

# Environmental, Energy, and Climate Justice

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U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ECONOMIC IMPACT AND DIVERSITY**

# Bipartisan Infrastructure Law (BIL)

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- A once in a generation investment in our energy, climate, and transportation infrastructure
- BIL has 121 provisions for DOE
- Several provisions for FECM, representing over \$6 billion in investments, and a chance to ensure greater energy, environmental, and climate justice moving forward

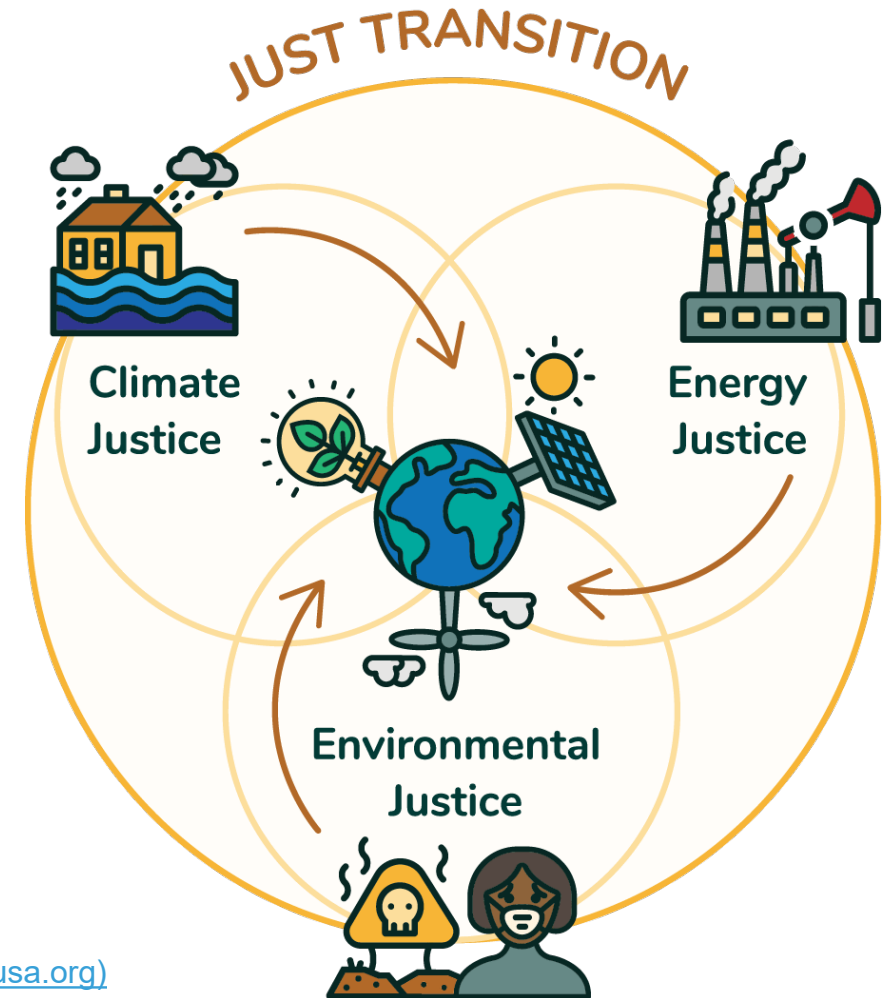
# What is Energy Justice?

Seeks **equity** in the **social** and **economic** participation in the energy system

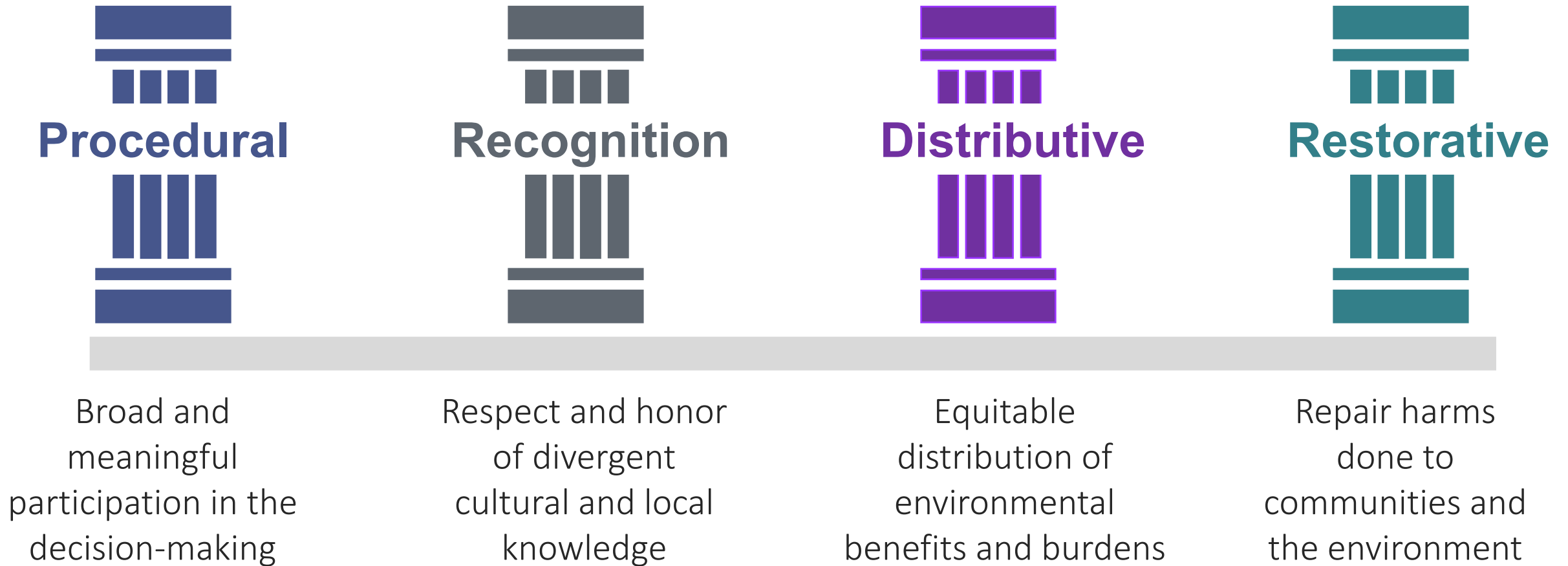
While **remediating** social, economic, and health **burdens** on “frontline communities” explicitly centering their concerns

Aims to make energy more **accessible**, **affordable**, **clean**, and **democratically** managed for all communities.

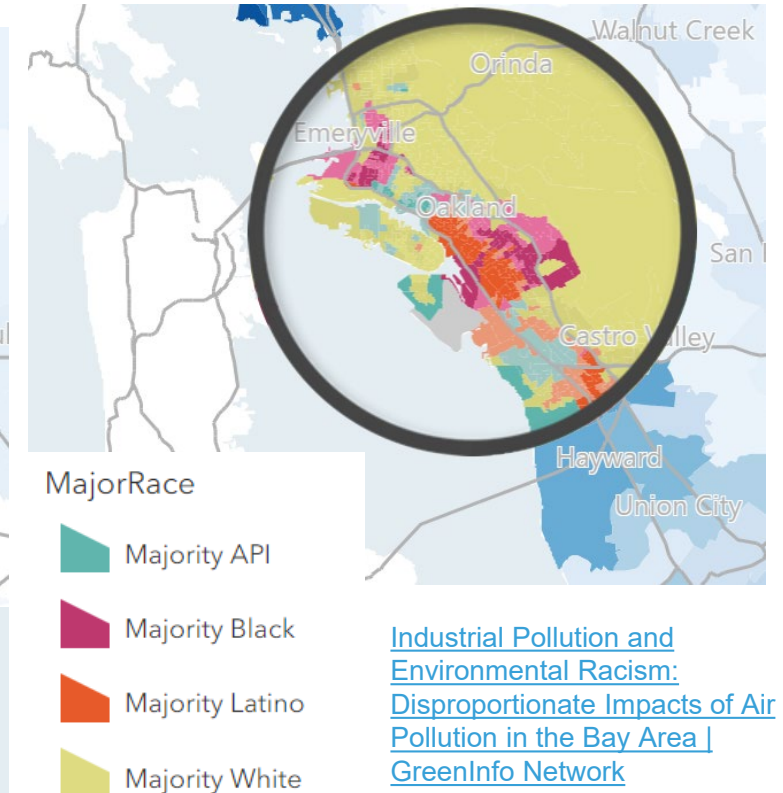
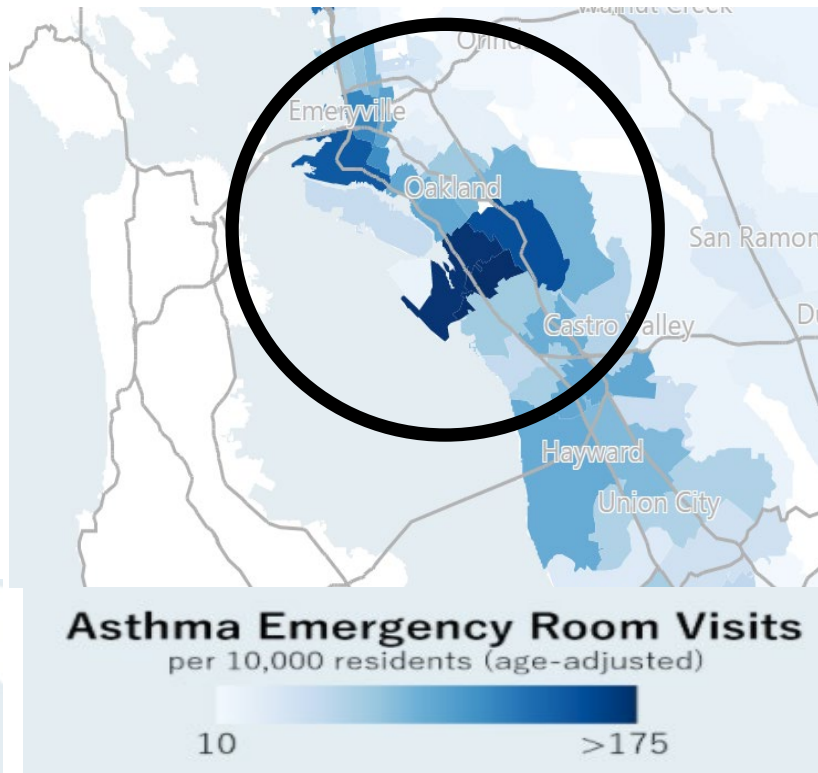
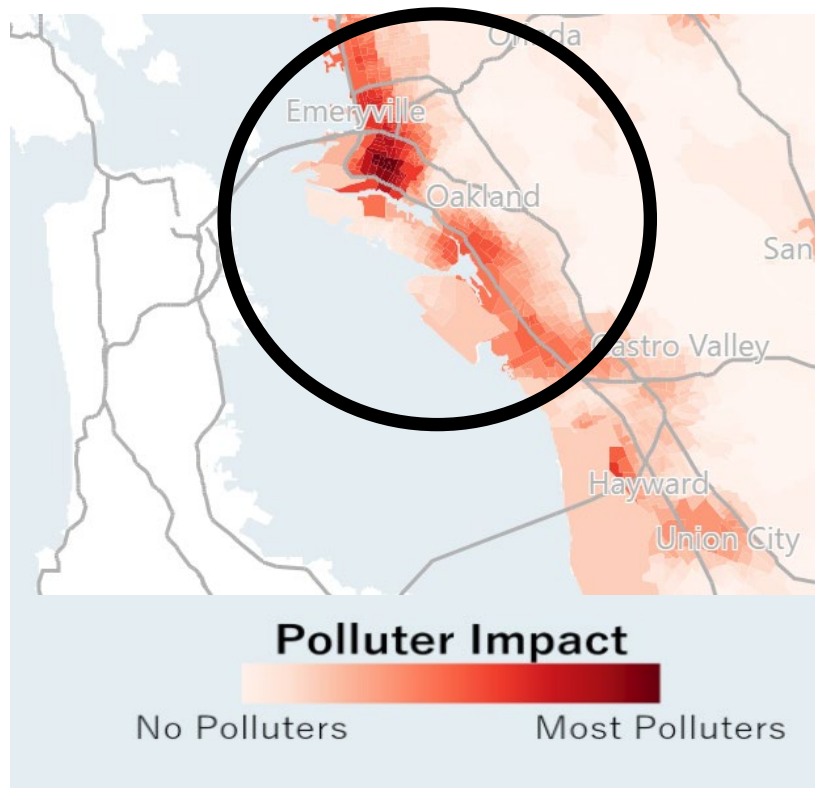
Image Credit: Initiative for Energy Justice [Section 1 - Defining Energy Justice: Connections to Environmental Justice, Climate Justice, and the Just Transition](https://www.iejusa.org/section-1-defining-energy-justice-connections-to-environmental-justice-climate-justice-and-the-just-transition) - Initiative for Energy Justice ([iejusa.org](https://www.iejusa.org/))



# Pillars of Energy and Environmental Justice



# A legacy of mining, energy drilling, and pollution

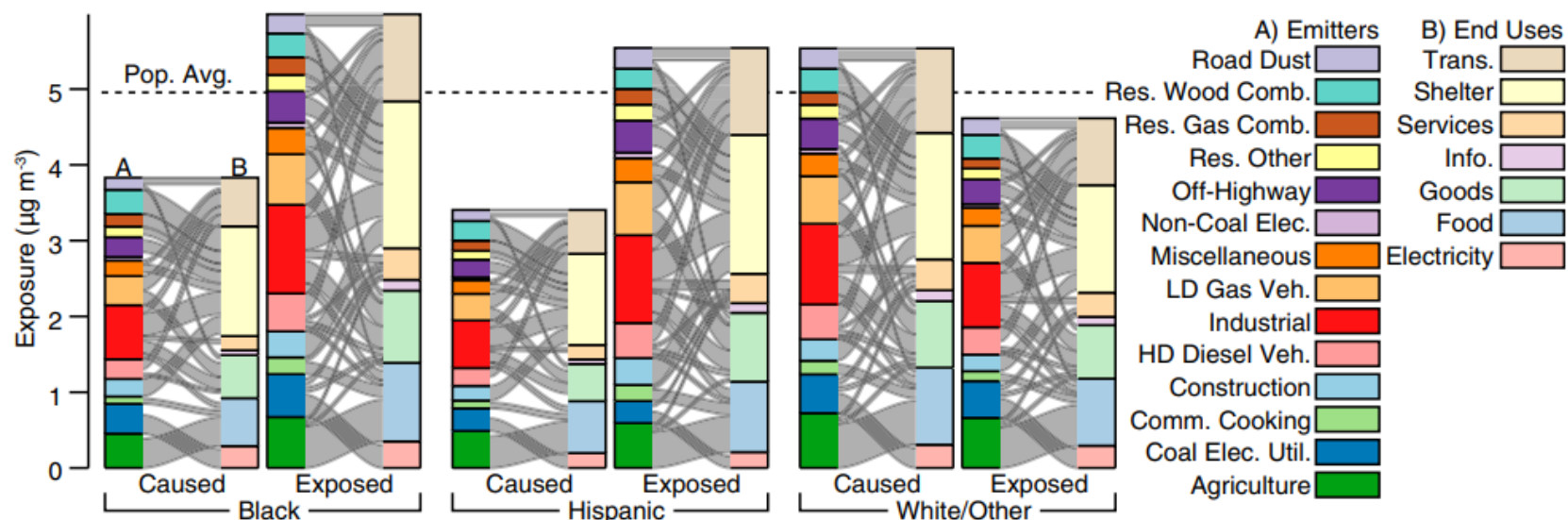


Communities near power plants and energy infrastructure are subjected to toxic pollutants that contribute to high rates of asthma, cancer, heart disease



# Environmental Injustice Today

*"Fine particulate matter (PM<sub>2.5</sub>) air pollution exposure is the largest environmental health risk factor in the United States...PM<sub>2.5</sub> 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."*



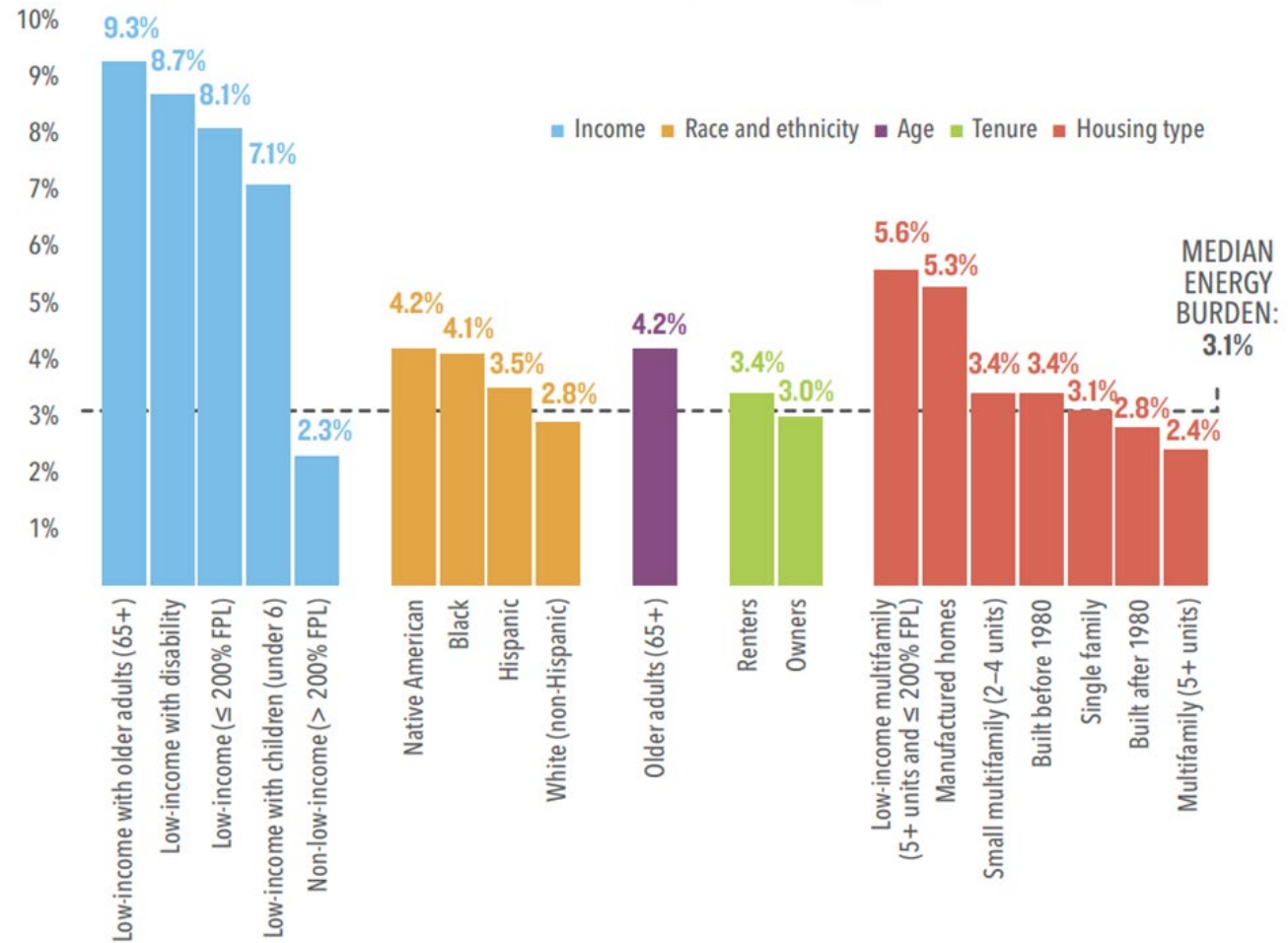
Source: Christopher W. Tessum, et al. "Inequity in consumption of goods and services adds to racial-ethnic disparities in air pollution exposure." *Proceedings of the National Academy of Sciences* (March 2019).

# 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 Dreihobl, 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.

\*Impacts not estimated for 65 and Older.



## COASTAL FLOODING AND TRAFFIC

Traffic delays from high-tide flooding.



## COASTAL FLOODING AND PROPERTY

Property inundation due to sea level rise.



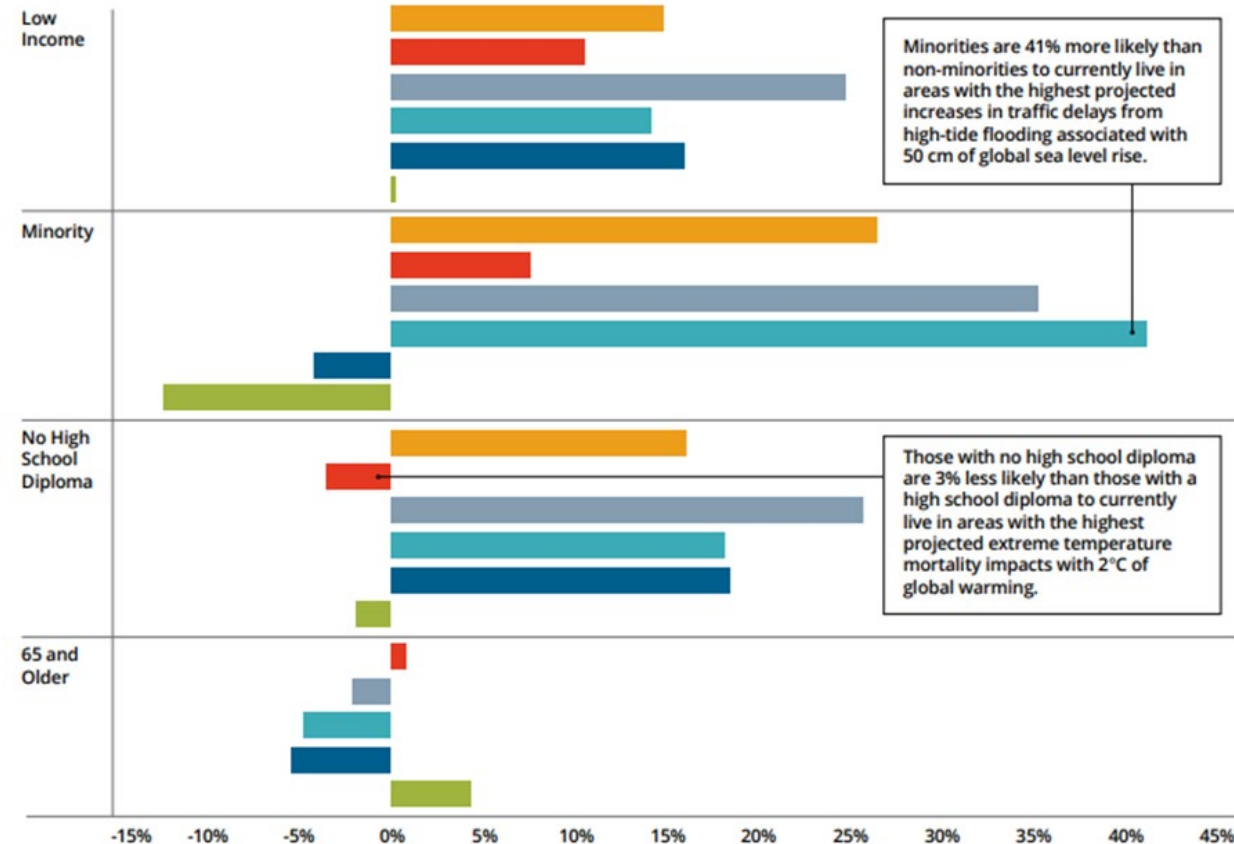
## INLAND FLOODING AND PROPERTY

Property damage or loss due to inland flooding.

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.

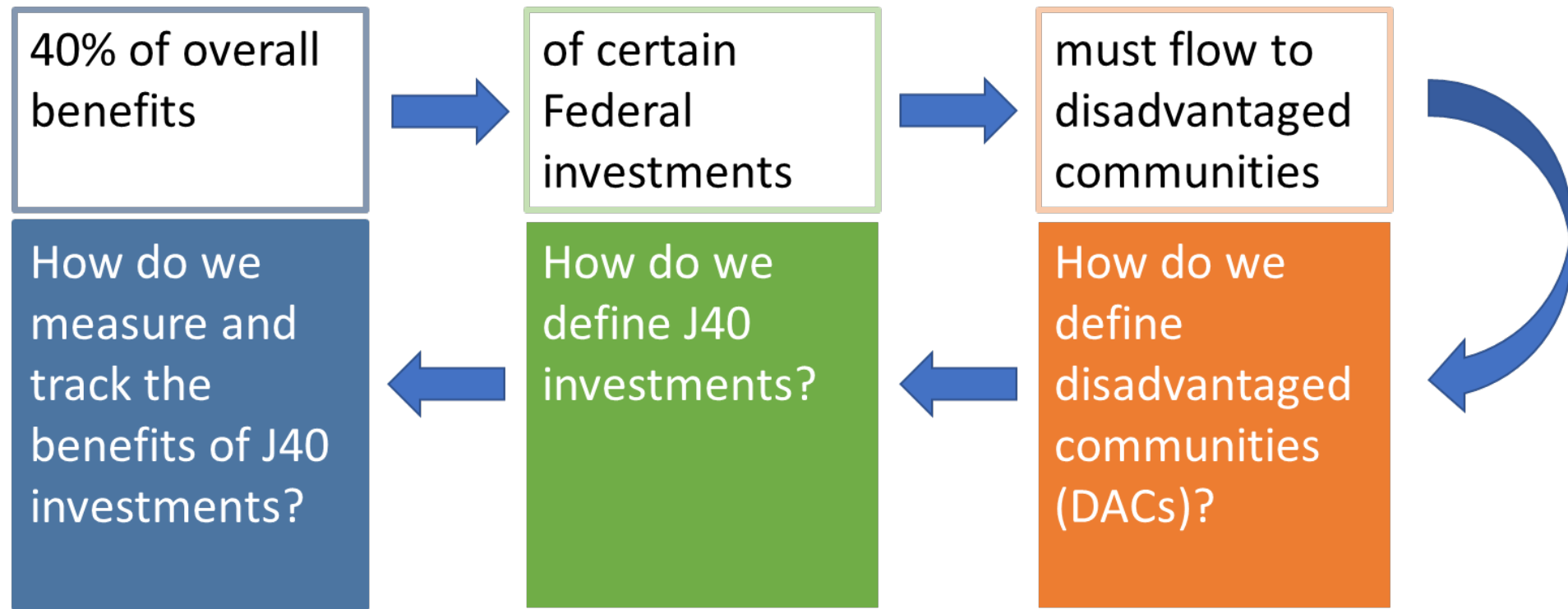


[Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts \(epa.gov\)](https://www.epa.gov/climate-change/social-vulnerability-in-the-united-states-a-focus-on-six-impacts)



# 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 Interim Disadvantaged Community Definition

## Disadvantaged communities

Current Thoughts:

- Census Tract Level
- 36 Indicators

**VULNERABILITY**

**FOSSIL DEPENDENCE**

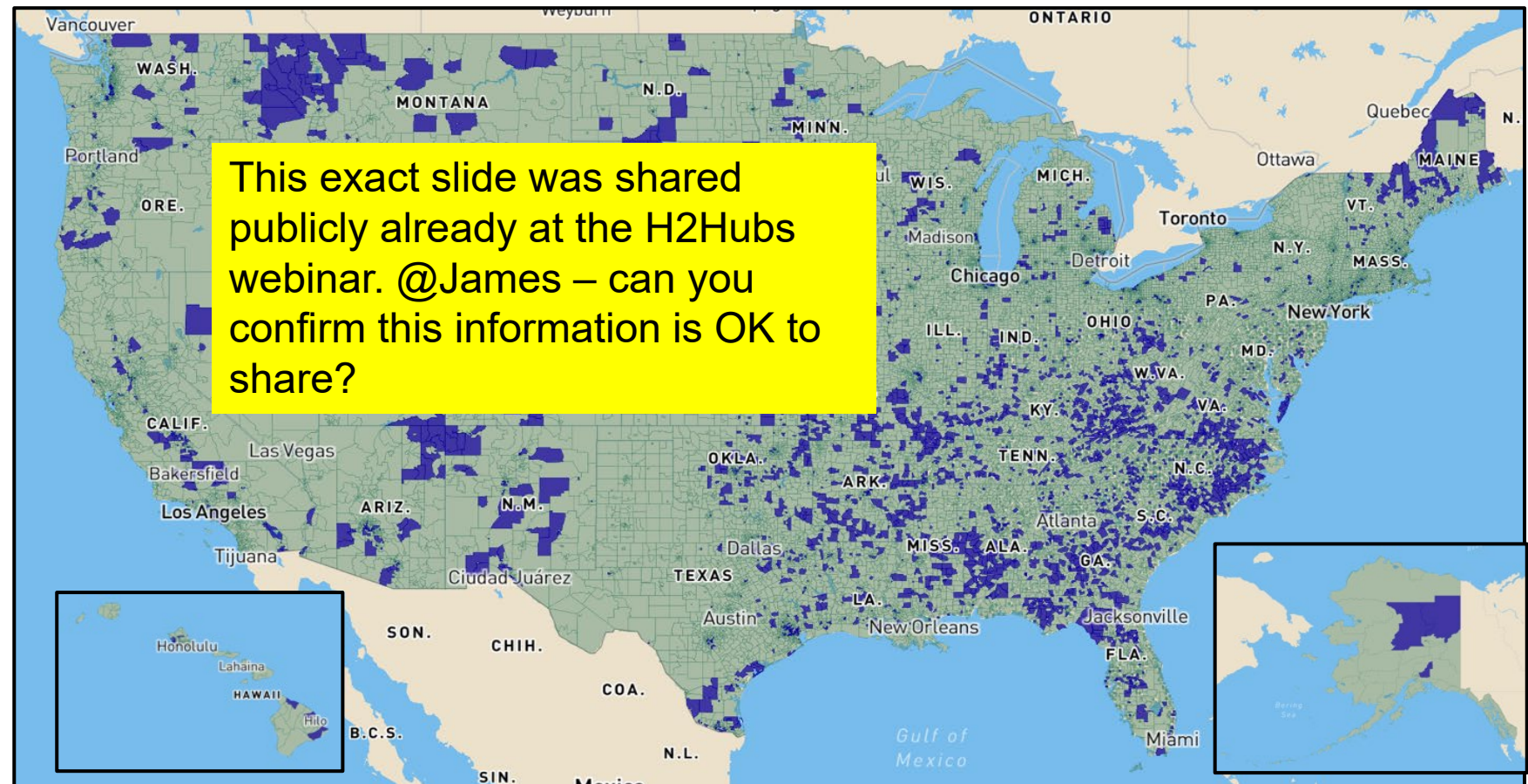
**ENERGY BURDEN**

**ENVIRONMENTAL HAZARDS**

Can also identify non-geographic DACs – groups that share a common characteristic

Distribution of census tracts identified as geographic DACs

■ DAC



# DOE Justice40 Policy Priorities

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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.



# Justice and Engagement in FECM

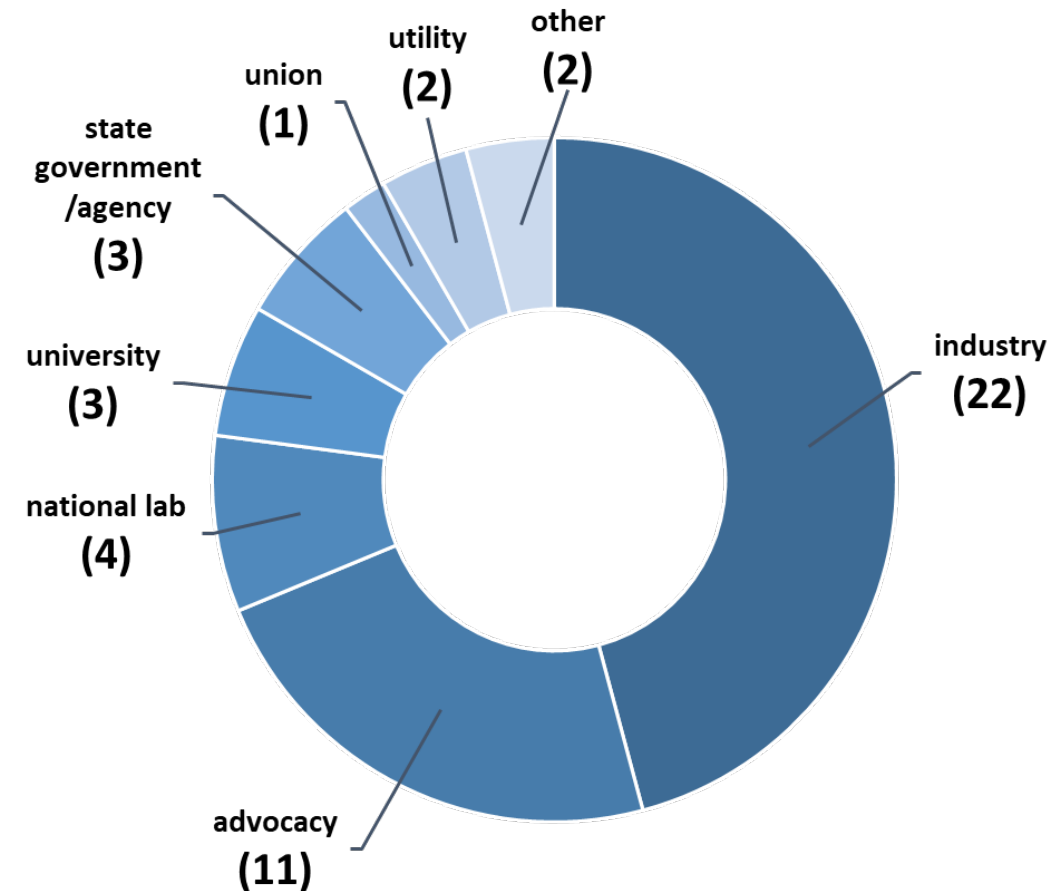
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- Advancing Justice, Labor, and Engagement is one of three priority directions in the new FECM Strategic Vision
- Justice, equity, and labor requirements will be included in funding opportunities
- Request for Information provided initial opportunity to gather input on these priorities

# RFI Summary – EJ, Engagement, Workforce

- Request for Information (RFI): DE-FOA-0002660 Deployment and Demonstration Opportunities for Carbon Reduction and Removal Technologies
- ~50 responses to non-project specific EJ, engagement, and workforce questions

Limited # of responses from tribes & Alaska Native Corporations (ANCs), EJ organizations & frontline communities, and labor—additional engagement is needed to gather this expertise



# RFI Summary – EJ, Engagement, Workforce

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## Project Impacts

- Impacts must be assessed for the entire lifecycle & specifically for disadvantaged communities
- Potential negative impacts noted: health and safety concerns; fossil fuel entrenchment; land, water, & energy impacts
- Potential benefits noted: job creation; economic benefits; reduction in air pollution
- Respondents suggested DOE:
  - Require detailed evaluation of cumulative impacts in funding applications
  - Prioritize projects with Community Benefits Agreements (CBAs)
  - Establish monitoring, permitting, and remediation requirements

## Engagement

- Prioritize engagement with disadvantaged communities and labor throughout all stages of the project
- Engagement must be meaningful; early and frequent; transparent, inclusive, and accessible
- Respondents suggested DOE:
  - Require detailed engagement plans in funding applications
  - Allow engagement activities as an eligible use of funds
  - Create community project oversight boards

# RFI Summary – EJ, Engagement, Workforce

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## Equitable Funding

- Cost share can present barriers for small businesses and disadvantaged and rural communities
- Prize funding is more accessible
- Funding application itself is a barrier for small or under-resourced entities regardless of type
- Respondents suggested DOE:
  - Provide more technical assistance
  - Foster collaboration between more- and less-resourced entities
  - Partner with organizations focused on reaching underrepresented innovators & entrepreneurs

## Workforce Development

- Job creation, especially for fossil energy communities and workers, seen as major benefit
- Leverage existing programs & educational institutions
- Provide competitive pay, job retention, and robust labor standards
- Respondents suggested DOE:
  - Prioritize proposals with project labor agreements (PLAs), prevailing wages, “Made in America” standards, labor unions, community benefit agreements (CBAs)
  - Increase activities and partnerships with Minority-Serving Institutions (MSIs)



# More Information

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- FECM Strategic Vision: [Strategic Vision: The Role of FECM in Achieving Net-Zero Greenhouse Gas Emissions | Department of Energy](#)
- Council on Environmental Quality Carbon Capture, Utilization, and Sequestration Guidance: [Federal Register :: Carbon Capture, Utilization, and Sequestration Guidance](#)
- Council on Environmental Quality Report to Congress on Carbon Capture, Utilization, and Sequestration: [CEQ-CCUS-Permitting-Report.pdf \(whitehouse.gov\)](#)

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The background is a deep blue with a network of thin white lines connecting various icons. Ten stylized human figures of diverse ages and ethnicities are positioned at the nodes of this network. Each figure is holding up a different symbol: a solar panel, a wind turbine, a large green leaf, a globe, a recycling symbol, a water drop, a lightbulb, a house, a sun, and a battery. The overall theme is sustainability, innovation, and community effort.

# Thank you.



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