. New oversight of EJ policy development should focus especially on agencies other than EPA (Transportation, Energy, Agriculture, Interior, etc.). The Interagency EJ Task Force should be restored and fully empaneled by agencies and required to produce an interagency strategic 10-year blueprint within the first year of a new administration, and subsequent interim and final progress reports.
- Update E.O. 12898 with a new section issuing complementary/aligned directives focused on emerging climate justice challenges for vulnerable communities not addressed in E.O. 12898.

b) Cumulative Impacts Directive

By executive order, direct EPA to require Cumulative Impacts and Risk Analysis (CIRA) agency-wide, wherever it is applicable in policy- and decision-making, such as setting and enforcing pollution standards, permitting facilities, or other agency actions. The E.O. should identify a meaningful but reasonable scope of CIRA applications in EPA policymaking. An advisory task force should be established and authorized to determine up-to-date methods and best practices of cumulative impacts and risk analysis, building on NEJAC recommendations dating back to 2004, as well as state-level models such as the CalEnviroScreen.⁵⁶ A science-based approach centered on impacts and risks for local population health and well-being (and one that is adjustable for varying forms and combinations of cumulative impacts in specific places), should be formally adopted for required use by

EPA. The CIRA assessment model should entail a consistent rubric as to factors considered and their interaction and weighting, developed in consultation with environmental justice leaders and health experts. Its stated purpose is to assess combined health effects and other human and social harms related to multiple environmental stressors considered over time. EPA should affirm compliance with this E.O. in a stated policy describing how it will be applied within the prescribed scope of actions in the E.O. The E.O. should additionally require similar consistent use of CIRA in all other relevant agencies, particularly with regard to transportation, energy, land and water uses, and actions affecting tribal nations and Indigenous populations. Non-EPA agency compliance with this order should be overseen by the Office of Management and Budget, in connection with the Climate Equity Accountability System (see below). The president should also revoke any and all adverse regulatory or administrative actions of the Trump Administration against policy, rules, and procedures of the National Environmental Policy Act.

c) Pollution Monitoring Directive

A new administration should at least triple funding for air, water, and soil monitoring. Expanded monitoring should be designed in consultation with state and local agencies and community organizations, including support for mobile monitoring and citizen science efforts. States and localities should target these resources to close pollution monitoring gaps in frontline communities, including tribal communities. Air monitoring components of this directive should be determined in connection with rulemakings and other directives of the federal No Hotspots policy (outlined above). Additional funding for air monitoring should be proportionate to need as determined by monitoring expansion required under the No Hotspots policy.

d) Safe Drinking Water Justice

By executive order, direct EPA to take the following actions:

- Develop a national safe drinking water action plan for community water systems regulated under the Safe Drinking Water Act (SDWA), more than 5,600 of which, serving nearly 45 million people, were found to be in violation of one or more health-based requirements of the law between 2016 and 2019.
- Develop a priority remediation list for eliminating drinking water risks in 500 counties with the highest combined rates of SDWA violations and racial equity vulnerability. Closing this list must be a top priority in ensuing executive budgets, notwithstanding congressional action or inaction, but the president should urge Congress to pass compre-

hensive legislation and related appropriations for 1) accelerated remediation of non-compliant community water systems, prioritizing those serving vulnerable populations and including replacement of all lead pipes; 2) wastewater and stormwater infrastructure upgrades and expansion favoring green over gray infrastructure and prioritizing federal resources for the most vulnerable communities, starting in the Gulf South and the Atlantic coast; 3) ensuring equitable access to clean drinking water for tribal communities, farmworker communities, and others among an estimated 2 million people who do not have direct, reliable access to safe drinking water in their homes or communities.

• By the same executive order, the EPA should be required to replace its obsolete 1977 guidance on water affordability in relation to wastewater upgrades, with the aim of more accurately reflecting the water utility burdens faced by low-income and especially very low-income households today. Accurate EPA guidance on water affordability should cover wastewater, drinking water, and stormwater, and accurate accounting for low-income affordability should be a key factor in considering utility rate-structure modifications in relation to utility service and infrastructure upgrades. The new guidance on water affordability should be followed with a mandated 50-state study of low-income water affordability and water access gaps, and the president should urge Congress to legislate and fund a federal block grant program for water Customer Assistance Programs in the states, similar to LIHEAP in the home energy sector.

e) Energy Justice—Rulemaking, Order, or Directive on Coordinating Energy Assistance and Energy Efficiency Programs

The president should order the Department of Health and Human Services (HHS) and the Department of Energy (DOE) to collaborate on an administrative rule requiring administrative and programmatic linkage of Low Income Home Energy Assistance (LIHEAP) and Weatherization Assistance block grant funds. States should develop integrated community-based strategies for linking energy-burdened households with energy efficiency services and upgrades. Households receiving LIHEAP assistance can be screened for weatherization services and other energy efficiency upgrades by use of a computerized energy audit. The energy audit is shared with Weatherization administrators and direct outreach to households follows to assist them with enrollment in Weatherization services programs. This approach

of programmatic integration serves LIHEAP'S statutory purpose of reducing energy bills by creating opportunity for positive energy savings, which in turn will also contribute to climate mitigation. In addition, energy efficiency employment is supported and taxpayers save money as energy-burdened households are made more efficient and enjoy related health benefits.

A holistic impact analysis of the two programs and their skewed proportionality of funds can justify this administrative policy based on statutory intent of both programs as well as fiscal impact analysis including co-benefits of health and climate mitigation.

Nothing in this administrative order can have the effect of diverting LIHEAP funds from bill assistance or reducing LIHEAP funds. The president should simultaneously pressure Congress to quintuple federal funding for LIHEAP and increase Weatherization Assistance funding to the same level.

One administrative stepping stone for integrated programmatic expansion of energy assistance and efficiency should be a presidential order to HHS and DOE to work with the Census Bureau and state and local agencies and utilities to conduct a national audit of low-income energy burdens and energy efficiency potential, including assessment of race and income gaps in energy burdens and energy efficiency of households and dwellings, as well as race and income gaps in enrollment in both programs.

f) Regulate PFAS

By executive order, require EPA rulemakings to establish comprehensive regulation of prevalent high-risk PFAS chemicals, including maximum contamination levels under the Safe Drinking Water Act, and designation of PFAS as hazardous substances under the Superfund program and the Resource Conservation and Recovery Act. The president should also urge Congress to amend SDWA to remove or revise regulatory review hurdles tailored for industry blockage of water safety regulation (established in 1996 SDWA amendments).

3. Regulate Oil Trains

Rationale

Fracked oil from North Dakota's Bakken Shale is extremely combustible, due to its high concentration of volatile organic compounds like propane, butane, and ethane released by the fracking process.⁵⁷

These compounds vaporize in tank cars as temperature increases, making them extremely flammable and likely to explode—hence the nickname "bomb trains." Tar sands crude shipped by rail from Alberta is similarly volatile due to natural gas condensate added to the tar sands bitumen, creating a substance called "dilbit." 59

Between 2008 and 2014, crude oil by rail traffic ballooned from 9,500 carloads in 2008 to 493,146 carloads in 2014—a 52-fold increase.⁶⁰ Rail transportation of volatile crude oil is increasing as pipeline construction has slowed and existing capacity is insufficient to keep up with supply.⁶¹ Rail accidents have also increased in recent years, but federal regulations have not kept up.⁶²

Low-income communities and communities of color are disproportionately at risk, according to national data⁶³ and in-depth mapping efforts looking at Pennsylvania⁶⁴ and California.⁶⁵ The same vulnerable communities are also disproportionately exposed to day-to-day pollution associated with increased diesel locomotive traffic and railyards.⁶⁶ In 2014, researchers found that approximately 25 million people live within a "blast zone" of these oil trains, in places like Albany (NY), Baltimore, Chicago, Houston, Philadelphia, Richmond (CA), and other parts of California.

Adding this kind of direct and potentially catastrophic community risk to the planetary risks compounding with each successive yearly cycle of fossil fuel extraction and combustion is not conscionable and not acceptable in federal policy charged with protecting public safety and health. At a minimum, specific rules should be developed to greatly improve public safety of oil rail cars and rail infrastructure, and to greatly reduce risk, especially in and around large cities and other populated areas.

Executive Actions

By executive order, a new administration should initiate a rulemaking to regulate and restrict rail transportation of fossil fuels—"virtual pipelines"—under transportation safety rules and a precautionary principle.

a) New Rulemaking: Direct DOT to initiate rail safety rulemaking immediately, covering crude oil and liquified natural gas by rail.

Ban dangerous DOT-111 tank cars and require accelerated replacement of unsafe cars with DOT-117 or other, safer cars, or retrofitting of unsafe cars to DOT-117 safety standards.

- Require two-person crews or more, tailored for unit length of trains.
- Require workforce policies to reduce crew fatigue and address other health factors compromising safety.
- Set a national limit of 9 psi (vapor pressure) to stabilize volatile cruel oil before transport.
- Require Electronically Controlled Pneumatic Brakes.
- Set speed limits at 30 mph or less depending on population and ecological risks along train routes.
- Require rail companies to re-route oil trains around urban areas and environmental justice communities by interchange.
- Establish requirements to ensure adequate spill response putting public safety first, and require certification of insurance coverage sufficient to cover full liability for rail accidents or other potential harms of shipping crude oil by rail.
- Other safety measures to be implemented or considered: Require adoption of Positive Train Control; establish federal regulation of track maintenance; limit train length and weight; limit sloshing.
- Prohibit shipment of Liquified Natural Gas (LNG) by rail.

b) An Immediate Moratorium on Unsafe Rail Cars and LNG.

- Until the rulemaking is complete, instruct DOT to immediately ban crude oil transportation via outdated tanker cars, and place an immediate moratorium on all LNG by rail.
- c) Statement of Policy: A statement of policy that the DOT will support states and municipalities to further regulate crude oil by rail.
 - The statement should include: labor standards like crew size requirements,⁶⁷ and measures to block permits for oil storage facilities, oil rail terminals, and other fossil fuel infrastructure.

II. Just Disaster Recovery and Equitable Adaptation

What is the Problem?

Among other climate change impacts, more frequent and stronger hurricanes, and other severe weather, in particular, bring disproportionate harm to low-income communities and communities of color. Not only are some communities more vulnerable to severe weather, but the damage done by severe weather disasters has a more lasting impact due to disparities in adaptation and in recovery efforts, compounding already existing economic, social, and political inequities. The same hurricane might hit 2 neighborhoods with the same amount of water and the same wind velocity, but whiter and more affluent neighborhoods fare much better in the short run and the long run due to discriminatory practices set into motion before and after the storm.

Disadvantaged communities have been excluded from housing options in less vulnerable neighborhoods for generations. As we upgrade our infrastructure to brace for more climate-fueled disasters, low-income communities and communities of color have been deprioritized, and upgrades that do move forward often result in economic distress and displacement of disadvantaged populations—a phenomenon called "climate gentrification." The historic and chronic problem of excluding community organizations and residents from policy planning and government decisions, which disproportionately affects communities of color, is acutely magnified as frequent climate disasters strain community resiliency already weakened by decades of public underinvestment in favor of affluent communities and economic elites.

When disasters hit, disadvantaged communities suffer more damage, and have a harder time getting help from authorities.

Following a disaster, disadvantaged populations suffer long-term wealth reduction and health consequences, and are more prone to long-term dislocation, family separation, and housing insecurity.

Recovery aid disproportionately helps affluent white communities recover, leaving communities with a greater degree of racialized inequality than before the disaster hit.

Communities with the least resources—and lowest carbon footprints—should not bear the brunt of a climate crisis rooted in an extractive and unsustainable economic model designed and implemented for the benefit of affluent white communities and economic elites. But the climate disasters scientists are predicting are on track to make our racial wealth and power gaps even wider. Our race-neutral and often discriminatory relief, recovery, and adaptation policies are making a less equitable world at every level, and the climate data suggest this problem will only get worse. Even in the most optimistic climate action scenarios, the disproportionate impacts of severe weather on communities of color combined with discriminatory disaster policies will continue to be a compounding societal problem if we fail to center racial equity and low-income equity in our disaster recovery and adaptation programs and practices.

To reverse these trends and set a better course for equitable disaster recovery, we must adopt a much more targeted approach that puts the most vulnerable communities, households, and populations first in determining the true scope of need, and ensures proportionate access to the resources necessary to meet that need.

Illustrative Findings

Disasters Increase Inequality

- Data show that rising wealth inequality and rising natural hazard damages are linked. Looking at disasters from 2009-2013, researchers found that as local hazard damage increases so does wealth inequality, especially along lines of race, education, and homeownership.⁶⁸
- Disasters also increase the racial wealth gap. Property damage data show that as damage increases, so does the gap between white wealth and Black wealth, even years after a disaster.⁶⁹
- The more disaster damages accrue in a county, the more wealth white households tend to accumulate, all else equal. Black households, on the other hand, tend to lose wealth as disaster damages increase.⁷⁰

Current Recovery and Adaptation Policies Increase Inequality

- The more Federal Emergency Management Agency (FEMA) money a county receives, the more white people's wealth tends to grow and the more Black people's wealth tends to decline, all else equal. So federal assistance seems to be exacerbating rather than reducing racial wealth inequalities in the wake of disasters.⁷¹
- An NPR investigation found that across the country, white Americans and those with more wealth often receive more federal dollars after a disaster than do people of color and those with less wealth. Federal adaptation and disaster readiness funding isn't allocated to those who need it most; it's allocated according to cost-benefit calculations meant to minimize taxpayer risk, meaning communities with higher property values are more likely to receive aid. Even in places that do receive adaptation investments, the climate gentrification that can follow tends to displace low-income people.⁷²

Recent Examples of Disaster Inequity

- African American communities, especially in metropolitan New Orleans, were disproportionately affected by Hurricane Katrina and underserved by the federal government. Rather than receiving the resources they needed to recover, rebuild, and return to their homes, many were forced out of Louisiana completely. Ten years after the storm, 90 percent of New Orleans residents had returned to their neighborhoods, yet just 37 percent of residents from the predominantly Black Lower Ninth Ward had come home. Today, there are 92,000 fewer Black residents in New Orleans compared with before Katrina.⁷³
- Following Hurricane Harvey, a survey found that white residents were twice as likely as Black residents to get aid applications approved. Approval rates were 34 percent for white applicants, 28 percent for Latinx applicants, and 13 percent for Black applicants. Wealthier applicants with incomes 4 times the poverty rate had a 46 percent approval rate.⁷⁴

No Such Thing as a "Natural" Disaster

 Climate-fueled severe weather events are increasing in frequency and intensity, further compounding inequality with each successive disaster. Disaster recovery experts Roberto Barrios and Colette Pichon Battle see social inequality in the wake of a disaster as a reflection of social inequalities that preceded a disaster. They

- refer to disasters as "lengthy historical processes that begin long before a hurricane makes landfall... Disasters are not things that besiege society from the outside, they are created by society."⁷⁵
- For example, starting with French Colonial law in the 18th century, the most desirable land in New Orleans was reserved for those who could prove complete French ancestry, while communities lower on the racialized class hierarchy could only live in more flood-prone areas. These geographic inequities persist to this day, resulting in more severe flood damage in low-income communities and communities of color compared to whiter and more affluent neighborhoods. Fecause socially created inequalities determine who lives and who dies, it is imperative that disaster recovery take local histories of inequality-making into account.

Privatization Makes Matters Worse

- In the wake of Hurricane Maria, ambitious plans to rebuild Puerto Rico's electric power infrastructure with hurricane-resistant distributed renewables and microgrids⁷⁷ were scrapped in favor of a privatization plan that relied heavily on new LNG infrastructure that would be both detrimental to the climate and more vulnerable to future climate disasters.⁷⁸ UTIER, the union representing utility workers claims that PREPA (the main public power utility for the Territory) intentionally delayed restoring power in order to build support for privatization, which could in turn cripple their union.⁷⁹
- Following Hurricane Maria, labor unions were able to take care of their members in areas receiving less FEMA aid, and assist with infrastructure planning efforts. Reports from the ground suggested that FEMA and their private contractors were confiscating aid sent by fellow union-members on the mainland, prompting unions to instead send small amounts of cargo on multiple passenger flights.⁸⁰ Policies that decrease union density like privatization of public services further inhibit labor unions from serving the needs of their workers after disasters.

The Equitable Path Forward

Disasters give us an opportunity to repair past wrongs. Segregation, unequal access to services, and disaster-prone infrastructure can all be addressed in the recovery process to yield a more equitable society, more resilient to the inequities of future disasters.

- True equity requires an acknowledgement of past injustices and a persistent commitment to remedy injustice. Barrios and Battle suggest that all relief and recovery efforts need to proceed with an acknowledgement of our "collective societal debt to historically disenfranchised communities" who bore the brunt of past disasters. Replacing neoliberal cost/benefit calculations and universally applied "best practices" with a culture that takes historic inequalities into account will require a fundamental paradigm change across multiple fields. The top-down decision-making patterns of adaptation, relief, and recovery efforts must give way to processes that promote community autonomy and self-determination, especially for communities who have been denied true democracy for generations.⁸²
- Anti-racist adaptation planning tools exist. Race-aware adaptation
 planning allows policymakers to resist systemic racism. The best
 adaptation practices will also work to combat racial inequalities
 in wealth and education—because these inequalities perpetuate
 uneven vulnerability in the face of disasters⁸³

Executive Actions for Disaster Equity

1. Equitable Long-Term Recovery

The president should issue an executive order or other directives to advance statutory goals of equity and justice for low-income households in the Community Development Block Grant—Disaster Recovery Program (CDBG-DR). The Department of Housing and Urban Development (HUD) should be required to establish a formal agency rubric of consistent requirements for CDBG-DR state action plans, specifying how damage and needs analysis will capture the true unmet need of low-income neighborhoods, households, and populations, how allocation and investment of recovery funds will remedy this true unmet need, and how the state action plans will protect civil rights and affirmatively further fair housing as required by CDBG law. The president should also issue rules or policy directives, as applicable, to ensure

that federal pre-disaster mitigation programs target substantial funding for locally planned resiliency solutions in the most vulnerable communities.

Rationale

CDBG-DR is the sole federal disaster program with a clear mandate for supporting long-term housing recovery and primarily for serving the needs of low-income households. However, from an equity standpoint, CDBG-DR implementation is fraught with problems. Not least of all, HUD has extensive waiver authority in the DR program, which can mean that state action plans do not always need to meet requirements of low-income prioritization or other standards carried forward from civil rights and fair housing laws. For example, because of HUD waivers, only 50 percent of CDBG-DR housing assistance not the statutory requirement of 70 percent—went to low- and moderate-income households after Hurricanes Katrina and Rita; Mississippi received a waiver to divert \$600 million to an unrelated port expansion project. Eighteen months after Superstorm Sandy struck New York City in 2012, a survey of low-income renters in Staten Island found that 40 percent had not returned to their homes and rents in the same areas had risen by 12 percent.84 After Hurricane Harvey, affluent white towns in southeast Texas received vastly more housing recovery funds per affected household than did cities such as Port Arthur and Beaumont, one-third to one-half of whose residents are black.85

To avoid inequitable outcomes in the future, State Action Plans (SAP) required by HUD for release of recovery funds should give much more attention, and specific policy focus, to equity. New Jersey's SAP after Superstorm Sandy, for example, had an overriding emphasis on linking recovery allocations to storm impacts, regardless of existing and significant variations in vulnerability and ability to recover in different hard-hit areas of the state. HUD's Allocation Notices only ask states to certify that they will make an effort to comply with the low-income and anti-discrimination standards of CDBG law; HUD does not require states to certify a detailed plan describing how, programmatically, they will achieve compliance with income targets and fair housing standards of the DR program, including how they will assess unmet low-income needs and how they will measure and monitor compliance. A related problem in imple-

mentation of CDBG-DR relates to insufficient data availability and/ or use of data to accurately assess disaster damages and to determine levels of unmet need with the distributional or geographic granularity necessary for targeting resources in compliance with income and other equity requirements. CDBG-DR State Action Plans often rely on FEMA damage assessments that vastly under-count disaster costs for low-income people and particularly non-homeowners.

Executive Actions

Equitable Determination of Damages and Unmet Need

To improve equitable implementation of disaster recovery, a new administration should issue an executive order requiring improvements in FEMA, HUD, and SBA data models for determining disaster damage assessments and unmet need for recovery of low-income households and neighborhoods, and vulnerable populations. These improvements should include, but not be limited to, the following:

- Require FEMA to develop a damage assessment data model that
 adjusts for factors that lead to undercounting of damage borne
 by low-income people and particularly low-income homeowners,
 renters, the unhoused, evacuees, undocumented people, tribal
 communities, and residents of *colonias*;
- FEMA should be required to publish damage assessment manuals for inspectors, and inspection records should include a demographical survey of each applicant, and anonymized data of inspection records should be analyzed by FEMA for demographic characteristics of inspection results.
- FEMA should formally codify and publish unbiased standards of No Disaster Related Damage in housing inspections, in keeping with a 2017 federal court decision finding illegal bias in denying disaster aid to more than 24,000 low-income residents hit by Hurricane Dolly in the Rio Grande Valley in 2008.
- Verified loss thresholds for determining unmet need should not be so high as to exclude many very low-income households from having "unmet need" for recovery aid. FEMA should standardize a verified loss assessment model that expands, not contracts, eligibility for residents with very low incomes. State and local data should be utilized in setting loss thresholds for recovery aid.

- FEMA cost-benefit methodology for determining value of disaster mitigation projects funded by FEMA and CDBG should be formally revised to exclude factoring of pre-disaster property values from benefit calculations—a practice favoring projects in more affluent areas because the benefit-to-cost ratio appears to be higher.
- Local impacts of disaster—and calculations of unmet need—should be assessed with regard to factors of disaster vulnerability that disproportionately affect low-income people and especially people of color, including but not limited to: affordable housing, exclusionary zoning, redlining and predatory home finance, economic displacement trends, transportation access, pollution exposure, and proximity to toxic facilities and waste management.
- States and cities seeking assistance, as well as other relevant federal agencies, should be required to cooperate with FEMA to ensure accurate and equitable damage assessments and unmet need determinations.

Equitable Allocation of Housing Recovery Assistance

- A. The president should immediately issue a statement of administration policy in support of permanent authorization of CDBG-DR through the Reforming Disaster Recovery Act (H. 3702; S. 2301). This legislation codifies the CDBG-DR program and is foundational for developing enforceable regulations to ensure equitable implementation of the program.
- B. The Secretary of Housing and Urban Development should issue a rule or directive establishing consistent requirements for CDBG-DR State Action Plans to do the following:
 - For determination of unmet need, utilize and publicize data, from FEMA and other sources, that capture, to the fullest extent possible, demographic and neighborhood distribution of disaster impacts on homeowners, renters, public housing and other affordable housing providers, unhoused people, *colonia* residents, Indigenous communities or populations, evacuees and relocated people, as well as impacts on schooling access, health care access, transportation access, and other factors that result in inequitable recovery outcomes after large disasters.
 - Detail a specific plan describing how, programmatically, the state will target DR resources with a purpose of achieving

compliance with equity mandates of CDBG law, including prioritization of low-income and very low-income residents, public housing recovery and affordable housing recovery, "affirmative-ly furthering" the amount of affordable housing units and their affordability, and proportionate recovery for renters, unhoused residents, and evacuees. How compliance with required equity priorities of the plan will be measured, monitored, and reported should be explained in detail.

- HUD should establish a formal Community Directives Protocol requiring grantees to follow a clear, consistent, and meaningful process for receiving input specifically from frontline community stakeholders on State Action Plans and related administrative processes. This Protocol should include a grantee report on frontline community input and a formal, public response on key equity challenges as determined by an independent assessor of public comments and hearing testimonies. A pre-disaster mitigation small grant program should be established for floodplain communities to work with FEMA Community Planning and Capacity-Building Department and local experts to develop local vulnerability assessments by neighborhood, which should be utilized by grantees to inform State Action Plans for disaster recovery. Post-disaster surveys of residents of impacted low-income neighborhoods should be required of grantees to measure and evaluate grantee performance on low-income recovery and equity across impacted areas.
- Undergo periodic reviews by HUD based on monitored actual spending, transparently reported, and with a procedure for HUD to require spending or other programmatic modifications by the state to correct unlawful inequities, implementation flaws, administrative failures, or other factors affecting compliance with equity priorities of the CDBG-DR program.
- HUD should issue a formal summary guidance on policies likely to land grantees in court on civil rights and/or fair housing grounds. Recovery funding allocation formulae based on discriminatory home valuations should be expressly prohibited, and specific legal guidance should be issued for home buyout programs related to mitigation goals—to ensure equity for low-income households and prevent discrimination in design and outcomes of such programs, especially as related to market property values.

2. Equitable Resiliency

The president should direct FEMA to establish an equitable, scientific, and natural systems-based based resiliency standard for its new pre-disaster mitigation program.

Rationale

The Disaster Recovery Reform Act of 2018 (DRRA) creates a new pre-disaster mitigation grant program called Building Resilient Infrastructure and Communities (BRIC). FEMA is charged with conducting a rulemaking for implementation of the BRIC program, including establishing criteria for defining resilience and meeting resiliency goals in the program design of approved grantees. It is essential that these regulations establish programmatic resiliency standards emphasizing equity of protections and benefits for the most vulnerable communities, and the need for nature-based mitigation. In this light, public comments already submitted in the rulemaking process on BRIC should be carefully reviewed by a new FEMA Administrator.

The president should also issue a policy position telling Congress to amend DRRA to eliminate a potentially massive loophole in resiliency requirements. DRRA authorizes presidential waiver power of FEMA's longstanding "duplication of benefits" prohibition, which is meant to prevent, among other things, diversion of federal disaster aid to other federal projects such as costly, ecologically damaging, and/or otherwise misconceived water engineering projects of the U.S. Army Corps of Engineers. BRIC funding and other pre-disaster mitigation funding should be shielded from such diversion and instead should be primarily invested to serve the resiliency needs of the most climate-vulnerable communities.

Executive Actions

A new administration should review and seek to amend or replace any proposed rulemaking on resiliency standards of FEMA pre-disaster mitigation funding, to ensure a federal definition of disaster resiliency, for BRIC and other mitigation funding, that accounts for and seeks to:

1) Produce equitable outcomes of pre-disaster mitigation by reducing disparities of climate risk and vulnerability created by multiple factors, including:

- A. Demographic factors such as income and wealth, race/ethnicity, Indigenous status, health disparities, poverty, employment, immigration status, housing status.
- B. Neighborhood characteristics such as pollution exposure, hazardous chemical and waste exposure, cumulative impacts of multiple exposures, water quality, racial segregation, housing affordability and quality, heating and cooling burdens, disability barriers, and access to quality health care, transportation, public assistance, and public services.
- C. Public mistrust, language barriers, lack of internet access, lack of public outreach capacity and other factors that determine accessibility of recovery assistance and services for the most impacted residents.

2) Implement equitable retreat from flood prone areas, and nature-based mitigation of disaster risk, including:

- A. Voluntary, equitable home buyouts and relocation funding for the most climate-vulnerable low-income households, with gradual green reclamation and cumulative rezoning of parcels as large natural area for mitigation and community amenity.
- B. Strategies to protect and restore local and regional ecosystems, including protection of coastal ecosystems from fossil fuel drilling and infrastructure.
- C. Resiliency infrastructure investments should align with upto-date flood mapping incorporating climate risk factors, with a primary goal of protecting public housing, transit, and lowincome neighborhoods.
- D. Green infrastructure to manage stormwater and other climate change impacts.
- E. Urban forestry to mitigate urban heat islands.
- 3) By executive order or other policy directive, the president should require OMB to coordinate with agencies to establish a regularly updated National Climate Preparedness Plan.

The Trump administration deleted climate change from the National Preparedness Report of the Homeland Security Administration. A new administration should do the opposite by establishing requirements for a National Climate Change Preparedness Plan, independent of the National Preparedness Report, which should narrow its focus to conventional security issues such as foreign and domestic terrorism, cyberwarfare, and biological warfare. Biennially released, the National Climate Change Preparedness Plan should focus on disaster recovery, mitigation of climate vulnerability and addressing sectoral and eco-systemic impacts, and long-term resiliency strategies. It should include a summary of enacted or proposed changes in recovery and resiliency policy that specifically seek to remedy racial and income disparities in climate change vulnerability, as well as administrative improvements to ensure that low-income policies in disaster recovery and mitigation are more fully utilized by the people most in need.

III. Climate Equity Accountability and Enhanced Stakeholder Review

What is the Problem?

We define frontline communities as those that have experienced systemic socioeconomic disparities, environmental racism, and other forms of injustice. That includes communities of Black and brown people, tribal nations and Indigenous communities and populations, and low-income communities more broadly. As the climate crisis worsens, these communities and others, including deindustrialized communities, depopulated rural communities, vulnerable elderly populations, unhoused populations, undocumented residents, and people with disabilities, will be on the frontlines of the climate crisis.

In the coming years frontline communities will face accelerating climate impacts with inadequate protections and resources available to defend themselves. Historically, environmental protection laws and regulations have not taken the particular needs of frontline communities into account. Even if a rulemaking process or other government action appears to consider equity or environmental justice, there is currently no enforceable accountability, whether to ensure meaningful input from frontline leaders or to empower frontline communities to modify or prevent federal rules or other actions. In the case of tribal nations, such lack of accountability is magnified by historic and ongoing violation of treaty rights, trust obligations, and Indigenous principles of self-governance.

Science tells us that avoiding the worst consequences of the climate crisis will require the United States to mobilize a full-scale effort analogous to the historic New Deal but focused on ending our reliance on fossil fuels and building out a transformative, zero emissions economy with millions of new jobs and much more resiliency. Yet history has shown that the New Deal and other large-scale government efforts have tended—and often intended—to reinforce historic and ongoing racial hierarchies of status, wealth, and power.⁸⁷ This is an enduring legacy of our country's founding as a

white settler colony and a slaveholding society, economy, and political system, but the climate crisis threatens new levels of risk and adverse impacts for communities of color and other vulnerable populations that continue to be subordinated by the affluent white minority in these and other respects. A truly positive path forward requires learning from our history; designing policies to remedy, not worsen, inequities; and proactively structuring accountability mechanisms that center frontline communities and their needs and priorities in climate and energy policy decisions.

Illustrative Findings

Regulation Without Equity

- While the executive branch, or at least its environmental justice advisors in NEJAC and other bodies, may have the expertise to assess equity in rulemaking and programmatic investments, there are no standard procedures for doing so, and there are no stakeholder engagement requirements for climate and environmental rulemakings that affect frontline communities. Furthermore, EPA's environmental justice screening tools, while important and useful for data analysis to identify environmental justice communities, are not intended for policy impact analysis, including distributional and cumulative effects and policy interactions.
- The Congressional Budget Office (CBO) has a mandate to provide "independent analyses of budgetary and economic issues," ⁸⁹ but that analysis does not include equity. [Senator Kamala Harris' Climate Equity Act, mentioned below, requires equity scoring of proposed legislation in the nexus of climate, energy, and environmental policies developed in the Congress]. The lack of independent equity analysis in the lawmaking process delays conversations about equity until implementation. At the same time, economic cost-benefit analysis is standard procedure in regulatory review at the proposal stage, which elevates costs to business over community needs and can be manipulated to vastly undervalue public welfare benefits. ⁹⁰

Top-Down Public Participation

 Despite the increased opportunity for public participation created by the environmental justice movement and executive agencies following E.O. 12898, participation from minority and low-income communities "remains uneven," according to Daley and Reames in their assessment of 20 years of stakeholder engagement by EPA, Department of Energy (DOE), and Department of Transportation (DOT).⁹¹ Opportunities for public participation in environmental decision-making have been increasing, but we have not seen a corresponding increase in public involvement.⁹²

- Daley and Reames found that traditional public participation mechanisms currently in use by the EPA tend to result in "top-down, expert-driven, decision-making despite calls for more bottom-up approaches to public participation." Their definition of traditional mechanisms includes: public hearings, public comment periods, and one-time seminars, workshops, roundtables, and advisory committees.⁹³
- White, wealthy, and more educated citizens are overrepresented in existing patterns of public participation. Existing public participation mechanisms set up language barriers, and use technical jargon that obscures how government decision-making might affect the interests of low-income communities and communities of color.⁹⁴
- Some research suggests that traditional public participation structures actually contribute to environmental justice problems. More politically active communities are more successful at waging NIMBY-style fights against power plants, hazardous waste sites, landfills and other locally unwanted land uses (LULUs). Participatory activity from privileged communities then increases the likelihood that LULUs will instead be sited in communities with lower levels of political mobilization and public participation, which are often minority and low-income neighborhoods. A race-neutral and class-blind policy of increasing total public participation can lead to less equitable outcomes. 95
- One particular challenge for the EPA has been broadening the scope of who represents the affected public in a rulemaking process. Government agencies commonly recruit people from organized groups, which results in a similar set of engaged stakeholders from process to process without expanding access to new participants.⁹⁶

Localizing Decisions Without Balancing Power Has Not Helped

• Devolution of decision-making to local and state governments has resulted in outcomes that are neutral at best and oppressive at worst, according to analysis from Sheila Foster. Consensus-based

processes have been shown to be particularly ill-suited for resolving questions of distributional equity that come up in siting or investigating LULUs, often just adding legitimacy to decisions that solidify existing hierarchies of race and class, and creating a feedback loop that further perpetuates inequality. The evaluation from Daley and Reams confirm that these challenges continue to manifest, allowing state and local processes to legitimize inconsistency on the part of federal regulators.

- According to Foster, devolution is an appropriate way to identify goals, but then more centralized authorities need to be empowered to make sure those goals are met, and context-based accountability mechanisms need to be put in place to ensure that the stakeholders most at risk are offered technical resources and access to decision-making processes designed to address the procedural and distributional equity concerns of the environmental justice movement.⁹⁹
- Shifting focus and access across different presidential administrations has made public participation more difficult. For example, in 2001, President George W. Bush's first EPA Administrator announced a new policy of "environmental justice for everyone," rather than highlighting the significance of communities of color and low-income communities included in most definitions of environmental justice. Privatization of public participation efforts has a similar effect on participation from affected communities.¹⁰⁰
- For example, researchers followed a 12-year DOT-led public participation process in the frontline community of Delray, Michigan, involving a new international bridge that would expose a low-income community of color already surrounded by industrial activity to additional air pollution from heavy-duty freight engines. From 2000 to 2012, community members were encouraged to spend hours of time and energy attending outreach meetings, phone meetings, and hearings, often utterly confused about the process and whether or not their efforts would have any impact on the outcome. Residents reported feeling "demoralized," "disrespected," and "discriminated against." In an interview, one resident said they stopped participating in the process "because I feel it is just a big PR event." Another resident said "they try to trick us," implying that the consultation process was inauthentic.101 Workers broke ground on the Gordie Howe International Bridge in 2018.

Models that Empower Frontline Communities

- Research suggests that increasing public participation from affected communities will require a combination of standard national approaches and flexibility to make sure solutions are tailored to local problems. For example, former EPA Administrator Lisa Jackson's "Plan EJ 2014" sought to break down silos and establish standard national procedures that also took local context into account, like a national approach to identifying environmental justice communities. The EPA's Community Action for a Renewed Environment (CARE) is often cited as a model initiative for facilitating meaningful public engagement between the EPA and individual EJ communities. The grants support robust community interactions with EPA staff, increasing trust between community leaders and EPA staff, and increasing the technical capacity of affected communities. 102
- Frontline communities and their allies have pioneered local climate change solutions and statewide policies, such as California's multi-family affordable housing solar mandate developed by Asian Pacific Environmental Network (APEN) and California Environmental Justice Alliance (CEJA),¹⁰³ and New York State's Climate Leadership and Community Protection Act.¹⁰⁴

Executive Actions for Climate Equity Accountability

1. Climate Equity Accountability System

The president should establish by executive order a Climate Equity Accountability System for federal policies addressing climate change and environmental protection, including federal actions affecting Indigenous communities and tribal lands, culture, and economic well-being.

Rationale

The people of the United States have the right to live in a healthy and sustainable environment, with access to clean air and clean water. In order for this right to be realized for all, the federal government must establish policies that address systemic environmental injustices and the growing inequities fueled by climate change. Systems of governance that increase the direct participation and representation of frontline com-

munities in policymaking processes, and that establish mechanisms to hold federal agencies accountable to the needs, priorities, and perspectives of frontline communities, are required to ensure that federal policies achieve this goal.

Climate Equity Accountability System (CEAS)

The president should issue an executive order requiring the Office of Management and Budget (OMB) to establish an accountability infrastructure and policy review process with consistent standards and procedures for ensuring that federal agency policy development achieves climate and environmental justice goals by:

Measuring Equity Impacts

- Requiring the Office of Information and Regulatory Affairs (OIRA) to develop a comprehensive, publicly accessible, interactive data mapping system to identify complex vulnerability of places and regions—including environmental, socioeconomic, and resiliency factors. The mapping system tools should be programmable to measure positive and negative effects of rules and policies. One mapping module should focus on identifying pollution hotspots in alignment with federal No Hotspots policies.
- Requiring equity impact assessments of proposed federal rules, and select existing rules, addressing climate change and/or environmental protection, or any federal action potentially having adverse environmental effects on frontline communities and tribal lands.
- Requiring equity impact reviews of programmatic investments addressing climate change and/or environmental protection, or other federal investments potentially having adverse effects on climate resilience and environmental protection in frontline communities and tribal lands, or perpetuating disinvestment in frontline communities in favor of affluent communities.
- Requiring OMB audit of programmatic investments and subsidies on climate, energy, and environment to determine a baseline percentage of total current investment in, or for the benefit of, frontline communities.

• Establishing an interagency mandate to modify programmatic investments, as allowable by law, for the purpose of ensuring that no less than 40 percent of total climate, clean energy, and environmental spending is targeted for the benefit of frontline communities and populations. This follows models of "disadvantaged community" investment mandates established in New York State and California. OMB is responsible for budget planning to achieve compliance with the 40 percent frontline investment mandate, as allowable by law.

Enhanced Stakeholder Review

- Adverse findings in equity assessments of proposed federal rules and programmatic investments triggers an additional dedicated process for enhanced, direct participation and representation of frontline communities in formal review of proposals and in modifying proposed rulemakings and programmatic investments.
- Federal agency accountability to frontline communities is not a choice but a matter of regulatory compliance with the procedures and goals of the CEAS.

In addition, the administration should actively engage Congress to pass the Climate Equity Act (sponsored by Senator Kamala Harris and Representative Alexandria Ocasio-Cortez), or similar legislation designed to codify a CEAS policy, or something similar, in federal law.

CEAS Administrative Structure

The CEAS shall be administered through a new administrative infrastructure based in the Executive Office of the President, and accountable to the President of the United States:

- The Office of Climate and Environmental Justice Accountability (OCEJA) is established in the Office of Management and Budget, headed by a Director appointed by the President of the United States.
- Senior Advisors for Climate and Environmental Justice Accountability are appointed to enumerated agencies, reporting to the Director of OCEJA to ensure government-wide compliance with the goals of this executive order.

• In the CEAS, frontline stakeholder input on rules and investments addressing climate change or environmental protection, or other rules and investments that raise concerns about climate resiliency and environmental protection in frontline communities, is invited, financially supported, and given significant weight in policy development. Opportunities and procedures for frontline community engagement in assessing proposed rules and programmatic investments, and reviewing existing rules and investments, are clearly delineated, enforced by the OCEJA, and, failing that, enforceable by judicial review of community complaints of non-compliance with ordered procedures of stakeholder engagement.

2. Other Equity Reforms of Regulatory Review

Strengthen Executive Order 12866 in Alignment with Environmental Justice

The president should issue an executive order modifying or replacing E.O. 12866, which requires cost-benefit analysis of significant federal rules with "an annual effect on the economy of \$100 million or more or adversely affect[ing] in a material way the economy, a sector of the economy, productivity, competition, [or] jobs."

The E.O. should discontinue use of formal, economistic cost-benefit analysis by federal agencies or other offices, except where explicitly required by statute or the courts. Where consideration of costs is broadly required by statutes, agencies can consider costs but not in a manner of weighing such costs against public benefits of regulation or statutory goals such as public health. Public benefits of regulation include co-benefits, non-market benefits, and consideration of cumulative impacts and complex risk.

Precautionary principle and, where applicable, zero or very low discount rates, should be utilized in regulatory review in critical areas of climate and environmental risk, including: public health risks due to climate change; environmental degradation of communities; disaster resiliency in multiple dimensions; GHG mitigation needs relative to scientific benchmarks of warming dangers; and ecosystem resiliency including biodiversity, coastal resilience, and soil, freshwater, and ocean health.

The Office of Information and Regulatory Affairs should be fundamentally transformed and have no central role in reviewing agency

rulemaking proposals. OIRA can be repurposed to focus on research in support of strong and effective regulation to improve public well-being and ensure equitable outcomes of federal policy. This research mission should include climate risk analyses and other complex research to align regulatory policy with the equity goals of the Climate Equity Accountability System and the Office of Climate and Environmental Justice Accountability. The purpose of executive actions to reform OIRA regulatory review should be stated as federal policy to the effect that strong regulation of public and private activities contributing to climate change and other environmental harms, notwithstanding private and public costs of harm reduction, is justifiable and necessary on democratic principles of protecting public health and providing a habitable and healthy future for today's children and subsequent generations.

3. Climate Equity Accountability and Indigenous Sovereignty

Rationale

These policies for executive action are undertaken in recognition that Indigenous peoples have suffered and continue to suffer from historic injustices as a result of dehumanization and racism, and the colonization and dispossession of their lands, territories, and resources, preventing them from exercising, in particular, their right of self-determination in accordance with their own needs and interests, extending to their rights affirmed in treaties, agreements, and other constructive arrangements entered into with the United States and its several states, and the urgent need to respect and promote their inherent rights as peoples.

Executive Actions

Free, Prior and Informed Consent of American Indian and Alaskan Native Tribal Nations and Entities

In alignment with the Climate Equity Accountability System, the president should, by rule or order, establish a consistent standard and procedure requiring federal agencies to secure the Free, Prior and Informed Consent of American Indian and Alaskan Native tribal nations and entities confronted with significant federal actions affecting their lands, livelihoods, and culture.

Indigenous Native Peoples' right of Free, Prior and Informed Consent shall extend to:

- Lands, territories, and resources which they have traditionally owned or otherwise occupied or used, and which have been confiscated, taken, occupied, used or damaged without their Free, Prior and Informed Consent, must be returned to them.
- Any removal or relocation from their lands and territories, whether ceded or unceded, without their Free, Prior and Informed Consent shall be prohibited and not take place.
- Their tangible or intangible cultural heritage, including cultural, intellectual, religious and spiritual property taken without their Free, Prior and Informed Consent or in violation of their laws, traditions, and customs shall in all cases be returned to them.
- No storage or disposal of hazardous materials shall take place in the lands or territories of Indigenous peoples without their Free, Prior and Informed Consent.
 - » Free, Prior and Informed Consent shall be obtained before adopting administrative measures that may affect them or prior to the implementation of any such legislative measures that may affect them.
 - » Indigenous consent to significant federal actions mandated by the United States government's trust responsibility to Indigenous nations shall be a rule of federal policy. Indigenous nation concerns shall be respected and accommodated by the federal government.
 - » As applied to federal permitting and other actions affecting tribal lands, inclusive of off- reservation treaty-reserved hunting, fishing, gathering and ceremonial rights, NEPA assessments, cost-benefit analysis and other evaluative determinations of agency actions, federal agencies shall adopt a precautionary principle of weighing risks and shall account for cumulative environmental, sociocultural, and socioeconomic impacts, as well as ecological resiliency and non-economic factors of culture, spirituality, religion, and communal health and well-being. Federal liability and indebtedness extending from historic and ongoing failure in trust responsibilities shall weigh against decisions based on economic benefits for non-native parties.
 - » The President of the United States shall be obligated to deny or overturn agency decisions that are not a result of negotiated consent of affected tribes; agencies must formally acknowledge this presidential obligation in writing within 90 days of inauguration of a new administration.
 - » The president will work with Congress to codify and enshrine Free, Prior and Informed Consent principles in federal law, with a right of judicial review.

Indigenous Understanding of Broken Trust, Responsibility, and Restoration by Supporting Indigenous Climate Justice

The President of the United States should order and commission an independent review and determination of broken environmental and social trust responsibilities to American Indian and Alaska Native nations and their citizens. This review shall be used to formally and legally recognize liability of the U.S. government and on that basis to direct Congress to establish a 12-year fund specifically dedicated to ensuring a just transition for tribal nations and their peoples, with spending levels determined according to need.

These efforts should be directed to ensure Indigenous peoples' right to maintain and develop their political, economic, and social systems or institutions, to be secure in the enjoyment of their own means of subsistence and development, and to engage freely in all their traditional cultural and other economic activities.

These efforts shall also extend to treaties and agreements entered into with the United States, according them their due recognition and observance.

The scope of violations of the trust responsibility to Indigenous nations in this review, related to the environment and its protection, and Indigenous well-being, include: land use practices; interior and coastal waters pollution; protection of aquatic ecosystems; wildlife decimation; soil contamination; plant biodiversity destruction; the impacts of fossil fuels, mining, and nuclear waste; electric utilities' rights of ways; household and tribal energy burdens; human and ecological health and education disparities; as well as spiritual and cultural loss. The factors and data used to verify liability on a proper scale shall be approved in consultation with Indigenous nation leadership and with their consent. Federal investment in an Indigenous just transition will support self-governance and self-determined tribal implementation plans, including investments in tribal owned and operated renewable energy generation; ensuring tribal wind and solar power projects priority access to the electrical grid; energy efficiency and healthy homes; safe drinking water access; habitat and ecosystem restoration; regenerative land use; food sovereignty; and other factors of an Indigenous Just Transition.

The scope of review shall also necessarily include racial and cultural discrimination against Native peoples, whether public or private in its nature and extent, and undertake effective steps to eliminate it.

In consultation and cooperation with Indigenous people's representation, legislative measures to achieve the ends of this policy will be undertaken and supported.

IV. Energy Democracy: Public and Community Energy

What is the Problem?

Today, distributed energy resources (DER) like rooftop solar, home batteries, and community power plants have the potential to fundamentally change the economics of our centralized electric grid. Unlike a coal plant, a solar panel can be economical at a very small scale, reducing the need for an expensive network of transmission lines. However, 72 percent of U.S. electricity customers are served by for-profit or investor-owned utilities (IOUs), with government-granted monopoly status and a huge financial stake in maintaining private monopoly control of the energy system.¹⁰⁵

For utilities maintaining large-scale transmission infrastructure, new rooftop solar installations and other distributed energy resources pose an existential threat to their bottom line, because localized on-site and community-based renewable energy competes with generation and transmission assets owned by vertically integrated utilities. At the same time, as electricity demand rises with electrification of transportation, buildings, industry, and agriculture—necessary to meet IPCC global warming targets—the overall structure of renewable power generation likely will need to strike a balance between utility-scale generation and distributed energy resources. Along this spectrum, public and community control of the energy system is the key to a just and equitable energy transition—primarily for residents and workers in climate-impacted frontline communities, but also for workers in the fossil fuel economy who deserve good jobs in the new clean energy economy.

Public control of utilities and grid infrastructure, blended with community-scale and regional build-out of renewably-sourced, community-owned distributed energy, can transform an energy system that is not only failing our planet, but is harming communities on the frontlines and fence lines of fossil fuel capitalism, as we have documented in this report. To effectuate the transition we need,

energy democracy is considered a pivotal paradigm shift by many frontline leaders in impacted communities.¹⁰⁶

Energy democracy describes a range of political, economic, and social opportunities for establishing public and community control of the energy system, in alignment with the new technological and environmental realities facing the electricity sector and the economy as a whole. Redistributing energy assets from big central power plants to small-scale solar installations and batteries means moving billions of dollars, and political power, out of the hands of the investor class and into the hands of local communities. Opportunities for community wealth-building and self-determination lie behind every new solar panel, and every new battery deployed as part of our renewable energy future. tribal nations, especially those working to transition from fossil fuels to renewable energy, should have sovereignty and public financing to determine the course of, and benefit from, community solar and wind or, in some cases, larger-scale renewables that could be sited on their border lands and generate revenue from nearby communities. With all of this said, however, most DER deployment, to this point, is riddled with racial inequities that must be addressed, now rather than later, in policy development and targeted investment.¹⁰⁷ An energy transition without equitable access to the assets, jobs, and other benefits of distributed energy cannot be considered a just transition.

No less important, energy democracy can alleviate increasing resiliency challenges and public safety risks posed by a top-down, centralized, and profit-driven energy system. California's recent record wildfires, the resulting destruction and public health impacts, and Pacific Gas & Electric's justifiable liability should not be considered an unfortunate outlier but a clear warning of future crises, as centralized energy faces increasing climate risks and impacts.

Finally, at a minimum, de-privatizing utilities and, more generally, affording greater public control of the energy system at all levels can be powerful leverage to counter fossil fuel interests and rapidly reduce fossil fuel dependency in the power sector. To the extent that utility-scale services are needed in a fully renewable energy system, it is critical that large utilities are de-privatized and investor control and fossil fuel interests are supplanted by public ownership with strong democratic controls.

We are at a critical stage in deciding who will control the energy system. The profit-maximizing model of investor-owned utilities is causing them to fight distributed energy resources like rooftop solar, battery storage, and microgrids. Policy barriers to competition from DER, and to its clear social benefits, are proliferating, not shrinking, as the climate crisis accelerates. As noted, however, even with a more level policy playing field for DER, financial barriers by income, race, and residential status are effectively segregating solar access in favor of affluent white homeowners and communities. Alternatively, by fighting back on policy and investing in community solar access for low-income communities and households, and especially renters, we can build a lasting economic constituency that will continue to support decarbonization efforts even as the political winds may shift.

Democratizing our energy system can create deep structures in the American economy that begin to undo the environmental injustices and inequitable vulnerabilities baked into our current energy system. By centering equity into our vision of a modern decentralized electricity grid, we have an opportunity to combat inequality as we solve climate change.

Illustrative Findings

Why are For-Profit Utilities Fighting Rooftop and Community Solar?

- Many for-profit, investor-owned utilities rightly see distributed energy resources (DER) as an existential threat to their business model. In 2014, Barclays downgraded electric utility bonds over concerns that distributed renewables would compete with investor-owned utility profits. "In the 100+ year history of the electric utility industry, there has never before been a truly cost-competitive substitute available for grid power," in reference to solar coupled with storage. "We believe that solar + storage could reconfigure the organization and regulation of the electric power business over the coming decade. We see … long-term risks from a comprehensive re-imagining of the role utilities play in providing electric power."
- For-profit utilities are increasingly using their incumbent advantage and political connections to block communities from using renewables. For example, in 2015 Nevada's investor-owned utility NV Energy famously torpedoed the state's growing solar industry by stopping a "net metering" law that would allow power consumers to sell solar energy back to the grid. Because the new distributed model of solar was in direct conflict with the centralized business model of the incumbent utility, NV Energy was incentivized to block policies that encouraged residential solar. 110

- The utility won, and Nevada's solar industry collapsed. A similar fight was instigated by the largest for-profit utility in Florida. And utilities in almost every state are following suit.
- So-called "deregulation" efforts in the 1990s have only cemented the monopoly status of most for-profit utilities. Current policies have created wholesale and retail markets that allow large-scale power generators to sell power to distribution utilities on terms beneficial to utilities, while closing off market opportunities for residential and community-level renewables, which don't require expensive transmission lines to get their power to market. This creates a market that overvalues large, centralized nuclear and fossil fuel-based power plants and large-scale transmission infrastructure over distributed renewables, resulting in higher electricity rates, and more wealth extracted from local communities. 115

The Promise of Public and Community-Owned Power

- In the 1930s, high rates and abusive business practices prompted Nebraska voters to support a measure to replace Wall Street-backed utility holding companies with public and community-owned electric utilities. Now Nebraska pays some of the lowest electricity rates in the country and leads the nation in wind power,¹¹⁶ all from 166 different public or community-owned utilities.¹¹⁷
- Nearly 2,000 publicly-owned utilities operate at the federal, state, and municipal level (colloquially called "munis"),¹¹⁸ and that number has been expanding recently due to grassroots (re)municipalization campaigns¹¹⁹ and New Deal-era laws that facilitate utility (re)municipalization in almost every state.¹²⁰ Over half the country by land mass is powered by 831 community-owned rural electric cooperatives, or co-ops, owned and controlled by their customers.¹²¹
- Because public power and community-owned power are accountable to the needs of communities, not just shareholders, they are seen by energy democracy advocates as more promising vehicles than for-profit utilities for maximizing self-determination and wealth-building opportunities for the communities they serve. For example, on issues of siting transmission infrastructure, or a community solar array, a smaller local municipal utility or co-op has more aligned incentives with community stakeholders than a for-profit utility that is accountable first and foremost to wealthy shareholders. 123

- In light of expanded DER, experts at the Rocky Mountain Institute see 2 archetypal paths a utility can take: either maintain their monopoly status by maximizing ownership of customer-sited DER like rooftop solar, and therefore maintain profitability; or transform into a neutral "platform operator" model focused on facilitating third-party DER connections, potentially for a subscription fee. 124 This platform model would make local distribution utilities a common carrier, like the post office or the internet, allowing for maximum community ownership of renewable energy and storage assets. 125
- It cannot be overstressed, however, that DER deployment, without strong direction from public policy, has been highly inequitable by income and race. By relying on market incentive structures such as tax credits and low-interest loans, instead of direct public investment, DER deployment is mainly comprised of rooftop solar in middle-and high-income communities. Particularly for renters, public investment equal to the potential scale of community solar access in low-income communities is a major building block for energy democracy.
- According to research from the Institute for Local Self-Reliance (ILSR), over two-thirds of the local benefits of siting solar panels in a community come specifically from ownership: "Every megawatt of solar installed adds \$2.5 million and 20 construction jobs to the local economy. In its 25year lifetime, a locally owned solar project will redirect an additional \$5.4 million of electricity spending back into local pockets, instead of to utility shareholders." 127

Challenges Facing Public and Community Power

- According to research from Johanna Bozuwa at the Democracy Collaborative, even though public utilities and cooperatives have far less incentive to attack distributed renewables, they aren't doing much to support them, either. The path of least resistance is to maintain the status quo.¹²⁸ Two frequently cited reasons for these challenges are: first, an (often malicious) erosion of democratic norms within munis and co-ops, and second, partial privatization via long-term power purchase agreements.¹²⁹
- More than 70 percent of cooperatives have voter turnouts of less than 10 percent, which experts attribute to a combination of apathy and intentional disenfranchisement.¹³⁰ For example, in Mississippi 37 percent of the state is Black, but only 6.6 percent of the co-op members in board seats are Black.¹³¹ In the Deep South, co-ops often function as "private reserves of capital for local elites," according to a

report from the Southern Regional Council. "In areas like the Black Belt, self-selected boards of economically powerful whites have dominated management of the co-ops through intimidation, misinformation, and blatant manipulation of electoral procedures." Local elites in these areas could then give lucrative contracts or cheap electric rates to other local elites, solidifying their place in the racialized class hierarchy. 132

- Grassroots organizations like One Voice Mississippi are organizing to ensure that women and people of color win co-op board elections. Others, like Kentuckians for the Commonwealth (KFTC)¹³³ and We Own It, have put forth proposals to remove structural barriers to energy democracy. Ironically, one of the most detailed democratization proposals comes from the national trade organization that represents the interests of co-ops.¹³⁴ Energy democracy advocates suggest the report was kept private in order to serve the interests of the less democratic cooperatives.¹³⁵
- Policy from the 1970s ensured that munis and co-ops got locked into long-term power purchase agreements (PPAs), often with generation and transmission co-ops (G and Ts) that rely mostly on coal. With decentralized renewables now available to co-ops, these power purchase agreements prevent democratic control and decarbonization.
- The expiration of a PPA in 2012 was the number one factor that famously helped the municipal utility of Georgetown, Texas, switch to 100% wind and solar.¹³⁷ In New Mexico, the Kit Carson Electric Cooperative paid \$37 million to sever a PPA with fossil-fuel heavy Tri-State Generation, allowing them to pursue cheaper renewable power that will make up for the money lost severing the PPA.¹³⁸ Farmers Electrical co-op in southeastern Iowa gets 20% of its power from a local solar array owned by its members. The project then sells power back to the REC via a PPA.¹³⁹ Helping other co-ops break existing PPAs could open up the door for replicating similar locally owned renewable energy opportunities.

Executive Actions for Energy Democracy

1. Presidential Commission on Energy Democracy and Renewable Energy Futures

The president should establish and empower a presidential commission to develop and deliver a national blueprint for energy democracy.

Rationale

The energy system is structured by a complex mix of federal and state regulation, wholesale and regional markets, public utility commissions, and regional grid operators, and each layer is, to one degree or another, entangled with fossil fuel interests. At the same time, achieving an economy-wide goal of decarbonization and zero emissions will require a substantial increase in electricity supply, for electrification of other sectors such as transportation, buildings, and equipment.

This possibility will not be achievable if we attempt to build it out from the margins of the energy system we currently have—a fossil-fuel dependent, investor-owned, and monopoly-controlled energy system. Rather, it depends on a fundamental restructuring of the energy system, involving significant changes in energy market regulation and energy ownership and governance. In addition to policy change, significant technical challenges must be addressed—in grid design, energy storage and load management, consumer behavior and efficiencies, and other technical and design aspects of electrical power supply and reliability. However, technological solutions, such as energy storage, are never inherently equitable, so public policy must ensure that frontline communities are first in line for the safest, most effective technologies for reliability and efficiency of local clean energy.

Energy democracy is a concept that speaks to the systemic changes we need and must demand. First and foremost, as stressed above, energy democracy recognizes that governance of the energy system must be wrested from investor-ownership of generators and utilities, and their financial and political collusion with fossil fuel suppliers. In this respect, energy democracy is a governance framework comprised of rules and policies that determine 3 basic things: who controls the energy system, who benefits, and who is harmed; where the energy comes from; and how the system can be more resilient and equitable in the face of climate change. As we stressed in the Preamble, these structural fault lines in the energy system disproportionately burden vulnerable communities. Climate justice leaders view the fight for energy democracy as a fundamental power struggle for self-determination of communities and for equity and resiliency in our economy.

The bottom line is that we have to replace fossil fuel energy capitalism with public and community control of energy sourcing, energy infrastructure, and energy value. We also have to prevent a privately-controlled transition to clean energy capitalism that retains monopoly control and extractive financing, reproducing the same inequities while conforming the clean energy timeline to the short-term needs of investors rather than the long term-needs of society and the planet. It was never a good idea to grant private monopoly control over the commons of energy resources, and the climate crisis gives us an opportunity to change the paradigm.

To accomplish this, we need a national blueprint for energy democracy, to set in motion the changes needed in a coordinated way that breaks the grip of fossil fuels in the power sector, decentralizes power generation and delivery, establishes public and community control of the broader system, and maintains reliability even as demand is rising in other sectors. For this to be possible and gain traction, we need bold and unapologetic endorsement and support from a new administration starting early in its first year. Whether and how we seize this opportunity to re-envision and remake the energy system should be a matter of urgent national concern and action for our elected leaders.

Executive Actions

To this end, the president should establish and empower a Presidential Commission on Energy Democracy and Renewable Energy Futures, as follows:

- A. In the first 90 days, issue an executive order establishing the Presidential Commission on Energy Democracy and Renewable Energy Futures.
- B. The Commission should be chaired by the Secretary of Energy, with an enforceable mandate of delivering a national blueprint of energy democracy and energy system reforms to the president within 15 months.
- C. The Commission should have a majority of members with relevant policy expertise and technical expertise, and no corporate ties. No less than one-half of commission members shall be community-based experts especially reflecting needs and priorities of frontline communities, or allies thereof as demonstrated in previous research or policy work. Community-based experts and allies shall be chosen from a pool of candidates nominated by community-based organizations/networks, with appropriate consideration of regional representation and demographic diversity. Utility and fossil fuel workers should also be represented on the Commission.

- D. Fiduciary or lobbying representatives of fossil fuel energy corporations, utilities, and other private actors with a significant stake in the current system can advise the Commission in public comments, but they cannot serve on the Commission because it is a public proceeding that should be free of economic conflicts of interest and any threat of capture by the regulated institutions and industries.
- E. Community organizations shall be invited and given financial resources to collaborate on local visioning to inform the national energy democracy blueprint by a process that is representative of frontline leaders and perspectives.
- F. The Commission shall act as a platform to uplift local visions and develop a blueprint of federal regulatory and statutory changes, and recommendations for state and local reforms, designed to supplant monopoly fossil fuel energy with energy democracy.
- G. The scope of the blueprint should include, at a minimum:
 - Regulatory reforms necessary to rapidly expand renewable energy deployment with an emphasis on equity and justice, low-income inclusion, and community control, including Free, Prior and Informed Consent for tribal nations.
 - Legislative agenda to permanently codify these reforms in federal energy law, as needed; to introduce additional needed reforms; and to secure equitable public investments and other (equitable) financing for implementation of policy vision.
 - Policy and financing strategies for managed draw-down of fossil fuel generation, while keeping low-income ratepayers, and taxpayers, whole.
 - Federal financial support, and policy and regulatory support as needed, for states and cities to establish public ownership and democratic control of all existing large utilities.
 - Legislative agenda to democratize governance of federal utilities and energy authorities, inclusive or renewable energy and community-owned DER mandates.
 - Federal legislation and rules to support community ownership of renewable energy; federal financial support to help capitalize community-owned energy projects on a large scale.
 - Programs and investments for expanding residential built environment of energy efficiency and demand reduction, prioritizing weatherization and healthy homes in low-income communities.

- Commercial building efficiency codes for new buildings; energy efficiency renovations for old buildings.
- Review and recommendations on equitable community-based decision-making models to assert public and community control over policy development of the renewable energy system, energy efficiency, and energy resiliency.
- Legislative agenda and investment plan to support transition of displaced fossil fuel workers to unionized clean energy jobs, and to support self-determined transitions of fossil-fuel dependent Tribes and other Tribes.
- New models for collective bargaining coverage or unionization
 of workforce of larger-scale clean energy development and larger-scale community power plants; training and apprenticeship
 programs in frontline communities to connect residents to clean
 energy jobs with wage and benefit standards attached to public
 financial support of projects.
- Estimates of job creation on timelines of renewable energy deployment, operations, and maintenance, as well as energy efficiency deployment.
- Meeting technological challenges for a blended system of public utilities and community power.
- Scientific research plan to support essential technological advances.
- H. Draft blueprint is subject to public comment process, and independent review of public comments is conducted and publicized. Draft blueprint is approved and submitted to the president by a two-thirds majority vote of the Commission. Dissenters can submit a minority report. Upon receipt of the National Blueprint, the administration takes required follow-up steps, including budgetary support, directives for proposed rulemakings, and directives to congressional committees to develop legislation specifically in support of the National Blueprint.

2. Rural Cooperative Coal Debt Relief

A new administration should use regulatory means in combination with legislative action to unburden rural electric cooperatives of debt and contractual obligations to coal generation, and to incentivize a transition to renewably-sourced rural electricity.

Rationale

Approximately 40 million people, including the vast majority of U.S. farms, get their electricity from rural cooperatives.

Starting in the 1960s, the federal government financed generation and transmission cooperatives—co-ops of co-ops—to foster energy independence and expanded service in rural America. Much of the investment went to building out coal generation and, to a lesser extent, nuclear power. A significant portion of rural cooperative debt is held by the Rural Utilities Service (RUS) in the U.S. Department of Agriculture; as of 2019, federally-owned rural cooperative coal debt and loan guarantees totaled approximately \$8.4 billion. This debt is a major reason why 40 percent of rural cooperative electricity is coal generated, despite the rising cost of coal generation compared to renewable sources. It also affects clean energy politics, as rural cooperatives have actively opposed federal standards such as the Clean Power Plan. 141 By contrast, the national average of coal generation is less 27.5 percent; in New York State less than 1 percent of electricity is generated by coal.

In rural places where more than 40 percent of households earn less than 200 percent of the federal poverty line, retiring uneconomical coal generation assets and transitioning to renewable rural electricity will bring financial benefits by lowering utility bills; creating jobs; providing lease income to farmers, growing associations, and other rural landowners; and raising tax revenues for local needs.¹⁴²

Approximately 250 rural cooperatives have tribal reservation lands in their service territories. A federal policy of rural cooperative coal-debt retirement and rural cooperative build-out of renewable energy should stipulate clear conditions for Free, Prior, and Informed Consent to determine significant decisions affecting tribal lands, livelihoods, and cultures. Specific policy design incentives should be given for promoting tribal community ownership of rural renewable energy systems serving Tribes. A new administration can take measures¹⁴³ to retire rural cooperative coal debt and replace coal generation with renewable generation, including the following:

Executive Actions

Federal Buyout of Rural Cooperative Coal Assets

The Rural Utility Service can buy out coal assets, exchanging debt forgiveness for ownership of the coal assets. There is legal precedent for this type of rural utility buyout in a mid-1990s bankruptcy proceeding

authorizing RUS to buy out the utility's 30 percent stake in a nuclear power plant.¹⁴⁴

A federal buyout of this type should entail a quick retirement of the coal assets and a commitment of the utility to replacing the stranded coal assets with renewable energy. Financially, such a transition, on a large scale, would likely require additional RUS funding to absorb the costs, which may in turn be dependent on congressional action. In this scenario, future RUS lending should be restricted or barred from underwriting fossil fuel generation by rural cooperatives.

Federal Bailout of Rural Cooperative Coal Debt

Simply forgiving rural cooperative coal debt is another pathway that follows a similar principle of using public financing authority for rural electrification as leverage to retire coal assets and replace them with renewables. However, congressional support could be needed and this is not a clear path for transitioning rural electricity to renewables. Among other things, rural cooperatives are also carrying a significant (but not well-monitored) amount of private debt, which may outweigh public debt relief and resist stranding of coal assets and public efforts to require or incentivize a transition to renewables.

Credit Asset Swaps

This concept essentially means that future credit is made available when rural cooperatives retire coal assets and replace them with renewables. A new administration should promote this idea among others designed to use federal financing of rural electrification as leverage for a renewable energy transition in rural America. This approach can be complementary to federal buyouts and/or debt relief to retire coal assets, but it would likely require congressional action to codify restrictions of future RUS lending to exclusively or primarily support renewable generation.

3. Regulatory Actions to Advance Renewable Sourcing of Energy by Federal Power Authorities and Power Marketing Administrations

Federal power authorities such as the Tennessee Valley Authority have statutory purposes on economic development and related

societal goods that potentially could support renewable energy, for example, as a green jobs or community development strategy in rural areas.

A new administration should explore potential federal utility rulemakings that connect renewable energy to economic development and public health goals, and pursue the most impactful, reasonable rulemakings in this vein.

Community development organizations should be engaged and financially supported in establishing job training and apprenticeship programs for local residents of service areas. A similar approach to the Power Marketing Administrations should be pursued to use hydropower authorities to leverage public build-out of other forms of renewable energy generation in a service area or region.

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