

## Attachment E

### Missoula First United Methodist Church

#### Solar Education and Outreach Plan

With the installation of rooftop solar, First United Methodist plans a lively, multi-generational education and outreach program for our congregation, our building's thousands of other users and the larger Missoula community. We will be rigorous in verifying this program's success. At each event, we will track the number of participants, record their comments and questions, and follow up with any who ask for help launching their own project. We will succeed if our solar installation inspires others to do the same at their homes and businesses; we will be their advocates and workmates. Success will also be measured by the impact of this installation on our building's carbon footprint, and by the number and results of new conservation projects we undertake.

Here's an outline of First UMC's education and outreach plan:

**Installation Day media:** We will invite Missoula media and NorthWestern Energy representatives to watch as the 66-panel array is lifted onto First Church's roof. The event will provide needed photographs and video for TV and print/online media – and will give us an opportunity to talk about our congregation's 151-year presence downtown, the benefits our community will reap from the installation, how solar power and net metering work, the assistance we received from NorthWestern Energy, SBS Solar and our congregation, and how we hope our project will inspire others downtown and across Missoula. We'll also have several posterboard-size graphics and take-home pamphlets about the project and solar energy available along the front sidewalk, as the event is sure to attract many passers-by. The media will be provided with news releases highlighting details of the installation and its financing. Our congregation includes two longtime Missoula journalists, so we feel confident in attracting a strong media presence. We expect this event and its coverage to reach thousands of local and regional residents. There is no cost, as all educational materials and media coverage will be free of charge.

**Celebration Sunday:** Once the solar panels are fully operational, First Church will host a Sunday celebration. We'll give thanks and sing praises during our 10:30 a.m. worship service, then take the festivities outside for a community celebration and potluck. That event will feature project leaders describing the yearlong process that brought solar to First Church, thanking NorthWestern Energy, SBS Solar and our congregation for their financial support and expertise, and describing some of the cool features of our panels. They generate electricity from the front AND back sides! A sensor on the back of each panel shifts production from one to the other as the shadow of our church tower moves across the roof each day, maximizing electric generation! A special structure holds our panels atop the roof, so they can withstand even the 100 mph Hellgate Canyon winds! We'll also have all our posterboard graphics on easels spaced around the lawn, and will have tables filled with information on solar energy – and how to bring the sun's power to

your own home or business. This special day will also feature the debut of a computer monitor displaying our solar array's real-time power generation stats. (See explanation below.) As on Installation Day, we will reach out to Missoula media for coverage of the historic event. Again, there are no costs associated with this event, thanks to volunteers and donations.

**Real-time tracking/display of solar power generation:** In the Narthex of First Church, we will install a live display showing how much energy our solar array is producing. The wall-mounted computer monitor will show data from the SolarEdge inverter via our building's WiFi. A table in front of the monitor will provide the thousands of Missoula residents who visit our church each year with information to help launch their own solar projects, as well as a pamphlet on First Church's project. (See explanation below.) A rotating series of educational posterboards will engage visitors with explanations of our solar array, net metering, how solar power works, reductions in CO2 emissions, etc. A pair of permanent displays mounted alongside the monitor will 1. Explain what the monitor shows and 2. Thank NorthWestern Energy, SBS Solar and our congregation for making this solar project possible.

Our budget for the solar monitor is below. We hope to greatly reduce this cost by utilizing existing/donated equipment, wherever possible:

○ 27" Acer monitor:	\$350
○ Lenovo IdeaPad 114 Laptop:	\$285
○ Power Strip with Surge Protector:	\$30
○ Timer for Monitor (Lowe's):	\$10
○ Best Buy Essentials wall mount for monitor:	\$40
○ HDMI cord, connectors, etc.	\$30
○ Storage cube for laptop	<u>\$20</u>

**TOTAL: \$765**

**Educational/informational pamphlet:** We will produce a simple pamphlet about the project that explains why we decided to go solar, components of the array, how much electrical energy our building uses in an average year, how much electrical energy we expect the array to produce, how much money this will save the congregation, examples of ways we can use the savings to further our church's mission, and acknowledgement of those who helped us fund the installation. This pamphlet will be produced by volunteers and with donations.

**Sunday School/Youth Group curriculum:** A longtime Missoula schoolteacher who is a member of our congregation is developing a Sunday School curriculum that will teach our First Church children and teens about solar power and the new system providing

our building's electricity. The curriculum will cover one or two sessions, depending on the age of the children. In part, we would make use of the terrific resources provided on [solarfuturestoolkit.com](http://solarfuturestoolkit.com), which cover solar and renewable energy, energy efficiency and conservation, and career paths. The youngest children will enjoy the coloring pages and stories. Teens will learn about career and entrepreneurial options and the science behind our own church's electric generation. We will bring in guest speakers, where that is appropriate. And, of course, every age group will get a chance to go outside and see the solar panels on our roof, look at the net meter, and see our real-time power generation numbers on the Narthex computer monitor.

Then our children will spread all that newfound knowledge to others. Students in each class will design a display to explain our solar project – and solar power – to others. Some classes might choose a poster project or photos to share. Some might make a video. Our teachers and youth leaders will ensure the information is accurate, while encouraging the youngsters to let their creativity flow. The end projects will be displayed to the congregation and public. The intent is that some of these projects will ignite future “green” initiatives at First Church: a new approach to energy or water conservation, for example, or a Sunday morning rideshare campaign to reduce vehicles on the road. We expect the Sunday School curriculum to reach hundreds of families and folks in the larger community. We'll also share our materials with other local churches and across the West via the Methodist Church's Mountain Sky Conference. There is no cost for this outreach.

**Adult Sunday School/Worship Service:** First UMC's Green Team began its outreach to the congregation during the pandemic. It will continue far into the future. These presentations include weekly Green Notes published in First Church's Sunday announcements (distributed by email, paper copy and [online at firstumcmissoula.org](http://firstumcmissoula.org)). Over the past two years, column topics have included everything from the environmental benefits of clotheslines to local, state and federal legislation. Since last December, though, every Sunday's column has focused on solar energy and our church's quest to install solar panels. We've explored net metering, anchoring a solar array at the mouth of windblown Hellgate Canyon, and compensating for the shadow created by our church tower. We've provided weekly updates on the \$18,353 pledge drive to provide our 30% match of the project costs.

The print columns have been supplemented by a monthly series of very engaging Green Team presentations during our worship service. Since January 2022, those talks have kept our congregation apprised of progress on the solar panel project. “Everything we know, you will know,” Green Team co-chair Jim Gillison promised church members. We have kept that promise, and will continue to do so. We believe the in-church announcements were a key to the enthusiastic response to our solar fundraising – and to our congregation's renewed energy as we emerged from the pandemic's isolation.

We look forward to continuing our in-person monthly presentations and our weekly Green Notes columns as the solar project comes to fruition. Already, we've been approached by congregation members interested in installing solar panels atop their

homes. We believe that energy will grow as we report on the church's installation and operation, educational curriculum and community outreach.

Our Adult Sunday School class has been an important part of our outreach effort in recent months, and we'll continue that education in the year ahead. We've watched and discussed videos on climate change, discussed ways to reduce our carbon footprint and increase energy conservation, ways to reduce our vehicle trips around town and beyond, and how to cut back on food waste at home – and at church potlucks! We will include sessions on solar energy to coincide with the installation of our rooftop system.

**Solar Fair:** First Church's Green Team will host a Solar Fair for the public and our congregation once our rooftop array is in place. This will provide team members with another opportunity to talk about our project with the Missoula community – and to spread our enthusiasm far and wide!

In one area at the fair, we will show videos available from Climate Smart Missoula and Solar-Ease Missoula on "Solar in Montana: Simple Steps to Going Solar" and on "What You Need: Solar Financing and Considerations." Along with the videos, we'll distribute handouts from NorthWestern Energy, Climate Smart Missoula and our own project brochure.

In another area, we will explain our rooftop solar project in detail, with informational posterboards, photographs taken during the installation, and displays created by children and youth in our church as part of our educational curriculum.

Finally, we will show the public the power generation happening atop our church – via the computer monitor in our Narthex. At each of these stations, Green Team members will be available to answer questions and distribute written information.

Other community groups and solar businesses, as well as NorthWestern Energy, will be invited to participate in the Solar Fair with booths or information tables. Initially, we will host a fair at our church – to show off our own solar project. Then we will offer to replicate the event at other venues – in the lobby of the Florence Hotel before a meeting of City Club Missoula, for example; or at one of downtown's farmers markets; or one Monday night before a City Council meeting; or at one of the Documentary Film Festival venues. We will use our downtown location to advantage, reaching out to organizations that attract a diverse cross-section of Missoula residents. We believe these Solar Fairs can reach thousands of people. There is no cost, as all planning and presentation will be provided by volunteers.