

Environmental and Energy Justice

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U.S. DEPARTMENT OF
ENERGY

Fossil Energy and
Carbon Management

Presentation Goals

- What are Environmental and Energy Justice, and what does this look like in communities today?
- What is the Justice40 Initiative, and what are DOE's priorities and approach to Environmental and Energy Justice?

What are Environmental and Energy Justice?

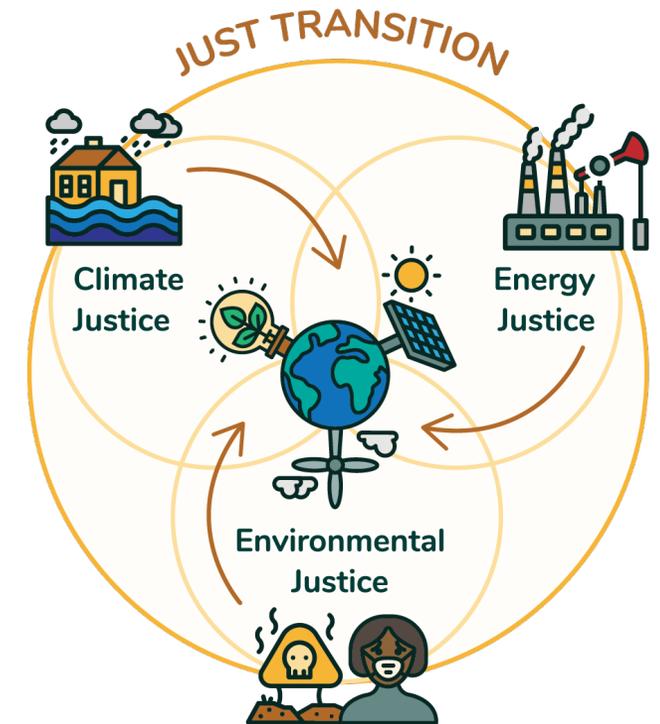
Environmental Justice

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys:

- The same degree of protection from environmental and health hazards, and
- Equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

Energy Justice

- Seeks equity in the social and economic participation in the energy system
- While remediating social, economic, and health burdens on “frontline communities” explicitly centering their concerns
- Aims to make energy more accessible, affordable, clean, and democratically managed for all communities.



Initiative for Energy Justice [Section 1 - Defining Energy Justice: Connections to Environmental Justice, Climate Justice, and the Just Transition - Initiative for Energy Justice \(iejusa.org\)](#)

Pillars of Environmental Justice



Procedural

Broad and meaningful participation in the decision-making



Recognition

Respect and honor of divergent cultural and local knowledge



Distributive

Equitable distribution of environmental benefits and burdens

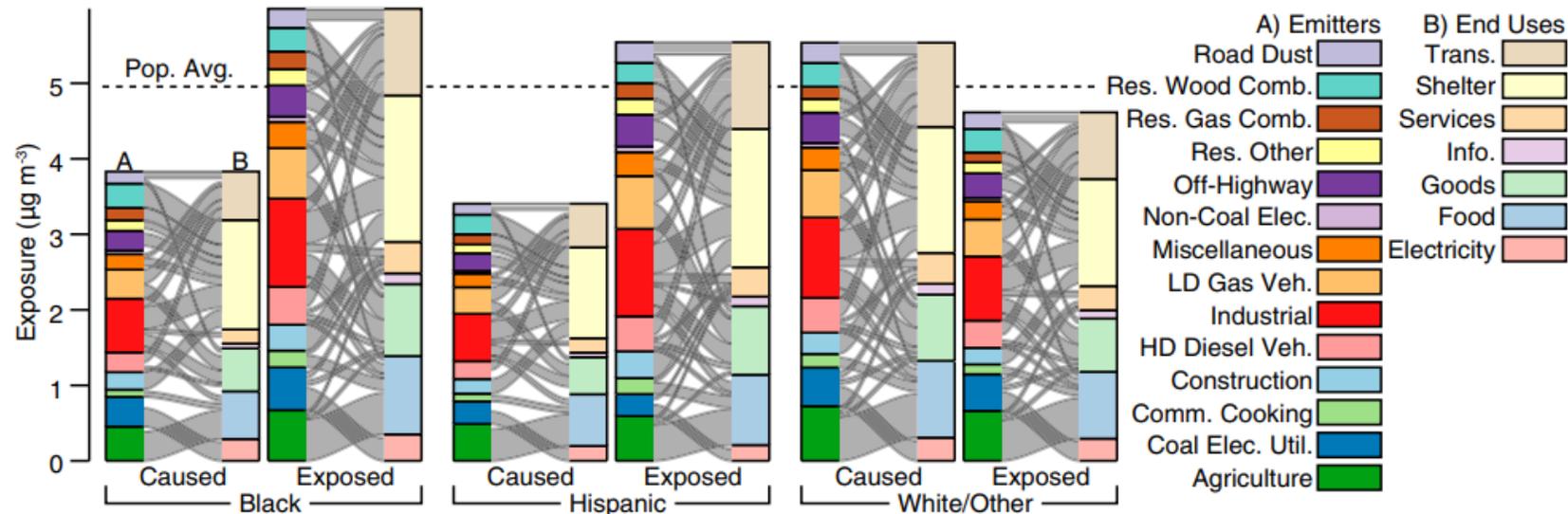


Restorative

Repair harms done to communities and the environment

Environmental Injustice Today

"Fine particulate matter (PM2.5) air pollution exposure is the largest environmental health risk factor in the United States... PM2.5 exposure is disproportionately caused by consumption of goods and services mainly by the non-Hispanic white majority, but disproportionately inhaled by Black and Hispanic minorities."



- Latinx Americans exposed to **63% more** PM2.5 than they produce
- Black Americans exposed to **56% more** PM2.5 than they produce
- White Americans (non-Hispanic) exposed to **17% less** PM2.5 than they produce

Source: Christopher W. Tessum, et al. "Inequity in consumption of goods and services adds to racial-ethnic disparities in air pollution exposure." *Proceedings of the National Academy of Sciences* (March 2019).

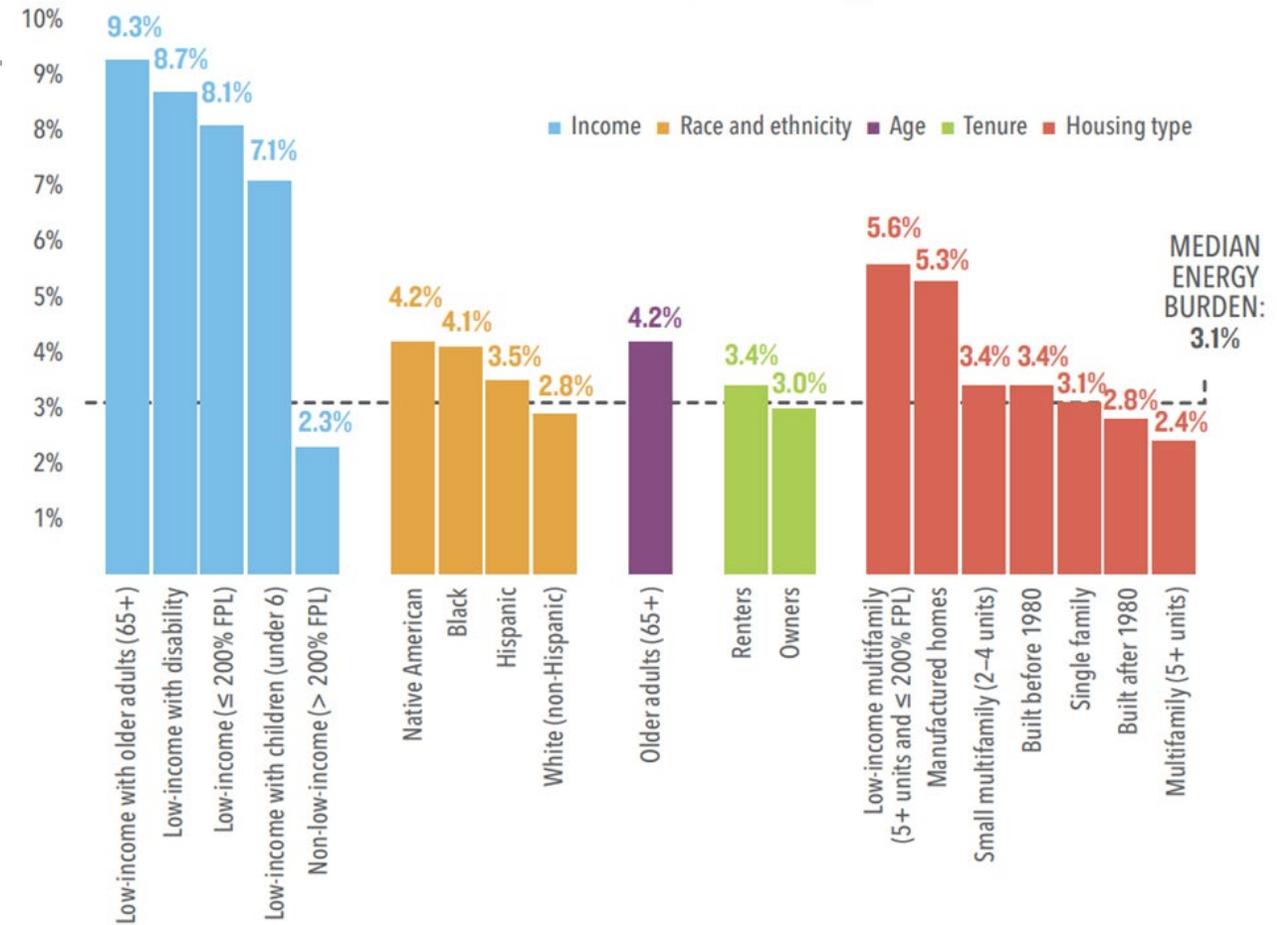


Energy Injustice Today

“Low-income households spend three times more of their income on energy costs compared to the median spending of non-low-income households”

"The median energy burden for Black households is 43% higher than for non-Hispanic white households, and the median energy burden for Hispanic households is 20% higher than that for non-Hispanic white households"

FIGURE ES1. National energy burdens across subgroups (i.e., income, race and ethnicity, age, tenure, and housing type) compared to the national median energy burden



Source: Ariel Drehobl, et al. "How High Are Household Energy Burdens? An Assessment of National and Metropolitan Energy Burden across the United States." American Council for an Energy-Efficient Economy (September 2020).



Climate Injustice Today

"Of the four socially vulnerable groups examined, minorities are most likely to currently live in areas where the analyses project the highest levels of climate change impacts with 2°C of global warming or 50 cm of global sea level rise."

-  **AIR QUALITY AND HEALTH***
New asthma diagnoses in children due to particulate air pollution.
-  **EXTREME TEMPERATURE AND HEALTH**
Deaths due to extreme temperatures.
-  **EXTREME TEMPERATURE AND LABOR**
Lost labor hours for weather-exposed workers.

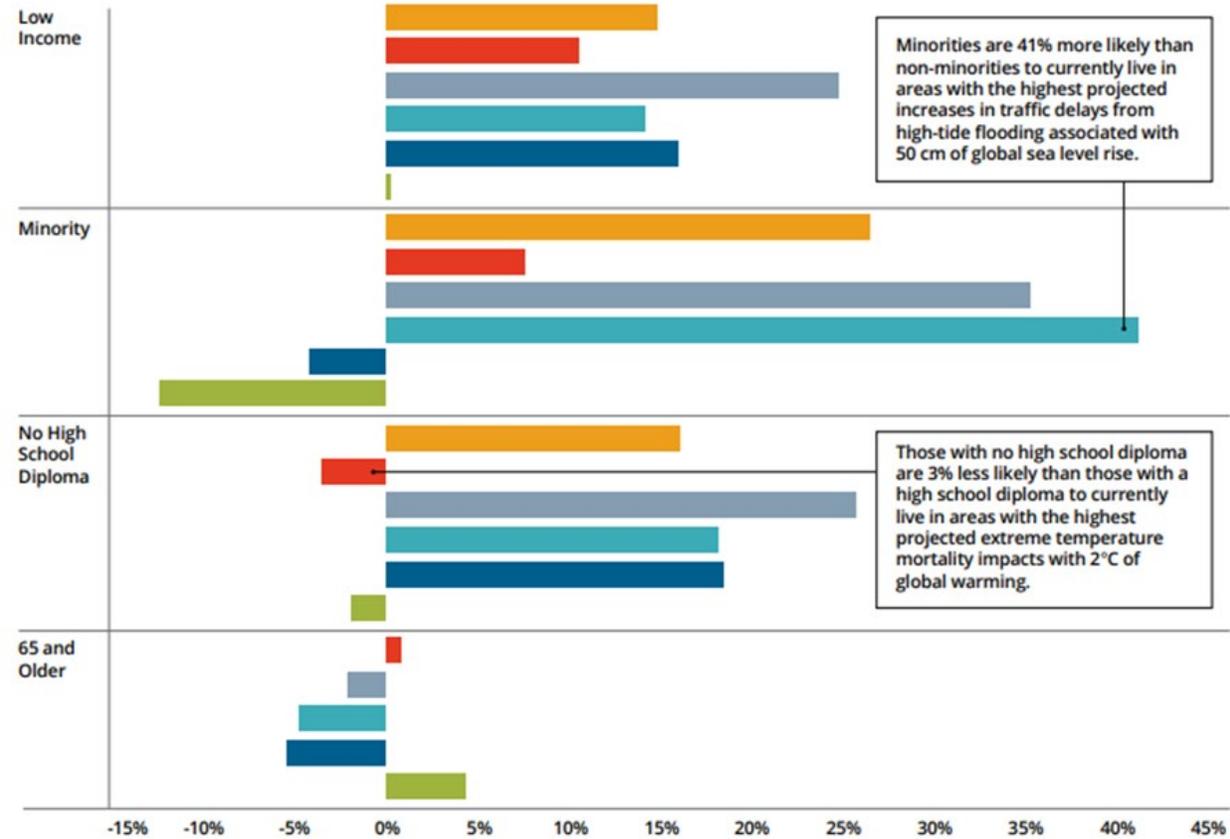
-  **COASTAL FLOODING AND TRAFFIC**
Traffic delays from high-tide flooding.
-  **COASTAL FLOODING AND PROPERTY**
Property inundation due to sea level rise.
-  **INLAND FLOODING AND PROPERTY**
Property damage or loss due to inland flooding.

*Impacts not estimated for 65 and Older.

Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts

Figure ES.2 – Differences in Risks to Socially Vulnerable Groups Relative to Reference Populations with 2°C of Global Warming or 50 cm of Global Sea Level Rise

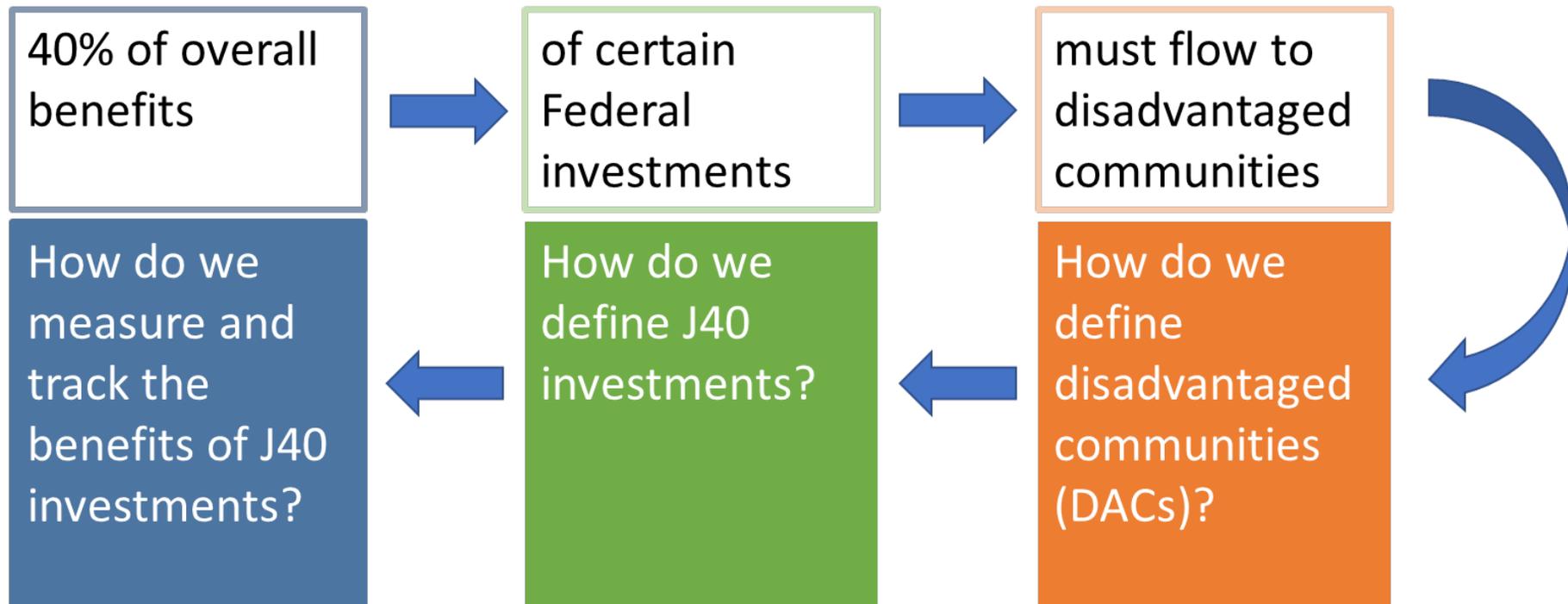
The estimated risks for each socially vulnerable group are relative to each group's "reference" population, defined as all individuals other than those in the group being analyzed. The estimated risks presented in the chart are for scenarios with 2°C of global warming (relative to the 1986-2005 average) or 50 cm of global sea level rise (relative to 2000). For the inland flooding analysis, the baseline is 2001-2020. Results for additional scenarios are provided in the following chapters and appendices.



EPA. 2021. Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts. U.S. Environmental Protection Agency, EPA 430-R-21-003. www.epa.gov/cira/social-vulnerability-report

Justice40 Initiative

Executive Order 14008, *On Tackling the Climate Crisis at Home and Abroad*, establishes a goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities.



What is Covered in Justice40?

Covered Program

- ✓ Climate change
- ✓ Clean energy and energy efficiency
- ✓ Clean transportation
- ✓ Affordable and sustainable housing
- ✓ Training and workforce development (related to climate, natural disasters, environment, clean energy, clean transportation, housing, water and wastewater infrastructure, and legacy pollution reduction, including in energy communities)
- ✓ Remediation and reduction of legacy pollution
- ✓ Critical clean water and waste infrastructure

Covered Investment

- ✓ Federal grants and procurement spending (including discretionary budget authority, direct/mandatory spending, and formula funding)
- ✓ Financing (including credit, loans, and guarantees)
- ✓ Programmatic Federal staffing costs (e.g. federal pay for staff that provide technical assistance)
- ✓ Direct financial benefits (including provision of goods and services)
- ✓ Additional federal investments under covered programs as determined by OMB

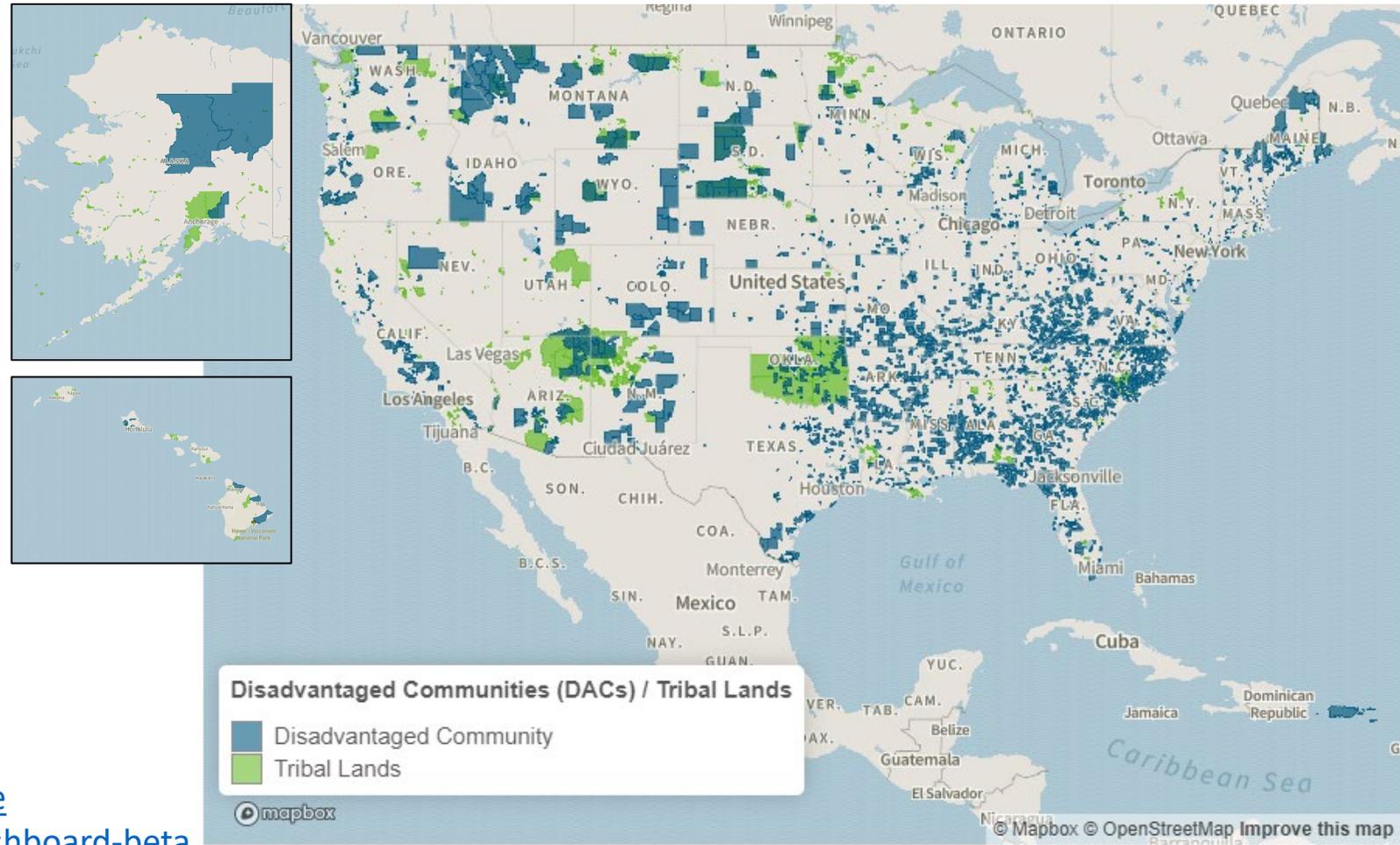
DOE Disadvantaged Community Working Definition

Developed by an internal and external collaborative research process and includes data for thirty-six (36) indicators, including:

- Fossil Dependence
- Energy Burden
- Environmental and Climate Hazards
- Vulnerability (socioeconomic, housing burden, transportation burdens, etc.)

Disadvantaged communities can include a group of individuals living in geographic proximity or a geographically dispersed set of individuals, where either type of group experiences common conditions.

<https://www.energy.gov/diversity/justice40-initiative>
<https://www.energy.gov/diversity/energy-justice-dashboard-beta>



DOE Justice40 Policy Priorities

1. Decrease energy burden in disadvantaged communities.
2. Decrease environmental exposure and burdens for disadvantaged communities.
3. Increase parity in clean energy technology access and adoption in disadvantaged communities.
4. Increase access to low-cost capital in disadvantaged communities.
5. Increase clean energy enterprise creation (MBE/DBE) in disadvantaged communities.
6. Increase the clean energy job pipeline and job training for individuals from disadvantaged communities.
7. Increase energy resiliency in disadvantaged communities.
8. Increase energy democracy in disadvantaged communities.

Environmental and Energy Justice in FECM

- Funding opportunities will include requirements on Societal Considerations and Impacts, including:
 - Justice40/Energy and Environmental Justice;
 - Community and Stakeholder Engagement;
 - Diversity, Equity, Inclusion, and Accessibility; and
 - Economic Impact and Quality Jobs
- Advancing Justice, Labor, and Engagement is one of three priority directions in the new FECM Strategic Vision