

RENEWABLE ENERGY PLAN (REP)

During 2018, HBPW took the following actions to meet REP standards:

- Renewable energy (RE) credits were acquired through power purchase agreements with Wildcat Wind Farm (wind power), Beebe 1B Wind Farm (wind power), North American Natural Resources (landfill gas) and Granger (landfill gas).
- Through the Michigan Public Power Agency, HBPW authorized approximately 9.9 megawatts (MW) of installed capacity from two solar projects in Michigan. Both solar projects are currently expected to be commercially operational in early 2021.
- HBPW acquired 46,162 megawatt hours (MWh) of electricity generated from landfill gas and 92,576 MWh from wind power for a total of 138,738 MWh of renewable energy during the 2018 calendar year. This resulted in 12.32% of HBPW's total sales being supplied by renewable energy.

MICHIGAN RENEWABLE PORTFOLIO STANDARD (RPS)

STATE RE SUPPLY REQUIREMENTS:

2014.....	5%
2015.....	10%
2016.....	10%
2017.....	10%
2018.....	10%

HBPW's YEARLY RE SUPPLY:

2014.....	9.50%
2015.....	13.24%
2016.....	12.43%
2017.....	14.16%
2018.....	12.32%

HBPW's BANKED RE CREDIT PROGRESS*:

2014.....	14.07%
2015.....	16.28%
2016.....	12.24%
2017.....	13.80%
2018.....	10.39%



* RE credits in excess of the annual PA295 (amended by PA 341 & 342) RPS compliance requirements are banked for potential usage in meeting compliance requirements of future years.

COST TO CUSTOMERS

The 2018 itemized monthly charge to a residential customer for the Energy Waste Reduction program (listed as Energy Optimization on your bill) was \$0.001759 per kilowatt hour.



Holland Energy Fund

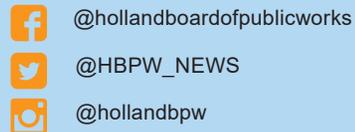
Holland Energy Fund is a 501(c)3 nonprofit corporation that finances the **Home Energy Retrofit** and **On-Bill Loan Programs** for city residents.
[Learn more at HollandEnergyFund.com.](http://HollandEnergyFund.com)



Lower My Bill is a FREE home energy check up. Schedule one today and learn how to save on your utility bills.

Call 616.393.5610

Find us on social media!



HOLLAND BOARD OF PUBLIC WORKS

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ENERGY WASTE REDUCTION & RENEWABLE ENERGY PLAN



2018 ANNUAL SUMMARY REPORT



Holland Board of Public Works

Dear Holland BPW Electric Customer,

Holland has demonstrated once again that it is an exceptional community. Through the efforts of residential and business customers and the staff at the Holland Board of Public Works, we have annually exceeded all State of Michigan requirements for saving energy and incorporating renewable energy into the power that we supply to you; 2018 was no exception. This Annual Summary Report highlights how that was achieved.



Earlier in this decade, Holland took a bold step by adopting a 40-year Community Energy Plan. That plan includes aggressive targets for use of renewable energy and for retrofitting homes to make them more energy efficient. Holland also pioneered a new program so that homeowners could pay for their energy efficiency improvements with on-bill financing. Homeowners within the City of Holland can borrow funds from the Holland Energy Fund and pay them back with their monthly HBPW bill.

The state requirements stem from Michigan Public Act 295 (amended by PA 341 and 342), known as the Clean, Renewable and Efficient Energy Act. It calls on all utilities in the state to implement a Renewable Energy Plan and an Energy Waste Reduction program for their customers. The Act requires utilities to source at least 10 percent of their energy from renewable technologies and to implement programs that help customers improve energy efficiency.

If you haven't visited yet, you can learn a lot about your sources of energy and things that you can do to save energy at the Holland Energy Park Visitor Center. To find out about tours and events, visit HollandEnergyPark.com. The Energy Park also includes a ¾-mile trail around the grounds, so that you can take a walk or bike and enjoy nature with a view of Windmill Island.

Copies of the complete 2018 annual reports filed with the Michigan Public Service Commission for both the Renewable Energy Plan and Energy Waste Reduction Program are available from Customer Service and on our website at HollandBPW.com.

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

David G. Koster

David G. Koster,
General Manager

Holland BPW now offers business and residential rebates for level 2 electric vehicle chargers to charge battery electric vehicles and plug-in hybrid electric vehicles. Visit hollandbpw.com/chargeupholland.



CHARGE UP
HOLLAND

MORE THAN 12 MILLION KWH SAVED THROUGH EFFICIENCY PROGRAMS...

The equivalent of more than 1,600 homes use per year!

Pursuant to 2008 Public Act 295 (amended by PA 341 and 342) Holland Board of Public Works (HBPW) is providing this annual summary of the Energy Waste Reduction (EWR) and Renewable Energy Plan (REP) results for the calendar year 2018.

ENERGY WASTE REDUCTION

Following are highlights of actions taken to meet State EWR standards:

- In 2018, **556 HBPW residential** customers received rebates for purchasing more than **1,000 ENERGY STAR** and other high-efficiency electric products for their homes, including appliances, air conditioners, ECM motors on furnaces, LED light bulbs, and more. Customers received rebates totaling more than **\$80,000**, saving more than **400,000 kilowatt hours** of energy.
- Promoting the dramatic energy-saving benefits of light-emitting diode (LED) technology, HBPW distributed **6,000 free light bulbs** at community events and the Service Center. At the Holiday Light Exchange, **1,000 pounds** of old incandescent holiday lights were turned in to be properly recycled in exchange for LED string lights.
- Commercial and Industrial customers received incentives for **upgrading lighting to LED** and installing **high-efficiency** equipment; **93 businesses** benefitted from the cost-saving incentives.
- Educational workshops for were held about houses of worship, **new electric vehicle rebates**, tunable lighting, and Strategic Energy Management.



Residential programs specialist Morgan Kelley stands next to the 1,000 pounds of old holiday lights collected for proper recycling. The 2019 Holiday Light Exchange will be November 22 in the HBPW Service Center lobby.

The table below shows the number of kilowatt hours (kWh) saved in 2018 compared to state requirements and how much was spent compared to what the state allowed. Also shown are the goals and allowances for 2019 as required by state law PA 295, amended by PA 341 and 342.

EWR KWH SAVINGS

2018 kWh Goal	2018 kWh Saved	2019 kWh Goal
304,390	461,367	315,094
2,432,960	1,625,326	2,432,960
8,211,971	10,526,692	8,321,150

TOTALS

10,949,321	12,613,385	11,069,204
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EWR EXPENDITURES

2018 Allowance	2018 Spent	2019 Allowance
\$91,295	\$56,022	\$94,505
\$393,372	\$267,062	\$413,425
\$1,204,088	\$605,691	\$1,220,097
\$89,031	\$89,031	\$94,630
\$35,612	\$33,981	\$37,852

TOTALS

\$1,813,398	\$1,051,787	\$1,860,509
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- LOW INCOME
- RESIDENTIAL
- BUSINESS
- ADMINISTRATION
- EVALUATION*

*HBPW contracted an independent auditor to verify the incremental gross energy savings for each EWR program for 2018. DNV GL Inc. reported that HBPW has met the energy savings requirement of PA 295.