



DIY Solar

with Tim Godshall and Jeff Heie

Solar Co-op

Godshall home

March 15, 2015

3.0 kW



Lantz-Trissel home

June 29, 2015

5.2 kW



Shristi barn

July 2015

5.7 kW



Johnston house

May 2016

6 kW

Project Planning

September 2016--Project plan finalized
3 arrays, totaling 105 kW (later enlarged to 113 kW)
Total cost: \$174,000, or \$1.54 per installed watt
Estimated usage covered by solar: 50.3%
Estimated payback period: 10 years
Estimated annual savings starting at \$14,000 and going up each year with projected electrical costs rising
System to be owned by 3rd party LLC “Thrifty Solar”
Fundraising begins with goal of \$40,000
Gofundme page raises almost \$10,000
Other donations raise about \$15,000 (church flyer, in-store donation display)



Harrisonburg Gift & Thrift will install solar panels this fall!

We will use all available space on our roofs to generate one-third of our electricity from the sun. We are teaming with Staunton-based Secure Futures to design, finance, own and operate the system so that Gift & Thrift will benefit from clean solar energy and all available federal tax incentives. We'll gain additional savings by using a team of volunteers to install the panels.

Installing this system is consistent with Gift & Thrift's value of care for God's creation by reducing our fossil fuel use and carbon emissions. Every dollar saved in electric bills is another dollar to fund MCC's relief and development work worldwide.

Over its 35-year life, this system will:

- Offset 65 tons of CO2 *each year*, equivalent to 55 acres of forest or six average U.S. homes
- Yield net savings of over \$360,000 in electric bills
- Educate & inspire volunteers, customers and supporters to install their own solar panels.

A matching grant from the sun!

We are seeking donations from individuals and congregations to reduce the estimated 10-year payback period of this system, which will cost about \$120,000. For every dollar you donate now, MCC will receive three additional dollars over time. That's not even counting the environmental benefits!

To make your tax-deductible donation, please write "solar project" on the memo line of your check, payable to Gift & Thrift. Drop off checks at the store, or mail checks to:
Gift & Thrift, 731 Mt. Clinton Pike, Harrisonburg VA 22802

Questions or comments? Call Shannon Secrist at 433-8844,

Go Fund Me campaign

The screenshot shows a GoFundMe campaign page for "Gift & Thrift Goes Solar". The main header features a large orange sun graphic with the text "Help Gift & Thrift go Solar!". The campaign title is "Gift & Thrift Goes Solar". The progress bar shows \$9,790 raised of a \$40,000 goal, with a "Donate Now" button and a "Share on Facebook" button. The campaign was created on September 9, 2016, by Tim Godshall, a charity in Harrisonburg, VA. The funds raised will benefit Harrisonburg Gift and Thrift Shop Inc, a certified charity. A "Recent Donations" list shows contributions from Kelly McDonald (\$100), two anonymous donors (\$5 and \$100), Andrew Yoder (\$100), and Ross Bair (\$200). A video thumbnail titled "Gift and Thrift solar barn raising" is also visible.

gofundme Search Start a Fundraiser Share Tweet Donate

Help Gift & Thrift go Solar!

Gift & Thrift Goes Solar

Share Tweet 156 shares

Story Updates 4

On Nov. 5, over thirty volunteers installed 160 solar panels on the Gift & Thrift warehouse roof in one morning! But we don't want to stop there. Please help us reach our \$40,000 goal to finance the remaining 120 panels. When complete, the 107 kilowatt system will be the largest in Harrisonburg. It will provide 46% of our electrical need, allowing us to donate \$14,000 more each year to the international relief and development work of **MCC**. We're raising funds through the end of 2016, with another "solar barn-raising" to happen next spring atop the new annex and Artisan's Hope building. [Learn more here.](#)

Gift and Thrift solar barn raising

\$9,790 of \$40k goal
Raised by 53 people in 13 months

Donate Now
Share on Facebook

Created September 9, 2016

Tim Godshall
Charity
HARRISONBURG, VA

Funds raised will benefit:
Harrisonburg Gift and Thrift Shop Inc
Certified Charity
[+ Learn More](#)

Recent Donations

- \$100 Kelly McDonald 5 months ago
Share
- \$5 Anonymous 5 months ago
Share
- \$100 Anonymous 9 months ago
Share
- \$100 Andrew Yoder 9 months ago
Share
- \$200 Ross Bair

In-Store poster

Help Gift & Thrift go Solar!

A matching grant from the sun!
To stay on schedule with this \$70,000 project, we need to raise \$40,000 in pledged donations by the end of 2016. Every dollar we receive will reduce the 10-year "payback period" after which all solar savings go directly to the global relief and development work of Memorial Care's Committee. For every dollar you give now, MCC will receive at least \$1.50 over 20 years, and up to six dollars over 30 years. All that is on top of the environmental benefits.

Help us raise \$40,000!
Donate now:
Place donations in the box with this display. If you need a receipt for tax purposes, please use an envelope and include your name and address with your donation.
Donate later:
• online at www.giftandthriftpanelsolar.com
• or mail your check to:
Gift & Thrift
731 Mt. Carbon Place
Harrisonburg, VA 22802

We appreciate donations of any amount!

Follow our fundraising progress: each colored rectangle represents \$275 in donations received, equal the cost of one solar panel. See photo at right for actual panel layout.

Fill us and like us via [Facebook](https://www.facebook.com/giftandthriftpanelsolar) @giftandthriftpanelsolar

If you have a question or comment, see Gift & Thrift General Manager Shannon Secrest. He can also be reached by phone at 540-433-8844, ext. 101 or giftandthriftpanelsolar@gmail.com

Environmental, social & economic benefits
Over a 30-year life, the system will:

- Offset 1,000 metric tons of CO2 each year equal to 40 acres of forest
- Save 2,000 barrels of oil equal to the annual energy use of 205 average U.S. homes
- Offset savings of at least \$240,000 in electric bills
- Educate and inspire customers, customers and suppliers to install their own solar panels
- Provide an economic, green model for other nonprofits to follow

System size and installation schedule
Site: 107 Kilowatt rooftop system
Annex #1: 100 panels (300 sq ft)
Annex #2: 100 panels (300 sq ft)
Annex #3: 100 panels (300 sq ft)
Warehouse: 100 panels (300 sq ft)
Total: 400 panels (1,200 sq ft)

Prep work for solar barn raising



Setting the first row of panels



Solar Barn Raising 1

-video by Aaron Johnston

November 5, 2016



Groups Involved in the solar barn raising:

- Gift and Thrift Board of Directors
- Voluntary Gas Tax
- Secure Futures
- Carpenter's Guild
- Volunteers from Pennsylvania
- High School kids from HHS and EMHS
- Bowl of Good
- Community volunteers



This holiday season, give a gift that keeps on giving for 40 years!

Your tax deductible gift of a solar panel will support the global relief and development work of Mennonite Central Committee (MCC)

<https://www.gofundme.com/giftandthriftsolar>

Productivity to date



- Through September 2017, Phase-1 (62kW) produced at least **69.1 MWhs**, valued at **\$6,914**
- Through September, Phase-1 has produced at least **2.2% more energy than predicted**
- SF interface shows **108,000 pounds of CO2 offset** by Phase-1 through Sept.

How to do a Solar Barn Raising:

- **Justification:** The proposal of solar barn raisings comes out of the recognition that Mennonites have a long and rich history of community-based mutual support. The concept of barn raisings is known by most Mennonites, especially those with Amish heritage. While the cost of installing a solar system is often out of the reach of most small non-profits, many thrift stores have a natural base of support from people who donate goods, volunteers, and supporting organizations such as churches and financial institutions. These sources of support make thrift stores well situated to successfully pull off a solar barn raising.

- 1. **Find a source of seed money.** Whether it be savings, a grant, or funding from an organization that wants to help make it happen, this money can be used to get the effort off the ground. Often, there are projects (such as reinforcing roof trusses or installing a new roof) that need to be completed before a solar system can be installed.



- **2. Find an experienced installer to oversee the process. They must be willing to work with the assistance of volunteer labor. The labor costs involved in installing solar are a significant portion of the total cost of the system. If these costs can be minimized, the total financial outlay for the thrift store can be more feasible.**



- 3. Partner with a for-profit entity which can take advantage of federal tax credits. This entity can be the “owner” of the system for the first few years and take advantage of tax credits as well as depreciation. The partnership is another method of minimizing the initial financial outlay by the thrift store. The savings provided by the tax credits help reduce the total cost of the system and allow for a financing option that may help to make the solar system possible.

- **4. Leverage your community connections and resources.** The board of directors of a thrift store is a natural connection to the community support that can be mobilized. Many of these directors are connected to communities of faith or other local institutions. It helps to have a motivated non-profit that is willing to fundraise or put forth the money.

- **5. Make it a community effort.** There are lots of opportunities for involvement in such an effort: fundraising, publicizing the project, installing the panels, wiring the array, feeding the volunteers. It is useful to invite the involvement of local contractors such as carpenters, electricians, solar installers, and handy men and women. The installation of the racking and solar panels can usually be completed in one day.



- **6. Make it educational.** Most people do not know how to install a solar system. However, with a good orientation to the process, almost anyone can learn. It is useful to utilize people, such as carpenters, who are good with their hands and familiar with work flow. Young people can learn the installation process through pairing up with a mentor who is familiar with routine.



- **7. When it's done, Celebrate!** There is a lot to celebrate: utility bills being slashed or eliminated, community ownership of the project, education about renewable energy, a hands-on opportunity to practice creation care, contributing to the long-term financial sustainability of the non-profit.

Sun Shot Grant

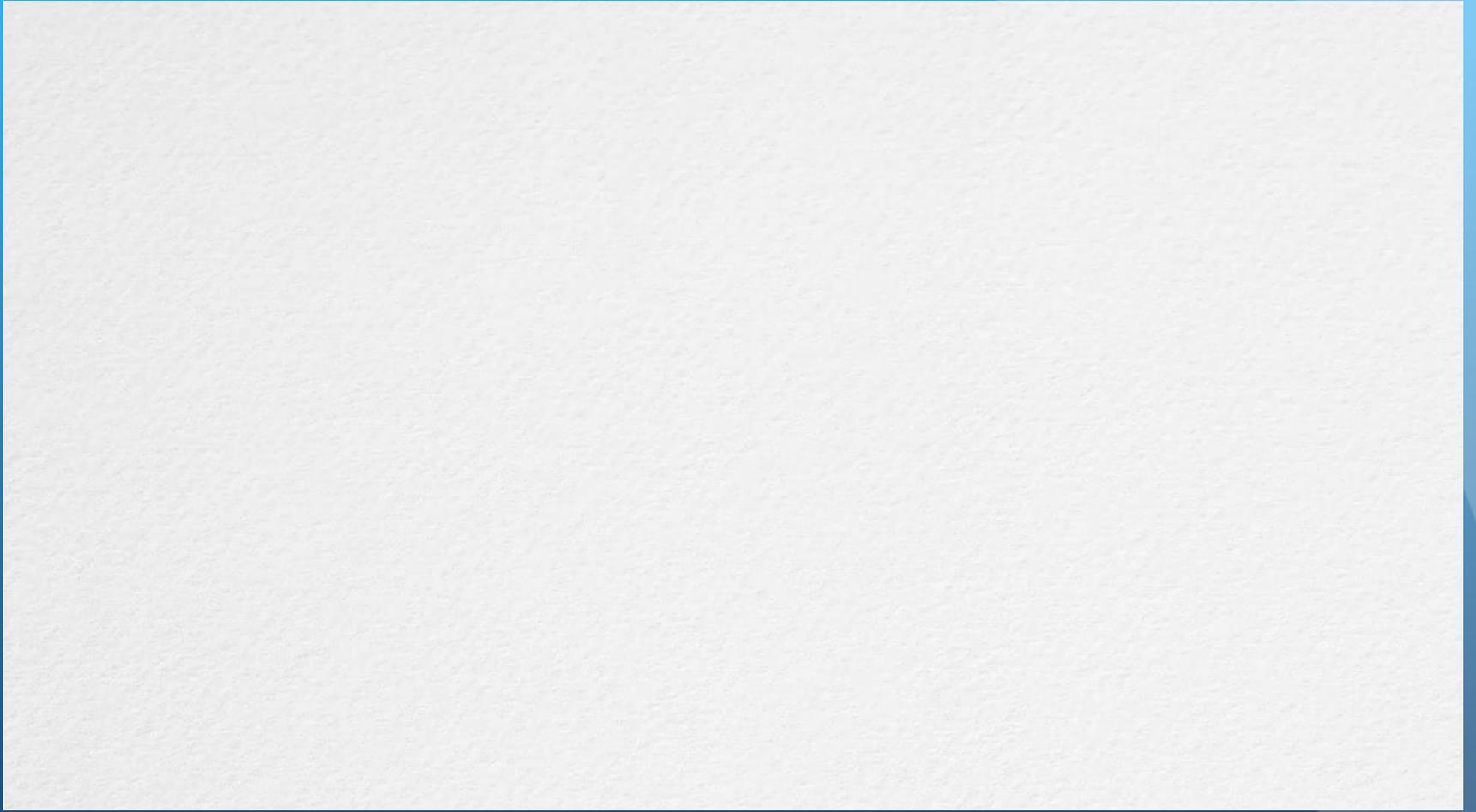
- **February 2017** - Secure Futures wins \$50,000 Solar in Your Community Challenge from the Dept. of Energy to be used toward solar barn raisings.
- \$8,000 toward G&T project, \$5,000 for grant admin. And the remaining \$37,000 for 3 additional projects -- MRC in Akron, PA, and 2 others to be completed by October, 2018
- MRC in Akron is working to find a financial partner to help them with third-party tax equity financing for the project, with the hopes of doing a solar barn raising in spring 2018.

Solar Barn Raising 2

June 3, 2016



18 local high school students volunteered for the day



Pros of barn raising approach

- raises profile of solar
- saves costs and helps motivate donors
- demystifies solar for those involved
- good way to mobilize volunteers with a reference to community mutual aid

Godshall home

9.7 kW

\$1.60 / watt to install

Installed with the paid labor of solar co-op members

