

People's Church Solar Panels

Frequently Asked Questions

What is the story behind our solar panels? How did we get here?

At the initiation of the Green Sanctuary Committee, in December 2019 the People's Church Board entered into a contract with Helios Solar to purchase a solar system for the church. The purchase took the form of a power purchase agreement (PPA) whereby Helios Solar would install and own the system and People's Church would receive the generated electricity and gain credits from returning unused electricity back to the grid. Helios, as a for-profit company, benefitted from this arrangement because they could take advantage of tax credits that would not be available to the church, as a non-profit entity. There was no up-front cost to People's Church for this contract. People's Church pays Helios for the energy at a slightly lower rate than it does for energy from Consumers Energy and enjoys the benefit of knowing that more than 40% of our electricity comes directly from this renewable source. After 5 years, the church acquired the right to purchase the system from Helios at its depreciated value as set forth in the contract. The 5 years was over in December 2024, though we chose to defer the purchase option to a later date.

Why are we having a congregational meeting about this now?

The board called this congregational meeting with the hope that the congregation will approve the purchase of the solar panels before the end of 2025, before the electricity rates we pay to Helios increase. We are having a congregational meeting to vote on this purchase because our bylaws require the congregation to vote on any non-budgeted expenditure that exceeds 5% of the total annual operating budget. This purchase is big enough that we need to make this decision together.

How much do the solar panels cost?

\$37,408. This is the depreciated cost of our nearly six-year-old solar panels. An equivalent new system would cost around \$60,000 today.

What is the financial impact of purchasing the solar panels?

In the first year, we will save \$3,750 in energy costs by no longer paying Helios for the energy produced on our roof. (This is assuming our energy usage holds steady.) Our savings will increase by about \$150 annually for the duration of the contract. In roughly ten years, our energy savings will equal the cost of the solar panels.

What is the financial impact of not purchasing the solar panels right now?

At the present time the church is paying Helios \$0.1642 per kilowatt hour for the generated electricity. On January 1, 2026 the rate will rise to \$0.1708 according to the escalator schedule in the contract. The rate goes up by 4% each year. We can exercise the buyout on December 31 of any year through 2033 at continued depreciating prices.

Where will the money to pay for the solar panels come from?

If the membership approves this purchase, anyone who wants to join in paying for the solar panels can give to the People's Church Building Fund. Church leaders anticipate that most of this purchase will be made with money from the Palmer Fund. The Palmer Fund is the church's unrestricted reserve fund. This is money given as unrestricted gifts to the church, surpluses from annual budgets, and the money earned by investing those funds. The current balance of the Palmer Fund is approximately \$250,000. The past generosity of People's people make this purchase possible.

What can we expect of the solar panels going forward? How long will they last?

As a rule of thumb, solar panels are assumed to last 25 years, which is when they produce about 85% of their original output. However, newer technology is longer lasting, and the history of photovoltaics in widespread use is limited, so that rule of thumb may be outmoded for our system. This technology has been advancing at a steady pace over the last 2 decades, with efficiencies improving and prices decreasing. We expect around 19 more years of optimal energy production.

Our solar panels generate 40% of our electricity. Why not more?

The size of our solar array was limited by state utility regulations. We signed our contract with Helios in 2019 in order to take advantage of full net metering rates. We are grandfathered into those rates. Given the changing costs, utility rates, regulations, and

government incentives, the financial analysis for an expansion of our system will look quite different. In recent years, we have focused our efforts on making our building more energy efficient, decreasing our total energy consumption.

I've just read a lot about numbers and finances. What about ethics and morals? What does our Unitarian Universalist faith say about this?

As Unitarian Universalists, one of our core values is interdependence. "We honor the interdependent web of all existence. With reverence for the great web of life and with humility, we acknowledge our place in it. We covenant to protect Earth and all beings from exploitation. We will create and nurture sustainable relationships of care and respect, mutuality and justice. We will work to repair harm and damaged relationships."

The installation of solar panels is one way to create more sustainable relationships with the world around us and mitigate some of the harm caused by fossil fuel emissions. The purchase of the solar panels will allow Helios to move forward with more solar projects in our community, increasing the amount of solar energy in our community, moving us all toward sustainability, care and mutuality. Purchasing the solar panels can be one way we live our values.

I have a question that isn't answered here. What should I do?

We will have an info session on Saturday November 8 at 11am in the Commons and streaming on Zoom, featuring our church treasurer, parliamentarian, and board members. If your questions can't wait or that time doesn't work for you, contact Tom Hackley, who is both our church treasurer and someone who was a leader in the installation of the solar panels. He will be able to answer your questions or direct you to the right person.