



The federal solar tax credit allows homeowners to deduct 30 percent of the cost of installing a solar energy system from federal taxes if completed during 2019. For those who can't install, electricity providers have programs that use power generated at Texas solar parks. Photo by Lance Cheung/Think via DC

GOING SOLAR

Energy Wave of the Future Reaches Rooftops in Houston

BY MARSHA CANRIGHT

Houstonians know the bone-chilling anxiety of opening the first electric bill of the summer. As temperatures climbed last year, the price of wholesale electricity spiked, which meant locals saw some of the highest bills in recent history.

There were also 1,500 new solar installations in Houston last year, according to a new report by the Environment Texas Research & Policy Center.

Solar panels are a solid investment with clear benefits, says Robert Noel, program director for the Texas branch of Solar United Neighbors, a non-profit that advocates for energy rights. "Going solar enables homeowners to lower their energy bills and stabilize their monthly energy costs," he says.

It's no surprise that interest is intensifying; the prospect of charging a phone, ironing a shirt or powering your refrigerator with electricity from a solar system instead of buying it from the grid sounds like a great idea, but there is a lot more to it than installing a few panels.

"Before adopting solar, Houston homeowners need to understand what they are getting and if it makes sense for their family," says Don Wolfe, Houston manager for Solar United Neighbors.

"There's no 'one size fits all' answer when it comes to rooftop solar, so homeowners should focus on understanding their options before making a decision."

Consider these tips before jumping on the solar bandwagon.

CHECK WITH YOUR HOA

In 2011 the Texas House of Representatives passed a bill limiting the power of homeowners associations to restrict solar systems. However, there are still hurdles to know about. Residents must follow normal procedures for seeking improvements, as outlined by their HOA, which often means submitting a request in writing or presenting your case to a review board.

Even if you follow the letter of the law, the association can deny your request for several reasons: if the solar energy devices are illegal or violate public health and safety, if they are located on common property within the subdivision, or if they have an element that is not in a silver, bronze, or black tone. Other reasons could be if they extend higher than the roofline or do not conform to the slope of the roof, are not parallel to the roofline, if they are ground-mounted and extend above the homeowner's fence, or if they are installed in a way that voids the warranties.



To produce more energy, it helps if solar panels face south. However, some homeowners fare better with panels facing west to better catch sunlight during electricity peak demand. (LEFT) Photo by iStockphoto/Photo via CC and (RIGHT) photo by Marufah_2/Photo via CC

DO A HOME ENERGY AUDIT

Inefficiencies mean you'll need more solar panels to power your home, so before you go solar fix those energy drains. Update your windows or fit existing windows with low-emissive film, and address and repair any insulation issues. If you're not doing so already, start using LED light bulbs and consider replacing older appliances with new Energy Star® models.

If you don't feel comfortable going it alone, enlist a home energy auditing service. They charge about \$300 for a session and can help identify your home's problem areas.

DO THE NUMBERS

The average cost of solar panels in Houston is \$3.20 per watt — 72 cents cheaper than the national average. This means a standard 6000-watt solar system would come to \$19,210 and around \$13,500 after claiming the federal solar tax credit for 2019; the credit is reduced in subsequent years.

On average, a solar system in Houston will pay for itself in about ten years, Wylie says. A decade may seem like a long pay-off period to many, but there is a solid return on investment, even if you decide to sell your home. Solar energy systems have been found to increase home values and those homes tend to sell faster, according to Department of Energy research.

SHOP AROUND

Once you've decided to join team solar, shop around. "Going solar comes with many of the same concerns as with any home construction project. That's why it's important to work with a trusted installer," Noel says. He suggests getting bids from at least three companies and recommends joining a solar co-op.

"The solar co-op educates participants about all aspects of going

solar, from how solar technology works, how it gets installed onto your home, and how you can pay for it. The group has already solicited bids from installers and selects the one that best serves the needs of the group," Noel says.

In Houston, Solar United Neighbors has launched two co-ops, with plans for one or two more this year. The Greater Woodlands Co-op has 33 qualified participants and the Houston Central Co-op has 31. The deadline to join The Woodlands co-op is June 15 and, for Houston Central, is June 30. To find out more, visit solarunitneighbors.org/texas.

KNOW YOUR OPTIONS

Investing in panels isn't the only way to go solar. Solar firms are experiencing a boom in Texas and several Houston companies have created new plans for customers interested in powering their homes with alternative energy.

"While the demand for solar energy in Texas continues to grow, many residents do not have the option or interest in installing solar panels on their rooftop," says Megan Talley, senior communications advisor for NRG Energy. The Local Solar plan offered by Reliant connects homeowners and renters with energy generated at two Texas solar farms, including Bovine near Houston, Talley says.

A similar plan was rolled out by Green Mountain Energy earlier this year. The Go Local Solar program powers homes using electricity generated at Texas solar parks. There are no rooftop installations or upfront costs required. "Green Mountain Energy is proud of our Texas roots and, with this plan, we can offer our customers a way to protect our environment and power their homes with renewable energy," says Mark Parsons, vice president.

"We want solar adoption to be easy and accessible to even more Texans who share our passion for conservation and sustainability."