

Solar power is a common theme that residents talked about at the first Inspire Pinecrest Community Conversation held last month. We will further discuss alternative energy at the second Inspire Pinecrest Community Conversation at 10:00 a.m. on Saturday, February 24th. For questions and comments, please email inspirepinecrest@pinecrest-fl.gov.

WHY CONSIDER GOING SOLAR?

Here are some of the reasons why people consider going solar:

- Storm ready 100% access to power if coupled with power storage device
- Drastically reduce or even eliminate electric bills
- Earn significant long-term return on investment
- Protect against future rising energy costs
- Increase property value
- 30% tax credit for qualified expenditures

HOW MUCH DO SOLAR PANELS COST IN SOUTH FLORIDA?

According to Energy Sage (a solar marketplace provider), the average price for solar panels in Miami in 2018 is averaging \$2.72 per watt. According to nationwide data, a typical system size in the U.S. is 5 kilowatts (5,000 watts). Based on a 5 Kilowatt system, the average cost of a solar panel system of that size in the South Florida market is \$13,600 before any rebates or incentives.

If one of the primary reasons you would consider investing in such a system is to ensure 100% access to power during a storm event, one would need to also install what is known as a "power wall" to store power, with a capacity to store up to 13,500 Kilowatts. The retail cost of a power wall including installation is \$7,000. Both costs are before a 30 percent tax rebate incentive.

FLORIDA NET METERING

Florida Power and Light offers net metering – a "make or break" factor for the economics of solar. Net metering is a significant benefit for homeowners connected to the grid who have a solar system installed. These homeowners can receive credits on their electric bills whenever their solar panels send electricity back to the grid.

WHAT SIZE SOLAR ENERGY SYSTEM WOULD I NEED FOR MY HOME?

Ultimately, you will be calculating how many kilowatt hours of power you will need and the correct system size and number of panels to power your house. Florida Power and Light can provide you with your total power consumption for the last twelve months. If you plan to purchase an electric vehicle or other large appliance you should plan for a system that will accommodate the increased energy need.

System Size (Kilowatts)	Average Annual Kilowatt Hour Production
3.5	4,954
5	7,161
7	9,909
10	14,165
12	16,987
15	21,234

PINECREST HOMEOWNERS CAN SAVE BIG WITH SOLAR

When it comes to installing solar, the long term return on investment and savings is often the biggest deciding factor – and the figures can be staggering. Solar panels aren't an expense – they're one of the best ways to invest, with returns rivaling those of more traditional investments like stocks and bonds. Thanks to substantial electricity bill savings, the average American homeowner pays off their solar panel system in seven to eight years and sees a return on investment of 20% or more. In addition, studies show property values can increase by up to 20%.

FOR EXAMPLE - GENERATOR VERSUS SOLAR

The average electric bill for a 6,000 square foot home in Pinecrest is \$500 per month. The same house would need a 36 Kw BU power generator at an initial cost of approximately \$30,000, plus 10-years' worth of operating costs totaling \$6,000, in order to be fully operational in the event of a power outage. If you financed the cost of the generator over 10-years at an interest rate of 4%, the cost including financing as well as operating costs, would be \$42,448.25. And over the same 10-year period, you would spend approximately \$60,000 in electrical costs. Therefore, you would be spending \$10,244.83 annually.

This same house can be completely energy independent with a 25 Kw solar system and it can achieve power independence during a power outage with four power storage walls. The cost of a 25Kw system is \$68,000. In addition, if you also factor in the cost of four power storage walls, each at \$7,000, the entire system would total \$96,000. Once you apply the tax 30% tax credit, the total expenditure is \$67,200. If you financed the cost of the solar system after rebates over a 10-year period at a 4% interest rate, the total cost would be \$81,644.08. Therefore, you would be annually spending \$8,164.44.

Going solar would represent a \$2,080.90 annual savings, which if applied toward the cost of the financed system, would be paid off in a little less than 8 years.

TRANSPORTATION MASTER PLAN COMMUNITY MEETING Wednesday, April 18th at Evelyn Greer Park For more information, please visit www.pinecrest-fl.gov/inspirepinecrest.

