



Energy Change

WATTS UP?

No, the watts are not up. The watts of electricity used to provide lighting in the rooms and spaces of the schools and buildings of the district are actually down, thanks to the efforts of the district staff and students.

Electrical energy that provides power to the electrical lighting fixtures of the district is measured in **watts**. As these watts of electricity are consumed over time they become watts used per hour, or kilo-watt hours of electricity consumed. A kilo-watt hour of electricity equals one thousand watts used in one hour of time. This is the unit of measure that is assigned a cost factor, and becomes the monthly electrical billing statement for the schools and buildings of the district. When considering the last three fiscal years of electricity usage, 10,388,957 kilo-watt hours of electricity usage have been avoided (saved). Those kilo-watt hours equate to over \$900,000.00 in electricity expense avoided for the district utility budget for those years.

The reductions in electricity energy usage are the results of various efficiency plans, and behavioral changes by the departments and staff of the district. The implementation of a Lighting Observations Project, with an observation team from School Plants, is an example of one of those plans. The lighting observations team members conduct random visits to the schools and buildings of the district and note efficient lighting usage conditions. The results of these observations are recorded and forwarded to the building administrators. The occupants of the buildings exhibiting efficient lighting usage are congratulated. The other

building occupants are advised of the lighting concerns observed, and assistance is offered to produce efficient lighting usage in those buildings.

How can you help continue this trend in efficient lighting usage?

School energy teams can continue their energy awareness activities and energy audits of their buildings. *District staff* can continue to switch lighting off when vacating a room, switch equipment off at the end of the day, and continue to be aware of using electricity only when needed. *Custodial staff* can continue to serve as the last line of defense in the search for the illusive “**Energy Hog**,” since they typically enter the buildings before anyone and remain in the building after everyone has departed. The custodial staff serves as the energy efficiency agents for finding and correcting the lights and other items switched on that may have been forgotten at the end of the work day. *Building administrators* can continue to provide reminders and awareness sessions that enable the staff to remain efficient energy users of electricity. By continuing to work as an energy efficient district of students, staff and buildings, we can benefit from reduced utility energy cost. Those avoided utility funds may be available for use in areas of classroom education. Always remember the most valuable energy is the energy not used. **Switch it off if it’s not needed. Help reduce Energy Hogs!**

Ask the Energy Hog!

ENERGYHOG.org



Dear Energy Hog:

I've heard that setting the thermostat back during the day and during times when you are away from home saves energy. Doesn't the heating or cooling equipment have to work harder, and use more energy, to return the area to a comfortable temperature when you return?

Inquiring Mind

Dear Inquiring Mind:

Yes, it's true your heating and cooling system may run longer to return the space to a comfortable temperature, but it will not run any harder. Just try to avoid activating the emergency heat sections, by raising the thermostat setting in increments. However, you will save energy with the “set backs” because the energy needed to return to a comfortable temperature will not be as great as the energy that would have been used to operate the system during the “set back” hours. The many start/stop and run times avoided typically exceed the start/stop and run times used when the system is returned to normal operating temperatures. So, you will save energy and money by setting your thermostat back. Energy hint: Programmable thermostats accomplish setbacks automatically, and save approximately \$100 each year in energy costs.

ELEVATING ENERGY EFFICIENCY TO A HIGHER LEVEL

Mr. John Sammons and Ms. Karen Arnett, along with the “GREEN Team” at Greenbrier Intermediate School ventured into new areas of energy efficiency last spring. The Greenbrier Intermediate School student “GREEN Team” accomplished electricity meter readings each Friday for a five week period beginning in March 2010. Their purpose was to document electricity savings related to the building energy efficiency measures implemented at the

school. Their study also confirmed energy savings related to the building systems usage being reduced during the times the building was closed for the spring break period. Congratulations and an “ATTA BOY” to the GREEN Team at Greenbrier Intermediate School for leading by example.



Welcome to the Energy Program!

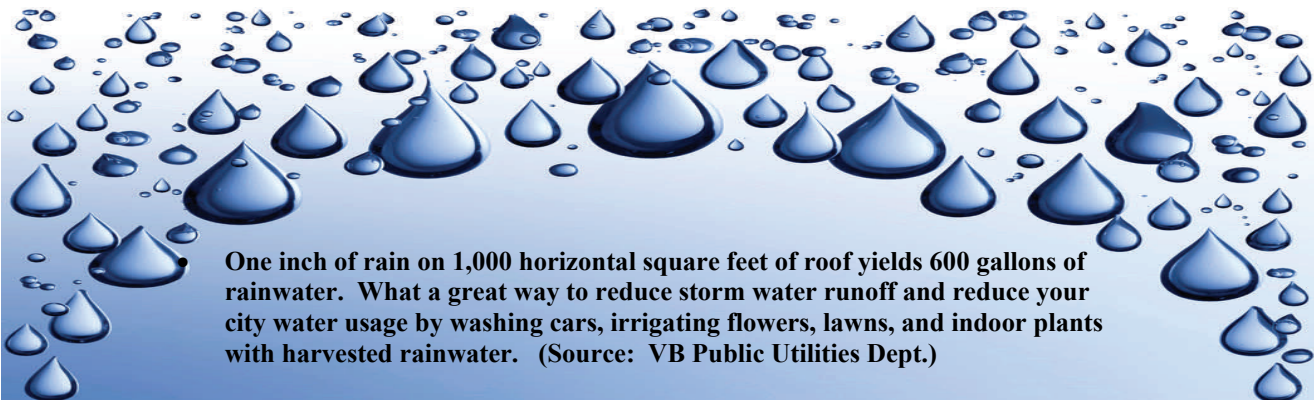
Five schools joined the Energy Program last year, and through October of this year.
An “energetic” welcome to:

Portlock Primary School
Indian River High School
Butts Road Intermediate School

Grassfield High School
Oscar Smith Middle School

Did you know?

- Over the last five years, over 21,000 students have used the energy curriculum classroom guides and energy kits provided by the district energy office.
- Over 800,000 energy study guide sheets have been used by students and teachers over those five years.
- 45 classroom energy kits were provided to 14 schools in the 2009/2010 school year.
- 5,489 energy awareness items were provided to the energy schools students and teachers during the 2009/2010 school year. (Awareness items are energy team tee-shirts, energy pencils, lighting switch cover decals, energy audit door hangers, etc.)



One inch of rain on 1,000 horizontal square feet of roof yields 600 gallons of rainwater. What a great way to reduce storm water runoff and reduce your city water usage by washing cars, irrigating flowers, lawns, and indoor plants with harvested rainwater. (Source: VB Public Utilities Dept.)