THE LIGHT POST

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Recap of 2013 St. Charles Conservation Program…

2013 was a good year for the St. Charles Energy Conservation Program! We saw an increase of customers taking advantage of the offerings for our rebate programs. Those who took the greatest advantage were in the commercial sector, with 13 customers using the Energy Assessment program.

Additionally, we were able to identify over 225,000 kilowatt-hours in savings or approximately $33,000. Residential customers were a little more reluctant to use the Energy Assessment program, however, we saw steady involvement in the Energy Star Rebate program for the purchase of new energy efficient appliances.

Over 130 rebates were applied for either replacement or new appliances, ranging from dehumidifiers and refrigerators to washing machines and clothes dryers.

We expected to see more participation in the appliance recycling and air conditioning tune up programs, with the outcome only have two participants. Remember, keeping that old refrigerator running in the garage can cost you up to $21 per month, so shut it down and get some cash for recycling. Spring is coming (sometime this year!) don't forget to tune up that air conditioner for smooth running during those hot summer days. Did you know an un-maintained air conditioning system can actually cost you an extra $33 each month? This year take a stand! Air conditioning tune-ups provide a valuable service to home owners; they restore much of your AC unit's lost efficiency, capacity and improve reliability. Take preventative measures to catch problems before they lead to failures.

Overall, a very successful year for the St. Charles Conservation Program!

Sub - Program	Energy Savings (kWh/yr.)	Gallons of Water Savings
Multi-Family + Direct Install	2,496	35,678
School Based Energy Project	6,646	18,222
Rebate Processing of Custom Energy Efficiency Projects	133,384	-
Total:		
*131 Energy Star Rebates	142,526	53,900

D.I.Y Heating Equipment Maintenance

It's been a long, cold winter and it's not over yet! Don't neglect your heating system. Remember these helpful D.I.Y. Tips!

1. **Furnace Filters:** As a homeowner, you should change your air filters monthly.
2. **Thermostat:** Check your thermostat to make sure your furnace is working properly. Is your system achieving the set temperature? If not, you could have a problem.
3. **Programmable Thermostat:** You could also consider installing a programmable thermostat, allowing you to preset temperatures for different times of the day. This will ensure that your heating system only works when it needs to.
4. **Vacuum:** Vacuum any debris from your furnace blower compartment.
5. **Air Vents:** Always make sure your supply air and return-air vents are open to ensure proper air flow.

Recycle Your Old Working Appliances and Get Cash Back From St. Charles Utility!

That old refrigerator in your garage is costing you money every minute. Turn in your old appliances: refrigerators, freezers, window air conditioners and dehumidifiers to receive cash back from St. Charles Utilities. First, stop by City Hall to pick up your rebate application then drop your items off at Timm's Auto Salvage located at 936 West 12th Street, Saint Charles, during regular business hours.

Call (507) 932-4464 for recycling.

Cash Back:
- $35 per refrigerator – limit one per household.
- $35 per freezer - limit one per household.
- $15 per window air conditioner - limit two per household.
- $15 per dehumidifier - limit two per household.

For more information, call City Hall at (507) 932-3020.

Winter 2014, Issue 5

Did you know?

EnergyGuide Labels

In a typical U.S. home, appliances are responsible for about one-fifth of the energy bill. Electric appliances like refrigerators, freezers, clothes washers, dryers, dishwashers, ranges and ovens are the primary energy-using appliances in most households. Taking steps to save energy while using these appliances and replacing old, inefficient appliances with modern ones, can save money. In the United States, all refrigerators, freezers, clothes washers and dishwashers are sold with yellow EnergyGuide labels to indicate their energy usage. These labels provide an estimated annual operating cost for the appliance and also indicate the cost of operating the models with the highest annual operating cost and the lowest annual operating cost. By comparing a model's annual operating cost with the operating cost of the more efficient model, you can compare their efficiencies.

The average monthly kilowatt-hour consumption figures shown on this chart are based on normal use. Electrical consumption may be higher or lower depending on how the people in the home and on the farm, use the various appliances and equipment.

	Approx. Average wattage	Estimated hrs. used per month	Estimated monthly kWh	Cost per month at $.12/kWh
Air Conditioner (central)	3,500	100	350	$42.00
Clothes Dryer	5,000	16	80	$9.60
Coffee Maker	1,050	16	17	$2.04
Dishwasher (doesn't include hot water)	1,300	15	20	$2.40
Freezer (frostless 15 cu. ft.)	335	334	112	$13.44
Furnace Fan (conventional blower – 24hrs./day)	400	744	298	$35.76

	Approx. Average wattage	Estimated hrs. used per month	Estimated monthly kWh	Cost per month at $.12/kWh
Microwave Oven	1,100	10	11	$1.32
Range With Oven	3,500	15	53	$6.36
Refrigerator/ Freezer (frost-free, 16 cu. ft.)	725	250	181	$21.72
Television (50-60" Plasma)	300	180	54	$6.48
X-box 360	185	31	6	$0.72

Comparing Prices Since The 1900's & The Increase Of Usage..

Currently, the average price of electricity in the U.S. is about 12 cents per kilowatt-hour. In 1900, electric utility power cost over $40 ($1086 in 2012 dollars) per kWh. Fortunately, by 1916 electric power had dropped to just $9 ($203 in 2012 dollars) per kWh.

***How Electric Usage Started To Increase*:**

Electric Iron
The first electric iron was invented in 1882 by Henry Seeley.

Electric Light
The electric light bulb was invented by Joseph Swan in 1878.

Electric Car Heater
The electric car heater was invented in 1890 by Thomas Ahearn.

Electric Toaster
The first electric toaster was invented in Britain in 1893 by Crompton & Co.

1903 – St. Charles gets electricity

Fridge
A number of men developed the refrigerator during the 19th century. The first domestic refrigerator was made in 1911.

Washing Machine
The first electric washing machines were made in 1907.

Electric Blanket
The first practical electrical blanket was invented in 1912 by Sidney I. Russell

Electric Dishwater
The first electric dishwasher was invented by the Walker brothers in 1913.

Television
Television was invented in 1926 by John Logie Baird. The BBC began broadcasting in 1936.

12 Fun Facts about Energy Efficiency:

1. A hot water faucet that leaks one drop per second, can add up to 165 gallons a month. That's more water than the average person uses in two weeks!

2. Every time you open the refrigerator door, up to 30% of the cold air can escape.

3. By 2020, U.S. energy consumption could be cut by 11% through simple building efficiency measures such as, more efficient lighting, water heating and appliances.

4. If every U.S. home replaced just one light bulb with an ENERGY STAR® efficient light bulb, the amount of energy saved could light more than 3 million homes for a year and prevent 9 billion pounds of greenhouse gas emissions per year; this is equivalent to the emissions of about 800,000 cars.

5. More 285 million new computers will be sold this year. The manufacturing of these machines will require 25 million ton of fossil fuel – more than the whole state of Iowa consumes in 1 year!

6. Approximately 30% of energy used in buildings is used inefficiently or unnecessarily.

7. In the average home, 75% of the electricity used to power home electronics is consumed while the products are turned off. The average desktop computer idles at 80 watts, while the average laptops idle at 20 watts. A Sony PlayStation 3 uses about 200 watts and nearly as much when idle. Idle power consumes more electricity than all of the solar panels in America combined.

8. The average home in the U.S. uses about 1,000 kilowatt-hours (kWh) of electricity per month – or the equivalent of 79 gallons of gas, 18 trees or 29 barbecue grill propane cylinders.

9. The most efficient appliance in your kitchen is your microwave, which uses just 1/3 of the wattage of most ovens.

10. A compact fluorescent bulb (CFL) uses 75% less energy than a traditional incandescent bulb.

11. The television sets in the U.S. collectively draw the power equivalent of a Chernobyl-sized nuclear plant when they are turned OFF! They use this power for their instant-on capacity, so we don't have to wait a minute or two for our screens to warm up.

12. U.S. houses are 5% of the world's population, but use 23% of the world's energy.