

## Zion Special Meeting – April 14, 2024

Hear how solar power can contribute estimated cost savings and revenue totaling \$750,000 over the next 25 years.

- ❖ Good stewardship of resources
- ❖ Community interest and engagement
- ❖ Clean energy powering Zion
- ❖ Younger generations see Zion's care for their future and the environment
- ❖ Possibilities for the Zion church attendees to be involved
- ❖ Continues Zion's legacy of community leadership
- ❖ Revenue and Cost Savings to provide a major funding source for continued church capital project needs

There will be a presentation, dialogue and vote on Zion's Solar Project after the church service and refreshments.

# Solar Energy for Zion

Special Meeting – April 14, 2024

- 1) Project Cost & Payment Plan
- 2) Financial Benefit to Zion
- 3) Installation Size and Placement
- 4) Question and Answer/Fundraising Options

# Project Cost

- 1) Equipment and Installation: \$208,200.
- 2) Underlayment for Panels \$20,000
- 3) Contingency – Hopefully not needed \$10,000
- 4) Cost with Contingency: \$238,200

# Payment Plan Before Additional Fund Raising

Funding Information	Amount	Date Due	Source	Balance	Notes
Creation Care Committee	\$ 5,000.00	January 25, 2024	Creation Care	\$ 233,200.00	Paid from Creation Care Members
Creation Care Committee	\$ 60,960.00	ASAP After Approval	Creation Care	\$ 172,240.00	Committed from Creation Care Members and Youth Group
Creation Care Committee	\$ 5,000.00	June, 2024	Creation Care	\$ 167,240.00	Committed from Creation Care Members
Direct Payment from U.S. Treasury	\$ 62,460.00	March, 2025	IRS	\$ 104,780.00	Federal Incentive - 30% of Equipment and Installation
Direct Payment from U.S. Treasury	\$ 20,820.00	March, 2025	IRS	\$ 83,960.00	Domestic Content Bonus - 10% Equipment, Installation
MCCN - Menn. Church USA	\$ 10,000.00	2025	MCCN	\$ 73,960.00	Pam DeYoung Net Zero Energy Grants
Everence Charitable Services	\$ 5,000.00	2025	Everence	\$ 68,960.00	JustPax Fund Grants
Zion Mennonite Church	\$ 68,960.00	2024-2025	Capital Projects	<b>PAID OFF</b>	Capital Project Fund serves as checkbook

\* MCCN and Everence Grants totaling \$15,000 are not certain.

\* Amy will present a fund-raising case of \$84,000 which would restore the \$69,000 - \$84,000 remainder to the Capital Project Fund sooner

# Payback Timeline

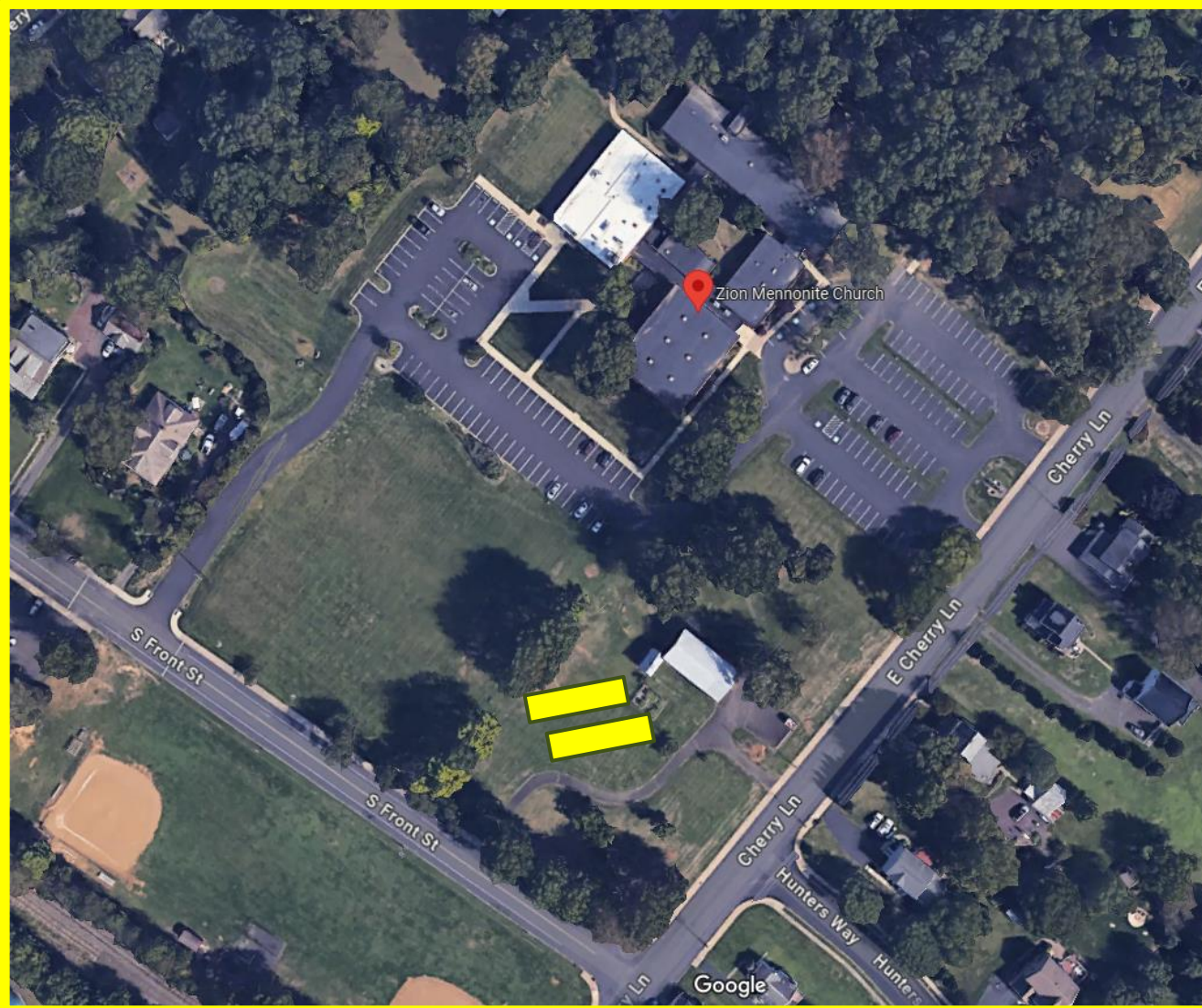
# Before Fund Raising

\*\*\* Assumes MCCN & Everence Grants Secured

Solar Payback to Capital Projects	Amount	Time Period	Source	Balance	Notes
Electricity Cost Avoidance - 2024	\$ 5,664.00	Sept-December 2024	Generation	\$ 63,296.00	Four months at \$1,416 per month (\$17,000 per year)
Electricity Cost Avoidance - 2025	\$ 17,680.00	January-December 2025	Generation	\$ 45,616.00	Twelve Months (\$17,680 per year)
SREC Payments - 9/2024-9/2025	\$ 3,180.00	Various Through 2025	SREC Market	\$ 42,436.00	106 SRECs value at \$30 each
Electricity Cost Avoidance - 2026	\$ 18,387.00	January-December 2026	Generation	\$ 24,049.00	Twelve Months (\$18,387 per year)
SREC Payments - 9/2025-9/2026	\$ 3,180.00	Various Through 2026	SREC Market	\$ 20,869.00	106 SRECs value at \$30 each
Electricity Cost Avoidance - 2027	\$ 19,122.48	January-December 2027	Generation	\$ 1,746.52	Twelve Months (\$19,122 per year)
SREC Payments - 9/2026-9/2027	\$ 3,180.00	Various Through 2027	SREC Market	<b>Paid off with \$1,433.48 +</b>	106 SRECs value at \$30 each

\*\*\* Capital Reserve Refunded in 2027 \*\*\*

# Installation Size and Placement



Two Arrays positioned behind the barn and angled toward the intersection of Front and Cherry Streets

Each array is 11 feet tall at the highest point

Each array is 120 feet long

# Financial Contribution – 25 Year Benefits

## Assumptions:

- 1) 25 Year Time Horizon – The system will be operational longer than 25 years. Full Years 2025 – 2049 modeled for cost/benefit analysis.
- 2) PPL Electricity Increases 4% annually
- 3) SREC Rates Vary. Legislation is pending to increase rates. We are modeling \$30 which is conservative.
- 4) No Costs estimated for maintenance

✓ PPL Electricity Savings: \$642,180

✓ SREC Payments to Zion: \$ 79,500 (106 SRECs for 25 years at \$30 each)

✓ Total: \$721,680

# \$84K Fund Raising Case – Sponsor 160 Panels @ \$525 Each

## Each Panel generates \$4,510.50 to Zion over 25 years

Total	Number of donors	Amount given per donor	# of Solar Panels per donation	Total number of panels	Total raised by donation category
	6	\$3,150	6 panels	36	\$ 18,900
	8	\$2,100	4 panels	32	\$ 16,800
	10	\$1,575	3 panels	30	\$ 15,750
	16	\$1,050	2 panels	32	\$ 16,800
	30	\$525	1 panel	30	\$ 15,750
<b>Total</b>	<b>70</b>			<b>160</b>	<b>\$ 84,000</b>