



GENERAL MEETING MAY 22, 2013

President Dan Kruger called the meeting to order at 7:05 PM. Edith Byrd led the Pledge of Allegiance.

The President introduced the speaker, **Steve Rypka**, from Green Dream – The Art of Green Living. He started by mentioning how humans have had an enormous impact on the Earth's atmosphere after the Industrial Revolution. The steady increase of CO₂ creates a "blanket" around the Earth that holds more energy and creates an energy imbalance. We now add the equivalent of 400,000 World War II atomic bombs every day. Natural cycles that used to take thousands of years now happen in decades.

If we want to lessen our carbon footprint, the most efficient thing we can do to our homes is energy efficiency itself. Do that first! After a home is properly sealed, insulated and waste has been minimized, then a solar energy system can make a lot of sense. (Note: I do not sell solar systems or energy efficiency upgrades. I am simply sharing knowledge.)

As a simple example, we'll use a five-kilowatt (5kW) AC solar array. The last I checked, prices have come down to around \$4 per watt installed for an approximate total of \$20,000 (this is about half of what they were just eight years ago). Properly installed on a south-facing roof, the system will generate roughly 11,500 kWh of electricity a year. At \$0.12 per kWh, that's about \$1,400 a year.

There is a rebate from NV Energy but it keeps going down in value, is hard to get (one must win a lottery system) and the rebate contract requires assigning all of the Renewable Energy Credits produced by your system over to the utility: Forever. (This is no longer a good idea in my opinion.) At this point, everyone has access to a 30% federal tax credit, with no limit on system size (consult your tax professional).

Keeping your RECs and using the tax credit results in a net system cost of approximately \$14,000. The system will raise the equity in your home significantly from day one, and simple payback is eight years or less after factoring in energy price inflation and the potential to sell your RECs.

Every installation is different and costs will vary with the situation, contractor and market fluctuations. This is a simple example but will give you an idea of the cost / benefit. If you happen to charge an electric vehicle with the PV system it will increase the return on investment in solar since EVs are very efficient and gasoline is relatively expensive. Solar panels increase the value of your house and is a very safe investment.

If you buy a new house, don't buy anything less than Energy Star rated, preferably LEAD certified. Nevada has the biggest LEAD projects in the world with City Center and the Venetian. Every house should be self-sufficient with energy.

Houses that have most windows to the north and south require less energy. Overhangs can give a lot of shade. Trees can also be strategically planted to give shade.

Other things you can do: drive an electric car or a hybrid like Prius; update your appliances; eat a vegan diet, use less air travel.

Unless we do something with our release of carbon, we will be in big trouble when the temperature continues to rise. We have little influence over big companies and other countries but privately, there are many things we can do.

The pot of gold was won by Virginia Kruger who donated it back to the Club. The meeting was adjourned at 8:20 PM.

Lisa Kershaw

Recording Secretary 2013