

Mayor's Column for December 29, 2010

The past few weeks I have attended several energy-related meetings. It is appropriate that I provide an update on city energy initiatives and information.

Early in November, all Evansville Water and Light customers, residential and commercial, were sent information about our renewable energy program. In my letter, I encouraged participation through purchase of blocks of clean energy and set a goal of a 25% increase in monthly block purchases in our community, an additional 73 blocks. I am pleased to report that this goal has been reached in just six weeks. With the new participants, 138 residential and 19 commercial customers purchase 353 blocks of clean, renewable energy each month. On an annual basis, our purchases of 1,270,800 kWh of "green" power reduce carbon dioxide emissions by over 1,000 tons.

The Evansville Energy Independence Team met early in December. Updates were given on active projects identified in the 25 x 25 Energy Independence Plan.

Both the wastewater treatment facility (WWTF) and the wind turbine are now fully operational. The WWTF has historically accounted for 25% of the total energy usage in City operations. The upgrade project was designed to accomplish treatment using the minimum amount of energy. A vertical-loop reactor system and highly-efficient variable frequency drive motors are now in use. Geo-thermal heating/cooling is installed in the new headworks building.

New groundwater quality standards necessitated the facility upgrade. The new design allows cleaning of the wastewater using natural processes with no chemical additions, returning the treated water to the groundwater where the water came from. After four months of plant operation, the treated water is crystal clear and test concentrations of contaminants are far below standards.

The treatment process is truly sustainable since each gallon of water that is removed from the ground is returned to the ground once it is cleared. Even the solid material removed from the wastewater is treated for contaminants and will be re-used for fertilizer by local farm operations.

Following frustrating lightning-related down-time, we are receiving first energy production information for the wind turbine. According to Dave Sauer, Evansville City Engineer, for the three-month time period from September 15 to December 15, approximately 37,000 kWh of energy was generated by the Northwind 100 turbine. When the wind energy site assessment was undertaken, the annual projection for energy generation was 132,000-140,000 kWh.

The installation of 250 LED street lights in the City is complete. Total funding for this project was through an American Recovery and Reinvestment Act Energy Efficiency and Conservation Block Grant (EECBG). There was no required local match. We will be determining energy savings in the coming months.

The Public Works Facility lighting upgrade, also part of the EECBG award, will be undertaken in the next few months. Energy-efficient fluorescent lights and off-the-grid solar light pipes will be ordered shortly.

The Public Works Department recently purchased a new diesel park mower. The mower will be environmentally cleaner and is more energy-efficient, with the ability to use bio-fuels.

One of the actions identified in the 25 x 25 Plan was to undertake detailed audits of our municipal buildings. Audit reports were recently completed for City Hall, the Library, Police Station, Youth Center, EMS Building, Public Works facility, and Water & Light buildings. Suggested energy improvements will be prioritized. \$5,000 was included in the 2011 capital budget to begin energy efficiency measures. Focus on Energy incentives will be used whenever possible. Some of the audits' suggestions are:

- Install occupancy sensors in elevators. There are two city-owned elevators, one in City Hall and one at Eager Free Public Library. The elevators are used minutes of each day but are lighted 24/7. Occupancy sensors would slash lighting costs for the elevators.
- Activate energy management settings on all computers. When computers are used sporadically, programming for going into sleep mode after 10-15 minutes of inactivity will reduce energy use.
- All municipal exit signs should be LED-lit. LED exit lights use 90% less electricity than incandescent signs. Through WPPI Energy's joint purchasing program, LED exit signs are available for \$12/sign, making the payback period a matter of just months.
- Motion sensors should be used in all bathrooms to make sure lights are not inadvertently left on.
- Make efficient use of programmable thermostats. Some thermostats were not appropriately programmed.
- Use power strips to turn off electronic equipment, reducing "phantom" energy use.
- Install timers on refrigerated water coolers. The city has a number of water fountains that cool water 24/7. Eliminating power to the compressor two-thirds of each weekday and on weekends will generate significant savings.
- Use ceiling fans in high-ceiling rooms to better circulate air in winter and summer.

- Make various lighting upgrades.
- Add hot water pipe insulation.

Energy audits of school facilities by CESA 10 were undertaken this year in the Evansville School District. The District will participate in Focus on Energy's Building Tune-Up Program and use WPPI Energy incentives to improve energy efficiency in school buildings.

On December 15 I attended a day-long meeting of Pilot Energy Independent Communities at the Retzer Nature Center in Waukesha. The eleven 2010 Energy Independent Communities presented their completed 25 x 25 Energy Independence Plans. Three 2009 Pilot Communities, Evansville, Oconomowoc, and Brown County, were able to attend and provide updates on implementation of their 25 x 25 Plans.

The 2009 Communities were asked several questions about implementation, especially inquiries about efforts to obtain community buy-in. There was discussion of the value of local government commitment and the importance of individual or a group of designated energy advocates championing community energy awareness and education. Public relations, such as energy fairs, speaker presentations, and written articles, were identified.

The Wisconsin Pilot Program is completed. The U.S. Department of Energy did not fund a third year. Using information gathered from the 21 communities participating in the two year pilot, the Energy Center of Wisconsin will fine-tune the interactive measurement tool that can assist local communities in determining the impact of possible projects on energy generation and consumption. The tool will become available to all Wisconsin communities next year.

As part of the 25 x 25 grant, communities agreed to promote energy independence and efficiency through public relations activities. Evansville continues to represent Pilot Communities at various meetings and events. In late September I was a presenter at the Solar Decade Conference in Milwaukee. Last month, Butch Beedle, J. C. McKenna Middle School teacher, Energy Fair Coordinator, and member of our Energy Independence Team, spoke about our outstanding annual Energy Fair at the WPPI Energy Community Connections Conference in Sun Prairie. Our collaborative Energy Fair is seen as a model for other communities. Columbus and Bayfield, fellow 2009 Pilot Communities, both held their first energy fairs in the past few months, working in conjunction with their local school districts. Both communities were pleased with the success of their fairs.

Personally, we continue to change out light bulbs to CFLs at our house. There are now more than 25 CFLs throughout our house and garage. Paul and Bill at Dave's Ace Hardware will attest to my multiple trips to purchase new LED Christmas lights. According to energy information provided with the lights, it will cost us \$1.54 to light our tree for 12 hours daily for 30 days. The new LED lights use 20% of the energy of our old tree lights.

Planning for the 2011 Evansville Energy Fair is well underway. The third committee meeting was held last week. The Fair will be held on Friday, April 15, from 4:30-8:00 p.m. Tours of the updated city wastewater treatment plant and the high school trades class house construction project are planned. The Dancing Mad Scientist, Jeffrey Vinokur, will perform during the Fair. He has appeared on “America’s Got Talent” and on Madison television. You can find him on YouTube.

Early in 2011 our baseline municipal energy use will be entered into the U.S. Environmental Protection Agency free energy management software, Energy Star Portfolio Manager. Initial training on the tool has already occurred. As energy efficiency improvements are undertaken and renewable energy projects completed by the City, Portfolio Manager will provide ongoing energy savings information.

The Evansville Energy Independence Team will continue to meet quarterly to monitor results, champion new projects, continue energy education and awareness activities, and keep informed of emerging technologies and opportunities.

Community Announcements

City Hall will be closed on Friday, December 31, for the New Year holiday.

The Plan Commission meeting on January 3rd has been cancelled. A draft comprehensive plan amendment is being fine-tuned by City technical staff and will be considered by the Commission at its February 1 meeting.

The fourth annual Agricultural Economic Outlook Forum will be held on January 19, 2011 from 12:45-4:00 p.m. at the Pyle Center, 702 Langdon Street, on the UW-Madison campus. The free event will provide an outlook of the economics, emerging issues, and opportunities for Wisconsin agriculture. The forum will be webcast live the day of the event. The program is being hosted by the UW-Madison College of Agricultural and Life Sciences and UW-Extension Cooperative Extension. A tentative agenda and registration for the Forum can be found at www.cals.wisc.edu/agoutlook/index.html.

Community Congratulations/Thanks

Congratulations to EHS students Stacy Hill and Zach Simonson for being selected as winners of Stoughton Trailer’s 50th Anniversary Design Contest. Great job!

Our community thanks all of the citizens and businesses participating in the renewable energy program. You are contributing to energy independence and a cleaner environment. Special recognition is given to new participant Evansville Manor for purchasing blocks of renewable energy equal to 10% of their electrical use.

Evansville thanks the employees of Baker Manufacturing Company for providing 55 Christmas “Baker Baskets” of food to families in need and for the generous contribution of funds to “Toys for Evansville.”

I am extremely grateful for the generosity of our community in providing support for AWARE’s “Toys for Evansville.” 85 families and 216 children were recipients of clothing, toys, and food for the holidays.

Thanks to area Mary Kay representatives for coordinating a holiday gift program for residents of Evansville Manor and The Heights. Every resident was remembered with a gift.

Special thanks are extended to all volunteer “Red Kettle” bell ringers who participated in the Salvation Army campaign at local businesses. Monies collected locally will be used locally. Your efforts are appreciated by your friends and neighbors in need.

I hope everyone enjoyed holiday gatherings with family and friends. We had fun reminiscing about past celebrations and laughed at gag-gift and ugly sweater stories.

Have a safe and happy new year. GO BIG RED!