In 2005 we got really interested in solar panels to generate clean energy. At that time we lived in a condo and owned 3 more. The condo association's building was wonderfully situated for solar panels on the roofs. When legislation was passed to prevent associations from denying the installation of solar panels for cosmetic reasons and we owned 3 condos that were on the top floor we asked to be allowed to install solar panels. We also secured a bid for the entire community. The Board, of which both Ray and I were members, denied us this right because we didn't own the roofs and they were not willing to work out a legal agreement to make us responsible for any repairs to the roofs. Within a year we sold all our condos and bought a house with good solar potential and moved. The HOA lost it's most responsible board members and market values of their property and are left with ever increasing utility bills.

Here is the house, built in 1963, which we bought in March 2010.

Our first order of business was to get an energy audit done. The house, like all those on the block in this neighborhood, was not insulated. We immediately set about renovations, adding a very large deck where we could have meetings and parties. Also we replaced an old boiler with a high efficiency boiler (97% efficient) which we had installed outside the main house so as to have no combustibles inside.

Then we started our research for solar panels. After interviewing and getting bids from 4 companies we chose Solar City because they offered a prepaid 20 yr lease and required no down payment or up front charges for engineering and installation. The system is designed to provide 120% of our electricity

needs based on the electric use of the previous homeowners. Here are the Solar City workers finishing the installation on the south side of our roof.

They installed an identical bank on the west side. It was turned on Jan 3, 2011 and we are monitoring it daily so that we learn about how it works, what production we are getting, etc.

We had our Prius converted to Plug In Hybrid in July 2010 and our most recent analysis of our gas mileage was 195 miles per gal with the use of a block heater about an hour before we go somewhere. We charge the car's batteries during the day with our solar panels and the estimated cost if we were paying for electricity would be 50 cents to charge it. When using the block heater (which keeps the gas engine from coming on when not needed at the beginning of a trip) we are also heating the block with solar generated electricity.

Another thing we did was to turn the lawn into xeriscape plus food production (blueberries and pear trees which replace the brittle silver maples out front which shaded the roof. The back yard was changed from lawn and Russian olive trees (thirsty trees) to raised bed organic gardens.

Our back yard BEFORE:

Now:

Recent photo of front of house with xeriscaping:

We have switched from sprinklers to drip system except for 2 sprinklers, one of which can be seen here. We'll change it out next summer.

When asked recently by the former chair of the PUC if we would have gotten solar panels if we had not been able to get the $2.50/kwh rebate from Xcel my response was that our "return on investment" was cleaner air and that it would not have affected our decision to add these panels.

We actually did things sort of backward, on purpose. We got the energy audit up front and then we sealed the attic and insulated just this spring. We anticipate that our energy usage in the winter will be much less and we are also able to live without air conditioning except for an hour or so at night. We are hoping to get our home included in a solar home tour with CRES in October.