



SUSTAINABILITY REPORT

Fiscal Year 2022

LANSING BOARD OF WATER & LIGHT SUSTAINABILITY REPORT

FISCAL YEAR 2022

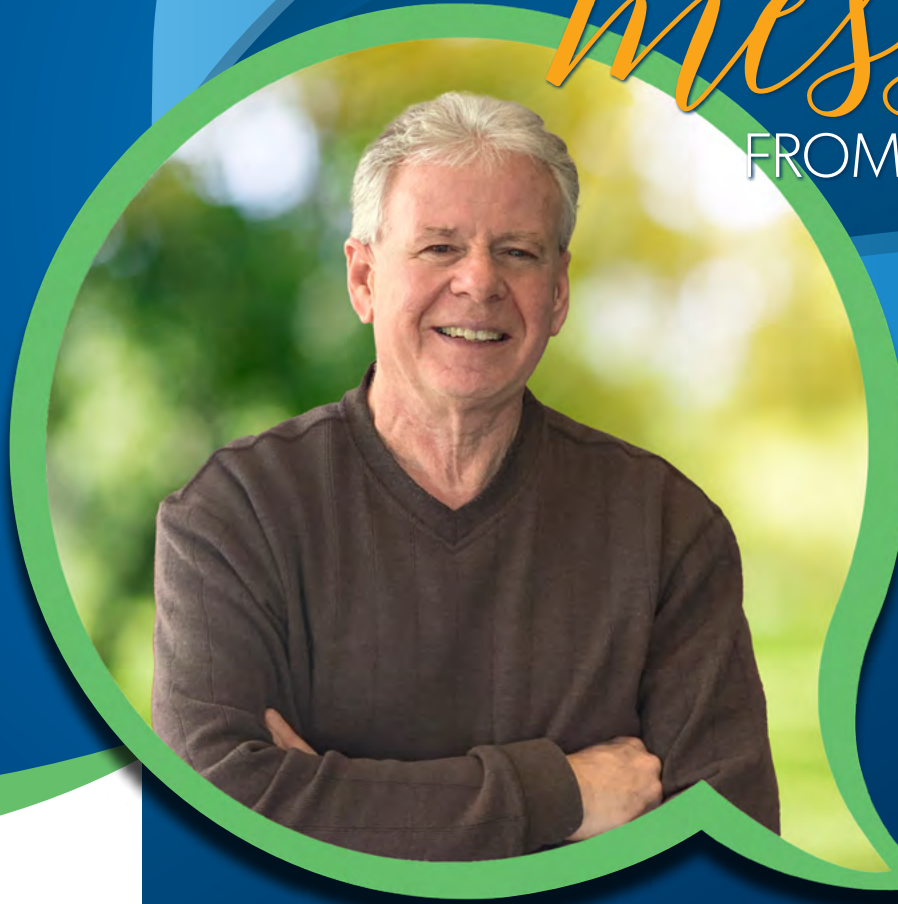


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message FROM THE GENERAL MANAGER



Welcome to our first Sustainability Report—there's a lot to share regarding our progress towards sustainability. The Lansing Board of Water & Light (BWL) strives to achieve a balance of environmental stewardship, social development and economic growth, and we're excited to highlight our achievements this past fiscal year.

Through the development of our Integrated Resource Plan, we have set ambitious climate goals, committing to:

- **Greenhouse gas reductions of 80% by 2025**
- **50% clean energy by 2030**
- **Carbon neutrality by 2040**

To be the "Utility of Today, Transforming Tomorrow," we consider every day, sustainable actions, all while moving towards our long-term vision. Read about the accomplishments in Fiscal Year 2022 that have furthered our sustainable growth.

COVID-19 has changed the way in which we work, but it hasn't limited our success. While many staff worked remotely this past year, we continued to meet or exceed ambitious goals leading to our success. In this report you will find ways we continue to invest in our community and grow our business while reducing landfill waste and reducing air emissions.

Richard R. Paffley
BWL General Manager



● lbwl.com
● 517-702-6006

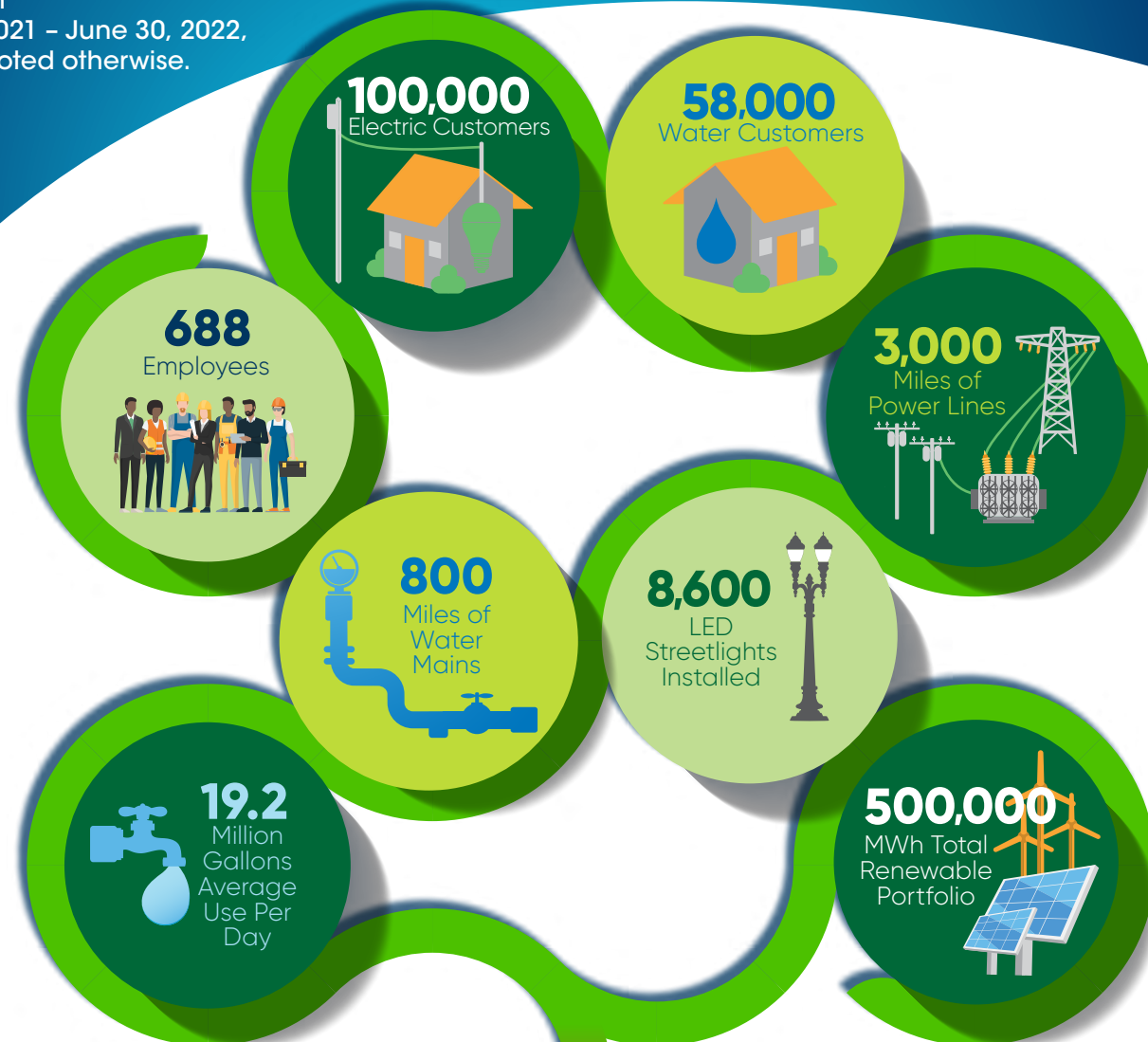


ABOUT THIS REPORT

What we do - every day - is sustainability in action. Corporate sustainability reporting is a mechanism to generate data, share stories, and move towards sustainable development. The reporting process allows for a transparent assessment of our performance and further supports the transition towards a low carbon, resource efficient and inclusive green economy.

The Lansing Board of Water & Light's Sustainability Report: FY22 illustrates our mission towards a safe, reliable and affordable utility experience through public ownership, climate consciousness and innovative strategies. The report is a voluntary disclosure of our efforts towards our mission, vision and values. The reporting period utilized is the company's Fiscal Year, which has taken place between

July 1, 2021 – June 30, 2022,
unless noted otherwise.



**BWL FY22:
"AT A GLANCE"**



SERVICE TERRITORY



WORKFORCE

BWL employs talented individuals from the Lansing-area and beyond. We're an employer who values innovation, integrity and inclusion through the celebration and appreciation of differences. BWL employees bring a wealth of knowledge and experience to their job every single day. Despite the challenges of a global pandemic, BWL hired 77 new people, celebrated the retirements of 28 valued staff members, and had 20 interns serve across a multitude of work areas.

With employee safety the top priority during these challenging times, the BWL continued to implement protective measures within the COVID-19 Response Plan, including daily health screening, masking protocol, usage of cleaning tools and approved disinfectants, and remote work. BWL encourages and supports both professional development and safety training for all employees. Over 56,000 training hours were recorded in FY22, averaging approximately 80 hours of training per person.



SOCIAL DEVELOPMENT

Diversity, Equity, and Inclusion



BWL strives to have an inclusive workforce and offers training and educational opportunities through the leadership of BWL's Diversity, Equity and Inclusion (DE&I) Committee. To further our mission and values by promoting shared, authentic values of inclusion, equity, respect and understanding

of those we work with throughout our organization and community, BWL hired our first DE&I Specialist. At BWL we treat all people with dignity and fairness first. We value diverse opinions and worldviews and meet people where they are on their diversity and inclusion journey.

1st STEP



On May 25, 2022, BWL celebrated the graduation of nine students who completed "1st STEP." The School to Training and Employment Program allows high school students to spend time before graduation split between classes and real-world experience. Students who

complete the program receive a \$2,000 scholarship to use at any Michigan college.

Safety

We take safety and reports of hazards and incidents very seriously, and are pleased to report a steady decrease in time it takes for reported incidents to be investigated. Safety is job number one at the BWL, and the average incident in 2021 only took 11.6 days to investigate, which is far less than reported in 2020 at an average of 19.4 days. 76.5% of investigated incidents are completed in a week or less.

Safety training for almost 300 employees was conducted through facilitation in CPR/AED and First Aid. Lifesaving training for our employees creates a generative safety culture by giving staff the tools to go above and beyond corporate compliance.

COMMUNITY EVENTS

BWL staff are committed to serving their community as illustrated through thousands of hours of community volunteerism.



ADOPT A RIVER

On May 14, 2022, BWL held its annual river clean up event, "Adopt A River," at Impression 5 Science Center, hosting over 200 volunteers who cleaned alongside the Lansing River Trail. In addition, volunteers planted and maintained a pollinator garden and pulled scrap metal from the river.



GOLF

The 2021 BWL/IBEW 352 Golf 4 Charity scramble event held on August 20 at Eagle Eye and Hawk Hollow golf courses attracted over 345 participants and collected over \$30,000 to donate to various organizations including Guardian Angels Medical Service Dogs, Inc, the Boys and Girls Club of America (Greater Lansing), the Michigan State University Women's Basketball team, and Pennies for Power.



Silver Bells in the City

BWL was proud to once again be the presenting sponsor of the premiere holiday season kick-off event, Silver Bells in the City. This event brings together families and friends throughout our community and beyond. This year, BWL's float was themed "Christmas Candy" and was generously decorated with holiday treats and over 10,000 lights! Due to construction work at the Capitol, we tried something new this year: a drone show instead of traditional fireworks. It was a dazzling spectacle of floating holiday icons we hope to see again in the future.



United Way

BWL gathered in support of the United Way at an annual spaghetti lunch on November 9 where all employees were encouraged to donate however they see fit. The reputation of BWL as utility leaders in the greater Lansing region is eclipsed only by the commitment they make each year to provide assistance to community services and non-profit organizations that strengthen the Lansing region.



Keeping On Together

BWL hosted four community resource fairs at local community centers throughout the Greater Lansing Region to assist customers behind on bills and connect them to local resources, as well as attended the Mayor's Capital Area Senior Activities Fair.

RECOGNITIONS

APPA Smart Energy Provider Designation

The BWL was designated as a Smart Energy Provider by the American Public Power Association (APPA) for its commitment to smart energy practices. The award highlights how BWL provides its customers choices in their energy use, is being mindful to the environment and considering sustainability in its energy choices, and providing top-notch customer service.



PRSA Pinnacle Award for Pandemic Resource Fairs

The Lansing Board of Water & Light's effort to provide community support through a series of four Pandemic Resource Fairs was given a Pinnacle Award by the Central Michigan Public Relations Society of America.

United Way Corporate Partner of the Year

The Lansing Board of Water & Light was recognized by the Capital Area United Way for its continued annual corporate giving campaign, as well as its commitment to serving the community by organizing the Pandemic Resource Fairs.



WASTE MANAGEMENT

Eckert Station Decommissioning & Waste Removal

As a municipal utility dedicated to reducing our greenhouse gas emissions and increasing clean energy to our customers, we will phase out outdated technology in a sustainable manner that balances cost, resources and our environment. In collaboration with contractor AECOM, BWL has begun the process of decommissioning the 375-megawatt (MW) coal-fired Otto E. Eckert Station (Eckert Station), which ended electric production in 2020. The cornerstone for Moores Park and Eckert Station was laid on August 5, 1922 and the plant was first commissioned in 1924, which drove BWL's growth to deliver power to the region.

AECOM was retained to carry out a 10-year plan for demolition and decommissioning activities and will consider all available options for diverting landfill waste. The project plan includes responsible resource management through salvage practices and beneficial reuse of materials.

The sustainable demolition will balance economic, environmental and social aspects of the project and weigh recovery costs, schedule and impacts to the community and environment. Using current research, technology and innovative practices, the project team is working collaboratively to establish feasible metrics by tracking material streams to reach waste management goals.

During the planning, design and execution of the project, sustainability best practices have been, and will continue to be implemented. These include efforts to minimize air emissions, reduce waste, recycle materials, protect sensitive areas, control pollution and utilize local resources. Sustainability requirements and metrics will be incorporated into the scopes of work for design and execution. These efforts may include, but are not limited to:

- Minimizing air emissions, including greenhouse gases
- Reduction of waste and recycling of materials
- Protecting sensitive areas and controlling pollution
- Considering impacts to employees and the community

This fiscal year, hazardous and non-hazardous waste removal efforts were taken as part of Eckert's decommissioning. Waste was collected, packaged and labeled throughout Eckert Station to comply with regulatory requirements. Wastes included water treatment additives, mineral spirits, paint, mercury devices, batteries, flammables, oils, aerosols, dust suppressants, acids and bases. All waste oil, totaling 6,600 gallons, was removed for beneficial reuse.





BWL Facility Waste Reduction and Minimization

BWL facilities offer staff opportunities to divert waste from the landfill by providing waste receptacles for composting and recycling purposes. Even staff working remotely were provided the opportunity to compost from home during a 12-week Green New Year Employee Compost Challenge.

Over the Past Fiscal Year our Facilities Recycled



65,000 lbs Composted Material



1,700 Florescent Lamps

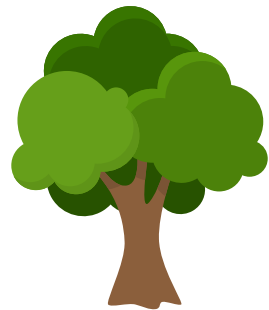
300 lbs Aerosols

1,800 lbs Batteries

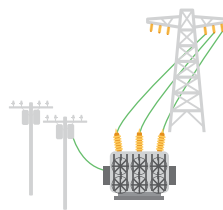


100,000 lbs Cardboard, Newspaper, Mixed Paper, Plastic, Glass and Metal

Which Saved



850 Trees (17 Trees/Ton of Paper Recycled)



**205,000 kWh of Electricity
(4100 kWh per Ton Recycled)**



**350,000 Gallons Water
(7,000 Gallons/Ton Recycled)**



**3,000 lbs
Air Pollution
(60 lbs/Ton Recycled)**



**167 Cubic Yards Landfill Space
(3.33 Cubic Yard/Ton Recycled)**

WATER

The 2021 Annual Water Quality Report was issued in April 2022. The BWL continues to meet or exceed all water quality standards established by the U.S. Environmental Protection Agency (EPA) and the Michigan Department of Environment, Great Lakes, and Energy (EGLE). We are proud to celebrate our safe, reliable water and the talented people who help to produce and distribute it to our nearly 58,000 customers. This year included a water campaign using billboards and TV commercials recognizing BWL's water, and our commitment to our customers.

During 2021, no violations occurred in the testing for contaminants. Water is tested in the distribution system, water conditioning plant and at our customer's tap.

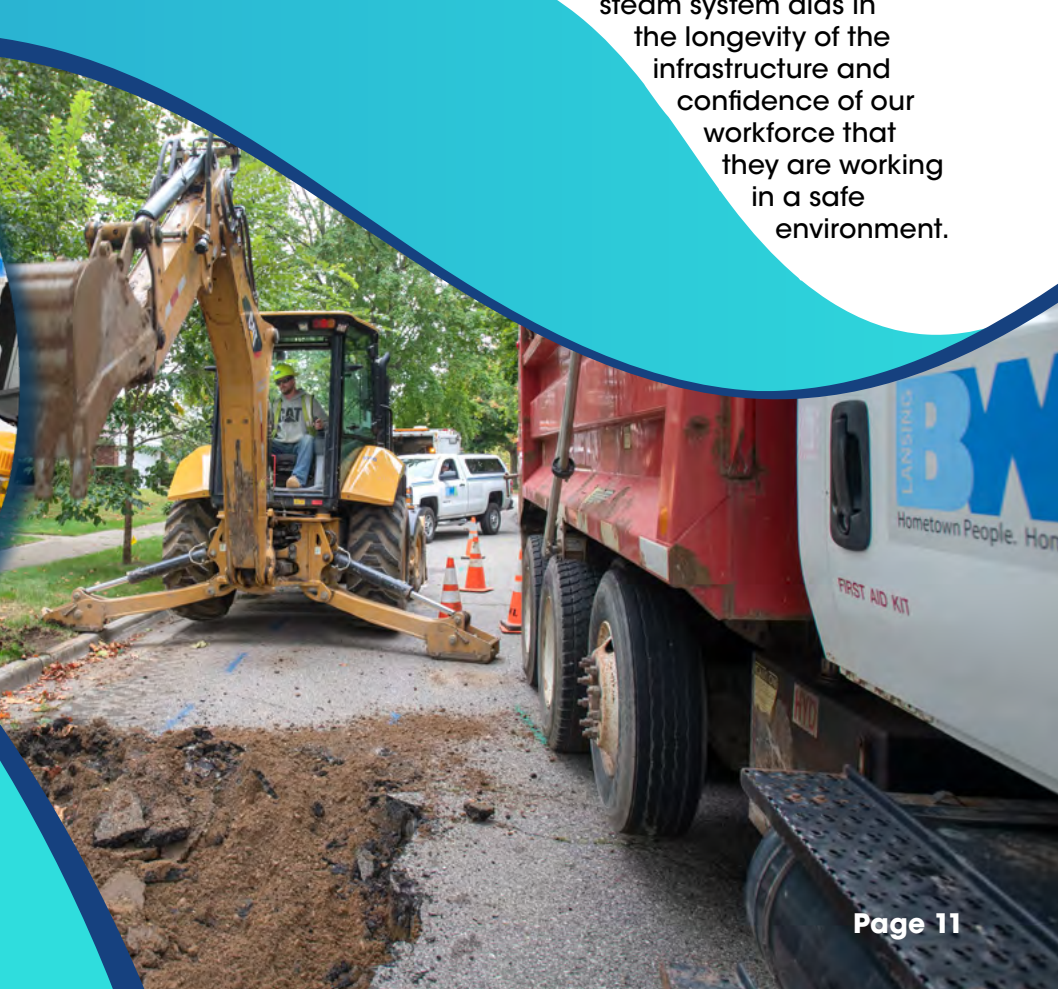
Water and Steam Distribution

The Water and Steam Distribution Department continues to provide long-term operational excellence through the delivery and administration of integral utility services. To increase operational sustainability and reduce the likelihood of breaks, the department conducted inspections of over 5,600 fire hydrants and approximately 5,500 valves.

During FY22, BWL installed approximately 15,000 feet of new water main, making progress towards our long-term goal of replacing all water main within the service territory. Scheduled replacement of water mains will reduce financial losses, service interruption and safety hazards posed to our customers during an unexpected event.

Finally, we conducted 155 steam manhole inspections, rebuilt or repaired over 25 manholes, and tested over

100 steam meters. Routine maintenance of the steam system aids in the longevity of the infrastructure and confidence of our workforce that they are working in a safe environment.



**BWL Water
Quality Report**

ENERGY

Name	Fuel	Nameplate Capacity (MW)	Capacity Credit (MW)	Annual Energy (MWh)
REO Town	Gas	119.70	75.20	560,000
Delta Energy Park	Gas	260.25	218.50	1,500,000
Erickson – RETIRING SOON	Coal	162.00	155.10	1,000,000
Belle River – RETIRING SOON	Contract Coal	165.00	146.90	1,000,000
Beebe 1b	Wind	19.20	1.80	54,000
Pegasus	Wind	68.00	4.30	198,000
Delta Solar I & II	Solar	24.00	17.00	40,000
Assembly Solar I & II	Solar	80.00	41.90	148,000
Other Local Solar	Solar	0.50	0.25	500
UPCOMING: Solar Under Development	Solar	36.00	18.00	63,000
TOTALS		934.65	678.95	4,563,500

Energy Portfolio

BWL’s energy portfolio illustrates our progress towards the goal of 80% greenhouse gas emissions reduction through the retirement of the coal-fired Eckert Station and the planned retirement of Erickson Power Plant. In addition, we continue to invest in renewable energy, such as solar and wind, and seek new technologies to reach our goals of 50% clean energy by 2030 and carbon neutrality by 2040.

ENERGY WASTE REDUCTION

BWL’s Energy Waste Reduction (EWR) programs serve our community by offering rebates on the purchase and installation of qualified appliances, instant discounts for purchase of energy-efficient lighting from participating retailers, and incentives for commercial and industrial customers. BWL’s energy waste reduction programs exceeded the calendar year 2021 goal by achieving more than 20 million kWh in savings—almost 25% more energy savings than projected.

2021 Program	Goal - Savings (kwh)	Final Results - Savings (kwh)
Low Income	16,097,771	432,174
Residential		2,918,408
Business		16,161,557
Total Portfolio	16,097,771	20,931,646

Energy Efficiency

Pursuant to Michigan Public Act (PA) 295 of 2008 and amended by PA 342 of 2016, known as the Clean and Renewable Energy and



Energy Waste Reduction Act, BWL remains in compliance with all aspects of the legislation and continues to meet our clean energy goals.

BWL energy waste reduction programming savings were equivalent to the amount of CO2 emissions from burning 7,445 tons of coal, or nearly 1.7 million gallons of gasoline, or the amount of electricity used in 2,886 homes for one year. The residential EWR program installed over 34,500 measures including 559 Energy Star appliances, 6,561 Wi-Fi thermostats, 30,861 LED lights and 439 aerators.

COVID-19 continued to impact BWL’s energy efficiency programs, limiting in-person interaction due to safety concerns for interacting with the public for offers such as in home energy inspections. In addition, product supply challenges remained a constraint throughout the year for these programs.

Hometown Help: A Customer Story



Our residential programs offer opportunities for low-income customers to reduce their energy consumption through tailored in-home visits. During our Hometown Help energy assessments we assist our low-income customers in reducing energy usage by providing LED lighting and energy efficient appliances. But our commitment to our customers

doesn’t end there. During one Hometown Help visit, we noticed the customer’s refrigerator was not only old and inefficient but was too large for the space and was impeding the entrance to another room. The customer used mobility aids to navigate the home and the oversized refrigerator was further limiting safe kitchen access. To address the safety concern, BWL replaced the refrigerator with a smaller ENERGY STAR® unit that best fit the location and provided additional energy savings for the low-income customer.

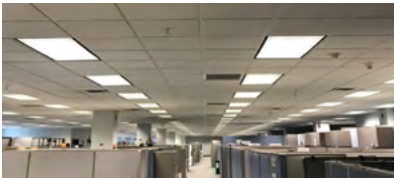


Hometown Energy Savers: A Business Story



The small business program for Hometown Energy Savers enjoyed its best year in the past five years exceeding its savings goal by six times. Much of this savings came from refrigeration and display case lighting measures at party stores, which was a point of emphasis for the program in 2021.

The largest prescriptive project of the year came from an interior lighting upgrade for State of Michigan facilities in downtown Lansing. Upgrading the building with LED lighting throughout provided the greatest single building savings of 500,000 kWh a year.



ECONOMIC GROWTH

The BWL continues to maintain financial stability and practice good fiscal stewardship. The BWL continues to maintain our high credit rating at AA- (S&P) and Aa3 (Moody’s) with stable outlooks. In addition, BWL continues to meet targeted return on assets to ensure current rate payers are not deferring costs to future generations and continues to invest in infrastructure to maintain exceptional levels of service.

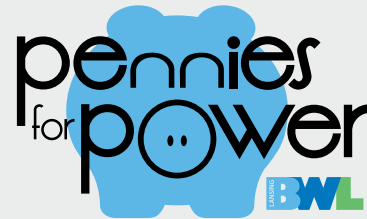


PENNIES FOR POWER

Pennies for Power is a convenient way for BWL customers to help families in need in the Lansing area pay their utility bills. Participants agree to round up their utility bill to the next highest dollar each month, with the extra change going to provide one-time utility shut-off protection for customers facing difficult financial times. Customers can participate in Pennies for Power in three ways:

1. **Rounding up their monthly utility bill to the next whole dollar**
2. **Rounding up their monthly utility bill to the next whole dollar and adding an additional \$1 each month**
3. **Issuing a one-time donation.**

Fiscal year 2022 brought the Pennies for Power fund to a total of \$65,000 of assistance towards prevention of utility shut-offs.



BUSINESS DEVELOPMENT

BWL supports a growing business community that employs our friends and neighbors, allowing for profitability while keeping rates affordable. While we're ceasing coal-generated electricity here in mid-Michigan, we're expanding our generating portfolio to meet long-term needs and continuing excellent service for current customers.



Delta Energy Park Goes Commercial

The Delta Energy Plant (DEP), BWL's newest natural gas-fired power plant, reached project completion and began commercial operations in 2022. Significantly cleaner, more reliable, and efficient, the new plant is located at the Erickson Power Station facility in Delta Township. This project was unlike any other BWL has undertaken before, and COVID-19 offered many unique challenges during construction and commissioning. However, after 20,000 hours of operator training and 1.4 million labor hours invested, we celebrated the significant investment in BWL's future.



Ultium Battery Plant

General Motors announced their plans to build a new \$2.6 billion battery cell manufacturing facility within BWL's service territory, as well as reinvesting \$550 million in its Lansing Grand River and Lansing Delta assembly plants. The Ultium Cells plant will be the third Ultium Cells facility in the U.S., joining the company's plants in Ohio and Tennessee. Ultium Cells is a joint venture between GM and LG Chem and will supply battery cells for a variety of future GM electric vehicle models.

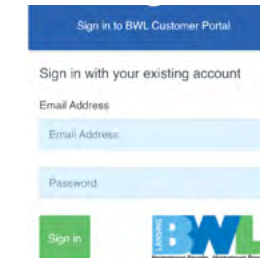
"As GM reinvents the auto industry, BWL is proud we'll continue providing GM's utility services, just as we've done for more than 100 years," said BWL General Manager Dick Peffley. "I want to recognize the talented BWL workforce and commend our state, regional and local leadership that contributed to making this once in a generation opportunity a reality."

TECHNOLOGY

Adopting to new technologies is integral to innovative business and customer service practices. As technology improvements are adopted, we can better assist our customers to monitor their energy use.

BSMART: Electric & Water Meter Installations

By the end of the fiscal year, BWL installed 159,000 water and electric meters, which reflects 99% of all customer meters. BWL is winding down its smart grid project, BSMART, upgrading all electric and water meters to "smart meters," which will provide more accurate and detailed usage information and allow our customers to become partners in our commitment to energy efficiency, reliability and affordability.



New Portal

During FY22, BWL fully transitioned to a new customer service portal that allowed for enrollment in eServices, autopay and paperless billing. The transition was aided through the development of three customer tutorial videos aiding individuals through a seamless process of enrollment. BWL adapted organizationally by developing a department specifically to support these systems within customer service, and leveraged existing technologies in order to address operational inefficiencies such as trouble tickets.

Customer Service

To ensure continual excellent customer service, BWL implemented an after-call satisfaction survey. This better helps in hearing customer voices, assist in identifying specific areas of improvement, and provides the opportunity to highlight positive customer interactions from our Customer Service Representatives. During FY22, the Customer Service Department averaged a positive 4.8 out of 5 stars from respondents.

RELIABILITY

Reliability: Outage Minutes

Electric reliability is measured by the minutes of non-momentary electric interruptions per year that the average customer experienced according to the U.S. Energy Information Administration. This measurement system is also referred to as System Average Interruption Duration Index, or SAIDI. During FY22, BWL had a rolling average of 136 minutes and was the second most reliable utility in the state of Michigan. As the "Utility of Today, Transforming Tomorrow," we illustrate sustainable electric service to our customers by being your dependable energy provider.

ISO 55000 Certification at REO Plant

For the past several years, BWL has embarked on a transformational journey to improve its operating performance by learning and adopting asset management best practices. This came to fruition with the ISO 55000 Certification at REO Plant. The REO Plant is the only power plant in the state of Michigan to be ISO certified!

ISO 55000 is a globally recognized standard for asset management. ISO 55000 certification is a standardized approach to asset management and encourages collaboration and communication between parties, resulting in increased responsibility and efficiency.

BWL was committed to developing an asset management system that would support its commitment to satisfy customer service needs and meet regulatory obligations as it provides affordable and sustainable service that optimizes financial returns. The asset management system will now help the organization continue to provide a safe environment for employees, contractors, and the community.



Hometown People. Hometown Power.

