



An Equitable Energy Future

Yasmin Yacoby

Policy Analyst on Energy Justice and Diversity, Equity, Inclusion, and Accessibility

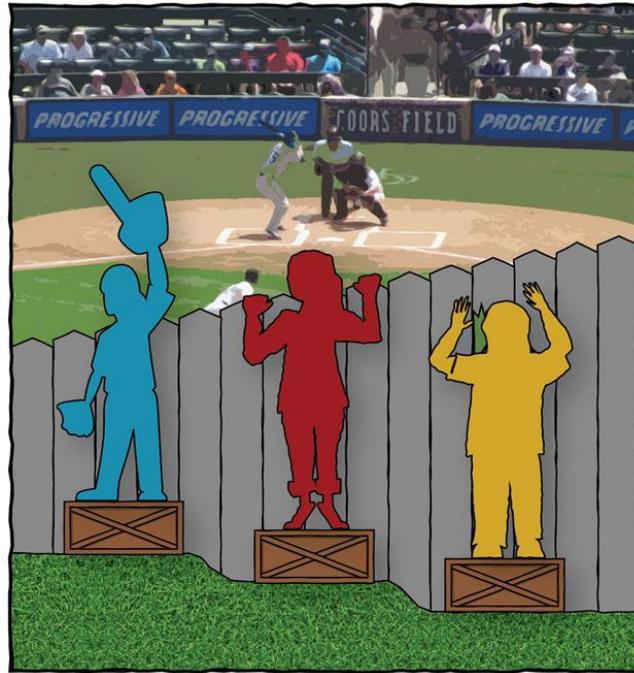
**Fusion Energy Conference
June 1, 2022**



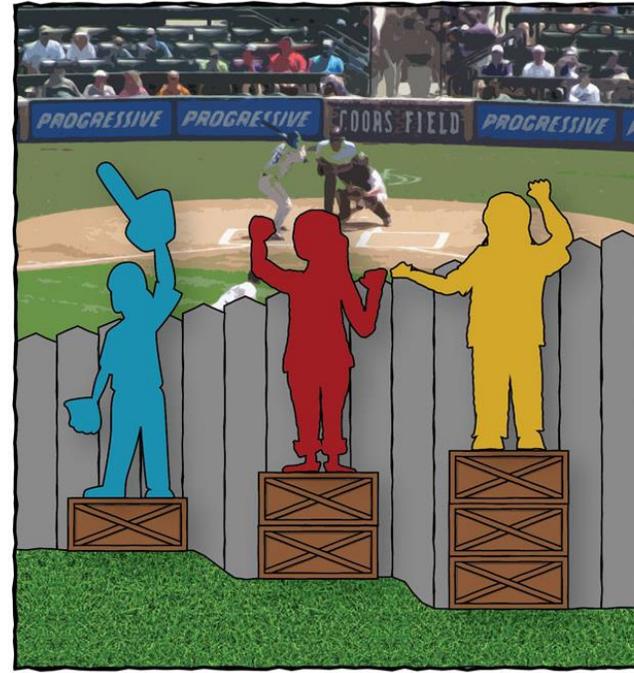
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Equality vs. Equity



EQUALITY

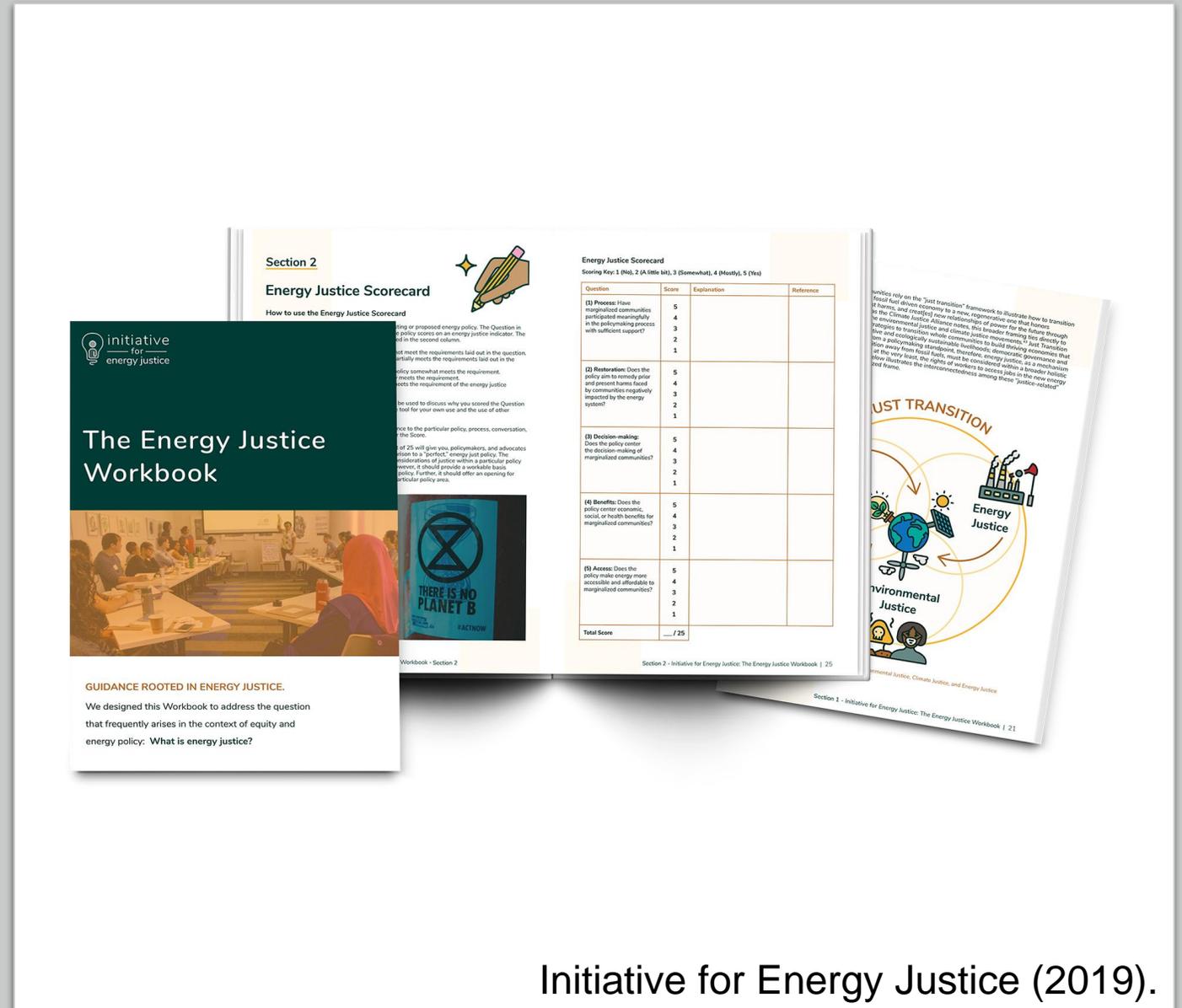


EQUITY

What is energy justice?

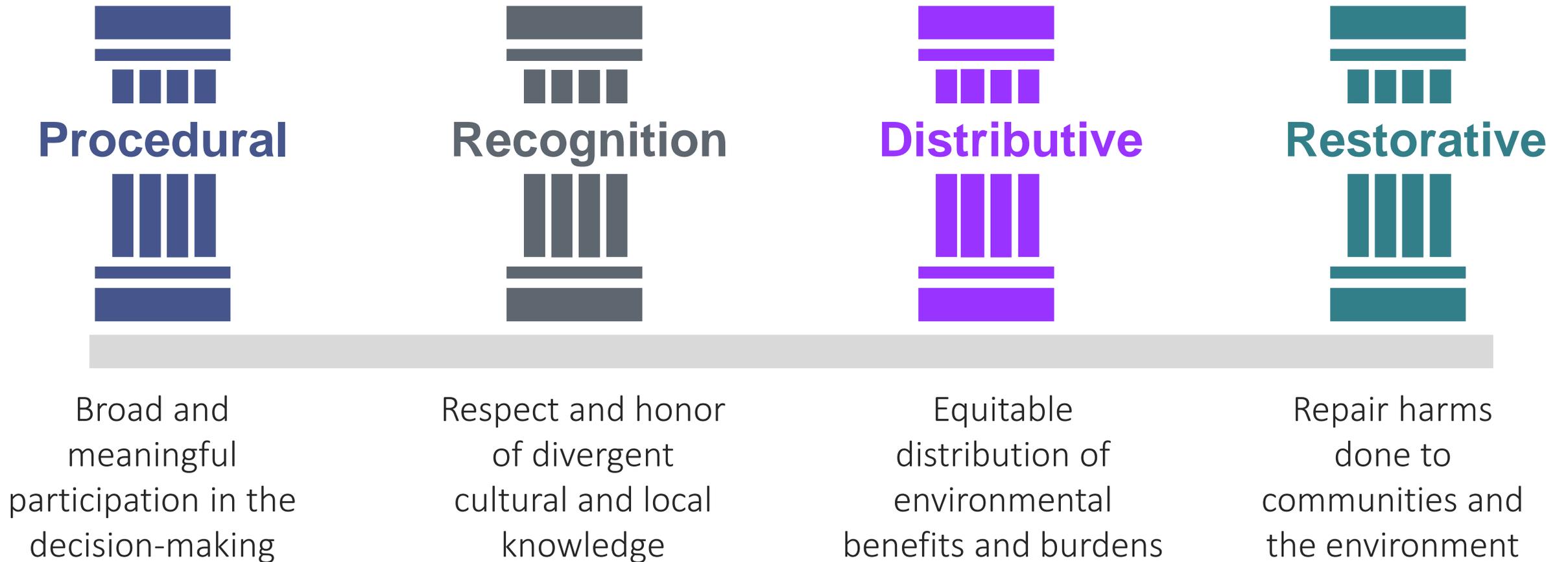
Energy justice refers to the goal of achieving **equity** in both the **social** and **economic** participation in the energy system, while also **remediating** social, economic, and health **burdens** on those historically harmed by the energy system (“frontline communities”).

Energy justice explicitly **centers** the concerns of frontline communities and aims to make energy more accessible, affordable, clean, and democratically managed for all communities.



Initiative for Energy Justice (2019).

Tenets of Energy and Environmental Justice



Heffron and McCauley, The Concept of energy Justice Across the Disciplines, 105 Energy Policy 658, 659 (2017)



Our Grand Challenge
How do we transform our energy system while ensuring it becomes more equitable and just?



Justice40 as a Just Energy Transition Framework

What is Justice40?

EO 14008 – Tackling the Climate Crisis at Home and Abroad

Sec 223 – Justice40 – how **Federal investments** might be made for **40% of the overall benefits** to flow to **disadvantaged communities**

**Federal
investments**



**40% of the
overall benefits**



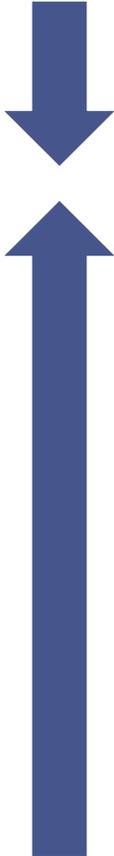
**Disadvantaged
communities**



Justice40 Policy Priorities

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

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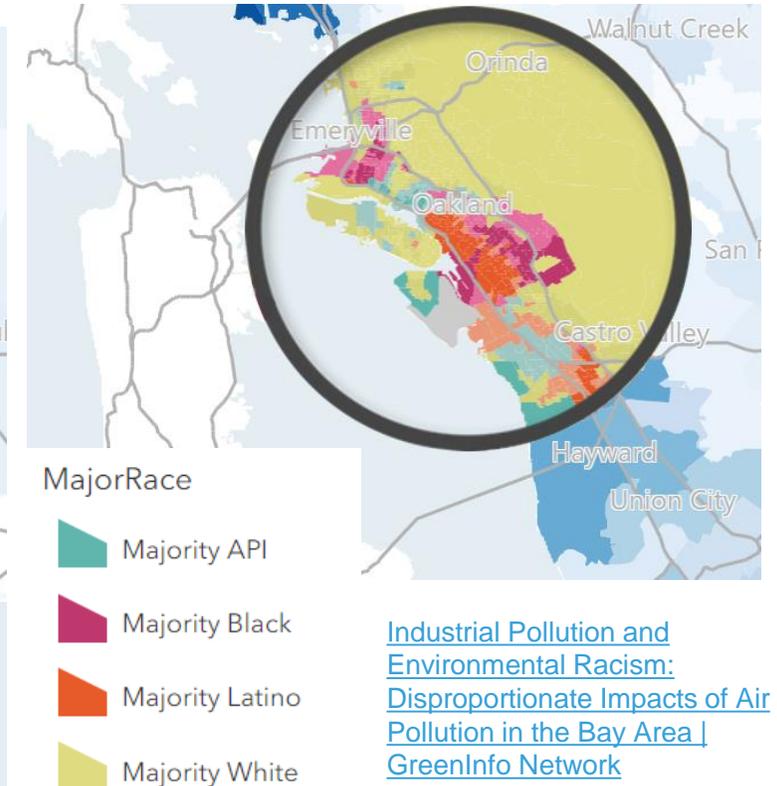
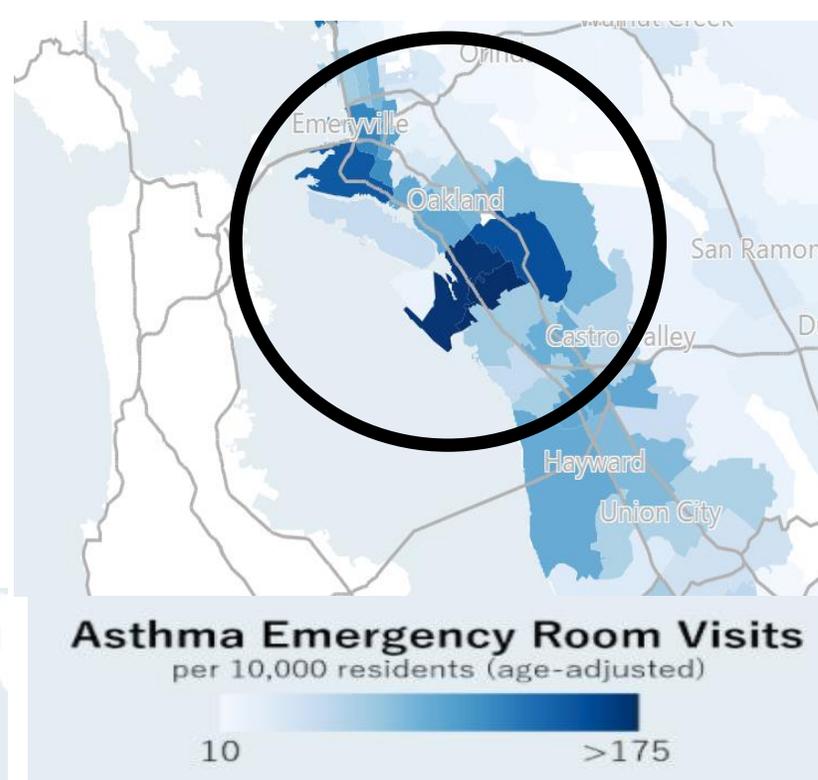
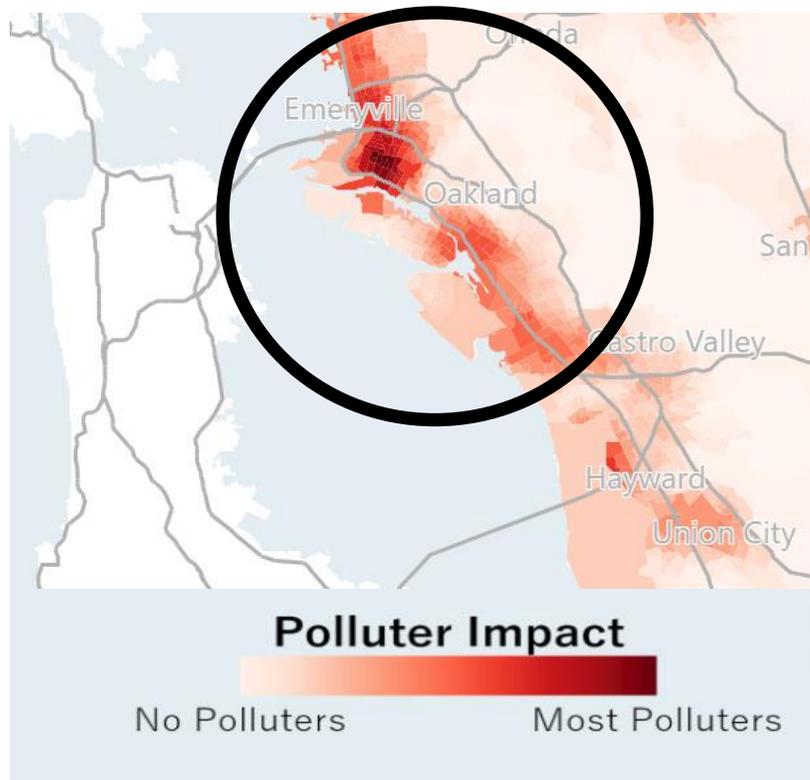
Reducing Environmental Exposures & Burden



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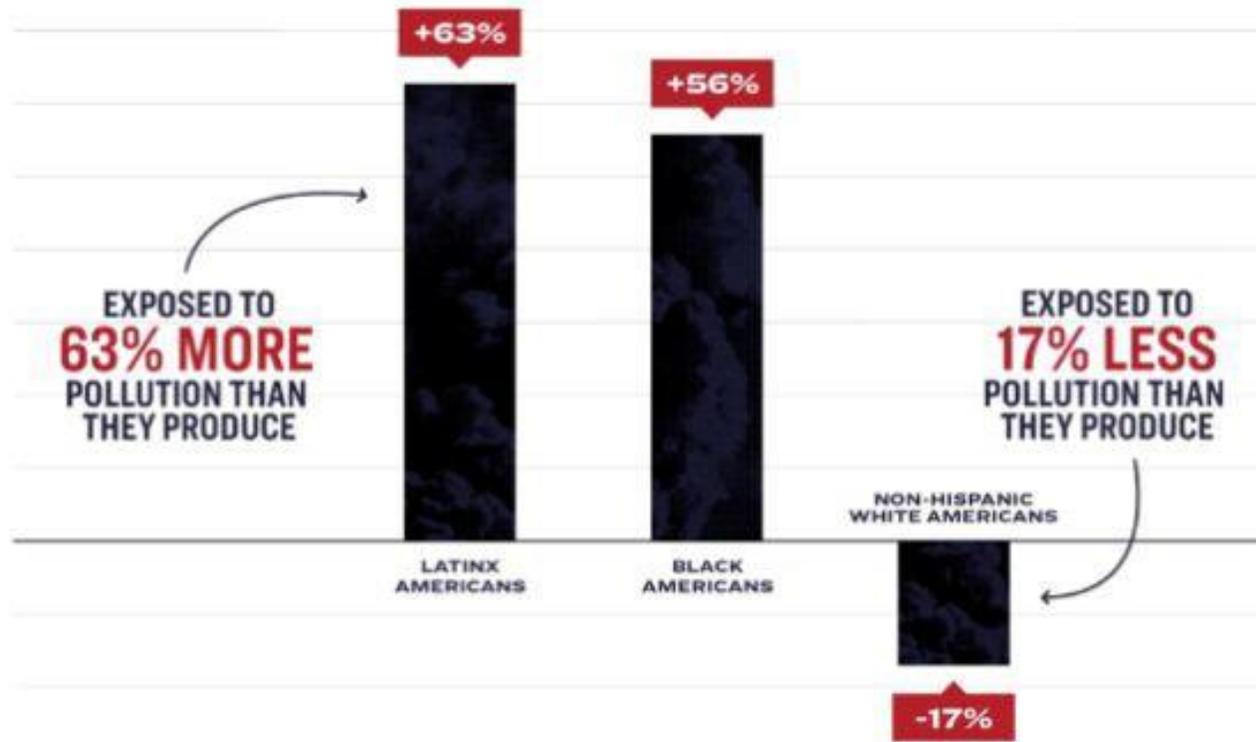
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A legacy of mining, energy drilling and pollution



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

POLLUTION EXPOSURE BY POPULATION (2003-2015)



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).



Increasing Diverse Clean Energy Enterprises & Contracting



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- Nuclear Programs at MSIs and HBCUs
- Diverse companies and startups

Increasing Clean Energy Jobs

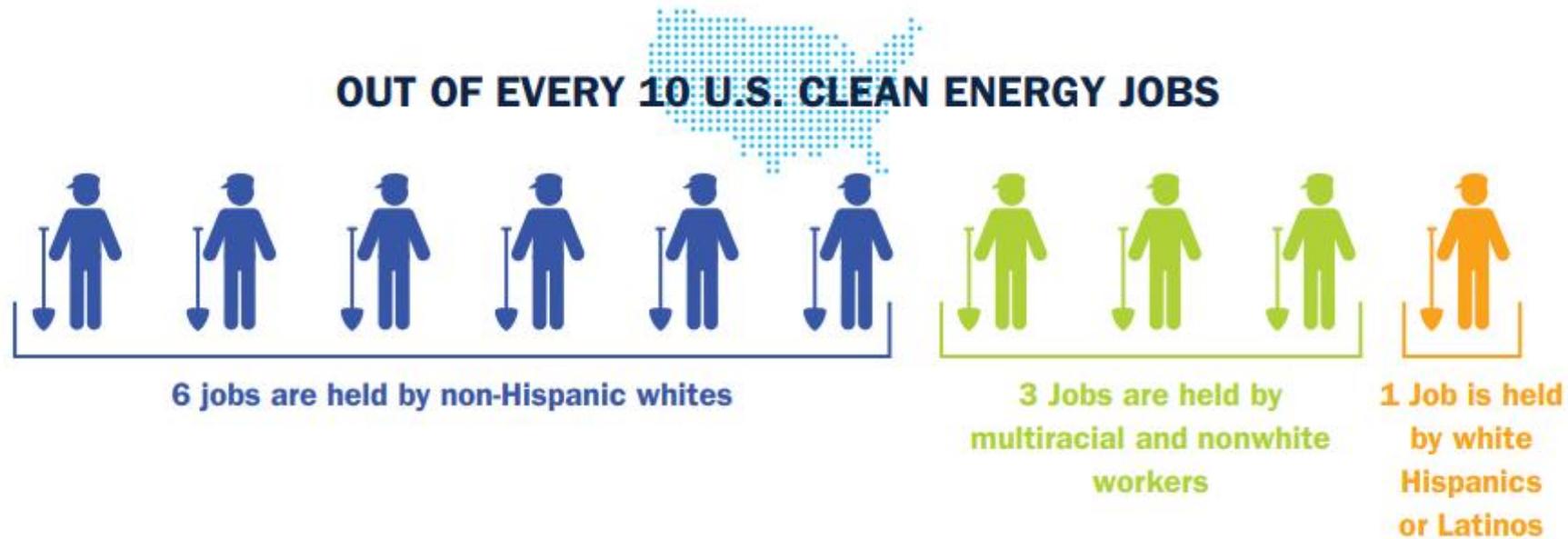


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U.S. CLEAN ENERGY LABOR FORCE CHARACTERISTICS

BY RACE, ETHNICITY, AND GENDER, 2020



Fuel Sector Demographics

BIPOC populations are underrepresented in clean energy workforce.

Latinx workers more likely to hold construction jobs in the industry.

Black workers make up 7% of clean energy employees but are 13% of overall US workforce.

<https://www.usenergyjobs.org/>

Fuels Sector – Demographics, Q4 2019

Demographic	Employees	Percent of Sector	National Workforce Averages ⁴
Male	859,684	75%	53%
Female	289,209	25%	47%
Hispanic or Latino	133,376	12%	18%
Not Hispanic or Latino	1,015,517	88%	82%
American Indian or Alaska Native	18,937	2%	>1%
Asian	60,606	5%	6%
Black or African American	77,487	7%	12%
Native Hawaiian or other Pacific Islander	8,425	1%	>1%
White	889,130	77%	78%
Two or more races ⁵	94,308	8%	2%
Veterans	114,279	10%	6%
55 and over	242,575	21%	23%
Union	35,352	3%	6%

Nuclear Fuels Demographics

Although below national averages in several categories, the nuclear fuels sector is more diverse than the national workforce.

<https://www.usenergyjobs.org/>

Nuclear Fuels – Demographics, Q4 2019

Demographic	Employees	Percent of Sector	National Workforce Averages
Male	6,547	70%	53%
Female	2,859	30%	47%
Hispanic or Latino	1,330	14%	18%
Not Hispanic or Latino	8,076	86%	82%
American Indian or Alaska Native	97	1%	>1%
Asian	806	9%	6%
Black or African American	603	6%	12%
Native Hawaiian or other Pacific Islander	85	1%	>1%
White	6,452	69%	78%
Two or more races	1,364	15%	2%
Veterans	863	9%	6%
55 and over	1,458	16%	23%
Union	542	6%	6%

Increasing Energy Democracy



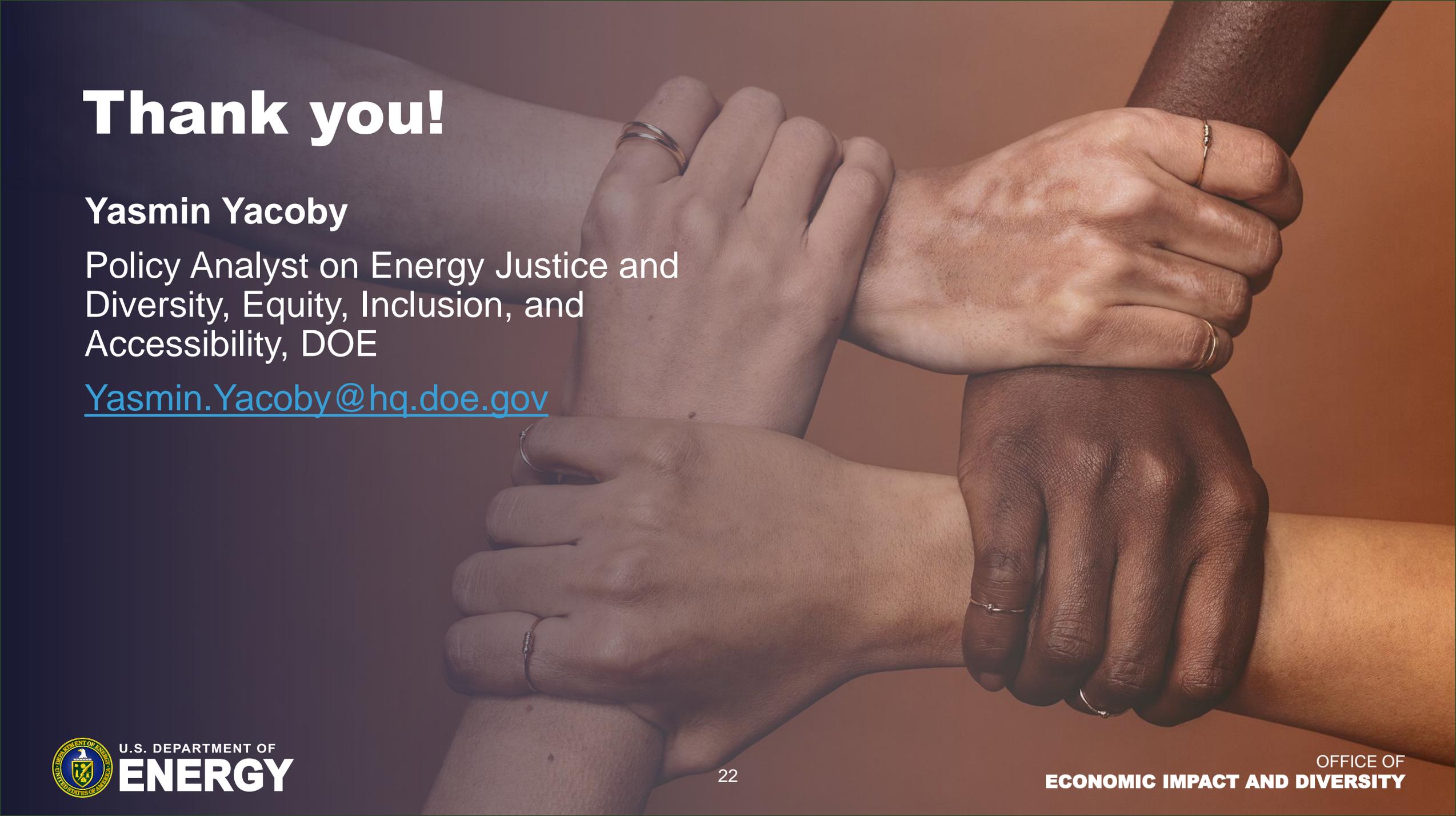
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Procedural Justice

- **Procedural justice** is the ability of people to be involved in decision-making procedures around energy system infrastructures and technologies
- We know how important having a meaningful seat at the table is, and how we must include underserved, overburdened frontline communities as co-creators of the clean energy future.
- We know that energy justice requires this participation, and that a failure to do so will cement inequality within our future energy system.
- We must focus on **energy democracy**, including providing pathways to community ownership and procedural justice in disadvantaged communities.





Thank you!

Yasmin Yacoby

Policy Analyst on Energy Justice and
Diversity, Equity, Inclusion, and
Accessibility, DOE

Yasmin.Yacoby@hq.doe.gov