# Return on Your Money:

# Repairing Versus Replacing Appliances A homeowner tends to

buy an appliance and keep it running as long as possible. Repairing an old, faulty appliance may seem like the least costly option, but this may not be the greatest strategy when we think about energy efficiency.

A key reason electric bills are high is that old, inefficient appliances eat up more energy than they are worth. In most homes, the air conditioner uses the most energy, followed closely by the refrigerator, according to the Department of Energy.

Swapping out a side-by-side refrigerator purchased between 1993 and 2000 with a more efficient and newer model could save \$80 in energy costs per year according to the **ENERGY STAR®** Flip Your Fridge calculator. Multiply that times the average life expectancy of a refrigerator (14 years), and that equals \$1,120 in energy savings. *Visit energy.gov for an online calculator.* 

To figure out how much energy your appliances use, look for an online calculator, or check the energy efficiency label. The amount of energy typically used per year is listed in kilowatt-hours. To translate energy use to annual energy costs, check your utility bill to find out the kilowatt-perhour rate. Then multiply this rate by the number of kilowatt-hours your appliance uses per year to determine

Below are the typical life spans of major appliances (assuming proper maintenance):

Range – 16 years
Furnace – 17 years
Washing machine – 12 years
Dryer – 14 years
Refrigerator – 14 years
Microwave – 8 years
Air conditioner – 13 to 15 years or more
Dishwasher – 12 years

the annual energy expense.



### **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

#### **ECM-Equipped Furnace**

Incentive per unit: \$150

#### 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** 



#### **Grand Haven Board of Light & Power**

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#### **Our Mission**

The GHBLP mission is to meet our community's expectations for quality local electric utility service that returns value to our customers and the community as a whole.

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 to recycle old appliances. Packages of LED bulbs were distributed to residential customers and qualified low-income customers.

**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.

2019 Energy Waste Reduction Program Results			
Program Total	MWh Goal	MWh Savings Achieved	% of Goal
	2,053	3,352	163%

# **Renewable Energy Plan**

#### Annual Summary - MPSC Case Number U-16613

In December 2016, Governor Synder 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 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 2019, 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 landfill gas and wind energy.

# 2019 Renewable Energy Portfolio Standard & Results

Renewable
Energy Credits
Required

37,377 MWh

Renewable
Energy Credits
Used for Compliance

37,377 MWh

GHBLP, through MPPA, has recently approved future power purchase agreements for additional wind and solar projects to exceed these growing renewable energy requirements.

Copies of the complete 2019 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 Clean, Renewable and Efficient Energy Act (Public Act 342 of 2016).

# Renewable Energy Portfolio Update

GHBLP's Power Supply is one of six key areas of Strategic Focus identified in the 2017 – 2021 Strategic Plan. Specific areas of concern include portfolio diversification and renewable energy supply. To address these areas, the Board established a goal to evaluate potential generation projects and longer-term purchased power alternatives that would provide "a more 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 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 2019, MPPA projects and purchases provided GHBLP the required 12.5% of supply from a combination of past renewable energy credits, landfill gas, and wind energy.

In 2018 and 2019, GHBLP, through MPPA, acquired rights to over 14 MW of solar energy that will begin phasing in throughout 2021 and early 2022, providing about 8.5% of GHBLP's power supply from solar by 2022.

Additional wind energy was brought online in 2020, and by 2021, approximately 8.5% of GHBLP's power supply will be provided by wind energy.

By 2022, approximately 25% of GHBLP's power supply portfolio will be from renewable energy (8.0% landfill, 8.5% wind, and 8.5% solar). GHBLP is then very successfully achieving its Strategic Plan goal to provide "a more sustainable, economical, and diversified power supply portfolio" for our community, about 67% more annual renewable energy than required under PA 342. However, GHBLP is not stopping there. Additional renewable energy projects and purchases are now being evaluated and will be incorporated into our power supply portfolio by MPPA, as determined by the Board to be cost-effective, appropriate, and in our community's best interests.