

RENEWABLE ENERGY PLAN (REP)

During 2019, 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), Pegasus Wind Farm (wind power), North American Natural Resources (landfill gas) and Granger (landfill gas).
- HBPW acquired 43,887 megawatt hours (MWh) of electricity generated from landfill gas and 84,297 MWh from wind power for a total of 128,184 MWh of renewable energy during the 2019 calendar year. This resulted in 11.79% of HBPW's total sales being supplied by renewable energy.
- HBPW's RE generation was lower than expected in 2019 due to an unanticipated delay in the commissioning of Pegasus Wind Farm (a new resource in HBPW's portfolio) and an extended derating of the Wildcat Wind Farm as a result of lightning damage.
- The difference between HBPW's RE generation in 2019 and the associated state RPS requirement was made up with RE credits (RECs) banked in prior years.

MICHIGAN RENEWABLE PORTFOLIO STANDARD (RPS)

STATE RE SUPPLY REQUIREMENTS:

2015	.....	10%
2016	.....	10%
2017	.....	10%
2018	.....	10%
2019	.....	12.5%

HBPW's YEARLY RE SUPPLY:

2015	.....	13.24%
2016	.....	12.43%
2017	.....	14.16%
2018	.....	12.32%
2019	.....	11.79%

HBPW's BANKED RE CREDIT PROGRESS*:

2015	.....	16.28%
2016	.....	12.24%
2017	.....	13.80%
2018	.....	10.39%
2019	.....	5.39%



* 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 2019 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.

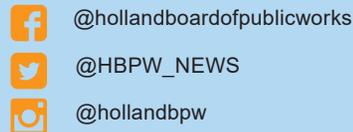
Learn more at HollandEnergyFund.com.



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!



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Energy Waste Reduction & Renewable Energy Plan

2019 ANNUAL SUMMARY REPORT



Holland Board of Public Works

Dear Holland BPW Electric Customer,

Implementing Holland's bold, 40-year Community Energy Plan (CEP) continues to be a reason why we are proud to serve the Holland area and why measurable progress continues to be made. Together, we are making smart energy choices that lead to a cleaner and more efficient use of energy. One result



SMART ENERGY PROVIDER

American Public Power Association

of these efforts is our new Smart Energy Provider (SEP) designation. Holland Board of Public Works earned national recognition from the American Public Power Association (APPA) for demonstrating commitment to and proficiency in energy efficiency, distributed generation, and environmental initiatives that support a goal of providing low-cost, quality, safe, and reliable electric service.

State requirements from Michigan Public Act 295 (amended by PAs 341 and 342), known as the Clean, Renewable and Efficient Energy Act, call 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. In 2019 we exceeded all state requirements for saving energy and incorporating renewable energy into the power that we supply to you. We sourced 12.5% of our power from renewables. Our Energy Smart Program is ongoing and successfully helps you save money and electricity by making simple changes. This Annual Summary Report highlights how that was achieved.



Copies of the complete 2019 annual summary 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.

David G. Koster

David G. Koster,
General Manager

Holland BPW 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.



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

The equivalent usage by more than 1,400 homes 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 2019.

ENERGY WASTE REDUCTION

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

- In 2019, **637 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 **\$83,000**, saving more than **277,000 kilowatt hours** of energy.
- Promoting the dramatic energy-saving benefits of light-emitting diode (LED) technology, HBPW distributed 7,950 free A-line bulbs, 2,636 night lights, and 851 PARs (totaling **11,467 free LED light bulbs**) at community events and the Service Center. At the Holiday Light Exchange, **1,429 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**; **143 businesses** benefitted from the cost-saving incentives.
- Six large industrial companies and Hope College completed cohort Strategic Energy Management training and averaged **3.2 percent savings in kWh**.
- An educational workshop was held for businesses to learn about **managing kW demand**.



Holland BPW and the City of Holland provided 300 free trees to HBPW electric customers through the Arbor Day Foundation's Energy-Saving Trees program.

The table below shows the number of kilowatt hours (kWh) saved in 2019 compared to state requirements and how much was spent compared to what the state allowed. Also shown are the goals and allowances for 2020 as required by state law PA 295, amended by PA 341 and 342.

EWR KWH SAVINGS

2019 kWh Goal	2019 kWh Saved	2020 kWh Goal
210,062	296,763	320,299
1,872,303	1,780,186	2,843,034
5,547,433	8,372,114	8,393,468

TOTALS

7,419,736	10,449,063	11,556,801
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EWR EXPENDITURES

2019 Allowance	2019 Spent	2020 Allowance
\$94,505	\$59,646	\$96,066
\$507,930	\$294,664	\$514,002
\$1,220,096	\$676,877	\$1,230,699
\$94,630	\$94,630	\$94,635
\$32,635	\$32,635	\$37,864

TOTALS

\$1,949,796	\$1,158,452	\$1,973,266
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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 2019. DNV GL Inc. reported that HBPW has met the energy savings requirement of PA 295.