

October 2012 Newsletter
Human Interest

Big Faith, Little Footprint
by Scharmél Roussel

The solar panels on my roof are an outward expression of my love for God and respect for the perfect balance of fragile ecosystems. When people visit and see solar panels on the roof, they have two questions: 1) how much did that cost; and 2) how long will it take to get your money back?

I have answers for those questions, but I wish guests would ask, "How much did you reduce your carbon footprint?" The answer is about 75% or "tons!"

Misconceptions surround PV panels. People think that if the power goes out during a storm, they can come over to my house. However, the solar panels are feeding energy into the power grid and sometimes pulling it off the grid. I am still connected to the grid. If my neighbor's power goes out, so does mine.

I moved from a 2-story house to a smaller patio home, built in 2004 with energy efficient appliances, bathroom fixtures and windows. Over the past 8 years, I have replaced the water heater with a tank-less water heater; added 4" more cellulose insulation to attic; installed a custom foam plug in attic stairwell door; replaced bulbs with CFL and LED bulbs as traditional bulbs burned out; adjusted thermostat to 68 in the winter and 76 in the summer; installed foam socket seals behind plugs and light switches; plugged items into power strips; unplugged items not in use; and installed 20 solar panels on the roof. State and federal incentives made the solar panels affordable.

My actual cost was 38% of the total. How much difference did it make? Tons!

Comparing energy consumption gets tricky because of recent heat records. Most months of every year the solar panels produce more energy than I consume. I earn credits to carry forward to the next month's electricity bill... until things get really hot in the summer.

One example, my July 2008 consumption (before solar panels) was 1,101 kWh, and my July 2012 consumption from the grid four years later was 206 kWh - an 81% reduction in electricity from the utility grid. Each year, the solar panels produce about 4,000 kWh, reducing my reliance on power from plants that burn coal and reducing my annual carbon emissions by about 4 tons per year.

The sun is very powerful. As long as we have daylight, the solar panels produce energy – even on a cloudy or rainy day – not at full capacity but still producing. They even produce energy under the snow until they are covered with 3 or 4 inches. When the sun comes up the next morning, the snow slides off, and the panels start producing again.

The panels have produced energy beyond my expectations. I have never experienced a problem that required maintenance of any kind. I was warned that the panels could cause leaks in my roof, explode, catch fire, burn down the neighborhood, fly off, peel off, hit other rooftops and injure people. None of that has happened. The solar panels simply sit on the roof all day every day generating energy. Sometimes we have high winds in my neighborhood and roof tiles fly off my neighbors' rooftops – but

not my roof. The solar panels are protecting my roof and holding it down. No moving parts are involved, and no repairs have ever been required.

The Creator God gave us a huge powerful sun that provides all the energy we need without causing pollution. If we follow the instructions of sacred writings to care for creation, we will use technologies available to harness that power, collect it, save it and distribute it to energy consumers.

By reducing energy consumption from the grid, I have reduced carbon emissions. I have joined a growing faith movement, which calls individuals and society to action – to reduce toxic emissions that affect our neighbors.

RE System Details:

70 Reservoir Heights Dr., Little Rock

20 panels – KD 135GX PV modules – Kyocera

Xantrex GT-2.8 Grid-Tied Inverter