

Douglas County Extension Energy Education Report, May 1, 2011  
Billy D. Wood, County Extension Director

We are indeed blessed in America to have readily available electricity, natural gas and propane to heat and cool our homes and businesses, operate our lighting and other electrical appliances, and enhance our quality of life. I also believe we have a great responsibility to be the best stewards we can of our natural resources to make sure the generations following us are able to enjoy the quality of life we do.



Solar Photovoltaic System

Douglas County Extension has chosen to make Energy Education a more visible part of our overall educational program. I have been an Extension Agent in Kansas since 1980. Extension has had energy information resources for a long time. The mid 80's was a time when energy saving and efficiency was promoted. The winter of 2003 I received so many questions on ways to save energy that I created a notebook of resources I could share with people. In a tough economy when money is tight, energy costs are a place to take a hard look at and see if anything can be done to save money today and in the future.

So how do we know where to look for unbiased practical energy saving ideas and information? My suggestion is to start with Extension and US Government web sites. We have listed some links under "Energy Resources" on our web site [www.douglas.ksu.edu](http://www.douglas.ksu.edu).



Sealing Leaks in the Attic

Our Extension Executive Board and Extension staff are working hard to be good stewards of our

energy resources. Some steps we have taken and are taking include: an energy audit- which included a pre and post blower door test; replacing our thermostats with programmable thermostats; replacing all regular incandescent light bulbs with compact florescent bulbs; exchanging T-12 florescent ballasts with T-8 ballasts (use half the energy) as the T-12's quit working; place aerators in all water faucets; weather strip exterior doors; seal cracks and holes between the ceiling and attic; sealed air return ducts in the attic; added cellulose insulation in the attic which increased the insulation value from an R-13 to an R-43 level; and installed a 4.2 kW solar photovoltaic (pv) system on the roof.



Recycling Paper, Plastic, Aluminum, and Metal

These projects were done with a two-fold goal. One is to save money. Yes, it does cost money to do these improvements, but they all have payback periods that are less than their projected life spans. Our energy savings start the day they are installed and will continue to save money for years to come. Some of them will be saving money until the building is torn down. The money being saved is tax dollars, which affects every citizen in our county.

The second goal of the energy projects is to serve as educational demonstrations for the public. Extension has a long history of doing demonstration and research projects so that citizens can see the project in action, and then evaluate whether it would be a good project to adopt for themselves.

Videos of the energy audit will be posted on our web site and used in educational programs to share the process of many of the improvements. Many of these improvements can be done by people willing to do-it-yourself. I had the privilege of helping with these improvements and can share from a personal experience how they were done.

There is a short video on our web site showing the installation of the solar pv system. There is also a link that shows you how much electricity the solar pv system is making daily, monthly, yearly and to-date.

Our office has made recycling a high priority. We presently recycle plastic, aluminum, metal cans, office paper, news paper, chip board, cardboard, and batteries.

We also have gone green by using real silverware, plates and glasses for meals, in place of paper and plastic.

For those who do not have internet access, we have a computer in our office available to view the information I have talked about.

We can all make a difference in caring for our natural resources, if we each do our part.





Sustainability Award won at Earth Day