

## St. Luke's Solar Project – Frequently Asked Questions

### How does the church's electric bill work

#### Vision and Purpose

##### Why is the church considering solar now?

The United Methodist Church encourages environmental stewardship, and our Social Principles emphasize caring for God's creation. Solar also offers the potential for long-term savings and budget stability, freeing up resources for ministry.

##### What exactly is being proposed?

We plan to install 371 solar panels on the south-facing roof and wall of the church, using Complete Energy Solutions (CES). This will reduce our dependence on the electrical grid and significantly lower long-term utility costs.

##### How does solar benefit both our budget and the environment?

About 70% of our bill comes from demand charges—the maximum amount of power we use at once—and 24% from energy charges—how much total power we use. Solar helps reduce both.

Over the next 25 years, our solar array will prevent over 3,254 metric tons of CO<sub>2</sub> emissions. That's like planting 4,800 trees. It's good for the planet and great for our church budget.

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### Financial Considerations

#### How would we pay for it?

The project will be funded in three ways:

- A \$250,000 congregational fundraising campaign. Each panel can be sponsored for a gift of \$750.
- A 20-year loan from the Methodists Helping Methodists Foundation
- Up to \$190,000 in federal tax credits (30% base + 10% for U.S.-sourced materials)

The rebate is not guaranteed, but if received, it will be used to directly reduce the principal of the solar loan, lowering interest costs and supporting faster repayment.

#### What happens if we don't get the federal tax credit?

While we fully expect to qualify for the federal rebate, delays or supply chain constraints could affect eligibility or timing. Our plan does not rely on receiving it. If the rebate is delayed or reduced, we still expect positive cash flow and long-term savings. If the rebate is received, 100% of those funds will be applied to reduce the solar loan.

#### How will the federal rebate be used?

If we receive the rebate, it will be used solely to pay down the solar loan. This decision reflects our commitment to financial stewardship—reducing debt, minimizing interest costs, and helping us fully repay the loan faster.

#### How will we get a tax credit when as a non-profit we do not pay taxes?

The program is administrated through the IRS. St. Luke's will file a tax return (first time ever) and we will receive the tax credit less our tax obligation (\$0). A CPA will prepare the paperwork for us.

#### How much will the church save?

We estimate nearly \$20,000 in utility savings in the first year alone. Depending on utility rate changes, total savings over 25 years could exceed \$500,000.

## **St. Luke's Solar Project – Frequently Asked Questions**

### **Have different financial scenarios been tested?**

Yes. We tested conservative and optimistic scenarios, including projections without rebates or donations. In all models, the project pays off over time and provides long-term benefits.

### **Can I contribute to the project?**

Absolutely. Contributions will help reduce the need for borrowing or help pay down the loan faster. This giving is separate from annual stewardship commitments.

### **Why are we borrowing money for solar when the church has other needs?**

This project is different from other capital expenses. It's not just a cost—it's an investment that pays for itself over time. The savings will eventually result in positive revenue.

Through a combination of utility savings and payments from Xcel Energy for our solar production, the system will eventually cover the cost of the loan.

The timeline varies depending on future utility rates and rebates, but in all scenarios we've modeled, the loan is paid off and long-term savings follow. Once paid off, the church keeps the savings, which can be redirected to other ministry needs.

## **Technical and Installation Questions**

### **Was the project competitively bid?**

Yes. We received proposals from three companies. The bids were all within 5% of each other.

### **Why did you select Complete Energy Solutions (CES)?**

CES had the highest-quality design and highest projected energy output. While they were \$24,000 more expensive than the lowest bid, their approach includes six wall-mounted inverters, which are easier to maintain.

### **Did we hire a solar consultant?**

Yes. David Chittle, recommended by the conference, is assisting with planning and coordination. His fee is 5% of the project cost.

### **Will our roof need to be replaced?**

No. The roof was replaced after a hailstorm in December 2023. It has an estimated 20-year lifespan.

## **St. Luke's Solar Project – Frequently Asked Questions**

### **What happens if there's another hailstorm?**

Solar panels are highly hail-resistant. If they're damaged, they are covered by a 25-year manufacturer's warranty. If the roof is damaged, we have a wind/hail insurance rider to cover the roof, less the deductible. The rider does not cover the cost to remove and re-install the panels. The approximate cost of that is in the neighborhood of \$92,000. We plan to increase the amount of the rider (reducing the deductible) to effectively cover most of the cost of removing/re-installing the panels.

### **Is insurance being updated to include the solar system?**

We will inform our insurance company of the addition of solar panels when that is completed. In any case, the amount of property value for our insurance is updated annually by our insurance company.

### **Will we be running any other capital campaigns during this time?**

No. This is our only planned capital campaign through at least the end of 2026

### **Can community groups who use the church support the project?**

Yes! We welcome support from all groups in the St Luke's community. Sponsors can dedicate a panel in honor of a person or group, and your gift helps make St. Luke's more sustainable for all.

## **Energy and Maintenance Questions**

### **How does the church's electric bill work?**

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### **What is the Xcel Energy Renewable Energy Credit (REC)?**

It's a performance-based incentive for solar energy producers. Xcel pays qualifying solar systems for 100% of the energy they produce.

### **What are the expected annual maintenance costs?**

We expect little to no annual maintenance. Optional inspections or cleanings can be performed, but they are not required.

### **What about long-term maintenance?**

- Inverters have a 10-year warranty and cost about \$4,000 to replace today.

## **St. Luke's Solar Project – Frequently Asked Questions**

- Panels have a 25-year warranty and cost about \$250 each if replacement is needed.

### **How long does it take to get a building permit?**

A Building permits for roof-top solar are issued by Douglas County. The approval process takes three to four weeks. Approval is also required from the Highlands Ranch Community Association but it is primarily for informational purposes only.

### **How was the capacity of the system, 200,000kWh/yr determined?**

Our usage in 2023 and 2024 was approximately 200,000kWh/yr. The program allows you to exceed your current usage by up to 20%. The fifteen percent was selected based on potential load increase in the future and suitable solar panel roof space available.

### **How do we know Xcel Energy will continue to pay out the RECs?**

Xcel Energy signs an agreement with participating solar energy producers in the program requiring Xcel Energy to pay RECs for energy produced for 20 years.