

Solarize with Faith Resources

Stewardship in our hearts. Solar on our roofs.

Why buy a solar photo voltaic (PV) system?

Because of your stewardships-- solar PV protects and preserves things important to you:

- **Stewardship of your wallet: Solar PV is a cost-effective alternative to buying your electricity from an electric company.** It may cost more upfront, but you benefit in the long run. The “break even” point depends on many factors, including 1) whether you purchase or lease the system, 2) the size and cost of the PV system, 3) your financing arrangements, 4) available state and federal incentives, and 5) the changing price of fossil fuels that run power plants.
 - **Now is the time to buy:** the cost of PV systems is very low; there are many low-cost financing options; state incentives are declining; and the federal tax credit starts declining in 2019. Electrical energy is expected to return to its historic 3% annual increase. See:
<http://programs.dsireusa.org/system/program/detail/1235> and
<http://www.eia.gov/todayinenergy/detail.php?id=24672>
- **Stewardship of the environment: Most of our electricity in New England is from burning fossil fuels** (mostly natural gas, i.e., methane), which causes local pollution and produces greenhouse gas emissions that cause climate change. Both effect people and ecosystems. See:
https://www.iso-ne.com/static-assets/documents/2016/02/NE_Power_Grid_2015-2016_Regional_Profile.pdf
<http://www.ucsusa.org/clean-energy/coal-and-other-fossil-fuels/hidden-cost-of-fossils#.WEL6fLrLcs>
- **Stewardship of others: Both local pollution and climate change tend to have their most severe effects on poor and vulnerable people, but all future generations will be impacted by climate change.** See:
<https://www.nrdc.org/stories/environmental-justice-movement>
<http://www.sciencedirect.com/science/article/pii/S0027968415300092> (I had to push my local study!)
<http://www.naacp.org/issues/environmental-justice/>

How does a solar PV system work? The light from the sun hits a solar cell in a panel consisting of many cells. The cells convert the light energy to direct (DC) current. An inverter converts the DC current to AC current, which is fed into the house for use or, if you don't need all of it, the excess is supplied to the electric grid, which causes your electric meter to run backwards. Thus, the electric grid acts like a huge back-up battery. See also:

<http://www.energizect.com/events-resources/energy-basics/solar>

Is it best to purchase or lease a solar PV system? For most people purchasing the system (even with a loan) is a better rate of return than leasing one (or having a power purchase agreement --PPA). For more info see the following:

<http://www.consumerreports.org/energy-saving/real-cost-of-leasing-vs-buying-solar-panels/>

What steps are needed to participate in the *Solarize with Faith* (SwF) program?

- **Outreach to leadership, key groups, & key individuals:** Someone (you?) in the house of worship (HoW) needs to explore how much the members and, especially, leadership are interested in residential solar PV for HoW members. (**NOTE: SwF is for residential solar, not solar on the HoW.**) This might be done by attending a leadership meeting to describe SwF and discuss level of interest and how/whether to continue your efforts.
- **Recruit a working group:** Participation in SwF requires more time and effort than most individuals have, so it is wise to recruit a team of people who want to help.

- **Get Memorandum of Understanding (MOU) signed:** Participation in SwF requires a signed MOU between leadership of the HoW and SmartPower. In some HoWs this may require a vote by members, which require more time to educate members (via flyers, tabling at services, mailings, etc.) and scheduling a vote. A sample MOU is among the handouts at meetings and on the *Solarize with Faith* website: www.SolarizeCT.com/Faith.
- **Establish a contact person:** It is important to have a designated person for coordinating activities between the HoW, SmartPower, and members (and public?) interested in purchasing PV systems through SwF.
- **Work with Sunlight and SmartPower to design campaign:** Assess resources for meeting places and publicity. Brainstorm ideas for campaign design and create action plan. Decide if efforts will be combined with another HoW. Plan dates for workshops and related publicity efforts.
- **Generate interest and publicize workshop(s):** Print and hang up flyers, submit article to your newsletter, request a blurb in the bulletin, identify webpage master for putting link on website for HoW, publicize workshop in local papers, etc.
- **Hold workshop(s):** Make sure you have access to the facility. Assess and bring or reserve presentation equipment, such as computer and display resources. Make sure someone knows how to use them. Prepare handouts.
- **Maintain interest:** The campaign in each HoW will last about 18 weeks, so keep up some publicity, perhaps have a tour of solar homes or Sunlight might have a “show & tell” at one of their installations. Collect and share testimonials from early adopters. Every two weeks the contact person or someone on the team checks in with Sunlight and SmartPower to assess progress and discuss next possible steps.
- **Interested HoW members (and the “local” public?) contact Sunlight Solar:** This could be from attending workshops, calling the SwF contact person or Sunlight Solar, using the www.solarizect.com/faith website, etc.
- **Sunlight Solar takes over:** Sunlight team first assesses the home site.
 - **If site is NOT suitable,** Sunlight advises homeowner about participation in the state’s Home Energy Solutions (HES) and how a small fee (\$124) provides an energy audit & improvements of the home that will help owner save money on their energy bills.
 - **If site is suitable,** Sunlight will proceed with normal steps of explaining PV solar, designing the system, reviewing proposal and contract with home owner, signing contract, getting permits, installation and inspections, and connecting to the grid. Finally, they give an explanation to the homeowner about how to care for and monitor the PV system.

Do we have to use Sunlight Solar as the installer? As you can see from the above steps, Sunlight Solar receives considerable help from those HoWs that participate in Solarize with Faith. This is why they are willing to offer a substantial discount on their solar equipment to home owners recruited through SwF. We wanted to make the process simpler for you by offering a high quality installer to start the process of investigating solar. It does not hurt for homeowners to get a second bid, just make sure when comparing offers that the same equipment is being quoted. There are over a hundred solar installers in CT that have been minimally vetted by the CT Green Bank. They are listed at the following website: <http://www.gosolarct.com/review-qualified-solar-contractors> .

Contacts for *Solarize with Faith* team:

Chamae Mejias, SmartPower, cmejias@smartpower.org, 860-331-1041

Jeff Howard, Hartford Unitarian Society, jeff.howard.29@gmail.com, 817-999-6208

Jay Stewart, Unitarian-Universalist Society: East (Manchester), jstewart@hartford.edu, 860-906-7737

Bernie Pelletier, Green Houses of Worship, IREJN, bernard.pelletier@comcast.net

Lauren Foss at Sunlight Solar, Inquiries about Solar PV Purchases, solarizect.com/Faith, 203-878-9123

www.solarizect.com/Faith