

CLEAN ENERGY NEOLIBERALISM: CLIMATE, TAX CREDITS, AND RACIAL JUSTICE

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*This issue brief is part of Roosevelt's **All Economic Policy Is Climate Policy** series. Learn more about the series [here](#).*

INTRODUCTION

The growing recognition that climate policy is deeply interconnected with racial justice has been one of the most important progressive developments in recent years. The rising national influence of environmental justice leaders and new policies such as the Biden administration's Justice40 initiative illustrate how the climate debate increasingly centers around race and communities of color (Daly 2022; Aning 2021; White House 2022). Yet, as we collectively try to move forward with the climate clock ticking, advancing racial justice in and through climate policy still faces strong headwinds that threaten to stall this momentum.

Justice40 envisions direct, democratic, and beneficial investment in disadvantaged communities—the communities most harmed by the fossil fuel economy and most at risk from climate change. Repairing previous harms and achieving an equitable future for disadvantaged communities requires a substantial and measurable shift in federal budget priorities, and Justice40 sets a goal of ensuring that 40 percent of all climate-related investments are targeted for the benefit of disadvantaged communities. But over the last year, the mainstream climate conversation—particularly around infrastructure spending—has shifted in a conservative direction that is antithetical to this vision. Proposals to directly invest in clean energy and environmental justice on a significant scale have largely been stripped and set aside or clouded by misinformation about budget deficits and economic damage caused by public spending.

The primary remaining climate policy with widespread support is clean energy tax credits—specifically, a 10-year extension and expansion of credits proposed in the Build Back Better (BBB) legislation. Utilities, environmental groups, and climate experts have made common cause around using expansive tax policy to incentivize clean energy development, and researchers estimate that these credits would reduce greenhouse gas emissions in the electricity sector by as much as 73 percent in 2031 compared to 2005 levels, as well as generate net benefits (benefits relative to costs) in a range between

\$200 billion and \$1.5 trillion under different cost scenarios (Greenstone et al. 2022). The BBB energy tax credit proposal is projected to cost more than \$300 billion—making it potentially the largest climate change investment of the Biden presidency—if not ever (Joint Committee on Taxation 2021).

However, the prospect of an energy transition that substantially relies on private tax behavior rather than more direct—and accountable—forms of public investment is alarming for several reasons. Unlike direct investments that communities can design and control for their own benefit, as envisioned in Justice40, a tax-driven transition is not likely to promote widespread, equitable access either to the tax benefits themselves or to the clean energy resources and related benefits that the tax credits are supposed to promote. Further, beyond energy savings or other direct economic benefits, a clean energy transition driven by private incentives and choices rather than public investment in communities may lead to significant disparities in other critical areas, such as indoor and outdoor air quality, good local jobs, housing values and security, and community resilience (Lukanov and Krieger 2019).

The Biden administration's stated commitments to environmental justice and racial equity require policies and investments that ensure distributive justice: The communities most harmed by the fossil fuel economy should be the least burdened, and the most benefited, in the clean energy transition. New, large-scale investments targeted to drive this transition should thus be designed and implemented with racial equity and greenhouse gas reductions as equal goals. Given the projected scale of the investments needed—up to \$13 trillion over the next decade, according to one leading model (Jacobson et al. 2015)—an equitable climate transition could be truly transformative for disadvantaged communities, especially if 40 percent of the benefits of these investments are directed to disadvantaged communities in line with the goals and principles of Justice40.

The following issue brief examines the energy tax credit program proposed in Build Back Better, with a focus on questions of distribution and energy justice—how burdens and benefits of the energy system and the clean energy transition are shared, or not shared, across race and income divides in our society.

Section One looks at the role of tax credits as a policy tool of neoliberal inequality, and how the use of this tool is expanding to promote a market-driven climate transition that threatens to reproduce or even deepen racial inequities in the broader economy. Section Two explores whether tax credits can serve energy justice and examines the current extension and expansion proposal passed by the House of Representatives in the Build Back Better Act. Finally, Section Three offers a suite of recommendations, mainly for consideration by the administration and primarily focused on aspects of oversight that are needed to bring attention to and address distributional gaps and other potential harms of the tax credit program, especially for communities of color and other disadvantaged communities and populations.

A NEOLIBERAL LEGACY GOES GREEN

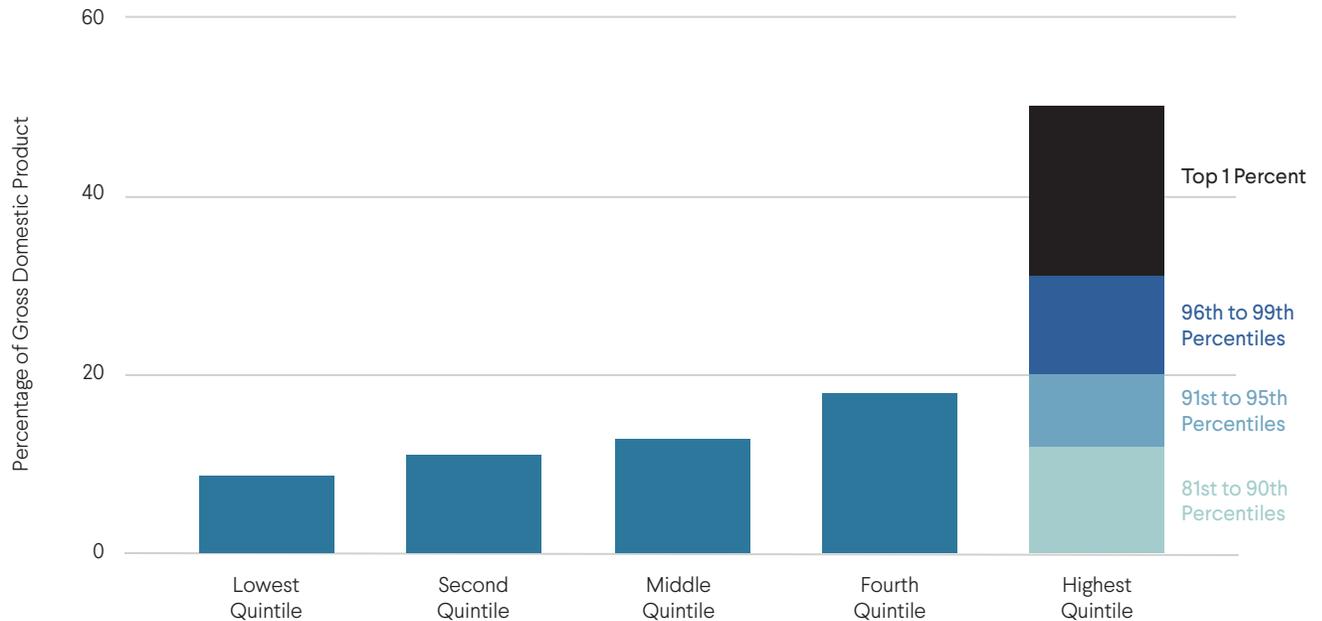
TAX CREDITS AS SOCIAL POLICY

Tax credits—which generally have the effect of reducing tax burdens and for the purposes of budget analysis are sometimes termed “tax expenditures” or “tax preferences”—are a major component of social policy in the United States. The largest tax expenditures promote key societal goals such as homeownership and retirement security, essentially forging what Christopher Howard (1997) describes as a “hidden welfare state”—that is, a welfare system in which social benefits are provided through the tax code rather than through federal assistance programs or direct community investments. In the broader economy, tax credits for clean energy are a critical component of the neoliberal toolkit, exploiting collective energy needs for financial gain and privatizing the benefits of the transition to clean energy (Knuth 2021).

Howard (1997) calculates that by 1995, tax credits made up a very large fraction of total social spending—between \$343 and \$437 billion (depending on how it is calculated), as compared to roughly \$900 billion in direct social spending, including Social Security and Medicare. Between 1967 and 1995, tax credits grew annually at a rate of 4.8 percent, as compared to 5.9 percent for direct social spending. By 2019, tax expenditures were worth an estimated \$1.6 trillion, equal to 7.8 percent of GDP (Congressional Budget Office 2021). The largest of these are the home mortgage interest deduction and net exclusion of pension contributions for individuals, which encourage homeownership and retirement security, and the exclusion of health care costs for employers, which encourages employers to provide health care benefits to employees

Since the 1980s, the striking increase in social tax credits has coincided with steadily rising inequality, a correlation that is underscored in assessing the distribution of credits. As shown in Figure 1, in 2019, the top 20 percent of households (by income level) received more than 50 percent of combined income tax expenditures while the bottom 60 percent of households received only about 30 percent. The top 1 percent received about as much as the entire bottom 40 percent (Congressional Budget Office 2021).

FIGURE 1. SHARE OF COMBINED MAJOR INCOME TAX EXPENDITURES BY INCOME LEVELS, 2019.



Source: Congressional Budget Office, using estimates from the staff of the Joint Committee on Taxation. See www.cbo.gov/publication/57413#data.

While tax credits are used for many different purposes, most, as noted, share the goal of trying to advance broadly supported social objectives by using the tax code to financially incentivize decisions and behavior of private individuals and employers. Thus, a cardinal trait of these social tax credits is substituting private choice for public investment in the pursuit of societal goals. This is evident in our health care system, in which employer-based coverage has been heavily preferred and essentially set in stone politically by tax credits that massively subsidize employer-based health benefits. The epic defeat of the proposed Health Security Act of 1993, or “Hillarycare,” during the Clinton administration was at least in part the result of a backlash against proposed reductions in employer tax benefits, which would have generated public funding for broader coverage (Howard 1997).

THE NEOLIBERAL RECIPE: PRIVATE POWER (WHITE AND UNEQUAL) BY PUBLIC WEAKNESS

Given that the clean energy transition appears to be following a similar path, relying on tax credits for social goals has had two clear outcomes that warrant serious concern. The first, as already stressed, is a distribution of benefits that mirrors, reinforces,

and extends pre-existing distributional inequities in the marketplace, whether in terms of income and wealth gaps, homeownership, or retirement security. The second is diminishment of public power. Tax credits essentially treat societal goals as an aggregate of private decisions—a marketplace. Substituting private, individual choices and behavior for collective decision-making and investment diminishes public power—and revenue—which, in turn, makes it difficult to fix the underlying disparities.

The concerns about tax credits are magnified when the focus turns to the energy system. Accessible, reliable energy is clearly a collective good: Virtually no one can survive for long—let alone thrive—without electricity or heat and cooling. Electric utilities have been heavily regulated from the beginning of the modern electricity system due to this common need for accessible, reliable energy. Yet today, more than two-thirds of electricity customers are served by “public” utilities that are in fact owned by private investors, whose expected financial returns often compete with critical investments in clean energy and energy resiliency, leaving ratepayers or taxpayers to foot the bill as the electricity system is increasingly exposed to impacts of climate change (Lusiani 2022). This example shows how private benefits are already in conflict with public needs in our energy system, and specifically, the needs of low-income households burdened with high energy costs. How, then, will the burdens and benefits of a clean energy transition be shared—or segregated—across historic income and race divides in our society if tax credits are the primary mechanism for federal investment? Today’s skyrocketing electricity bills, which directly correlate with rising fossil fuel prices and disproportionately harm lower-income households, should not be inevitable in a world where stable and much lower renewable energy prices could be the norm (Melodia and Karlsson 2022). Yet, given racial wealth gaps, including homeownership gaps, more public investment to ensure equitable access to cheaper, cleaner energy is a paramount need. Relying on energy tax credits alone, on the other hand, is a means of effectively privatizing the energy transition, at the risk of reproducing or even worsening existing inequalities, especially by race.

The question of how we transition to clean energy—whether primarily by public or private means—is set into relief by deepening struggles in disadvantaged communities. Energy insecurity rose in 2020 during the COVID-19 pandemic, with 13 percent of low-income households reporting inability to pay an energy bill the previous month and more than 1 million households (in the 17 states where data is available) experiencing utility shutoffs (Carley and Konisky 2020; Ryan 2021). Energy insecurity can have serious health effects (Hernandez 2016) and this underscores how questions of energy justice today and going forward—who will be burdened and who will benefit from a 100 percent clean energy transition that cannot be delayed—are far from academic. Neither are the distributional profile and social results of clean energy tax credits, which may very well end up being neoliberalism’s surest legacy in the age of climate change.

A HIDDEN ENERGY WELFARE STATE?

To assess the BBB energy tax credit proposal, it is important to understand historic trends in energy credits that can illuminate the path going forward. For this analysis, it is useful to understand the basic structure of energy credits, which, though implemented unevenly, has essentially remained intact over the last several decades.

The structure of energy tax credits has two basic components. The first, and larger, component is commercial credits, including investment tax credits (ITC) for building or expanding clean energy facilities (mainly solar) and related technologies (energy storage, carbon capture), and production tax credits (PTC) for actual production of clean electricity (mainly wind power) and clean fuels (mainly biofuels and hydrogen). Commercial credits in the Build Back Better (BBB) proposal total roughly \$200 billion over 10 years.

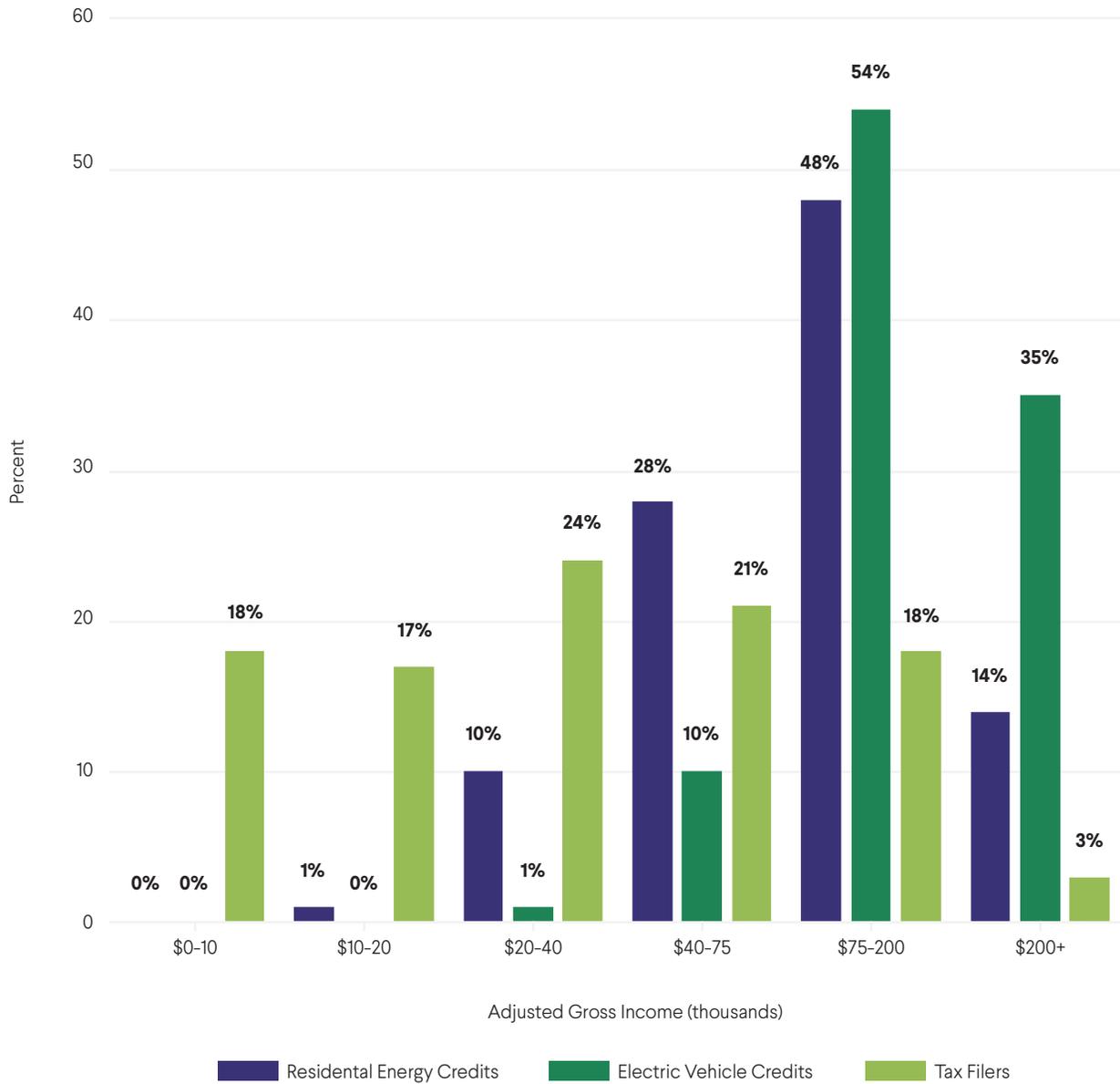
The second component is individual tax credits for purchasing clean energy technologies for residences, such as rooftop solar, efficient heating, batteries, and weatherization, and for purchasing electric vehicles. Individual credits in the BBB proposal total about \$68 billion over 10 years.

To put the scale of the 10-year proposal in perspective, in 2020, commercial energy credits cost roughly \$10.6 billion and individual credits cost about \$3.9 billion.¹ Thus, relative to 2020 levels, the current proposal nearly doubles annual expenditures on commercial credits and increases individual credits by about 74 percent.

In extending and expanding energy credits at this scale, as proposed in BBB, we are effectively on the verge of dramatically expanding a hidden energy welfare state alongside our hidden social welfare state. It is notable, then, that distributional inequities of energy tax credits are even more extreme than those of traditional social tax credits. As Figure 2 illustrates, between 2006 and 2012, about 60 percent of total residential and individual credits—worth about \$18 billion—went to the top 20 percent of households, while only about 10 percent went to the bottom 60 percent. Electric vehicle credits were even more concentrated, with the top 20 percent of households receiving 90 percent of the credits and those earning \$200,000 or more receiving 35 percent (Borenstein and Davis 2015).

¹ Authors' calculations based on Joint Committee on Taxation, report number JCX-23-20 (November 5, 2020), <https://www.jct.gov/publications/2020/jcx-23-20/>.

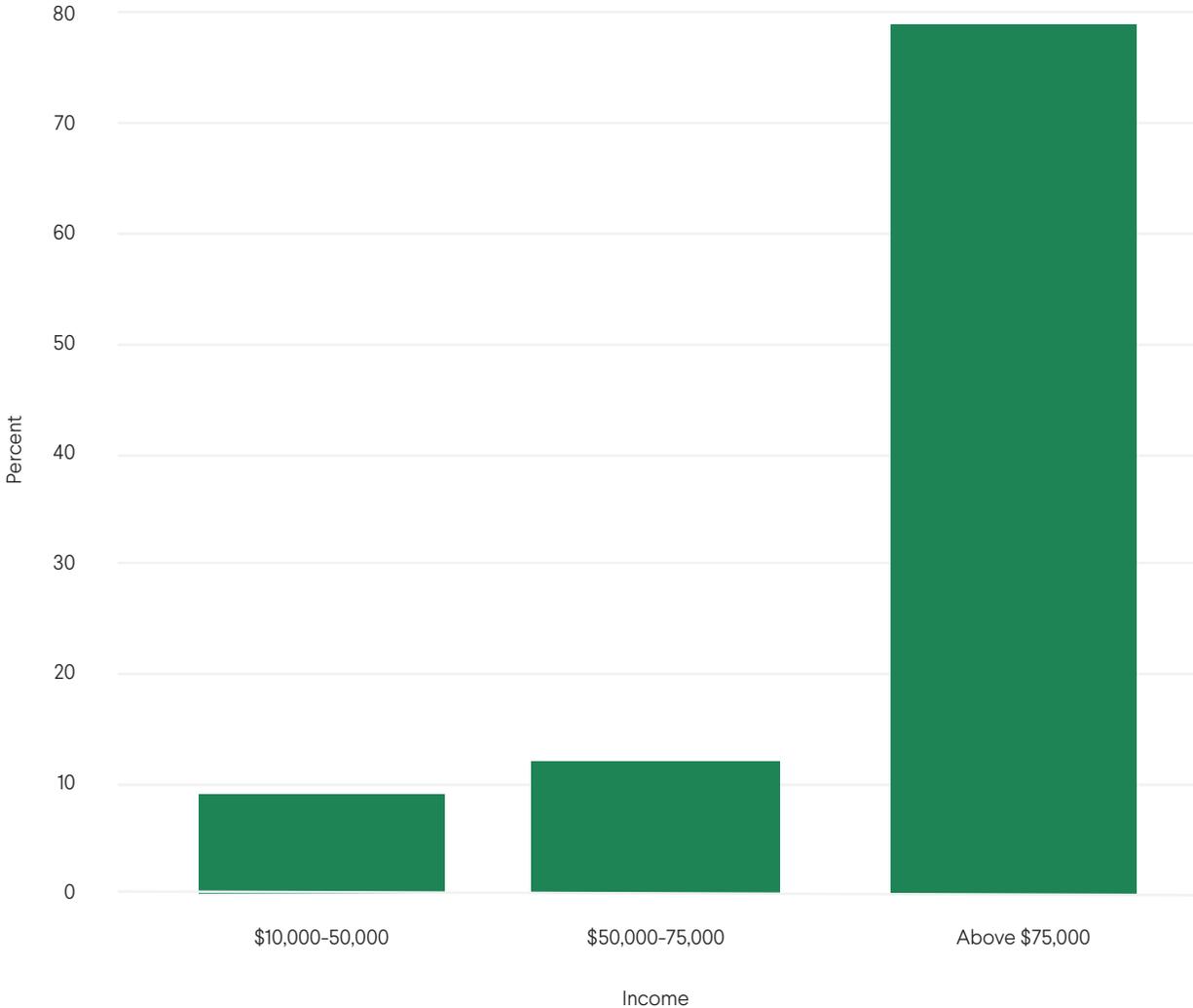
FIGURE 2. CLEAN ENERGY TAX CREDITS GO TO HIGHER-INCOME AMERICANS



Source: Borenstein and Davis 2016; Internal Revenue Service.

Inequitable distribution of individual energy tax credits did not change in subsequent years and in fact grew worse. In 2015, approximately 75 percent of credit expenditures went to households earning more than \$75,000 annually (Crandall-Hollick and Sherlock 2018). In 2019, the share going to households earning more than \$75,000 was nearly 80 percent, as shown in Figure 3.

FIGURE 3. PERCENTAGE OF RESIDENTIAL ENERGY CREDIT EXPENDITURES BY INCOME LEVEL, 2019



Source: IRS Statistics of Income Data. https://www.irs.gov/statistics/soi-tax-stats-individual-statistical-tables-by-size-of-adjusted-gross-income#_grp8. Table 3.3.

While it is hard to disentangle the effect of federal tax credits from other factors, such as state and local policies and declining clean technology prices, solar investment is clearly correlated with more access to tax credits and higher credit values. Individuals could claim a 30 percent residential energy credit starting in 2007, but it was capped at \$2,000 even though the average price of solar installations at the time was nearly \$40,000. In 2009, the American Recovery and Reinvestment Act removed the cap and rooftop solar capacity grew more than eightfold by 2014.

The role of energy tax credits is considerably more concerning in light of the clear correlation between inequities in the distribution of credits and equally stark inequities of clean energy access—looking at who is adopting rooftop solar and who is not. High-income households are overrepresented among solar adopters and low-income households are underrepresented. Households earning more than \$100,000 comprise about 30 percent of the population but about 50 percent of solar adopters, whereas households earning less than \$50,000 comprise about 40 percent of the population but only about 12 percent of solar adopters. The median household income of solar adopters is \$120,000, as compared to the national median income of \$64,000 (Darghouth et al. 2022).

Race, more than income, is the strongest predictive factor when it comes to the adoption of rooftop solar (Sunter, Castellanos, and Kammen 2019). Even controlling for income and homeownership, Black-majority census tracts installed between 60 to 70 percent less rooftop solar compared to no-majority census tracts, and nearly half of all majority-Black census tracts did not have any rooftop solar installed. Research to fully understand this solar access gap is in its infancy, but it is probably due to a mix of financial barriers (low-wealth; poor credit) as well as service barriers—where communities of color are de-prioritized in the sales strategies of developers and in public education about solar programs and financial supports. However, with solar costs falling rapidly (an installation today costs roughly \$11,000 to \$15,000 for the average home after tax credits [Parkman 2022]), public investment to reduce racial barriers could be highly impactful for solar equity if sufficiently funded and targeted through Justice40 or other policies.

Individual credits can also be used for energy efficiency upgrades, which are critical for reducing energy burdens. In the BBB proposal, energy efficiency credits are projected to cost about \$13 billion over a decade by the Joint Committee on Taxation. While there is no available breakdown of distributional data on who is using credits for weatherization or other efficiency upgrades, data on energy burdens point to significant gaps in household energy efficiency by race. If low-income housing were upgraded to efficiency levels of the average US home, energy burdens would be reduced by 45 percent for Black households and by 65 percent for Latinx households (American Council for an Energy-Efficient Economy 2016). It is notable that the tax credits for energy efficiency are projected to cost more than three times the current budget of the Weatherization Assistance Program, which received a large one-time infusion of \$3.5 billion from the bipartisan Infrastructure Investment and Jobs Act. This is the main federal grant program providing public assistance for weatherizing low-income homes, but historically it has been vastly underfunded, reaching only about 2 percent of eligible households (Office of Energy Efficiency & Renewable Energy 2022). Energy burdens remain a stubborn problem affecting low-income households, yet this large

imbalance between direct assistance and tax credits for energy efficiency has received little attention in discussions of the tax credit proposal.

The commercial (non-residential) development of solar energy is mainly supported by the Investment Tax Credit (ITC), which promotes clean energy by giving developers credits when they build or expand solar facilities. The ITC commercial credit cannot be analyzed distributionally in the same way that individual credits can be analyzed using tax data. However, compared to access to rooftop solar, access to community solar programs—where solar arrays are installed on rooftops of large, often public buildings or on nearby land—appears to be similarly inequitable, suggesting significant equity gaps with the investment credits. One survey found that only 5 percent of community solar programs have enrollments with more than 10 percent participation by low-income households (Gallucci 2019).

One reason for the inequity in commercial clean energy tax credits is perhaps the most underreported and dirtiest secret of neoliberal clean energy finance: tax equity investors. Many clean energy developers are newer businesses without significant tax liability. But unlike with the tens of millions of individual taxpayers excluded from energy credits for lack of sufficient tax liability, the potential value of commercial energy credits is a magnet for outside investors seeking to shelter other income. As a result, investors essentially purchase the credits from the developers and use them to reduce their tax liability for other income.

This means that tax credits for clean energy have been transformed into tax shelters for Wall Street. To put a finer point on it: Neoliberalism's cardinal non-virtue—financialization—is running amok in the very tax game legislators have created to circumvent expansive government in the fight against climate change.

For the clean energy transition, the consequences are twofold. First, the significant fees and other costs involved reduce the capital for clean energy development overall. And second, investors effectively become decision-makers for clean energy deployment based on the projects they choose to support. This has significant equity implications because large, profitable corporate projects are the most financially attractive in this model, while public, nonprofit, and community-owned projects face financial barriers that limit their scale. Thus, the capital structure of the clean energy transition, built around tax equity, is heavily tilted toward private profitability and complex financing, not community benefit or equitable outcomes for the most vulnerable communities (Knuth 2021; Aronoff 2021).

A notable historical point is that when clean energy tax credits were first ratified in the late 1970s, they were refundable. But in 1980, refundability was repealed, with little debate, in legislation establishing a crude oil windfall profits tax. By 2020, clean energy tax equity was worth an estimated \$18 billion and owned by a handful of large banks (Knuth 2021).

SECTION TWO

CAN TAX CREDITS SERVE ENERGY JUSTICE?

For communities of color, the energy system has long been a critical battleground, marked by racial divides and the competing paradigms of public purpose and private power. With climate change bearing down and as the clean energy transition is starting to take hold, this conflict is only sharpening. How will the burdens and benefits of a clean energy transition be shared—or segregated—across historic income and racial divides in our society? Without policies that directly confront these divides, the transition to cleaner sources of energy and lower overall emissions could reproduce, if not worsen, pre-existing inequalities in the broader economy. Clean energy access and benefits will be divided by race, just as housing, health care, education, public safety, and financial services are divided today (Carley and Konisky 2020a).

Energy justice issues are becoming more acute, not less, as use of clean energy expands. For example, in the case of residential solar, some research suggests that these disparate trends in burdens and benefits may be linked, as costs of maintaining the baseload grid are shifted from affluent solar adopters to generally poorer non-adopters (Borenstein 2022). More broadly, as utilities transition power generation from centralized fossil fuel facilities to more distributed renewable sources or try to harden their risk-laden transmission and distribution systems against climate shocks, low-income households may bear a greater burden as the costs of baseload performance and expensive system upgrades are shifted to ratepayers. In contrast, affluent households and communities that can already access and afford clean energy technologies, efficiency upgrades, and electric vehicles in the near term will begin to accrue net savings and other benefits in just a few years, if not sooner—essentially getting ahead of transition costs. Cheaper clean energy will also disproportionately benefit them because they use a lot more energy per household.

The clean energy transition also brings environmental justice concerns. For example, as the grid transitions off fossil fuels to renewables, remaining fossil fuel plants may be needed only intermittently as demand-response resources, mostly critically during heat waves in large cities. As remaining fossil plants (or other combustion plants) cycle on and off more frequently, pollution controls are less effective and plants emit more pollution per megawatt hour in nearby communities, which are often disadvantaged (Behles 2021).

Additionally, the tax credits themselves include billions of dollars for technologies and energy sources that could actually increase local pollution and are considered harmful by environmental justice advocates.²

Justice40's reparative and transformative vision for disadvantaged communities speaks directly to the concerns of energy justice described above. If targeted for the most vulnerable communities and appropriately scaled, Justice40 sets a clear template for a race-forward, justice-centered climate transition that recognizes the climate crisis as an opportunity not only for repairing the specific harms of environmental racism, but also for correcting the harmful course of chronic underinvestment in disadvantaged communities. This course correction requires disadvantaged communities commanding significant federal resources for local needs, on a scale that is proportionate to the historic and enduring harms and disparities they have experienced.

Given the amount of public investment needed to finance a transition to clean energy, a minimum goal of targeting 40 percent of climate-related investments for the benefit of disadvantaged communities could be transformative. But relying on tax credits as the primary mechanism for funding the clean energy transition makes it more likely that long-deferred opportunities for repair and transformation in communities of color—which depend heavily on the ways in which new, large-scale climate investments are targeted and structured—will be squandered in this pivotal period.

This fundamental concern should not deter us from analyzing tax credits, especially given the potential for further harm with this type of policy, or possible improvements to achieve more equitable results. In what follows, we assess the energy credit program in three basic dimensions: residential/individual credits, community-oriented credits, and commercial credits.

WHAT'S IN IT FOR PEOPLE?

As we have already shown, the distributional problems with energy tax credits are most evident in the case of residential/individual tax credits. Historically, a fundamental problem in the policy has been the non-refundability of individual credits: Households do not get a full credit if their tax liability is less than the credit, and households without tax liability get no credit at all. Without refundability, 7 out of 10 households do not have enough tax liability to fully benefit from solar credits and 4 out of 10 cannot benefit at all (RMI 2021).

² These include carbon capture technologies that enable continuing fossil fuel use and potentially increase local pollution, as well as combustion sources that are not fossil fuels but still pollute such as liquid biofuels, wood and waste biomass for energy, and hydrogen fuel for multiple uses. While this brief does not analyze these particular tax investments further, many environmental justice advocates and allies view the overall tax credit program as compromised by these potentially harmful solutions even before considering the distributional issues examined here (Schmitt et. al. 2021; Daly 2021; Milford, Mullendore, and Ramanan 2020; Ingless 2021).

Fortunately, advocates succeeded in overturning non-refundability in the BBB credit program. The new proposal makes most of the individual tax credits refundable. Previously, households with little or no federal income tax liability—predominantly low-income and BIPOC households—were simply excluded from the program because there were minimal or zero taxes owed to be reduced. Now, at least in principle (and if the proposal becomes law), households can obtain credits regardless of taxable income.

Two limitations remain. First, refundability is delayed until 2024, when in fact it should be expedited for 2023 in order to prioritize low-income accessibility in the program—whatever that may require administratively on the part of the IRS or Department of Treasury. Second, individual tax credits for solar and other energy upgrades top out at 30 percent of costs paid, available equally for most households. One study suggests that refundability may somewhat broaden the pool of credited people, but how much so is very unclear (Borenstein 2016); it seems likely that affordability for low-income households with little discretionary income will continue to be a significant barrier even if the credits are refundable.

Even with refundable credits, solar installations and other credited residential and individual investments are still major purchases for many households. The average rooftop solar installation costs about \$15,000 after the tax credit (there is some variation by state) and a new low-end electric car costs about \$35,000. Either purchase is likely well out of reach for lower-income households with little discretionary income, few savings, and possibly poor credit. This is not even to mention that low-income households should be able to enjoy multiple clean energy benefits; they should not have to choose between reducing their electricity bill or reducing their transportation bill while affluent households can rack up clean energy benefits of all kinds with little concern about affordability.

A more equitable approach would be to make credit values variable by income, with poorer households receiving more credit. In one area, electric vehicle credits, affordability appears to be addressed by limiting eligibility for the full credit to households making under \$500,000 (for joint filers). Not subsidizing affluent households—in this case very affluent households—is necessary for equity but totally insufficient if affordability for low-income households is ignored. “Phasing in”—starting with higher credits—for lower-income households is a much better idea for equity.

Other major equity gaps in clean energy and energy savings simply aren’t fixable through the tax code and underscore the problem of relying on tax credits to advance climate goals. Most importantly, renters—who are more likely to be Black and/or low-income—are categorically excluded from residential credits because of “split incentives”; renters cannot make capital improvements on properties they do not own, and many landlords have no incentive to make energy-saving improvements since these improvements would

primarily benefit renters by reducing their utility bills. This problem could be solved in part by regulation. Energy efficiency standards could be integrated into building codes, rent regulation, or municipal emissions reduction mandates for residential buildings, and these requirements could be publicly subsidized (US Department of Energy n.d.). Public financing is another possible route (Bird and Hernandez 2012). Continuing to rely on tax credits, on the other hand, will only perpetuate endemic barriers to energy savings in rental housing.

CAN ENERGY CREDITS HELP COMMUNITIES?

The proposal includes some positive improvements that should be celebrated, including two equitable policies and one major financing reform.

The first is an ITC credit bonus for solar projects in low-income communities (§ 136103 of the [Build Back Better Act](#)). If prevailing wage, apprenticeship, and domestic content requirements are all met, developers receive a 10 percent bonus on top of a maximum 30 percent credit for solar projects located in low-income communities or on tribal land.³ In the case of small solar or wind facilities installed on affordable housing or as part of a “qualified low-income economic benefit project,” the bonus is 20 percent. Economic benefit projects, as defined in the law, must provide at least 50 percent of the financial benefits of the electricity generated to low-income households, including electricity acquired from the project at below-market rates.

In terms of specific local benefits, however, the legislative language is vague and discretionary. The Treasury Secretary is asked to “consider” aspects of health, economic benefit, and community benefit in allocating enhanced credits for low-income solar projects. But the legislation does not require such benefits as a condition of receiving enhanced credits. Local employment or community ownership, for example—which are critical aspects of an equitable clean energy transition—are identified for consideration under the law but not required. Further, there are no criteria for addressing environmental justice—for example, tying bonus credits to local pollution reductions. Also missing is any requirement for consultation with local community organizations and residents of the host communities. Lack of meaningful community engagement encourages projects that do not consider community needs, so community engagement should be mandatory for many types of projects. If mandating community engagement is impracticable or deters investment in disadvantaged communities, another way to address this need could be to provide additional credit to projects that engage with host communities and support training and technical assistance for community needs related to the project.

³ Another community-based provision provides a 10 percent bonus credit for facilities sited in “energy communities,” defined as communities where coal plants have closed or been retired.

The program also risks misplacing projects by using a narrow, income-based definition of disadvantaged communities that does not account for additional burdens often tied to race. Without a more comprehensive definition of “disadvantage,” the most vulnerable communities, especially from an environmental justice perspective, may not benefit the most from low-income solar credits. The Climate and Economic Justice Screening Tool, which is currently in development for use in identifying disadvantaged communities for Justice40 investments, attempts to remedy this problem by delineating disadvantaged communities based on environmental and economic justice indicators like pollution burdens, energy burdens, climate risks, affordable housing and transit access, health vulnerabilities, linguistic isolation, and other factors (Council on Environmental Quality n.d.).

It is also notable that the total amount of credits available under the low-income community solar provision is set at 1.8 gigawatts annually, or 18 gigawatts over a decade. Currently, nationwide community solar capacity totals 3.6 gigawatts, with an additional 4.3 gigawatts projected to be installed in the next five years. Thus, crediting a maximum of 18 gigawatts in new solar capacity targeted for low-income communities could significantly shift the landscape for smaller solar installations and make it more equitable. This type of possibility should motivate efforts to address and remedy the issues of community benefit and consultation described above.

Finally, the proposal also expands eligibility to include nonprofits and local governments in the program. This is a tremendous improvement, as the previous standard of limiting eligibility to corporations with income tax liability excluded localities and community institutions from the universe of federal energy credits. Enabling nonprofits and local governments to access these credits has the potential to unlock significant investments in low-income and environmental justice communities. However, it is critically important to require community engagement in public and nonprofit projects. Requirements for robust and meaningful community engagement in neighborhoods hosting the credited projects, as well as resources to help community-based organizations participate in planning processes, could help ensure that these incentives actually benefit low-income residents and help them improve their communities.

COMMERCIAL CREDITS AND COMMUNITY BENEFITS

Most of the funding for clean energy tax credits—roughly two-thirds—is for businesses, not individuals. It is therefore critical to consider whether and how community benefits and impacts are taken into account in the broader commercial program. We highlighted above the problem of insufficient project criteria for community benefits such as local employment and pollution reductions, and it is worth reiterating the problem of harmful technologies and energy sources credited in the program. Further, there are critical infrastructure gaps that could impede solar deployment, particularly in disadvantaged communities. In California, for example, disadvantaged communities have disproportionately less grid capacity for hosting solar projects and other distributed energy resources. To be more equitable, solar investment credits may need to be combined with targeted grid investments in many disadvantaged communities (Brockway, Conde, and Callaway 2021).⁴

In addition, risks to housing security in host communities should be addressed, because clean energy can lead to displacement ("climate gentrification") as cleaner air and access to cheaper renewable energy drive up housing values and attract affluent homeowners with higher energy use, who have the most to gain from the savings generated by a transition to renewables.

Identifying these factors underscores an obvious but neglected point: Commercial tax credits inherently have implications for the communities hosting the credited projects. Questions such as who can receive the credits, what they can be used for, and how will the community benefit cannot be ignored simply because a developer is technically eligible for a credit by narrow definitions. Further, such questions should be carefully considered as a matter of compliance with Justice40 and its goal of serving frontline communities in the climate transition.

It is telling, however, that the Department of Treasury is not designated as an agency with "covered programs" in the administration's initial policy guidance on implementation of Justice40, which implicitly exempts clean energy tax credits from being part of Justice40 (Executive Office of the President 2021). Given the budgetary effects and the implications for clean energy development and energy justice, advocates should make the case that clean energy tax credits should be included as covered programs in Justice40, which means that at least 40 percent of the distribution of credits would be geographically targeted for the benefit of disadvantaged communities.

⁴ The bipartisan Infrastructure Investment and Jobs Act of 2021 allocates more than \$10 billion to competitive grant funding for grid investments, and this funding should be subject to Justice40 so that at least \$4 billion is directed to investments that promote energy resilience in disadvantaged communities (Weinrub 2021).

To further clarify these issues, it is worth considering the case of Opportunity Zones, which represent a cautionary tale of how tax credits, untethered to community-serving project criteria or even impact analysis, have been used to exploit disadvantaged communities for private gain. Established in 2017 as part of the Tax Cuts and Jobs Act (TCJA), Opportunity Zones (OZs) were designed to “encourage private investment in communities that are struggling to attract capital, create jobs, and lift residents out of poverty.” The policy allows investors to defer, and in some cases completely avoid, taxes on unrealized capital gains by rolling those gains into an “Opportunity Fund” that is then invested in property or businesses in Opportunity Zones—a set of low-income census tracts nominated by governors and certified by the Department of Treasury. But neither the TCJA nor the regulations later adopted by the Department of Treasury include any requirements to ensure that projects benefit residents in the census tracts deemed Opportunity Zones. In fact, approved projects only have to derive 50 percent of their income from an “active business” located in an Opportunity Zone.

Furthermore, unlike other federal economic development initiatives, OZs do not include any rules that require beneficiaries to hire local residents, provide services to local communities, or prove that investments are even intended to provide any type of public benefit; investors only have to “self-certify” to qualify for the credit. Additionally, neither the IRS nor the Department of Treasury are required to report data about Opportunity Zones to the public and, as a result, we do not know how much money OZs have raised, how much has been invested, or how much benefit has been derived from those investments. But by all accounts, the majority of the money raised by Opportunity Zones has gone to large-scale real estate projects, many of which were already slated to be built, as well as to luxury housing and businesses heavy on land-use but employing few people, like self-storage facilities or parking lots (Wessel 2021).

In light of the Opportunity Zone example, one notable financial reform in the energy credits proposal should be highlighted: direct payment of credits, which is a policy that will reduce the role of tax equity investors in the clean energy transition essentially by providing up-front grants for project financing. This is important for many reasons, but perhaps the most important reason is that it limits the role of Wall Street in selecting projects for development. It is beyond alarming that in a hidden energy welfare state poised for long-term, massive expansion, private financial strategies and choices are being clothed in a public purpose as important as fighting climate change. Although analysts are doubtful that direct payment will fully shield the energy system’s tax-finance infrastructure from Wall Street extraction, it is still an important step forward for public purpose in the climate transition and perhaps the most commendable improvement yet proposed for commercial energy credits.

However, more regulation of credits is needed to ensure that clean energy development is a vehicle for thoroughly aligning the needs of disadvantaged communities with decarbonization pathways and goals. But much like Opportunity Zones, commercial clean energy tax credits—historically and as proposed going forward—lack the requirements needed to ensure that occurs. In particular, corporations and investors who receive clean energy tax credits do not have to report where the credited projects are located or who those projects are intended to benefit, and there are no proposals to change that. Equally problematic is that there is little data publicly available about who is applying for and receiving these credits. This is especially problematic in the case of large corporations that may own multiple power plants or fuel production facilities, some or all of which may be considered “cleaner” in terms of greenhouse gas emissions even as they are emitting harmful local pollution that is not accounted for in the tax credit program and in some cases may be worse than local pollution from fossil fuel combustion. In particular, facilities combusting biomass, renewable natural gas, and hydrogen raise environmental justice concerns that should weigh heavily in considerations of tax credit financing for corporate owners of such facilities (Nerurkar and Behles 2022; Partnership for Policy Integrity 2011).

These considerations lead to a more general final point about commercial energy credits: We are essentially investing hundreds of billions of dollars in clean energy but know very little about how these investments are playing out at the community level. In the absence of this information, we should assume that most of the proposed clean energy tax resources will continue to flow to private enterprises with strictly commercial goals. Benefiting disadvantaged communities by reducing local pollution and creating local jobs and energy wealth for their residents is not a hallmark of commercial clean energy development, and the revised tax credit program does not seem poised to fundamentally change that general trend. It is worth reiterating that most tax benefits are meant to help individual taxpayers—especially corporate taxpayers—rather than surrounding communities. But if clean energy credits are to meet the goals of Justice40, much less what is necessary to advance energy justice, they should effectively be co-governed—for taxpayer benefit, community benefit, and of course climate benefit. Clearly the current proposal is not structured in that way.

SECTION THREE

RECOMMENDATIONS

As a cornerstone of federal climate policy, the design and implementation of clean energy tax credits are critically important for ensuring equity and justice in the climate transition. In this light, and with the aim of improving the tax credit program as proposed in BBB—or as modified, potentially, by other proposals—we conclude our analysis with a suite of recommendations primarily focused on oversight of the program.

In addition to the positive reforms outlined above—which have already been proposed by legislators—addressing inequities in a tax program on this scale should start with oversight and programmatic evaluation from the Department of Treasury. In fact, many of these changes are similar to reforms proposed for Opportunity Zones in a bill introduced by Senator Ron Wyden (D-OR) (Opportunity Zone Reporting and Reform Act 2019). This legislation requires, among other things, public information reporting from Opportunity Zone investors, terminating zones that are not low-income or impoverished, and prohibiting non-beneficial investments that drive gentrification, such as stadiums and luxury hotels and apartments. For energy tax credits, the following changes could—and should—be adopted:

- Corporations, developers, and other project sponsors claiming investment and production tax credits should have reporting requirements to provide information for assessing equity impacts of the resulting clean energy buildout.
- The Department of Treasury should also develop robust and measurable beneficial project criteria, not only for the low-income community solar program (although that is most critical) but for all projects seeking credits from the program. Credited projects are not location- or community-neutral, and that principle should be codified in Treasury policy to maximize equity impacts of energy tax credits and especially racial equity impacts. To this end, the function of developing beneficial project criteria could be shared with other agencies as well as states and localities.
- Oversight of individual energy credits should include evaluating distributional impacts, considering both income and race, and this should inform programmatic changes or revisions of the law that will reduce persisting disparities in the program.
- Credits for eligible energy sources and technologies considered harmful by environmental justice advocates should be subject to local or community review and accountability. Treasury guidance on community review and conditions for revocation and/or repayment of credits should be developed if unavailable, and consistently utilized. This should include pollution and public health reporting

requirements for corporations or other businesses owning/operating energy facilities that emit local pollution or otherwise pose local health risks.

- Energy tax equity investments should be profiled for climate and community impacts.
- No corporation currently or previously found to be in violation of environmental laws or labor and workplace safety laws should be eligible for credits.
- And finally, given the troubled distributional track record of tax credit policy generally and clean energy tax credits specifically, the question of how Justice40 applies to climate-related Treasury programs—especially one on this scale—deserves consideration by the Biden administration and more attention from advocates.

CONCLUSION

“For more than 50 years,” Kyle Strickland and Felicia Wong wrote in a 2021 report, “the fight for racial justice has been weakened by an individualistic, ‘race-neutral’ conception of access and opportunity within a society dominated by neoliberal economics” (Strickland and Wong 2021). Using the tax code for broad societal goals—whether it’s health care, retirement, or clean energy—is a hallmark of neoliberalism because it weakens the direct, democratic role and power of government in equalizing access to these very goods. This could be changed to some degree by adopting a much more progressive tax code and using the revenue to invest equitably in public needs, and especially in climate needs. Instead, however, we have ended up with extreme inequality and chronic underinvestment in disadvantaged communities, both due in part to a tax code and multiple giant tax credit schemes that have largely benefited affluent white households and communities.

Supporters of the clean energy tax credit proposals currently being debated rightly point out their likely effectiveness on greenhouse gas emissions and clean energy capacity, and some reforms in the current proposal could help to start closing the racial gaps we have seen thus far. But to effectively implement these reforms, and to advance the reforms necessary for energy justice and racial equity, it is important to begin with oversight of tax credits, linked to necessary policy reforms—whether through agency rules or guidance, other administrative action, or future congressional action.

Justice40 can and should be applied as federal policy for such an effort given the scale of federal resources in question and the inescapable questions of energy justice and racial justice confronting us during this pivotal moment of great promise—and greater peril—in addressing climate change.

More broadly, we need to pivot aggressively to major public investments in a rapid clean energy transition and in climate resilience, investments that could be designed for the benefit of disadvantaged communities and controlled by them, as envisioned by Justice40. Yet neoliberalism’s grip on the energy system is seemingly poised for expansion while government shrinks from the task of investing in equitable climate solutions. The energy tax credit proposal currently on the table does not directly address racial inequities in the current energy system or in the clean energy transition because it is not meant to do so: It is an individualistic, status quo policy that is very likely to perpetuate or even worsen systemic disparities and inequities inherited from the fossil fuel economy. This is a serious risk of any national climate strategy that largely rests on energy tax credits while falling short on direct, targeted investments as envisioned in Justice40 (Daly 2022). Today’s stark distributional inequities in clean energy access and energy burdens are a case in point, making it clear that equity and

justice in a clean energy future, including climate resilience for the most vulnerable people and places, depend on putting disadvantaged communities first in line for federal resources. Communities—not tax-preferenced individuals and corporations, and not private incentives—are the key to unlocking a just transition. Providing the long overdue public resources that disadvantaged communities need to survive, and thrive, in the fight against climate change should be a primary goal of federal policymakers negotiating the future of US climate policy.

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ACKNOWLEDGMENTS

Lew Daly thanks his Roosevelt Institute colleagues Rhiana Gunn-Wright, Suzanne Kahn, Sonya Gurwitt, Matt Hughes, and Ariela Weinberger for their expert assistance and kind support in producing this issue brief.

Sylvia Chi thanks Aiko Schaefer and Arjun Makhijani for their thought partnership.



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Just Solutions Collective identifies and promotes just solutions to climate change from Black, Latinx, Asian, Indigenous, and Frontline communities.