



Approaches to Defining Environmental Justice Community for Mandatory Emissions Reduction Policy

To State and Federal Climate Policy Makers and Environmental Justice, Community and Climate Policy Advocates:

The following recommendations were developed by the Platform for a Just Climate (formerly known as Equitable & Just National Climate Platform). We are a group of environmental and environmental justice organizations that have come together to advance a national climate and environmental policy agenda that centers on environmental justice. The recommendations below provide an effective framework to identify environmental justice communities for a state or federal mandatory emissions reduction in environmental justice communities policy.

We recommend the following definition for Environmental Justice (EJ) communities in the context of state and federal policies designed to achieve mandatory emissions reductions¹ in environmental justice communities. An EJ community is a census tract or census block group:

- Whose percentage Of Color population is equal to or greater than the average percentage Of Color population in the state; or
- Whose percentage of population households living at or below twice the federal poverty level is equal to or greater than the state's percentage of population households living at or below twice the federal poverty level.

A detailed description of considerations that informed the recommendations is provided below.

I. Purpose

One of the environmental justice movement's primary goals with respect to state and federal climate change mitigation policy has been to guarantee emissions reductions in environmental justice (EJ) communities. The proposal is usually called mandatory emissions reductions for EJ communities and is intended to improve the health of low income communities and communities of color by decreasing disproportionate pollution burdens through GHG co-pollutant reduction. Ideally, any climate change mitigation policy, in addition to achieving a specified GHG reduction

¹ Nicky Sheats, Achieving Emissions Reductions for Environmental Justice Communities Through Climate Change Mitigation Policy, 41 Wm. & Mary Env'tl. L. & Pol'y Rev. 377 (2017), <https://scholarship.law.wm.edu/wmelpr/vol41/iss2/3>

goal, would also include intentional strategies that maximize the reductions of GHG co-pollutants from sources located in, or that significantly impact, EJ communities. Since no proposed climate change mitigation policy currently maximizes co-pollutant reduction, EJ advocates have proposed mandatory GHG reductions in EJ communities, which would inevitably also result in incidental co-pollutant decreases. A policy that intentionally reduces power plant emissions in EJ communities would need to accurately identify, target and prioritize these communities. Therefore a critical aspect of this policy recommendation is defining an “EJ community.”

The approaches recommended below, developed with input from EJ advocates across the country, intend to identify and define EJ communities in state and federal policy proposals to achieve mandatory emissions reduction in these communities. It should be noted that a widely accepted definition of an EJ community based on significant input from EJ organizations has not yet been developed. It is expected that such a definition could and would be used in a variety of strategies, in addition to a mandatory emissions reductions policy, intended to protect EJ communities. The increase in environmental and climate justice laws and policies result in a need for a clear definition for an EJ community. The recommendations below on defining an EJ community were developed in a process that was led by EJ groups. We make these recommendations as a guideline for policymakers. However, in any given state, the definition of an EJ community should be determined by the members and representatives of such communities, and as such may take different approaches than the approach we offer here.

II. Background

Researchers and policy makers have constructed numerous approaches to identify and understand geographies of disadvantaged populations that are subject to a variety of disproportionate environmental and socioeconomic burdens, by using different units of analysis, methods, and measures. These geographic areas are often referred to in policies, using terms such as “EJ communities”, “overburdened communities”, “disadvantaged communities”, or “EJ areas of concern”. Defining such communities consistently has been difficult due to the range of political agendas and administrative strategies that have shaped environmental justice policy at the federal level². The Environmental Protection Agency’s (EPA) efforts to define EJ areas have been complicated by the shifting focus on environmental justice policy from one administration to another. It has also been technically challenging to define and measure “disproportionate burden”.

EPA has developed a series of information management systems to display the geographical connections among various demographic, socioeconomic, environmental, and health indicators, but it has yet to define potential EJ communities. States differ dramatically in policy design and practices related to EJ. Some states have explicitly defined EJ areas and maintained screening and mapping systems with varying degrees of functionality, while others do not. Over the years, both external and internal government auditors have suggested that a national definition of areas of concern is critically important for policy interventions that target disadvantaged populations.

²Holifield, R. (2001). DEFINING ENVIRONMENTAL JUSTICE AND ENVIRONMENTAL RACISM 1. *Urban Geography*, 22, 78–90.



III. Defining an EJ Community

Part of the process of identifying a community that will be the subject of some type of strategic intervention, must center the goal of the proposed policy. For instance, is the policy intended to distribute funding to certain communities or will it be designed to add some type of community protection from pollution? The recently adopted NJ cumulative impacts bill³ imposes new requirements on permit applicants in the state for facilities located in “overburdened communities”. The legislation defines what we would refer to as an EJ community (see below) since it uses only socio-demographic indicators that include race, income or linguistic isolation. It also sets thresholds that are intentionally inclusive in order to protect as many vulnerable communities as reasonably possible. A policy intervention that intends to target communities for investments might utilize a narrower and more multi-layered definition for communities it is seeking to identify so that populations that need resources the most can be prioritized.

To design and implement a state or federal mandatory emissions reduction policy, policy-makers and advocates must first decide if the policy applies to an EJ community, overburdened community or to communities at the intersection of those two subsets.

The terms EJ communities and overburdened communities are often used interchangeably, however there is a distinction. Overburdened communities should be characterized by the concentration of pollution and other burdens that disproportionately harm local populations, whereas we suggest that the definition of an EJ community should rely on socio-demographic indicators. An EJ definition, should also validate to a large degree what local leaders and EJ advocates already recognize as EJ areas. Regardless of the application, there has to be an opportunity for communities who already self-identify as EJ communities to be part of the definition process.

Community Based Identification of EJ Communities

One approach to identifying EJ communities relies on participatory mapping by members of affected communities. This approach has the advantage of embodying the ideals of democratic participation and is likely to be more consistent with how affected populations define an EJ community⁴.

Through a stakeholder process involving a diverse range of environmental justice and health organizations, community members can identify areas of elevated concern in a region, consistent with the EJ movement principle “We speak for ourselves”⁵. This bottom up approach was modeled

³Halliday, S. S. (2020, September 1). NJ Passed Landmark Environmental Justice Legislation. National Law Review. <https://www.natlawreview.com/article/new-jersey-passes-landmark-environmental-justice-legislation>

⁴Bacon, Christopher & deVuo-Powell, Saneta & Frampton, Mary & LoPresti, Tony & Pannu, Camille. (2013). Introduction to Empowered Partnerships: Community-Based Participatory Action Research for Environmental Justice. Environmental Justice. 6. 1-8. 10.1089/env.2012.0019

⁵ 30th Anniversary of the EJ Movement. (n.d.). Retrieved November 16, 2021, from <https://losjardinesinstitute.org/blog/f/30th-anniversary-of-the-ej-movement>



in the development of the CalEnviroScreen mapping tool in use in California, with EJ communities weighing in to ground truth early iterations of the indicators and mapping of EJ areas.

Creating a Baseline Definition of EJ Communities

There is value in both allowing for a stakeholder process in identifying EJ communities but also providing a baseline EJ community definition. Case-by-case community definitions are difficult to replicate across large planning areas and may also miss spatially dispersed EJ populations. For federal policies, there is value in providing a baseline definition of EJ community that can serve as a floor and as a guardrail to ensure that the most affected geographic areas are covered under the definition.

Using race and income to define an EJ community

Prior work has illustrated race⁶⁷ and income⁸ as important predictors of environmental inequality. The use of these two variables in EJ analysis is common and often utilized in federal and state government policy guidance. Most commonly used EJ community definitions rely on static population thresholds defined for the race or income category (e.g., 30% low-income population)⁹. Geographic areas whose population exceed that threshold are considered an EJ community.

EJ advocates have maintained that racial factors significantly and independently influence the distribution of environmental burdens. Environmental inequality is the result of the legacy of racial segregation and discrimination which spatially concentrated disproportionate pollution burdens in communities of color placing them at a higher risk of exposure to environmental toxins¹⁰¹¹. Data show that race is the most consistent factor in determining the location of commercial hazardous waste sites, nationally leading to neighborhoods of color breathing in toxic air pollution.¹² The same neighborhoods are placed near highways and experience pollution from transportation

⁶ Bullard, R. D., Mohai, P., Saha, R., & Wright, B. (2007). *Toxic wastes and race at twenty 1987–2007: Grassroots struggles to dismantle environmental racism in the United States*. Cleveland, OH: United Church Christ Justice & Witness Ministries.

⁷ Anderton, D. L., Anderson, A. B., Oakes, J. M., & Fraser, M. R. (1994). Environmental equity: The demographics of dumping. *Demography*, 31(2), 229–248.

⁸ Ash, M., & Fetter, T. R. (2004). Who lives on the wrong side of the environmental tracks? Evidence from the EPA's risk-screening environmental indicators model. *Social Science Quarterly*, 85(2), 441–462.

⁹ <https://thenewschool.carto.com/u/tedc/builder/c70364c8-7029-46c0-87cf-71aad6b62221/embed>

¹⁰ Zimring C.A. *Clean and White: A History of Environmental Racism in the United States*. New York University Press; New York, NY, USA: 2015.

¹¹ Environmental justice: human health and environmental inequalities. *Brulle RJ, Pellow DN Annu Rev Public Health*. 2006; 27(1):103–24.

¹² Mohai, Paul and Saha, Robin, "Which came first, people or pollution? Assessing the disparate siting and post-siting demographic change hypotheses of environmental injustice" (2015). *Environmental Studies Faculty Publications*. 7.

https://scholarworks.umt.edu/envirostudies_pubs/7



emissions¹³. Racial segregation has placed communities of color in substandard housing¹⁴ with the heightened risk of exposure to lead hazards, mold, mites, allergens and other pollutants associated with poor health¹⁵. Additionally, poor access to critical services (such as health care,¹⁶ affordable housing, clean water, and reliable heat and energy) and blocked channels of residential, social and economic mobility increase the susceptibility of communities of color to environmental toxins.

Defining an EJ community using race and income, could be an important component of a state or federal policy that protects low-income communities and communities of color who might not be currently overburdened with pollution but are vulnerable to pollution.

Legal hurdles may exist for classifications based on race. However, they may be permitted if they serve a compelling governmental interest and are narrowly tailored to further that interest. Whether a race-based classification is permitted requires case-by-case consideration based on the policy context at issue. For example, evidence of the history of racial discrimination and its ongoing effects that leaves a community of color vulnerable to high pollution burdens could support specific protections from pollution for the community, although significant legal challenges may remain.

Use of indicators to reflect history of racial disparity

As discussed above, race is a key predictor of environmental inequality. For example, the racial composition of a community is an essential determinant of where an unwanted land use, such as a polluting facility, might be sited^{17,18}. Statistical analyses often demonstrate that race and income are the two most important factors in deciding the location of a polluting facility, with race frequently outweighing income.¹⁹ For this reason race should be included in the definition of an EJ community, but the legal challenges described in section above should be taken into account. If race is not included in the definition of an EJ community, indicators that capture the impact of current and historical racial discrimination – such as census tracts in geographic areas that were

¹³ Union of Concerned Scientists: Inequitable Exposure to Air Pollution from Vehicles in Massachusetts: Fact Sheet, 1 (June 2019), <https://www.ucsusa.org/sites/default/files/attach/2019/06/Inequitable-Exposure-to-Vehicle-Pollution-MA.pdf>.

¹⁴ Rachel D. Godsil, Viewing the Cathedral from Behind the Color Line: Property Rules, Liability Rules and Environmental Racism

¹⁵ Russ Lopez, Segregation and Black/White Differences in Exposure to Air Toxics in 1990, 110 *Env'tl. Health Persp.* 289 (2002); see also Jayajit Chakraborty & Paul A. Zandbergen, Children at Risk: Measuring Racial/Ethnic Disparities in Potential Exposure to Air Pollution at School and Home, 61 *J. Epidem. Cmty. Health* 1074, 1074 (2007)

¹⁶ What factors hinder women of color from obtaining preventive health care? *Cornelius LJ, Smith PL, Simpson GM Am J Public Health.* 2002 Apr; 92(4):535-9.

¹⁷ Bullard, R. D., Mohai, P., Saha, R., & Wright, B. (2007). Toxic wastes and race at twenty 1987–2007: Grassroots struggles to dismantle environmental racism in the United States. Cleveland, OH: United Church Christ Justice & Witness Ministries.

¹⁸ UNITED STATES GENERAL ACCOUNTING OFFICE. (1983). Siting of Hazardous Waste Landfills and their correlation with racial and economic status of surrounding communities.

¹⁹ DOWNEY, L., & HAWKINS, B. (2008). RACE, INCOME, AND ENVIRONMENTAL INEQUALITY IN THE UNITED STATES. *Sociological Perspectives : SP : Official Publication of the Pacific Sociological Association*, 51(4), 759. <https://doi.org/10.1525/SOP.2008.51.4.759>

definition of an EJ community, but the legal challenges described in section above should be taken into account.

formerly redlined, experienced exclusionary zoning or racially restrictive housing covenants; census tracts with proximity to commercial hazardous waste sites, and evidence in general of racial discrimination and racially segregating people of color should be considered.

Indicators that reflect socioeconomic burden, as well as indicators of pollution burden, could also be used to measure the effects of race. Possible socioeconomic indicators include education attainment rate, unemployment rate and wealth (e.g., household median net worth and cash reserves)²⁰. A variety of pollution burden indicators such as ambient concentrations of air pollution might also be used to at least partially reflect the manner in which race influences environmental and EJ decision-making in our society. These racially related, socially related and pollution related indicators could be considered for utilization if race is not explicitly included as an indicator.

Use of environmental and climate indicators

The use of environmental and climate indicators in the definition of EJ community could also differentiate between EJ communities that are more overburdened with pollution than others. Including these additional indicators enables identification of overburdened EJ communities that perhaps need to be prioritized for an emissions reduction policy application or for the reception of some type of benefit. The communities with the highest score or ranking (with respect to pollution burden and demographic data) could be prioritized to receive emissions reductions first and/or receive a higher level of emissions reductions if, for whatever reason, it is not feasible to protect all EJ or overburdened communities. These communities could also be prioritized for the distribution of various benefits.

Thresholds setting for Race and Income Variable

Using static population thresholds defined for some demographic category (e.g., 30% low-income population) is a common approach to identifying certain geographic areas as EJ, overburdened or other types of “communities”.

Since there is wide variation in the demographic makeup of each state, using state specific statistics instead of national statistics, to define population thresholds for each state, provides for a more accurate identification of clusters of low income communities and communities of color. When the income threshold is tied to a state’s percentage of low income population, it takes into account the wide geographical differences across states in cost of living which the federal poverty line (FPL) measure might be inadequate in capturing. Similarly for the race threshold, when it is tied to a state’s percentage of non white population, it takes into account the wide variation in demographics across the country - with particular attention to tribal communities and clusters of communities Of Color in states with overall low percentages of non-white populations.

As such, thresholds for identifying which block groups or census tracts would be considered an “environmental justice” community should be based on each state’s demographic (race and income) make-up.

²⁰ Survey of Consumer Finances (SCF), The Federal Reserve. <https://www.federalreserve.gov/econres/scfindex.htm>



Race Threshold

Block groups with a percentage Of Color population at or above the state's percentage of Color population would meet the race threshold. For instance, the percentage of color population in Minnesota is 22%. The race threshold for a block group in Minnesota to be considered an EJ community would be 22% or above.

Income Threshold

Block groups with a percentage of low income population at or above the state's percentage of low income population would meet the income threshold. There are different definitions of "low income" that can be used to set this threshold. Here are two different ways in which low income can be defined:

1. Twice FPL: Households where income is less than or equal to twice the Federal Poverty Level (FPL)
2. FPL: Households where income is less than or equal to the Federal Poverty Level (FPL).

When low income is defined as households with income less than or equal to twice the FPL a greater percentage of each state's population is identified as an "environmental justice" community. This is especially true for states such as Georgia, Mississippi or New Mexico where there are higher percentages of households that are just above the federal poverty level but don't necessarily meet the federal poverty level threshold.

Race and Income Threshold

Using both the race and income thresholds collectively rather than at the intersection provides a more inclusive definition of the EJ community. In other words a community should be considered an EJ community if it meets the relevant race threshold or the relevant income threshold.

IV. Conclusion

After discussing and analyzing several factors and related topics, we make the following recommendation regarding defining EJ communities. An EJ community is a census tract or census block group:

- Whose percentage Of Color population is equal to or greater than the average percentage Of Color population in the state; or
- Whose percentage of population households living at or below twice the federal poverty level is equal to or greater than the state's percentage of population households living at or below twice the federal poverty level.



About Us

The Platform for a Just Climate (formerly known as the Equitable & Just National Climate Platform) is a national coalition of environmental justice groups and national environmental organizations from across the country united around a shared commitment to ending the environmental racism that has left economically disadvantaged communities, Indigenous communities, Black communities, and communities of color exposed to disproportionate levels of toxic pollution and bearing the brunt of the climate crisis. Our coalition has stood strong since 2019 around our shared vision for a just climate future—and our platform has grown to include over 300 signatory organizations from all over the country. Learn more at AJustClimate.org

