Communities working together to educate each other about solar and capture discounted installation costs by buying in bulk.

www.SolarizeTexas.org
Solar Basics

- Photovoltaic (PV) solar panels convert sunlight directly into electricity.
- Solar panels can be installed on your roof or ground mounted on your property.
- Solar panels are warranted to achieve minimum energy output for 25 years, but panels can last much longer (30 or 40 years).
- Solar panels are tested to withstand hail of at least 1 inch in diameter.
- Energy production and use is measured in kilowatt hours (kWh).
- The amount of energy a system can produce at one time is measured in kilowatts (kW).
- Solar panels produce direct current, which must then be converted to alternating current to use in your home or business, with either a string inverter or micro inverters.

What is Solarize Texas?

- Solarize is a term used for solar group purchasing programs.
  - Customers purchase individual installations for their property, but at a discounted price awarded to the group by an installer.
  - Generally for residential installations, but could be made to work for commercial
- Solarize programs have a strong educational component.
- Public Citizen and the Texas Solar Energy Society, both nonprofit organizations, are helping organize community driven solarize programs. We’ll provide information and help with educational events, but community participation will be the key to success.

What are the benefits of Solarize?

- Save Money
  - Solar installers will discount the fees for their services because the closing rate for contracts is much higher than normal.
  - Usually, the larger the combined installation, the greater the discount
- Education
  - Solarize programs help educate the community about the benefits of solar, which can help increase the rate of solar adoption.
  - Solarize participants help each other ask smart questions and will be better educated consumers.
- Grow the Local Economy
  - Growing demand for local solar will encourage solar businesses to locate in the area.
  - Indirect jobs and sales tax revenues add to the local economic impact.
Comparing Energy Costs

- The cost of solar PV panels has declined very rapidly over the past few years (more than 60% in the past 2 years).
  - Cost of installed solar systems has declined rapidly as well, although not as much as the cost of panels
  - Solar prices that are even just a few months old are no longer accurate.
- Utility energy prices will almost certainly go up in the coming years.
  - The Texas Public Utility Commission (PUC) increased the energy price cap from $4,500 per megawatt hour to $9,000 per megawatt hour (that’s $9 per kilowatt hour).
  - The PUC is also looking to create a capacity market, which would pay power generators just for existing—currently, they only get paid for the energy they produce. This will result in additional cost to the end consumer.
  - EPA is developing new regulations for carbon emissions from existing coal plants.
- Fixed prices vs. variable prices:
  - Natural gas prices are very low now, but have historically fluctuated greatly. When natural gas prices go up, so does the cost of buying electricity from the grid.
  - Solar installations provide energy at a fixed price for 25 years or more. Unlike the cost of utility bills, this can be calculated up front and planned for.

Financial Considerations

- Federal Solar Investment Tax Credit: up to 30% of cost with no upper limit
- Texas Property Tax Incentive: renewable energy 100% tax exempt
- Net metering with payment for excess energy put out onto the electric grid
  - Offset purchasing energy: retail costs
  - Credit for excess on monthly basis: usually avoided cost of wholesale energy
  - With net metering, systems should be sized to approximate average monthly usage.
- Financing:
  - Some solar installers offer 0% financing for one year to give customers time to benefit from their tax credit before paying for their system.
  - Longer term financing can be obtained from banks and credit unions.
  - With the right size solar system to meet your needs and competitive installation and financing rates, your total monthly expense can be neutral even during the payback period.
- Homes with solar installations sell for more in solar savvy markets.
The Solarize Process

- Establish program leaders and points of contact
- Recruit volunteers—That could be you!
- Develop partnerships (utilities, businesses, etc.)
- Educational and outreach events—Solarize Gillespie County has already had 2 educational meetings and we will have more over the coming months.
- Enroll potential participants—Not all participants will chose to buy a solar installation right away, but all can still learn from the process and help make the program a success.
- Establish contracting committee
  - Issue requests for proposals from solar installers
  - Select contractor
- Potential customers get site assessments
- Individuals sign contracts with the solar installer selected by the contracting committee.
- Solar systems installed
- Start generating you own energy!

Get Involved!

- Email us if:
  - You are interested in getting a solar installation at your home and want join with others for a group purchase.
  - You would like to volunteer to help organize a local solarize group.
  - You want to learn more about solar.

Contact Information:

Kaiba White
Energy Policy and Outreach Specialist
kwhite@citizen.org
512-637-9462

www.SolarizeTexas.org