

Harnessing data for an equitable clean energy future

A just, clean energy transition plays a fundamental role in making frontline communities resilient to the unavoidable effects of climate change.

Energy justice is integral to climate justice and focuses on four pillars:



Energy burden¹

67% of low-income households* face high energy burden

3x These households spend three times more of their income on energy than non-low-income households

* Low-income households earn ≤ 200% of the federal poverty level (about 30% of the population)



Energy insecurity²

31% of US households face challenges sustaining adequate home heating and cooling.

Compared with White households:
50% of Black households and **45%** of Hispanic households experience **more** energy insecurity

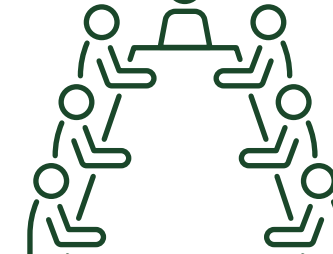


Clean energy access³

Black and Hispanic communities still have

61% less and 45% less solar installed than neighbourhoods with no racial majority

~50% Nearly half of Black-majority communities have no solar installed



Energy democracy

Frontline communities are inadequately represented in the decision-making process, including in the workforce:

% of solar senior executives⁵

White	90%
Black	2%
Hispanic	6%
Other	2%



The US has fallen short on clean energy equity. Economic disparities and climate change only widen the gap.

25-60% more energy per square foot is used in frontline communities compared to higher income neighborhoods. Lower levels of energy efficiency exacerbate the energy burden⁶

70% of US counties see more extreme weather (e.g. heat) in neighbourhoods with more people of colour and low-income people than their wealthier, whiter counterparts⁷

92% of low income communities experience low levels of tree coverage, increasing energy needs and reducing quality of life⁸

This can be solved. Achieving energy justice will require:

Reducing energy burden

Alleviating energy poverty/insecurity

Enhancing energy democracy

Improving energy access

Better access to data and technology can help to mitigate environmental harm and address energy injustice faced by frontline communities.

Madison, Wisconsin
Adding 1MW of solar a year

Madison, WI launched its "GreenPower" solar workforce training programme to:

- identify**
- train**
- hire**

local workers from underrepresented populations to make their transition to clean energy more inclusive. So far, Madison has:

- 1 MW of solar installed** on city facilities as of October 2020.
- Target: Add +1 MW/year by 2022 to support municipal goal of **100% renewable energy by 2030**⁹

Houston, Texas
Brownfield to "brightfield"

Based on existing brownfield data, Houston, TX approved the Sunnyside Solar Project to convert a **240-acre** closed landfill into the largest brownfield solar installation in the US.

Remediating a source of health and safety concerns for decades, the site is expected to:

- Generate energy to power 5,000 homes**
- Offset 120m pounds of CO₂/year**
- Bring \$70m in private investment to the community**¹⁰

Cleveland, Ohio
Engaging the community

Cleveland, Ohio used Greenlink Equity Maps (GEM) to overlay racial composition with energy burden in neighbourhoods across the city.

Identified **100+** Black-majority communities experiencing the worst energy burden.

City used GEM to target organisations and neighbourhoods to take part in clean energy neighbourhood surveys to drive Cleveland's clean and equitable energy future plan.¹¹

Investments in data infrastructure, training and data protection/privacy policies are critical to fighting environmental and climate injustices.

Local governments and community organisations can use granular-level data to:

- Identify gaps and inequities
- Track progress
- Build resilience

- Shape policy and target interventions
- Benchmark critical events

