

Bethany Church Solar & Battery Grant

The Washington Department of Commerce approved a grant for Bethany Lutheran Church to install solar panels and a battery backup system to enhance the church's function as an emergency resilience center.

The System

The proposed system **includes 97 solar modules (panels) and 3 batteries**. The modules will be installed on the roof of the church and the pre-school building as shown on the drawing on the back side of this sheet. The batteries will be installed on the north wall of the church in a discreet location.

The solar modules will produce electricity throughout the year. Production will be monitored by PSE and calculated to offset energy usage by the church on an annual basis. We estimate the operational savings to the church will be around **\$5,275** each year.

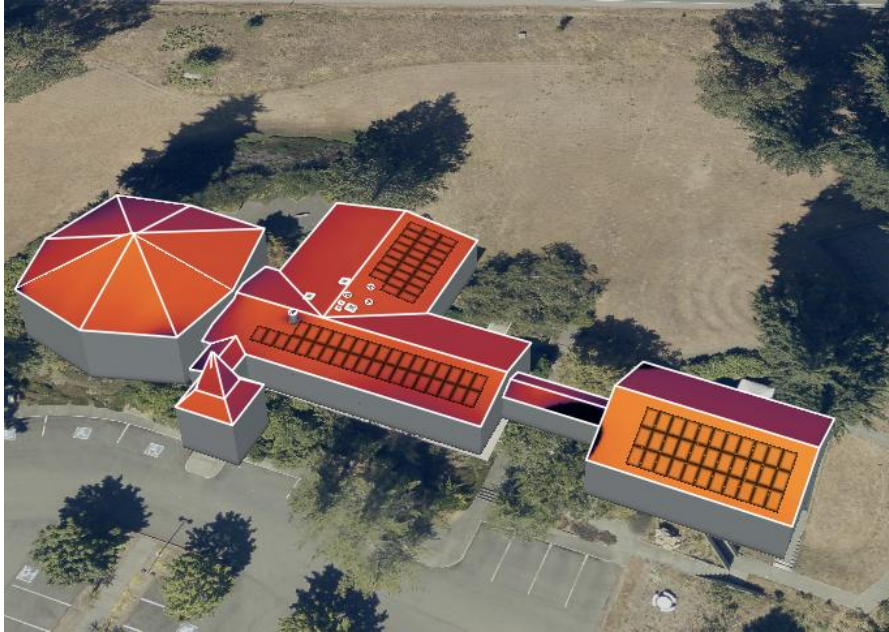
Budget

The grant totals \$213,750 which will cover the full cost of the solar and the battery system, including installation costs. The grant is a reimbursement which means Bethany needs to pay for the system installation and then submit the invoice to the Department of Commerce for payment. To do this, Bethany will get a loan from Craft 3 bank. Total project costs, including the loan fees and interest payments are shown here:

| Project Budget | |
|------------------------|-------------------|
| Uses | |
| Solar + Battery Cost | \$ 213,652 |
| Loan Fees 1% | \$ 2,500 |
| Closing Costs | \$ 1,500 |
| Interest Carry | \$ 6,500 |
| Subtotal | \$ 224,152 |
| Contingency (10%) | \$ 22,415 |
| Total Cost | \$ 246,567 |
| Sources | |
| WA Commerce Grant | \$ 213,750 |
| Investment Tax Credit* | \$ 32,817 |
| Total Funds | \$ 246,567 |

After the system is installed, Bethany can apply for a Direct Pay Investment Tax Credit that can pay for the costs not covered by the grant (this is available to nonprofits such as churches). There is, however, a chance that the Tax Credit will be rescinded by the budget bill moving through the Senate. If this is the case, we can apply for grant funds from other local sources such as PSE or Rotary.

The Solar system size is 94 solar modules, with 43,198 kWh annual production. The modules will be installed on the roof of the church and the preschool as shown below:



3 FranklinWh aPower 2 batteries will have Capacity of 45kWh. These will be used to power lights and the refrigerators during a power outage. The batteries are 45x29" in size and will be installed outside the church building.

