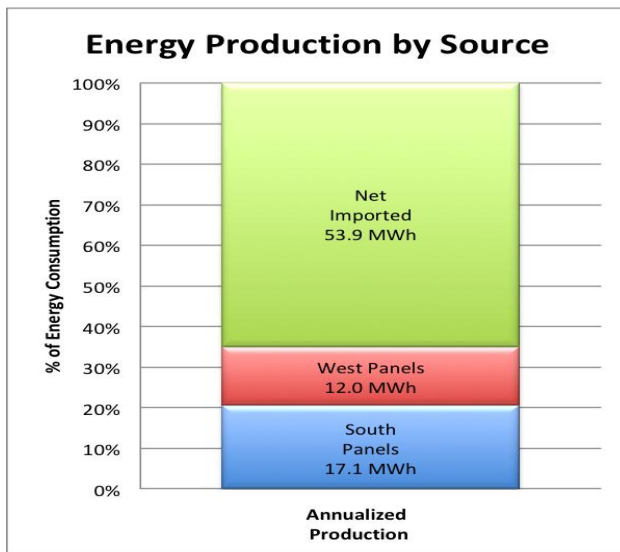


Solar Panels Production and Savings

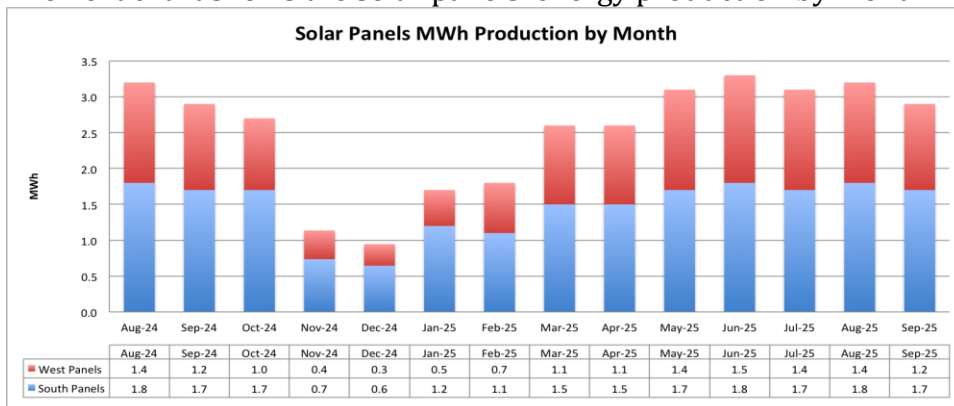
Our first set of solar panels on the south side of the church went operational 6/2/22, and the second set of solar panels on the west side went operational 7/15/24. Here are some answers to the questions about how much energy are YCUCC's solar panels producing and what savings have we been receiving.

Here is a chart that shows the church's annual electric energy use, and where we are getting the energy from. The church consumes about 83 megawatt hours (MWh) of electric energy per year, and the solar panels generate roughly 29.1 MWh of that amount and the remaining 53.9 MWh is the electricity that we are billed for. This means that our solar panels are producing 35% of our total electric usage, which results in an estimated savings of about \$3,050 per year.



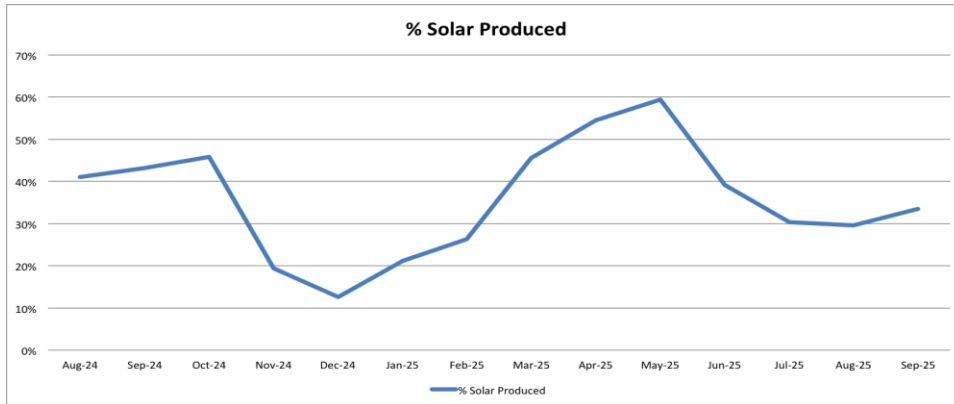
The original south-facing panels capture more sun and produce 20.5% of our usage, while the second phase west-facing panels produce about 14.5% of our usage. This production is on track with the expectations of our energy consultant.

The next chart shows the solar panels' energy production by month.



As you might suspect, the solar panels' production goes way down in the late fall and winter months but goes way up in the late spring and summer months. Peak production has been 3.3 MWh in June, but December production was only .9 MWh.

Before looking at this next graph, can you guess in what months our solar panels produced the greatest and the smallest percentage of the electric energy we use. Not surprisingly, the smallest percentage is produced in December (13%), but the greatest percentage is not in the summer but is in May (59%). That is because the summer air conditioning uses much more electricity than the additional energy produced by the solar panels



Here are some additional fun facts that come from our Enphase (the company that monitors the solar panels' electrical production) reports.

So far, as of the end of September 2025, the energy produced by our solar panels has resulted in a 51.2 ton reduction of carbon dioxide, which is equivalent to planting 861 trees; and the energy produced would be enough to charge 6.2 million phones.

In addition to the solar energy our own panels produce, a major portion of our imported electric energy supply is also solar powered, coming from the Clearway Community Solar farms. But the distribution and transmission charges continue to increase along with our usage, resulting in high electric bills. So we must continue to ask and act on "What can we do at YCUC to help reduce our energy needs?"