

Solar energy and its cheaper bills are coming to more disadvantaged communities

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When a lightning storm knocked out power in Doris Brown's Northeast Houston neighborhood this summer, her solar-powered home suddenly became a refuge for frantic neighbors left without electricity.

The impromptu guests were able to charge their cellphones, power up their CPAP and portable oxygen machines, and take hot showers.

Brown's single-family home has had solar power since the spring. A group of nonprofits installed her [solar panels](#) as part of a two-year project to create so-called hub homes to serve [low-income communities](#) during power outages. Climate change has increased the frequency and severity of the storms that have always battered this [coastal city](#).

In Houston and across the nation, there are few solar-powered homes in lower-income areas. Panel installation can easily top \$20,000, putting solar out of reach for many households with modest incomes. But a hefty infusion of federal dollars under the Inflation Reduction Act could begin to change that, providing relief to households that pay a disproportionate amount of their income on [energy](#).

The so-called Solar for All component of that law includes \$7 billion to pay for about 60 [solar energy projects](#) in disadvantaged neighborhoods around the country. Dozens of states, cities, Native American tribes and environmental nonprofits sought grants, pledging to bring rooftop residential panels, off-site solar farm arrays (which produce power for multiple customers) and solar installation jobs to areas largely left out of the renewable energy revolution. The government expects to award the grants in March.

"I think the Inflation Reduction Act is going to be a great catalyst for growth in solar in communities that weren't previously able to access it," said Ben Delman, the communications director for Solar United Neighbors, a nonprofit based in Washington, D.C.

Delman's group installed the panels on Brown's home, one of 10 it so far has retrofitted in Northeast Houston with financial support from the Hive Fund for Climate and Gender Justice, which has given money to more than 120 grantees across the South, mostly in Texas, Louisiana, Georgia and the Carolinas. Three houses, including Brown's, also were equipped with storage batteries to provide power during outages.

Home energy bills

Overall, U.S. households spend an average of 3.1% of their income on [home energy bills](#), according to a 2020 report by the American Council for an Energy-Efficient Economy, a nonprofit research organization that seeks to reduce energy waste and combat [climate change](#). But a quarter of the nation's households pay more than 6%, and 13% pay more than 10%.

Black, Hispanic, Native American and older adult households, as well as people living in low-income multifamily housing, manufactured housing and older buildings, are most likely to spend a high percentage of their income on energy, according to the report, which is based on 2017 data. Many experts say the numbers have only worsened in the years since it was published.

"Homeowners are having to make the decision on a regular basis between paying their utility bills or putting food on the table for their family," said Matt Abele, interim executive director of the North Carolina Sustainable Energy Association, which pushes for policies to expand the use of renewable energy and electric vehicles.

The Solar for All grants for smaller projects will range from \$25 million to \$100 million, while larger ones that will provide solar power to tens of thousands of households could reach \$400 million.

All but a half-dozen states have applied for grants, many of them through state agencies dealing with energy and the environment. Cities and counties, as well as tribal governments and nonprofits, were free to submit their own proposals in separate categories.

In North Carolina, the State Energy Office is taking the lead on a \$250 million Solar for All grant proposal that would expand solar power to

benefit more than 20,000 low-income and disadvantaged communities across the state.

In Greensboro, North Carolina, Diana Rosario and her family have seen their energy bills plummet after solar panels were installed in their home in 2020 through the efforts of nonprofit Community Housing Solutions, solar energy company Southern Energy Management and other organizations.

Rosario told Stateline her first electricity bill after the panels were installed was about \$17—down from a monthly average of about \$120. She said her monthly bill is usually higher than that first-month jaw dropper but never more than \$60.

"It's definitely saved me extra money I could put towards something else," she said. That includes college savings for her two teenagers.

Applying for grants

Colorado, Missouri and New Jersey are seeking grants of \$250 million each to expand solar access to disadvantaged residents, state officials told Stateline. New Hampshire, with a population of 1.3 million, is seeking \$70 million.

Although Congress approved the Inflation Reduction Act in August 2022 without a single Republican vote, more than a dozen GOP-led states, including Texas, are seeking Solar for All grants. The six states declining to seek the grants are all led by Republican governors, including GOP presidential contender Ron DeSantis of Florida, who has come under scrutiny in the press for taking a pass on the potential windfall.

Republicans control the governor's office and both chambers of the

legislature in four of the five other states that have declined to apply: Idaho, Montana, North Dakota and South Dakota. The fifth state, Nevada, has a Republican governor but Democrats control the legislature.

The Kiowa Tribe in Oklahoma submitted a joint \$190 million application with more than 30 other tribes, included the Apache Tribe, Caddo Nation, Suquamish in Washington state, Seneca Cayuga and the Iowa Tribe of Kansas and Nebraska. Ephraim Kelley, natural resources director for the 12,000-member Kiowa Tribe, said the goal is to expand solar to as many Native American households as possible to cut their energy costs.

"When you talk to the Native American community itself, we're always going to be for renewable energy and clean energy and protecting our environment," Kelley said. "Being stewards of the environment, of our land, and not taking more than is needed ... is embedded in our culture."

The Houston-based Clean Energy Fund of Texas submitted a \$250 million grant proposal to expand solar energy access to lower-income communities in 18 states. If they receive a grant, project developers plan to erect solar infrastructure at dozens of predominantly Black and Hispanic universities, providing [solar power](#) at the host institutions and making it available to subscribers in the surrounding communities. The solar arrays would be either mounted on the building rooftops or on the ground, according to Stephen Brown, founder of the Clean Energy Fund.

In Texas, he said, more than 4 million low- and middle-income residents, concentrated largely in South Texas, currently spend between 6% and 20% of their incomes on energy.

Texas' largest metropolitan counties have jointly submitted a \$400 million grant application for a range of projects, including rooftop solar

in disadvantaged neighborhoods and solar farms on undeveloped land to augment the state's power grid.

Led by Harris County, which includes Houston, the coalition also includes Dallas County, San Antonio, Austin and South Texas border areas as well as Houston neighborhood collaboratives.

John Hall, president and CEO of the Houston Advanced Research Center, which helped the Texas coalition craft its proposal, said it could help lower energy costs in more than 46,000 households.

Huey German-Wilson, a neighbor of Doris Brown who is president and founder of the Northeast Houston Redevelopment Council, said some people in her community resist solar energy because they are unfamiliar with it and skeptical of the staggering upfront costs.

"It's just a really not well-understood concept in our communities," said German-Wilson, a solar supporter who is hoping to expand access. "You're literally talking about a buying a Cadillac and putting it on your house, and not knowing whether it's going to give you any relief."

Brown, the community activist, offers herself as an example to the skeptics. After her frame home became a solar-powered hub house, she said, her electric costs were cut in half.

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