

November 18, 2023

To: UMC Leadership Team and Membership

From: Jean Landis for the Creation Care Committee

Re: Creation Care Committee Report

The Creation Care Committee aspires to bring the church building into compliance with a net-zero energy plan. The first prong of our aspirational plan was implemented through the installation of 75 rooftop solar panels which began generating energy from the sun May 31st. Since then, the solar panels have been producing more electricity than we have been using, enabling us to bank credits to use in the upcoming winter months when days are shorter, and usage is higher.¹ We now are in the beginning stages of exploring the implementation of the second prong of that plan—the replacement of our outdated resistant heating system with high-efficiency heat pumps in order to reduce overall energy consumption. The following report briefly reviews Prong 1 of the net-zero plan and addresses issues related to Prong 2.

Prong 1 -- Solar

After considering quotes collected from three different solar energy system vendors, upon the committee's recommendation UMC contracted with Envinity to install the solar panels, which have an expected functional life of 30-40 years. Upon inspection of the asphalt roof shingles, it was determined that replacement of half the roof was advisable, as it's estimated functional life was far less than that of the solar panels which were to sit on top of it. The cost of the partial roof replacement was \$11,135. The cost of the solar panels and installation totaled \$56,150, which was partially offset by a \$25,000 grant from the West Penn Power Sustainability Fund and a \$4,000 Pam De Young Net Zero Energy Fund Grant through the Mennonite Creation Care Network (now in transition to the Mennonite Church USA Climate Justice Ministry).

Both grant awards stipulated certain activities to be fulfilled both before and after the receipt of the funds, and the Creation Care Committee assumed responsibility for implementing them. Most of these conditional activities have been completed, but admittedly there is room to address these requirements more robustly in the coming year. In general, they include optimal energy conservation measures, larger congregational engagement, public witnessing and serving as a resource for other congregations and/or organizations within the larger community.

Prong 2—Optimal Energy Conservation Measures through High Efficiency Heat Pumps

The Creation Care Committee has not met formally since the solar panel installation. Informally we have begun to discuss the need to regroup and move forward on Prong 2, conditional upon the congregation's approval.

¹ Anyone interested in the detailed usage and savings figures can request them from the committee.

Previously, three HVAC estimates had been obtained from local vendors. However, they have expired and need to be resolicited.

The passage of the Inflation Reduction Act (IRA) potentially creates more favorable conditions for implementing Prong 2, as it offers tax credits and/or rebates for high efficiency heat pumps. The committee will be exploring our eligibility for these incentives. We also will be exploring additional grant funding opportunities to help defray the cost.

Look for more details on these costs and opportunities in the coming months.

The Committee:

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