

Just one week after his inauguration, President Joe Biden designated January 27 “Climate Day” at the White House and signed a number of [executive orders](#), including one aimed to “secure environmental justice (EJ) and spur economic opportunity.” Under this executive order, President Biden took the first steps to make good on his [campaign's EJ commitments](#). These commitments align closely with the [Equitable and Just National Climate Platform](#), a national climate agenda co-authored by EJ and national environmental organizations and co-signed by more than 300 groups. California's environmental justice screening tool, CalEnviroScreen, can serve as a model to inform federal implementation of these commitments, particularly when it comes to mapping and targeting benefits to disadvantaged communities.

Biden's executive order takes two critical steps in identifying and targeting benefits to disadvantaged communities (DACs). First, it will initiate the development of an EJ screening tool that will build upon the U.S. Environmental Protection Agency's existing tool, known as EJSCREEN. This tool identifies DACs where federal investments and benefits can, “inform equitable decision making across the federal government.” Second, the tool creates a “government-wide Justice40 Initiative” that will facilitate delivering 40 percent of overall benefits of “relevant federal investments to disadvantaged communities.” The day after the executive order was signed, Rep. Cori Bush (D-MO) and Sens. Ed Markey (D-MA) and Tammy Duckworth (D-IL) [introduced](#) the Environmental Justice Mapping and Data Collection Act of 2021, which builds on many of the concepts in President Biden's executive order, creating a [whole-of-government initiative](#), including data infrastructure and funding, to identify communities most at risk from environmental injustices.

California's EJ screening tool, CalEnviroScreen, offers several lessons that can help [guide](#) the update of EJSCREEN and the implementation of the Environmental Justice Mapping and Data Collection Act. These lessons are outlined in a report recently released by the Center for American Progress (CAP), entitled “[Mapping Environmental Justice in the Biden-Harris Administration](#).” As detailed below, EJ expert Charles Lee [proposed](#) six guiding principles from California's experience. Drawing from the example of CalEnviroScreen, CAP proposes 10 additional recommendations to help guide the design of a national EJ screening tool that can meet these principles.

CalEnviroScreen: A brief overview

[CalEnviroScreen](#) is a mapping tool designed to identify communities in California with both the greatest pollution burden and vulnerability to the effects of pollution. In California, similar to the rest of the country, communities of color are [disproportionately burdened](#) by pollution. In census tracts scoring in the top 10 percent of CalEnviroScreen, [89 percent](#) of

the residents are people of color. Black and Latino individuals [disproportionately reside](#) in these highly affected communities, while white people overrepresent the population in the least-burdened communities. EJ groups have been instrumental in pushing for the development and improvement of CalEnviroScreen as part of a more comprehensive approach to addressing the burdens faced by these communities.

CalEnviroScreen is founded on the principle of [cumulative impact](#). It takes up-to-date health, environmental, and socioeconomic data on [20 indicators](#)—ranging from educational attainment to groundwater threats to asthma emergency room visits. These indicators fall into two distinct categories: pollution burden and population characteristics. The data are then weighted and combined to derive a [CalEnviroScreen score](#). Areas with [higher scores](#) indicates that they experience higher pollution burdens and vulnerabilities.

CalEnviroScreen has undergone various iterations to improve its functionality, with the next iteration, CalEnviroScreen 4.0, planned for 2021. Although the tool benefits from its iterative development, CalEnviroScreen has faced [criticism](#) at various points over both its functionality and shortcomings in its ability to paint a complete picture of a community's pollution burden. Any tool developed at the federal level will also need to address these challenges.

Using CalEnviroScreen to target programs and resources to DACs

CalEnviroScreen plays a [critical role](#) in targeting programs and benefits to DACs in California. Since 2013, the [California Climate Investments \(CCI\)](#) program has reinvested proceeds from California's cap-and-trade program; [Senate Bill 535](#) requires that [25 percent](#) of CCI funds provide a benefit to DACs located in census tracts with CalEnviroScreen scores in the top 25th percentile. S.B. 535 also requires that at least 10 percent of funds go toward projects located directly in those communities, as opposed to projects that benefit but may be located outside of a community. This important distinction ensures that programs that are officially counted as benefiting DACs do so directly and not tangentially.

[California Assembly Bill 1550](#) - passed in 2016 - further requires that at least 25 percent of CCI funds go to projects that benefit and are located within DACs and at least an additional 10 percent go to those in low-income households or communities. It also requires that 5 percent of funds go to low-income census tracts next to DACs and 5 percent to any other low-income census tract in the state so that communities bordering DACs are not left out of critical funding.

California developed specific programs that support the distribution of CCI funds in DACs: one of the most well-known and successful of these has been the [Transformative Climate](#)

[Communities \(TCC\) program](#). The TCC program funds community-led plans at the neighborhood level to reduce greenhouse gases. CalEnviroScreen helped identify communities with the greatest need, with those in the top fifth percentile of CalEnviroScreen scores being the first to receive TCC funding and attention in the first year of the program. The TCC program was later broadened to support, at the very least, the top 25th percentile of CalEnviroScreen-scoring communities.

Applicants to the TCC program must form a [Collaborative Stakeholder Structure](#), which brings together a variety of community-based organizations during the application process. It allows these groups to organize themselves to outline their legal and financial relationships and decision-making processes for implementation of a TCC grant. This is a powerful method of organization that allows for collaboration and building a collective vision for community decarbonization in ways that meet the community's particular needs. In addition, as part of the TCC process, communities receive planning grants and support to develop their visions and proposals.

CalEnviroScreen has had a significant [effect](#) in helping target benefits: Over [\\$3.5 billion](#) (more than 60 percent of the money invested through CCI) has been invested in projects benefiting DACs and low-income residents, and [98 percent](#) of DACs have received investment funds. The benefits resulting from these projects range from increased numbers of affordable housing units to more community-based renewable and energy efficiency investments and increased access to safe and viable transportation.

Lessons learned for the Biden-Harris administration

As the Biden-Harris administration looks to update EJSCREEN and implement the new Justice40 Initiative, it will be important that the new federal mapping tool facilitate the longer-term health and socioeconomic well-being of affected communities. Publicly identifying and addressing cumulative impacts and democratically engaging with those communities can ensure lasting change. According to EJ expert Charles Lee, the development of an EJ mapping tool should be based on [six principles](#). The tool should be (1) science-based and data-driven; (2) informed by community experience; (3) endorsed and used by government; (4) available for public use; (5) developed through a process of public participation; and (6) a third-party validator of the lived experiences of DACs.

Furthermore, based on California's experience with CalEnviroScreen, CAP's recent report proposes 10 additional recommendations that should guide the overhaul of EJSCREEN and its application toward achieving the Justice40 goals:

Apply the right scale for analysis. In California, this has been at the [census-tract](#) level. The Biden-Harris administration will need to consider data distinctions between rural and urban areas and tribal and nontribal communities as well as the right scale to capture community boundaries.

Produce a cumulative score that can be used to provide a community assessment and comparison. This is fundamental if the tool will be used to direct resources to priority communities, as is expected under the Justice40 Initiative.

Establish a percentile threshold for determining which communities are designated as disadvantaged. The threshold might be based on a number of considerations, including how it compares with other relevant metrics, such as around [poverty](#), and how it aligns with the percent of funds allocated to DACs (a threshold that exceeds the percent of funds allocated could be considered regressive). Such a threshold should also be designed with the goal of not excluding communities with legitimate EJ concerns.

Establish minimum thresholds for investment in DACs. The Biden-Harris administration has already set a bar of 40 percent; it may consider increasing this threshold over time.

[Prioritize community co-creation, leadership, and engagement.](#) An inclusive and participatory public process to develop and apply the mapping tool is critical in order to generate well-informed decisions. The White House Environmental Justice Interagency Council and White House Environmental Justice Advisory Council can work in partnership with the EPA, the Department of Justice, the Department of Health and Human Services, and other agencies to support these critical engagement processes.

Acknowledge and account for the limitations to and incompleteness of data. A process of iteration should also be built into the tool's design—for example, every three to five years—as updated and more complete data become available.

Develop funding programs specifically designed for DACs. California's [TCC program](#) provides an excellent model that the federal government could seek to replicate. It supports community-led plans at the neighborhood level that reduce greenhouse gases while also addressing economic, environmental, and public health needs. Funding guidelines should also ensure that projects' benefits to DACs are "[meaningful, direct, and assured](#)."

Provide technical assistance and capacity-building resources to [support communities and community leaders](#). The federal government might consider

California's [Partners Advancing Climate Equity](#) program as a model.

Use screening tools not only to target benefits and investments but also to improve and better coordinate regulatory compliance and enforcement work in DACs. EJ screening tools such as CalEnviroScreen can and should also be applied for land use and zoning decisions, permitting processes, enforcement actions, general plans, and other long-term plans.

Acknowledge that mapping tools have limitations and, on their own, are not a panacea. They must be complemented by other approaches to address structural inequality and environmental injustices.

The lessons learned from CalEnviroScreen can be helpful as the Biden-Harris administration and Congress look to build out an EJ screening tool that identifies and distributes benefits to DACs. These lessons should be considered in the broader context of advancing environmental justice, acknowledging that CalEnviroScreen is only one piece of the puzzle.

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