

KEYNOTE

Shalanda Baker,

Director, Office of Economic Impact and Diversity,
U.S. Department of Energy

WINTER
2023

WIFI: LIUNAGUEST
Password: construction



Energy Justice and Justice40: Made for this Moment

Shalanda H. Baker

Director, Office of Economic Impact and Diversity, Secretarial Advisor on Equity

January 20, 2023



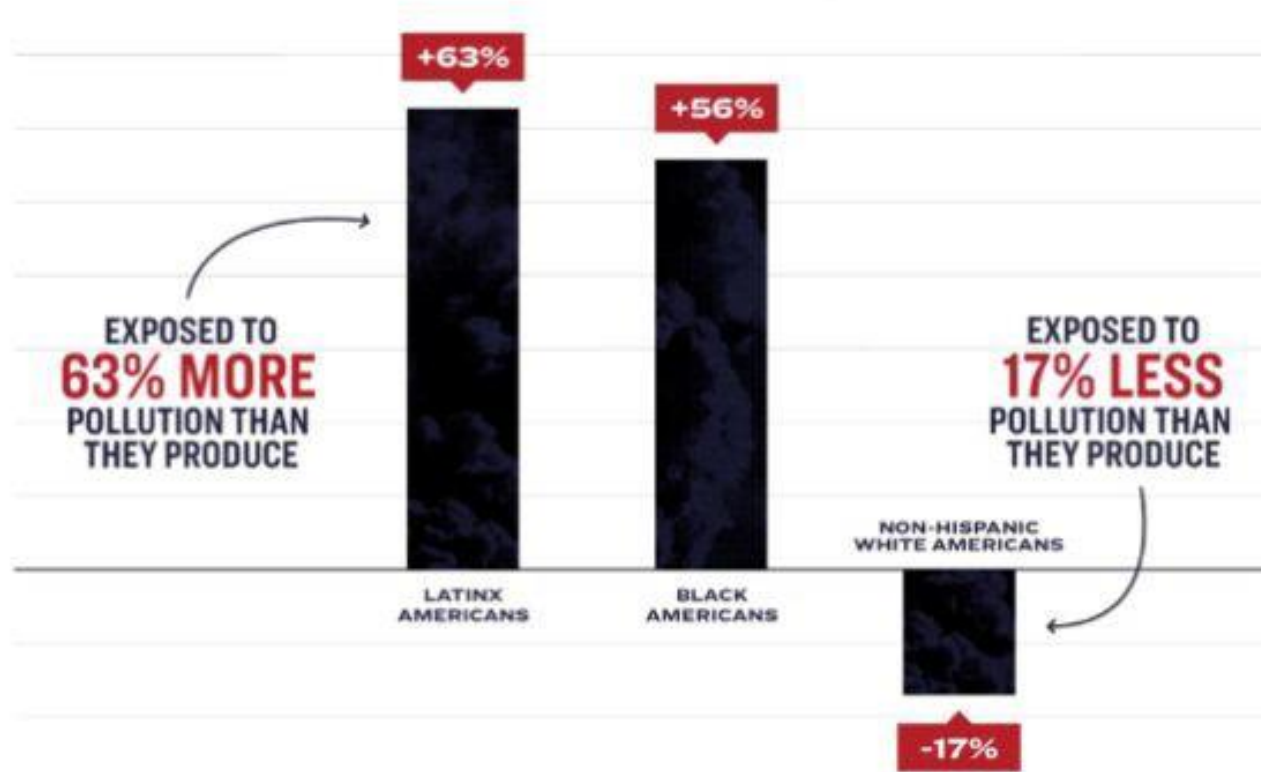
U.S. DEPARTMENT OF
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ECONOMIC IMPACT AND DIVERSITY

I MATTER!

Black and Latino Communities are Exposed to More Pollution Than They Produce

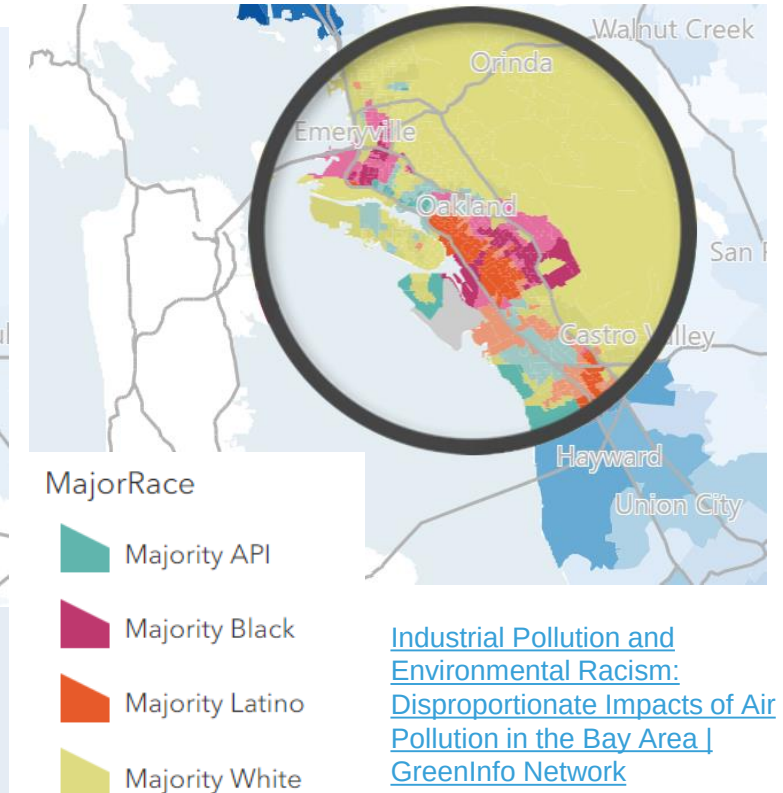
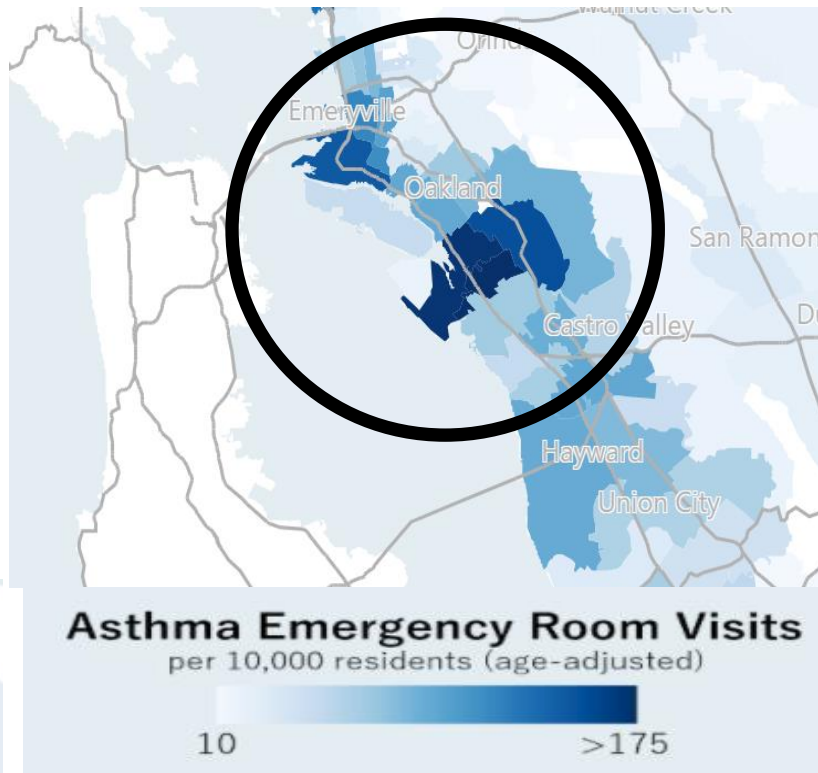
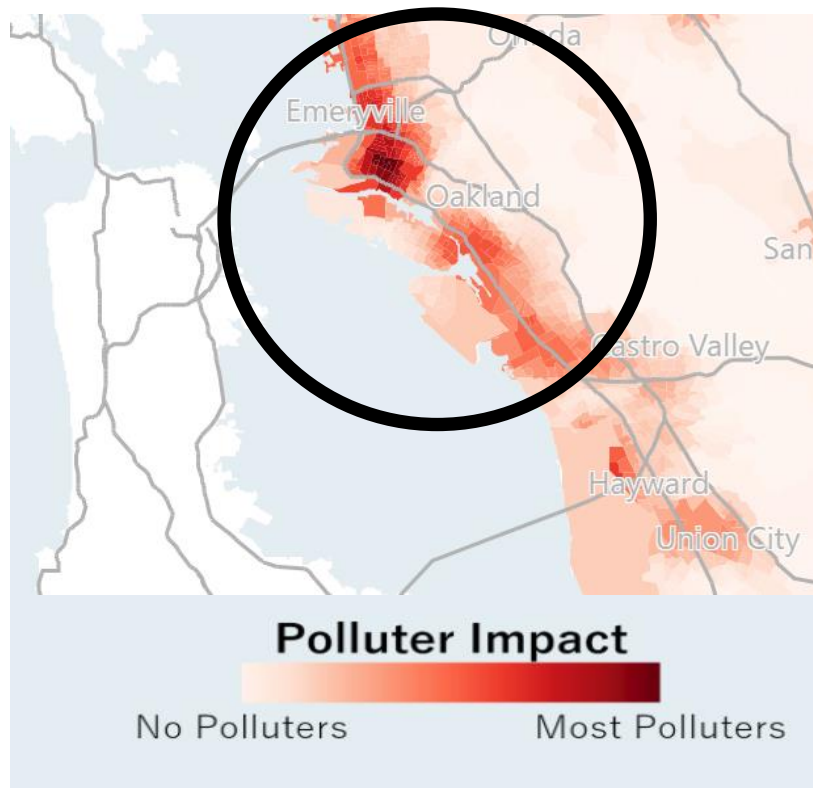
POLLUTION EXPOSURE BY POPULATION (2003–2015)



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).



Energy Infrastructure and Industrial Pollution



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



The Energy System and Environmental Justice



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Energy Burden and Energy Insecurity

Energy Burden: Percentage of household income that goes toward energy costs.

The lower your income, the more of your income you spend on energy.

Energy Insecurity: Lacking reliable access to uninterrupted energy sources at an affordable price.

A National Energy Insecurity Crisis

Bloomberg
US Edition

A 'Tsunami of Shutoffs': 20 Million US Homes Are Behind on Energy Bills

Surging electricity prices spur worst-ever crisis in late utility payments.

By Will Wade and Mark Chediak

August 23, 2022 at 6:30 PM EDT

POWERLESS IN THE PANDEMIC 2.0

By Jean Su and Christopher Kuveke¹

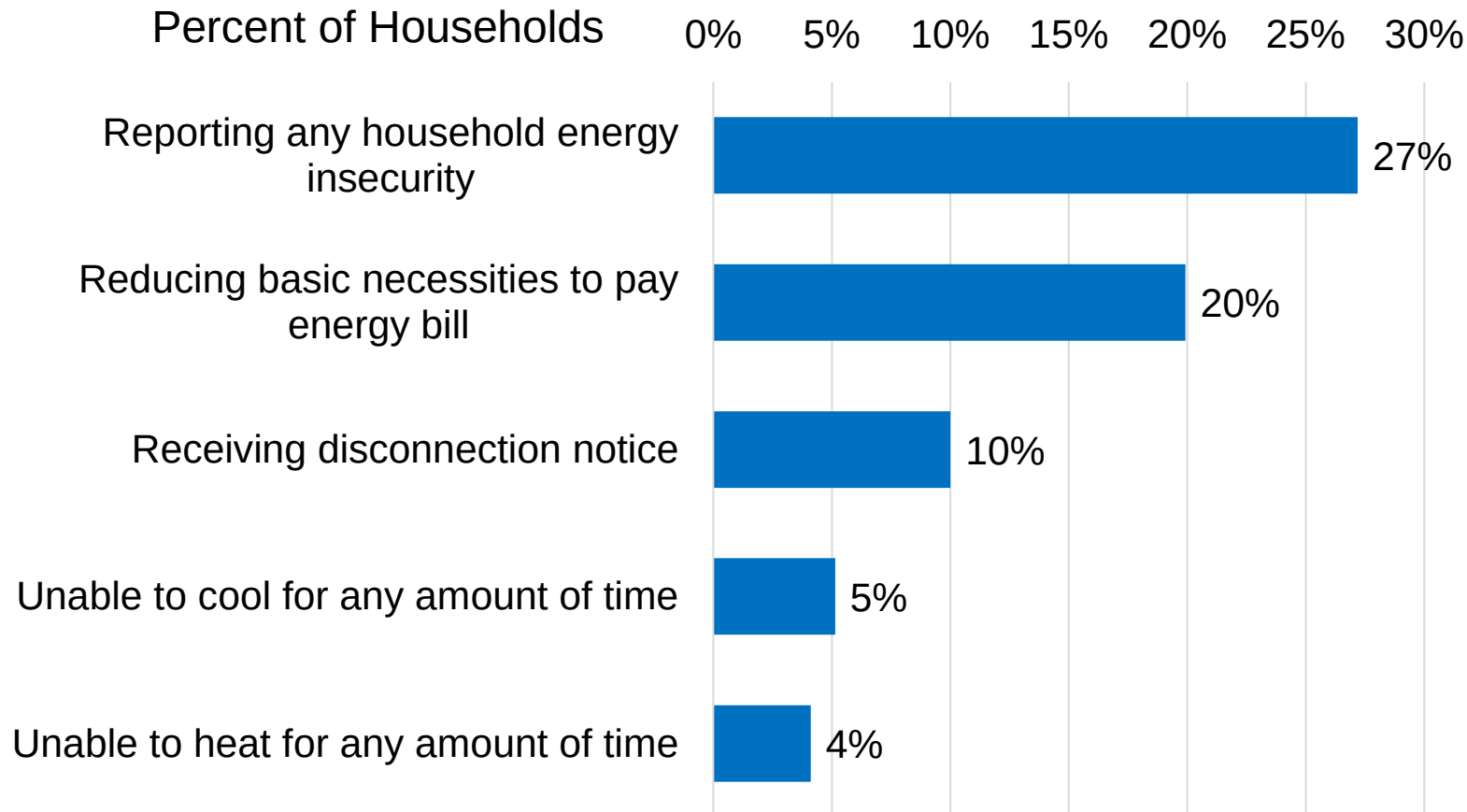
Center for Biological Diversity, BailoutWatch, and Tiger Moth LLC

FAMILIES HAD THEIR POWER CUT MORE THAN 3.6 MILLION TIMES (3,635,518) between January 2020 and December 2021. Disconnections **INCREASED 79%** between 2020 and 2021.

Energy insecurity is:

- **The inability** to adequately meet **household energy needs**, and includes **physical**, **economic**, and **behavioral** dimensions that lead to or exacerbate adverse health issues
- A **multi-dimensional** construct that describes the interplay between **physical conditions** of **housing**, household **energy expenditures** and energy-related **coping strategies** ([Hernandez](#), 2016)

Energy insecurity and high energy costs affect nearly 1 in 3 American households



Americans spend
>\$37 billion/year
on energy costs

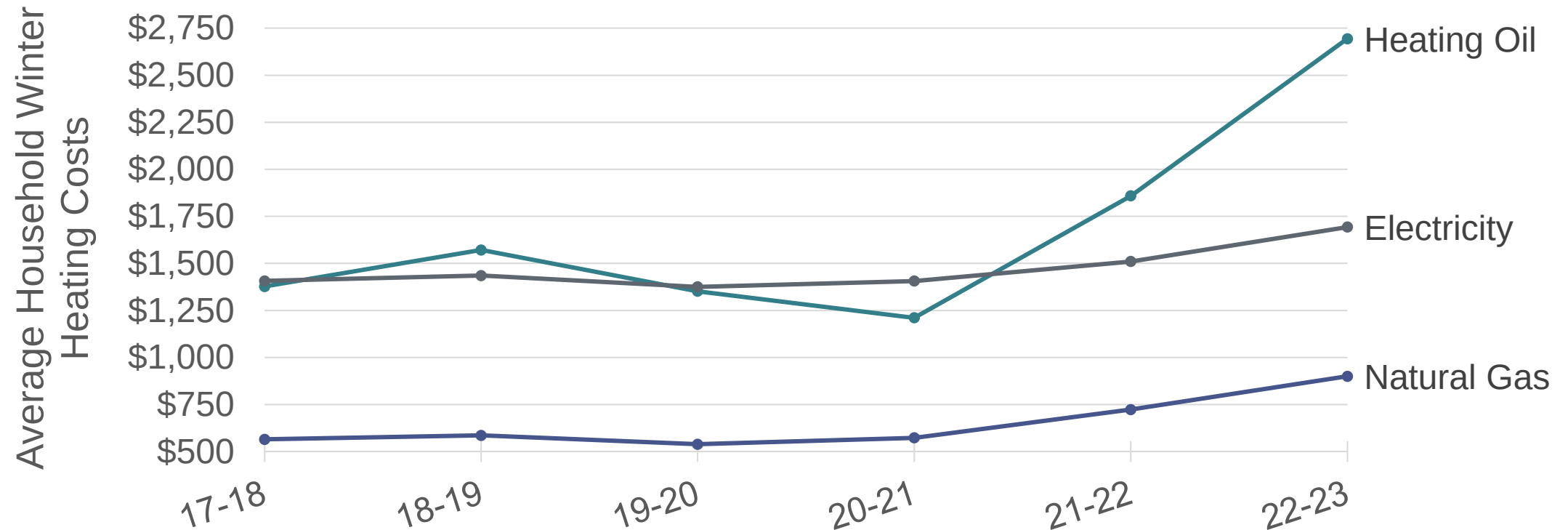
Over **27.8M** households are
energy burdened
(spend > 6% income on energy)

Sources: U.S Energy Information Administration (EIA), RECS 2020; LEAD: <https://lead.openei.org/>

Energy Prices on the Rise

Heating fuel prices have increased 20–50% over the past 3 years and EIA forecasts further increases for this winter.

Average Estimated Home Heating Costs for Winter

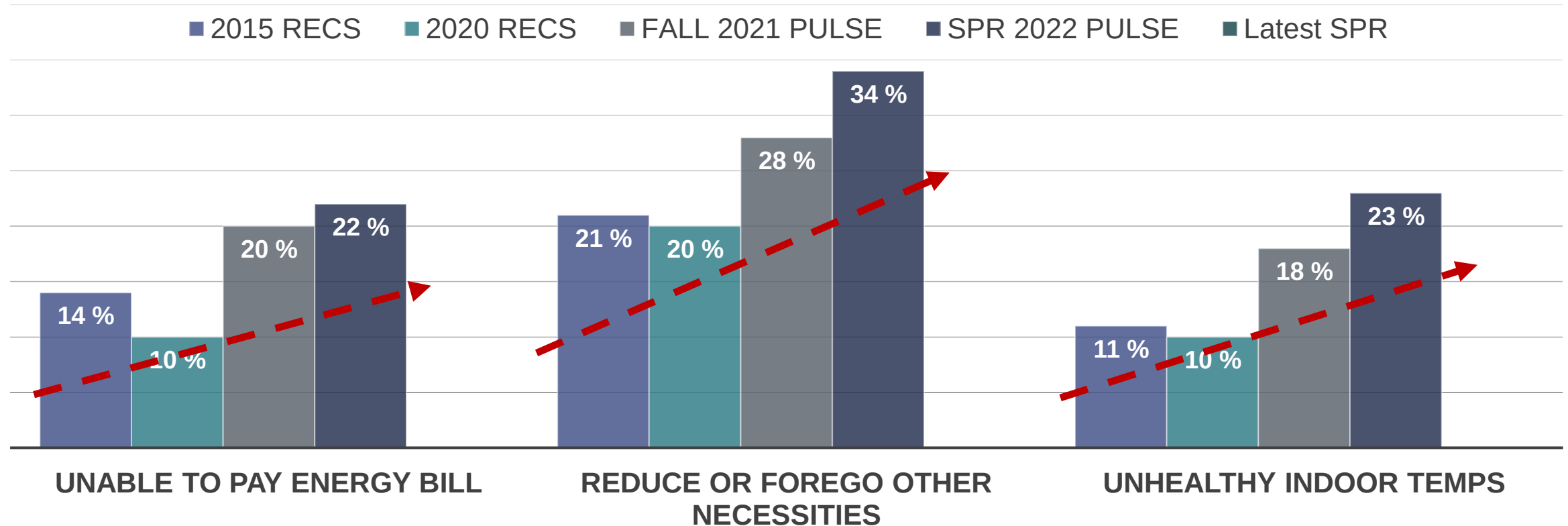


Source: EIA, Winter Heating Fuel Outlook

National Energy Insecurity Stats

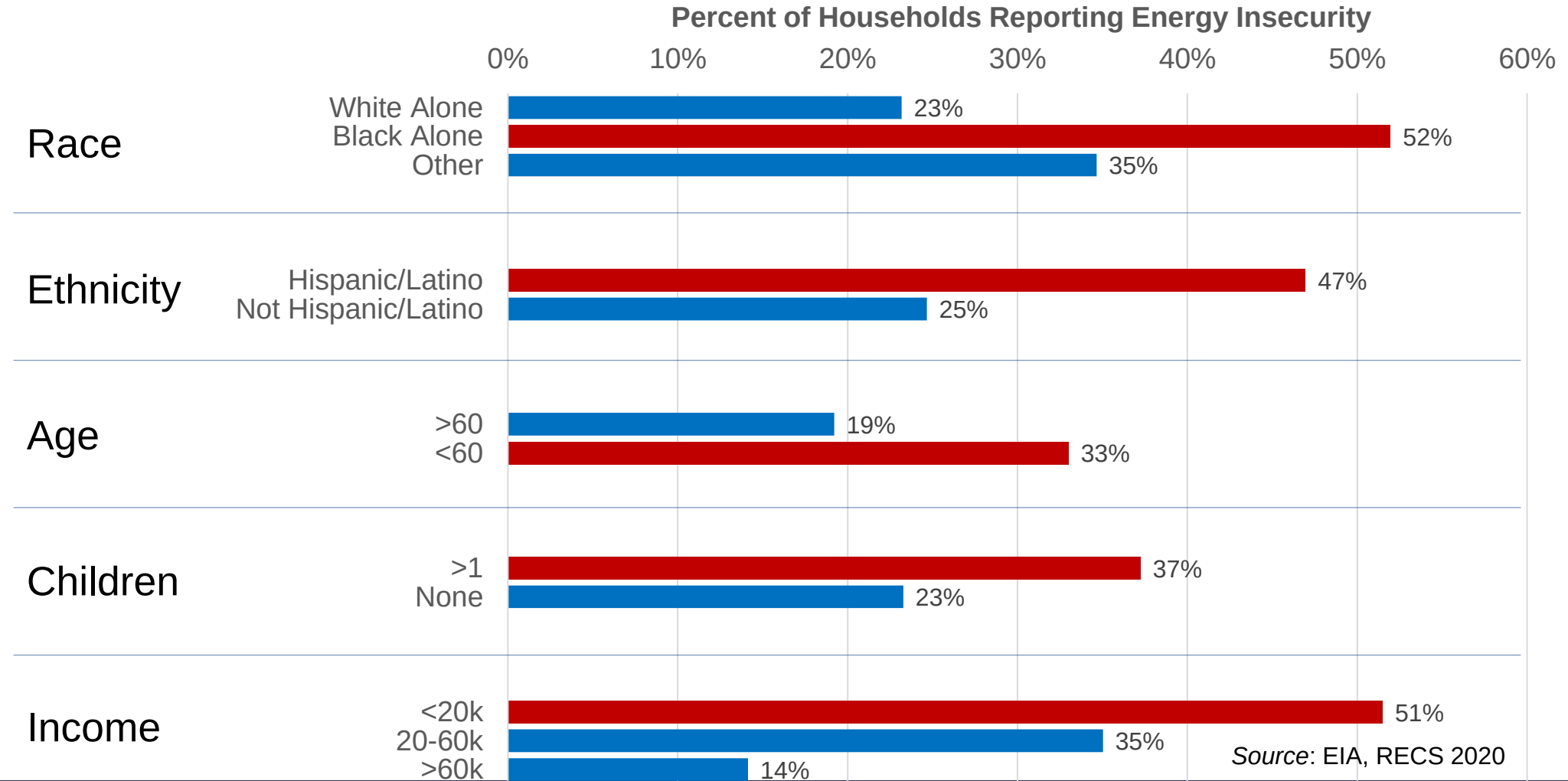
% of US Households Experiencing Energy Insecurity

**As of October 2022*

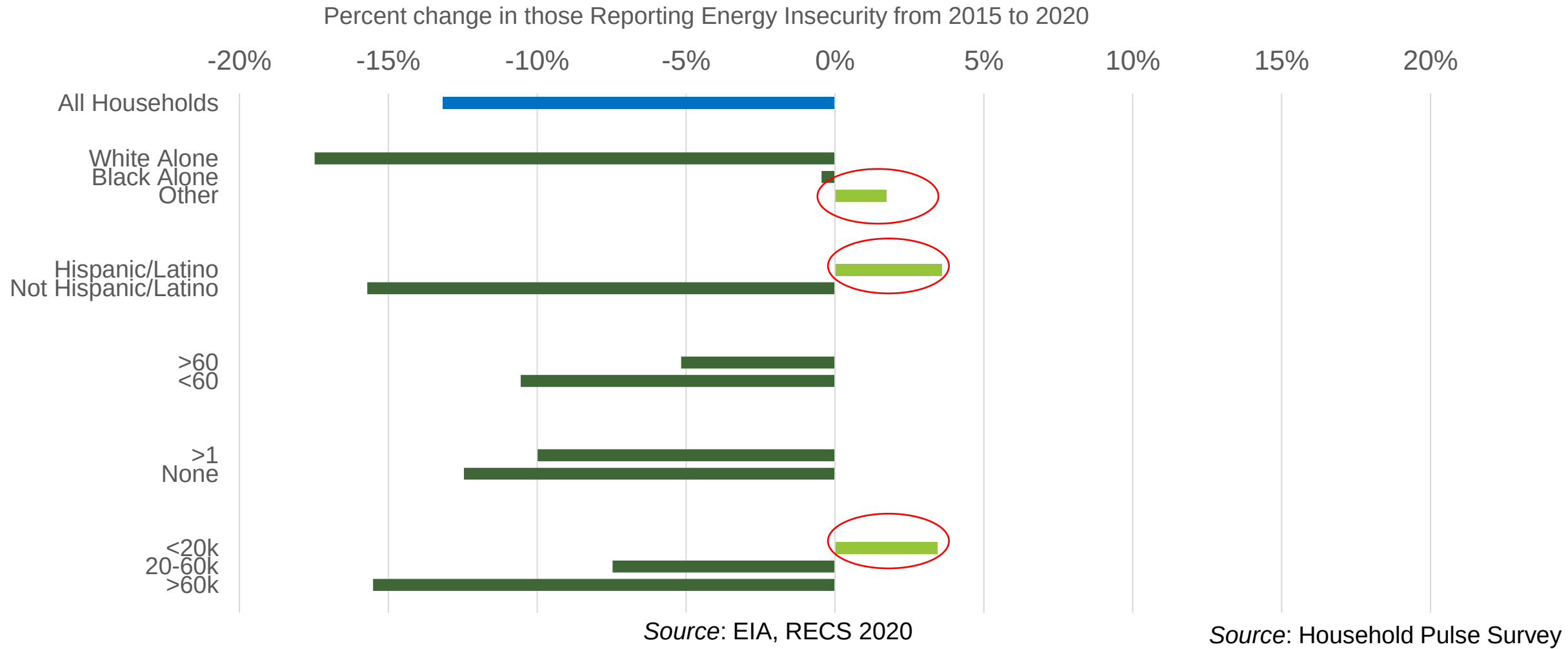


Sources: US Census Household Pulse Survey, 2021- 2022;
US Energy Information Administration, RECS 2020

Energy insecurity correlates with socio-demographic characteristics



Not everyone is included in the good news



Inequitable Clean Energy Access

- Same median household income – “Black- and Hispanic-majority census tracts have installed less rooftop PV compared with no-majority tracts by 69 and 30%, respectively...white-majority census tracts have installed 21% more.”
- Same home ownership – “Black- and Hispanic-majority census tracts have installed less rooftop PV compared with no-majority census tracts by 61 and 45%, respectively...white-majority census tracts have installed 37% more.”

Sunter, Castellanos, and Kammen (2019).



Terri Gruca  @TerriG_KVUE · Feb 15



A tale of two cities - on the right is downtown Austin - to the left East Austin. Look who has power. @KVUE



 244

 4.6K

 9.5K



Resilience

“Our results show that areas with a high share of minority population **were more than four times as likely to suffer a blackout** than predominantly white areas. Income status of areas did not appear to be a strong factor in the share of blackouts. The presence of hospitals or police and fire stations – critical facilities – in a CBG reduces the chances of blackouts by around 0%-6%, a small difference that does not otherwise explain the disparity among communities. **Further work is needed to explain what drives these disparities.**”

Carvallo, et al. (2021).

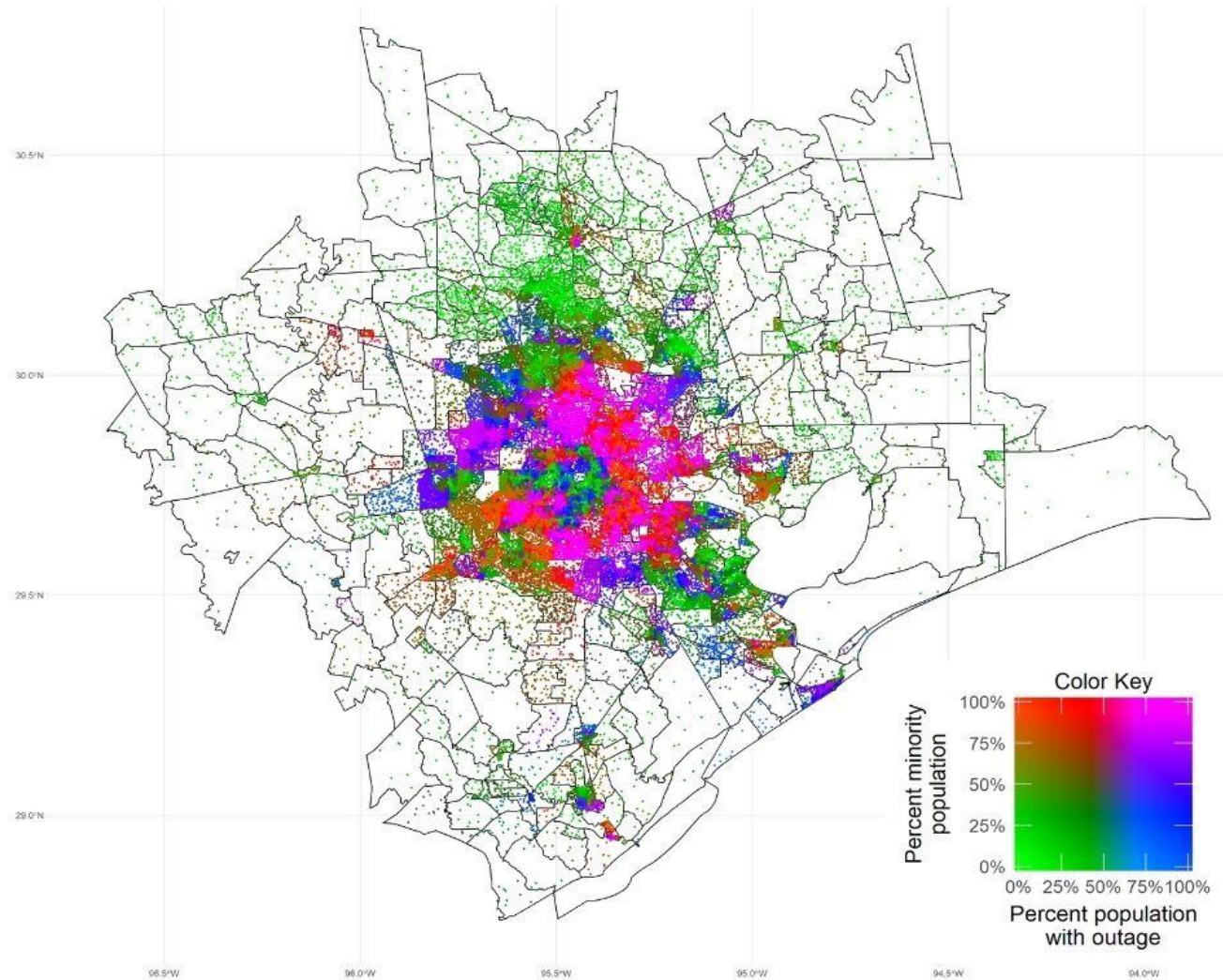


Figure 1. Map of the Houston, TX, Metropolitan Statistical Area showing proportions with blackouts and minority populations during the winter storms of February 14-18, 2021. Each dot represents 100 people.

Carvallo, et al. (2021).

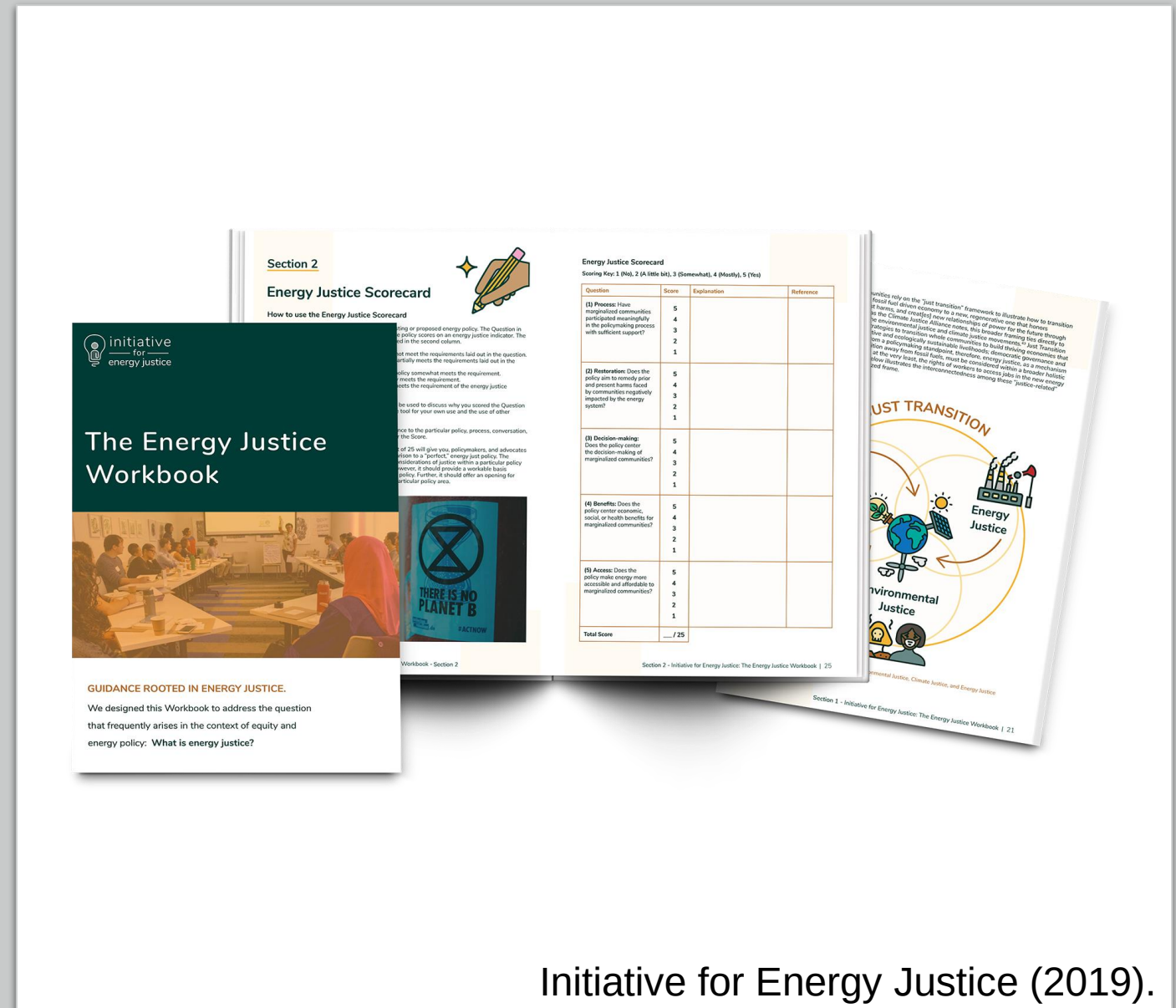
A photograph of a wind farm on a grassy hill at sunset. The sky is a mix of orange, yellow, and purple, with clouds catching the low light. Several white wind turbines are visible, their blades silhouetted against the bright sky. The foreground shows the dark, textured grass of the hill.

How do we transition our
energy system
without
exacerbating
inequality?

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).



The Justice40 Initiative (Executive Order 14008)

40% of the overall benefits of certain Federal investments—including investments in **clean energy and **energy efficiency**; **clean transit**; **affordable and sustainable housing**; **training and workforce development**; the **remediation and reduction of legacy pollution**; and the development of **clean water infrastructure**—must flow to disadvantaged communities.**

Justice40 Policy Priorities

- 
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.

How is DOE advancing energy justice?



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Justice requires collective ownership.



**Justice requires braiding equity into
programs, policies, procurement, and hiring.**



**Justice requires building a
team that looks like America.**

**Justice
requires
building a
diverse
supply chain
and building
the
ecosystem
of qualified
workers and
businesses.**





**Justice requires making
place-based commitments.**



**Justice requires listening to communities.
At the beginning. In the middle. At the end.**



U.S. DEPARTMENT OF
ENERGY



**Justice40 and energy justice
were made for this moment.**

This is OUR moment.



Thank you.

Shalanda H. Baker

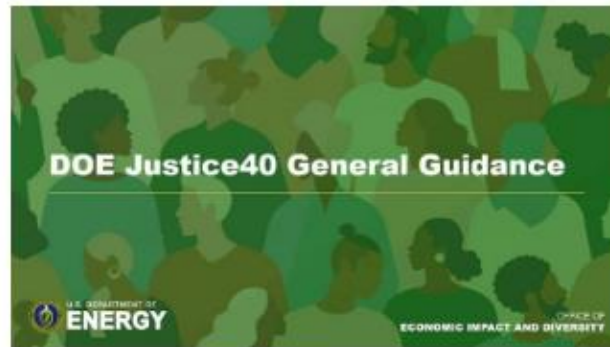
Director

Secretarial Advisor on Equity

Justice40 Resources

Guidance and Factsheets

DOE Justice40 General Guidance



Justice40 Factsheet



Environmental Justice Explainer



Justice40 Covered Program Highlights



Visit: www.energy.gov/justice40

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