

Why congregations may want to add solar power

by David Voigts, Care for Creation Network

There are several reasons for churches and other religious institutions to add solar power to offset a portion of electricity they use. First of all, money can be saved on the electricity bills. This will be enhanced by a big benefit from the government that will help churches and other religious institutions with the cost of installing solar panels. The Inflation Reduction Act will pay 30% of the cost of the project. This is called "direct pay" or "elective pay." Please be advised that the money will be paid to the owner only after the system is installed and operating, but the benefit is substantial.

The cost of installing solar panels would normally be about \$2.62 per watt (\$2620.00 per kilowatt). For example, the cost of replacing the electricity of an average electric bill of about \$150 would be about \$18,450. However, the direct pay funds would reduce the cost of the example project to \$13,000. This would reduce the payback time from about 10 years to seven years, depending on the actual cost of installing, and the net metering agreement with your utility that governs the amount they pay for the excess energy that is produced and provided to the grid. After the payback period, the electricity would be essentially free.

Please be advised that the cost of the project would be increased if any structural upgrades are needed before solar panels can be installed. For example, since solar panels should last for twenty years or longer, the roof or shingles may need to be replaced or upgraded before solar panels are installed. Also, compliance with local rules and ordinances may increase the cost. A cost estimate for the project can be determined at

www.solar-estimate.org. Also, a directory of solar consultants and installers is available at the Iowa Solar Energy Trade Association (www.iowaseta.org). You may receive marketing calls if you use either service.

Please be advised that considerable paperwork is needed to obtain the direct pay funds, so it is best to have a dedicated, knowledgeable person to ensure that this is done correctly. However, some installing companies will do the paperwork as a service to the client. It is important to add that other projects that reduce fossil fuel use should also qualify for an Inflation Reduction Act rebate.

Another important reason for adding solar is that you will be combating climate change by lowering your carbon footprint. Energy produced by solar panels does not come from the burning of fossil fuels, so their use will not add any heat-trapping carbon dioxide to the atmosphere. In addition, the placement of solar panels on your building or grounds may inspire others by demonstrating that you care about the environment and combating climate change.

The cost of the project would be the responsibility of the church, although after it is operational the cost would be reduced by the direct pay rebate. The system could be funded by available funds, by a special fundraising appeal, or by a loan for all or part of the cost. Please remember that the Mission Investment Fund of the ELCA provides low-cost loans to churches for projects like this.

If you decide that you do not want to own the system directly, a third-party could own it. The third-party owner may be a church member(s) or an in-

vestor. In this case, a "Power Purchase Agreement" will be needed. It will control how much will be paid to the third-party for the electricity generated by the solar panels. Usually, this will be at least 15% less than the current price being charged by the electric utility. Even if the electricity rate goes up, your cost will remain flat for the life of the agreement, typically 20 years. After this period, the church will be given ownership of the system.

Third party ownership has the advantage over direct ownership of having a guaranteed savings each month without any cost to the church. Also, Power Purchase Agreements have a long and successful track record. However, the savings probably will not be as much as with direct ownership, and since more parties are involved, there may be more project complications.

The final choice will be dependent on the unique situation of each church. The following sources of information may help you in making that choice:

- IRS Publication 5817
- Interfaith Power and Light's Congregational Solar webpage (under Resources)
- The Nature Conservancy: Solar for Nonprofits
- Environmental and Energy Study Institute
- Midwest Renewable Energy Association
- Greenpenny Bank (an Iowa online bank that helps with projects like solar)
- www.elca.org/climatecare
 - Social Message on Climate
 - Climate Crisis Study Guide