

## Community Profile

Texas leads the nation in crude oil and natural gas production, as well as in energy sector employment. Houston itself is home to a third of the nation's oil and gas extraction jobs. Meanwhile, Texas nationally ranked second for total installed solar capacity in 2022, enough solar to power over 2 million homes.<sup>1</sup> The current energy landscape presents a unique opportunity for Texas communities to be a blueprint for democratizing energy production and promote a clean air environment. This paves the way to help Houstonians take control of where their energy comes from with solar.



## Houston's Energy Burden



Low-income households spend **3.2 times** more on energy costs compared to the average household.<sup>3</sup>

Deploying solar and equipping batteries in communities that typically lack access is a way to lower this energy burden and prevent a power outage.

NE Houston is particularly vulnerable to grid outages due to extreme weather events. Equipping households with batteries is one way to address this long-term structural issue related to the Texas grid.

## Demographics<sup>2</sup>



**30%** average poverty rate



**35.9%** average rate for no high school diploma



**49.64%** Hispanic or Latino  
**46.22%** Black or African American  
**3.24%** non-Hispanic white

Income, language, upfront costs, homeownership status can be barriers to solar adoption for low to moderate income households. We spotlight this impact because it creates ongoing and growing inequalities in our energy system that affect specific communities.

## NE Houston Solar Equity Pilot

10 single family homes received 5.2 kW installations and 3 homes received donated batteries resulting in an estimated:

- \$338,180.10 of energy savings
- 1,496,762.80 pounds of carbon lifetime offset

# Community Driven Energy in Northeast Houston



## Project Funding

Funding for this project came from:

- HIVE Fund for Climate and Gender Justice
- Utility Incentive Program
- Solar United Neighbors (SUN)

## Partners

SUN leaned on **West Street Recovery** and **Launch Point CDC** for their local knowledge of Northeast Houston's people, culture, and environment. Learning from and working with these groups allowed us to identify policy barriers, develop strategies, and tailor customer support to be proactive to the needs of the community.

SUN's role was to provide technical assistance and overall program and solar installer management. The organizing of Northeast Houston residents and partners made this Solar Equity Pilot possible and successful.



## Lessons Learned

- The paperwork process is overly cumbersome.
- Half of the participants cited environmental reasons for going solar. This shows how solar energy plays an important role in reducing emissions.
- Participants need continued support, so SUN developed a "We Went Solar, Now What?" session.
- We need a contingency fund to help households be solar ready and take steps like repairing roofs or clearing shading issues.

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## Next Steps: Program Plans and Strategies to Scale

Going into next year, we will:

- Install solar for 10 new qualified households with established partners
- Explore ways to use unused contingency funds to help homeowners receive batteries
- Investigate if and how nonprofit organizations can own the solar array to benefit from elective pay
- Track the actions of the Public Utility Commission (PUC) of Texas in hopes of changing the policy landscape.

1. SEIA. <https://www.seia.org/state-solar-policy/texas-solar>

2. Distressed Communities Index (DCI) tool. <https://eig.org/distressed-communities/2022-dci-interactive-map/>

3. AEEE. [https://www.aeee.org/sites/default/files/pdfs/aeee-01\\_energy\\_burden\\_-\\_houston.pdf](https://www.aeee.org/sites/default/files/pdfs/aeee-01_energy_burden_-_houston.pdf)