

RENEWABLE ENERGY PLAN

During 2014, HBPW took the following actions to meet the REP standards:

- Renewable energy credits were acquired through power purchase agreements with Wildcat Windfarm (wind power), Beebe 1B Windfarm (wind power) CMS-Grayling (biomass), North American Natural Resources (landfill gas) and Granger (landfill gas).
- Through the Michigan Public Power Agency, HBPW secured a 20-year Power Purchase Agreement with Beebe 1B Windfarm located in Ithaca, MI. HBPW started receiving energy and credits for this power source in December 2014. HBPW expects approximately 55,000 MWh of renewable energy from this facility annually.
- HBPW acquired 40,854 megawatt hours (MWh) of electricity generated from landfill gas, 9,124 MWh from biomass, and 51,430 MWh from wind power for a total of 101,408 MWh of renewable energy during the 2014 calendar year. This resulted in 9.5% of HBPW's total sales being supplied by renewable energy.

MICHIGAN RENEWABLE PORTFOLIO STANDARD (RPS)

STATE RE SUPPLY REQUIREMENTS:

2013.....3.3%
2014.....5%
2015.....10%
2016.....10%

HBPW's YEARLY RE SUPPLY:

2011.....4.3%
2012.....4.2%
2013.....8%
2014.....9.5%

HBPW's BANKED RE CREDIT PROGRESS:

2011.....6.8%
2012.....11.45%
2013.....10%
2014.....14.07%*

The incremental cost of compliance for 2014 was \$1,930,097. This is the cost to comply with PA295 for 2014 and not the total cost of renewable energy. HBPW has more renewable energy resources than needed to meet the PA 295 requirements and banks renewable energy credits (RECs) for future compliance use or sells RECs to reduce overall power supply costs. The anticipated cost of compliance for PA295 for 2015 is \$2,590,432.

* HBPW has banked active RE credits above the amount needed for the annual PA295 compliance requirement. HBPW sold some credits earned in 2014 that were not needed for current compliance.

COST TO CUSTOMERS

- The 2014 itemized monthly charge to a residential customer for the renewable energy program was \$3.00 per month.
- The 2014 itemized monthly charge to a residential customer for the energy optimization program was \$0.001711 per kilowatt hour.
- The average Michigan electric residential customer is expected to save \$3.61 each month of the Energy Optimization program life.
- For the average Michigan residential customer, renewable energy is estimated to avoid \$3.08 per month of new coal-fired generation costs.
- The Michigan Public Service Commission's annual report on renewable energy can be viewed at the following website:
www.michigan.gov/mpsc



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To learn more about the Georgetown University Energy Prize visit www.hollandenergyprize.com.

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ENERGY OPTIMIZATION & RENEWABLE ENERGY PLAN



2014 ANNUAL SUMMARY REPORT



Holland Board of Public Works

Dear Holland BPW Electric Customer,

Michigan Public Act 295, known as the Clean, Renewable and Efficient Energy Act, calls on all utilities in the state to implement a Renewable Energy Plan and Energy Optimization program for their customers. The Act requires utilities to source a portion of their energy from renewable technologies and to implement programs that help customers improve energy efficiency.



Holland Board of Public Works surpassed its 2014 Renewable Energy Plan and Energy Optimization requirements and goals.

Holland is making significant progress within the 40 year Community Energy Plan. Construction began in April on the new Holland Energy Park that will act as a resource, a destination, and a gateway for our community. Holland has also been named a semi-finalist in the Georgetown University Energy Prize competition for a chance to win \$5 million and “change” by creating, and implementing, effective and replicable energy efficiency programs.

Information about Community Energy Plan initiatives and copies of the complete 2014 annual reports for both the Renewable Energy Plan and Energy Optimization Program are available at our office and on our website: www.hollandbpw.com.

On behalf of the Holland BPW, thank you for your continued efforts to create a first-class, energy efficient community.

Daniel D. Koster

Dave Koster,
General Manager

HBPW has earned ENERGY STAR certification from the U.S. Environmental Protection Agency (EPA) for its Service Center facility at 625 Hastings Ave. To earn the certification, a building must perform in the top 25 percent of similar facilities nationwide for energy efficiency and meet strict energy efficiency performance levels set by the EPA.



MORE THAN 10 MILLION KWH SAVED THROUGH EFFICIENCY PROGRAMS...

The equivalent of what more than 10,000 homes use per year!

Pursuant to 2008 Public Act 295 (PA 295), the Holland Board of Public Works (HBPW) is providing this annual summary on the Energy Optimization (EO) and Renewable Energy Plan (REP) results for the calendar year 2014.

ENERGY OPTIMIZATION

Following are highlights of actions taken to meet the State EO standards:

- Partnering with Ottawa County Community Action Agency, Community Action House, Salvation Army, and Department of Human Services, **over 600 low income families** received energy efficiency tote bags containing electric saving devices and educational materials. HBPW also distributed totes at the Salvation Army's Toys for Tots event to help those families in need.
- To promote the energy saving light-emitting diode (LED) technology, HBPW distributed over **15,000 free LED night lights and light bulbs** through local hardware stores. Residential customers also received more than **\$48,000 in incentives** for purchasing energy efficient furnaces, air conditioners and appliances and for recycling old or “second” refrigerators and freezers. HBPW gave out 11 rebates and over \$5,000 to customers purchasing ENERGY STAR® certified new homes in a program aimed at promoting energy efficient residential building techniques. HBPW also partnered with SEMCO Energy to supply **288 students** in 4th, 5th, and 6th grades with educational kits and presentations centered around saving energy.
- Commercial and industrial customers received incentives for upgrades to high-efficiency electric equipment. **104 projects were completed** with over 9 million kWh saved. HBPW also hosted a trade ally workshop as well as partnered with the National Renewable Energy Lab (NREL) on researching and piloting a tool to **streamline energy efficiency upgrades** for commercial offices.

The table below shows the number of energy optimization credits that the HBPW generated in 2014 kWh, the expenditures for 2014 and expected future expenditures for 2015 as required by state law PA 295.

EO KWH SAVINGS

2014 kWh Goal	2014 kWh Saved	2015 kWh Goal
269,482	267,914	281,062
1,342,291	1,543,255	1,399,973
8,786,762	9,073,855	9,164,355

TOTALS

10,398,535	10,885,024	10,845,390
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EO EXPENDITURES

2014 Budget	2014 Spent	2015 Budget
\$82,288	\$44,146	\$85,824
\$248,835	\$218,566	\$240,606
\$1,229,394	\$997,597	\$1,282,226
\$67,849	\$67,849	\$70,764
\$67,849	\$62,843	\$70,764

TOTALS

\$1,696,215	\$1,391,001	\$1,750,184
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- LOW INCOME
- RESIDENTIAL
- BUSINESS
- ADMINISTRATION
- EVALUATION*

*The HBPW contracted an independent auditor to verify the incremental gross energy savings for each EO program for 2014. DNV GL Inc. reported that the HBPW has met the energy savings requirements of PA 295.