

St. Luke's in Woodland investigates solar power

By Matt Weiser

The process of installing solar panels on a church can be a little bit intimidating. The Diocesan Commission on the Environment is working with one church, [St. Luke's Episcopal](#) in Woodland, in hopes of making the process a little more manageable.

St. Luke's recently began investigating solar power primarily as a means to reduce its electricity bill, said Rev. Alex Leach, priest-in-charge at the church. This past summer, the bill for power at the church surpassed \$2,000 per month, mainly driven by air conditioning. One large church building in particular is difficult to air condition efficiently. Known as the Great Hall, it was built in an old style with open-beam ceilings that lack any insulation from the broiling Sacramento Valley sun.

Kevin Hawkins, senior warden at the church, presented his vestry with an idea: Invest in solar panels so the church can generate its own power. With a half-dozen buildings on the church campus, there's plenty of roof space for photovoltaic panels. The panels, in turn, would shade those roofs to help keep buildings cool.

The vestry was interested, so the investigation began.

Leach contacted the Commission on the Environment, which put him in touch with one of its members, Daniel Moyer, who happens to work in the solar industry.

"We had a good conversation with Daniel," says Leach. "It was very helpful in learning about some of the process."

Moyer used a free software program called [Open Solar](#) to estimate the solar potential at the St. Luke's campus. It creates a three-dimensional model of the

property to assess sun exposure and potential mounting locations for solar panels, then develop a rough cost estimate.

That estimate was around \$100,000 — a lot of money for a small church.

“But if they spend \$2,000 a month on electricity now, it doesn’t take but a few years to pay off a \$100,000 solar system,” said Moyer, who chairs the Creation Care Ministry at St. Alban’s Church in Arcata.

There are also rebates available that could cut \$30,000 off the initial cost.

Other installation models might make sense. For instance, the Commission on the Environment is investigating a program started by the [Diocese of San Joaquin](#) to outfit all its churches with solar power and get the diocese off fossil fuel-generated electricity altogether.

That diocese is working with a contractor, which would own and install the solar systems and be responsible for all maintenance. The churches would provide only mounting space for the solar systems and agree to purchase power from the systems under long-term contract.

Already, solar installations at six of the 22 churches in the diocese are generating about half of all the electricity needed by the diocese, and more installations are planned. If successful, San Joaquin could become the first Episcopal diocese 100 percent powered by solar. And yet it aims to go even further: It plans to work with other diocese within the Episcopal Church to help them adopt solar using the same model.

Meanwhile, St. Luke’s in Woodland is reaching out to solar contractors to get detailed cost estimates for its own installation, which will guide the final decision-making process. Moyer plans to help the church review those estimates.

“Some of the latest thinking has been to do it in stages over several years,” Leach said. “It would be a huge benefit. I fully agree with the environmental sustainability of it.”