

WHAT IS RENEWABLE ENERGY?

A FEW FACTS

According to the Energy Information Administration, renewable energy surpassed coal and nuclear generation, becoming the number two generation source in 2020.

Electric power generated by renewable sources reached a record 834 billion kilowatt hours (kWh), or about 20 percent of the electricity generated in the United States last year.

- 40% Natural Gas
- 20% Renewables
- 20% Nuclear
- 19% Coal

Of the 20% renewable sources identified above,

1. 1.4% Biomass
2. 7.3% Hydroelectric
3. 0.4% Geothermal
4. 8.4% Wind
5. 2.3% Solar

<https://www.eia.gov/energyexplained/electricity/electricity-in-the-us.php>

We hear a lot about renewable energy, but what is it, exactly?

It is an energy source that is perpetual ... inexhaustible... "to infinity and beyond!" Renewable energy has storage limitations, however, and some types are not available 24/7.



THE MAJOR TYPES OF RENEWABLE ENERGY SOURCES ARE:


1 **BIOMASS, INCLUDING BIOFUELS**
(comes from plants and animals)



2 **WATER OR HYDROPOWER**



3 **GEOHERMAL**
(comes from heat of the earth)



4 **WIND**



5 **SOLAR**



SafeElectricity.org



Get Rebates

on Energy Efficient Appliances and Equipment.

Central Air Conditioning

Incentive per 17 SEER unit: \$150
Incentive per 16 SEER unit: \$100
Incentive per 15 SEER unit: \$75

Mini-Split System

Incentive per 18 or higher SEER unit: \$300

ENERGY STAR® High Efficiency Heat Pump Water Heater (Replacing Electric Water Heater)

Incentive per unit: \$150

ENERGY STAR® Air Purifier

Incentive per unit: \$40

ENERGY STAR® TV

Incentive per unit: \$30

Please see the application for full details.

mienergysmart.com

All applications and receipts for appliances and equipment must be dated in 2021 to qualify for incentives.



Grand Haven Board of Light & Power

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Annual Summary Report

2020 Energy Waste Reduction Program & Renewable Energy Plan



Our Mission

The GHBLP mission is to meet our community's expectations for reliable electric service that returns value to our customers, and ensures the economic and environmental sustainability of the utility.

This report covers some of the efforts by the GHBLP to support energy efficiency, waste reduction, conservation, and renewable energy utilization.

Energy Waste Reduction Program

Annual Summary – MPSC Case Number U-18295

The GHBLP contracts with Franklin Energy through the Michigan Public Power Agency (MPPA) to provide a variety of programs aimed at helping customers use less energy.

Residential: Rebates were offered to residential customers to purchase energy-efficient equipment and appliances and recycle old appliances. In addition, LED bulb kits were distributed to residential customers and we partnered with the City of Grand Haven to distribute LED bulbs through their 2020 Porch Light program.

Business: Incentives were provided to business customers to replace less efficient lighting and machinery with energy-saving equipment. Business customers were also eligible for prescriptive incentives or pre-approved custom program incentives that were tailored to fit their individual needs.

The specific Energy Waste Reduction and Renewable Energy Plan surcharges that were collected prior to 7/01/2016 are no longer being assessed. The program costs are now recovered through customer base rate charges.

2020 Energy Waste Reduction Program Results

Program Total	MWh Goal	MWh Savings Achieved	% of Goal
	2,087	2,748	132%

Renewable Energy Plan

Annual Summary – MPSC Case Number U-16613

In December 2016, Governor Snyder signed PA 342 into law, which amends PA 295 of 2008, increasing the renewable energy portfolio standard from 10% to 12.5% beginning in 2019 and to 15% beginning in 2021. GHBLP will continue to work with Michigan Public Power Agency (MPPA) to obtain its renewable energy credits through joint projects and purchase power agreements.

For 2020, PA 342 required Michigan electric utilities to use renewable energy credits equal to 12.5% of their three-year annual average retail electric sales. GHBLP obtained its renewable energy credits through power purchase arrangements with MPPA for wind, solar, and landfill gas.

2020 Renewable Energy Portfolio Standard & Results

Renewable Energy Credits Required	Renewable Energy Credits Used for Compliance
37,135 MWh	37,135 MWh

GHBLP, through MPPA, has recently approved future power purchase agreements for additional solar projects and will have 28% in renewable sources by 2024, exceeding the state's 15% renewable energy requirement.

Copies of the complete 2020 annual report for the Energy Waste Reduction Program and the Renewable Energy Plan are available at our Service Center and on the Grand Haven Board of Light & Power website at

ghblp.org

Grand Haven Board of Light & Power's **Energy Waste Reduction Program and Renewable Energy Plan** is in compliance with Michigan's Public Act 342 of 2016, which amends Public Act 295 of 2008.

Renewable Energy Portfolio Update

Power Supply is one of six Strategic Priorities established in the GHBLP's 2022 – 2026 Strategic Plan. Specific areas of focus include portfolio diversification and renewable energy supply. To address these areas, the Board established a goal to evaluate potential projects, emerging technologies and longer-term purchased power alternatives that will provide “a sustainable, economical, and diversified power supply portfolio.” Additionally, Public Act 342 increased the renewable energy portfolio standard from 10% to 12.5% in 2019 and to 15% beginning in 2021.

On June 1, 2020, GHBLP retired its coal-fired generation plant on Harbor Island and its Diesel Plant on Harbor Drive and is currently purchasing 100% of its power supply through the Michigan Public Power Agency (MPPA), a joint action agency of the State of Michigan, with 22 municipally-owned electric utility members and six associate member systems. In 2020, MPPA projects and purchases provided GHBLP the required 12.5% of supply from a combination of past renewable energy credits, landfill gas, solar and wind energy.

Securing a Sustainable Energy Future

Grand Haven Board of Light & Power (GHBLP) has transitioned from a single-source coal fired power plant to a diversified power supply portfolio and technologically advanced distribution system.

Projected 2024 Supply Portfolio

